Hong Kong Exchanges and Clearing Limited and The Stock Exchange of Hong Kong Limited take no responsibility for the contents of this announcement, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this announcement.

This announcement does not constitute an offer to sell or the solicitation of an offer to buy any securities in the United States or any other jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No securities may be offered or sold in the United States absent registration or an applicable exemption from registration requirements. Any public offering of securities to be made in the United States will be made by means of a prospectus. Such prospectus will contain detailed information about the company making the offer and its management and financial statements. The Company does not intend to make any public offering of securities in the United States.



# MONGOLIAN MINING CORPORATION

(Incorporated in the Cayman Islands with Limited Liability)
(Stock Code: 975)

# OVERSEAS REGULATORY ANNOUNCEMENT

This overseas regulatory announcement is issued pursuant to Rule 13.09(2) of the Rules Governing the Listing of Securities (the "Listing Rules") on The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

Reference is made to the announcements of Mongolian Mining Corporation (the "Company") dated 14 March 2012 and 23 March 2012 in relation to the issue of the Notes (the "Announcements"). All terms used herein have the same meaning as defined in the Announcements, unless otherwise defined.

Please refer to the attached offering memorandum in relation to the Notes (the "Offering Memorandum"), which has been published on the website of Singapore Exchange Securities Trading Limited on or about 30 March 2012.

The posting of the Offering Memorandum on the website of the Stock Exchange is only for the purpose of facilitating equal dissemination of information to investors in Hong Kong and compliance with Rule 13.09(2) of the Listing Rules, and not for any other purposes.

The Offering Memorandum does not constitute a prospectus, notice, circular, brochure or advertisement offering to sell any securities to the public in any jurisdiction, nor is it an invitation to the public to make offers to subscribe for or purchase any securities, nor is it calculated to invite offers by the public to subscribe for or purchase any securities.

The Offering Memorandum must not be regarded as an inducement to subscribe for or purchase any securities of the Company, and no such inducement is intended. No investment decision should be based on the information contained in the Offering Memorandum.

For and on behalf of the Board Mongolian Mining Corporation Odjargal Jambaljamts Chairman

Hong Kong, 2 April 2012

As at the date of this announcement, the Board consists of Mr. Odjargal Jambaljamts and Dr. Battsengel Gotov, being the executive directors of the Company, Mr. Gantumur Lingov, Ms. Enkhtuvshin Gombo, Mr. Enkh-Amgalan Luvsantseren, Dr. Oyungerel Janchiv, Mr. Philip Hubert ter Woort and Mr. Batsaikhan Purev, being the non-executive directors of the Company, and Mr. Ochirbat Punsalmaa, Mr. Unenbat Jigjid and Mr. Chan Tze Ching, Ignatius, being the independent non-executive directors of the Company.



# MONGOLIAN MINING CORPORATION

(Incorporated in the Cayman Islands with limited liability)

# US\$600,000,000 8.875% Guaranteed Senior Notes due 2017

Our 8.875% Guaranteed Senior Notes due 2017 (the "Notes") will bear interest from March 29, 2012 at 8.875% per annum payable semiannually in arrears on March 29 and September 29 of each year, beginning September 29, 2012. The Notes will mature on March 29, 2017.

The Notes are general obligations of Mongolian Mining Corporation (the "Company"), guaranteed by certain of our existing subsidiaries (the "Subsidiary Guarantors") and secured by the Collateral described in this offering memorandum. We refer to the guarantees by the Subsidiary Guarantors as Subsidiary Guarantees.

We may at our option redeem the Notes, in whole or in part, at any time and from time to time on or after March 29, 2015, at the redemption prices set forth in this offering memorandum plus accrued and unpaid interest, if any, to (but not including) the redemption date. At any time and from time to time prior to March 29, 2015, we may at our option redeem the Notes, in whole or in part, at a redemption price equal to 100% of the principal amount of the Notes plus the Applicable Premium (as defined herein) as of, plus accrued and unpaid interest, if any, to (but not including) the redemption date. At any time and from time to time prior to March 29, 2015, we may redeem up to 35% of the Notes, at a redemption price of 108.875% of the principal amount, plus accrued and unpaid interest, if any, in each case, using the net cash proceeds from certain equity offerings.

Upon the occurrence of a Change of Control (as defined herein), we must make an offer to repurchase all Notes outstanding at a purchase price equal to 101% of their principal amount, plus accrued and unpaid interest, if any, to (but not including) the date of repurchase.

The Notes will be (1) general obligations of the Company; (2) effectively subordinated to secured obligations of the Company (other than to the extent of the Collateral securing the Notes), to the extent of the value of the assets serving as security therefor; (3) senior in right of payment to any existing and future obligations of the Company expressly subordinated in right of payment to the Notes; (4) at least pari passu in right of payment with all other unsecured, unsubordinated Indebtedness of the Company (subject to any priority rights of such unsubordinated Indebtedness pursuant to applicable law); (5) guaranteed by the Subsidiary Guarantors on a senior basis, subject to the limitations described in "Description of the Notes – The Subsidiary Guarantees" and in "Risk Factors – Risks Relating to the Guarantees and the Collateral"; and (6) effectively subordinated to all existing and future obligations of the Non-Guarantor Restricted Subsidiaries (defined herein). In addition, applicable law may limit the enforceability of the Subsidiary Guarantees. See "Risk Factors – Risks Relating to the Guarantees and the Collateral".

For a more detailed description of the Notes, see the section entitled "Description of the Notes" beginning on page 212.

# **Issue Price: 100.00%**

plus accrued interest, if any, from March 29, 2012

## Investing in the Notes involves risks. See the section entitled "Risk Factors" beginning on page 30.

Approval in-principle has been received for the listing and quotation of the Notes on the Official List of the Singapore Exchange Securities Trading Limited (the "SGX-ST"). The SGX-ST assumes no responsibility for the correctness of any of the statements made or opinions expressed or reports contained herein. Admission to the Official List of the SGX-ST or quotation of any Notes on the SGX-ST is not to be taken as an indication of the merits of the Company, the Subsidiary Guarantors (if any) or any other subsidiary or associated company of the Company, the Notes or the Subsidiary Guarantees.

The Notes and the Subsidiary Guarantees have not been and will not be registered under the United States Securities Act of 1933, as amended (the "Securities Act"), and may not be offered or sold within the United States, or to, or for the account or benefit of, U.S. persons (as defined in Regulation S under the Securities Act ("Regulation S")) except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. Accordingly, the Notes are being offered and sold by the Initial Purchasers only (1) to qualified institutional buyers in reliance on the exemption from the registration requirements of the Securities Act provided by Rule 144A ("Rule 144A"), and (2) outside the United States to non-U.S. persons in compliance with Regulation S. For a description of certain restrictions on resale or transfer, see the section entitled "Transfer Restrictions" beginning on page 291.

It is expected that the delivery of the Notes will be made through the facilities of The Depository Trust Company (the "DTC"), on or about March 29, 2012 in New York, New York against payment therefor in immediately available funds.

The Notes are expected to be rated "B1" by Moody's Investors Service, Inc. ("Moody's") and "B+" by Standard and Poor's Ratings Services ("Standard and Poor's"). A rating is not a recommendation to buy, sell or hold securities, and may be subject to revision, suspension or withdrawal at any time by the assigning rating agency.

Joint Bookrunners and Joint Lead Managers

**BofA Merrill Lynch** 

**ING** 

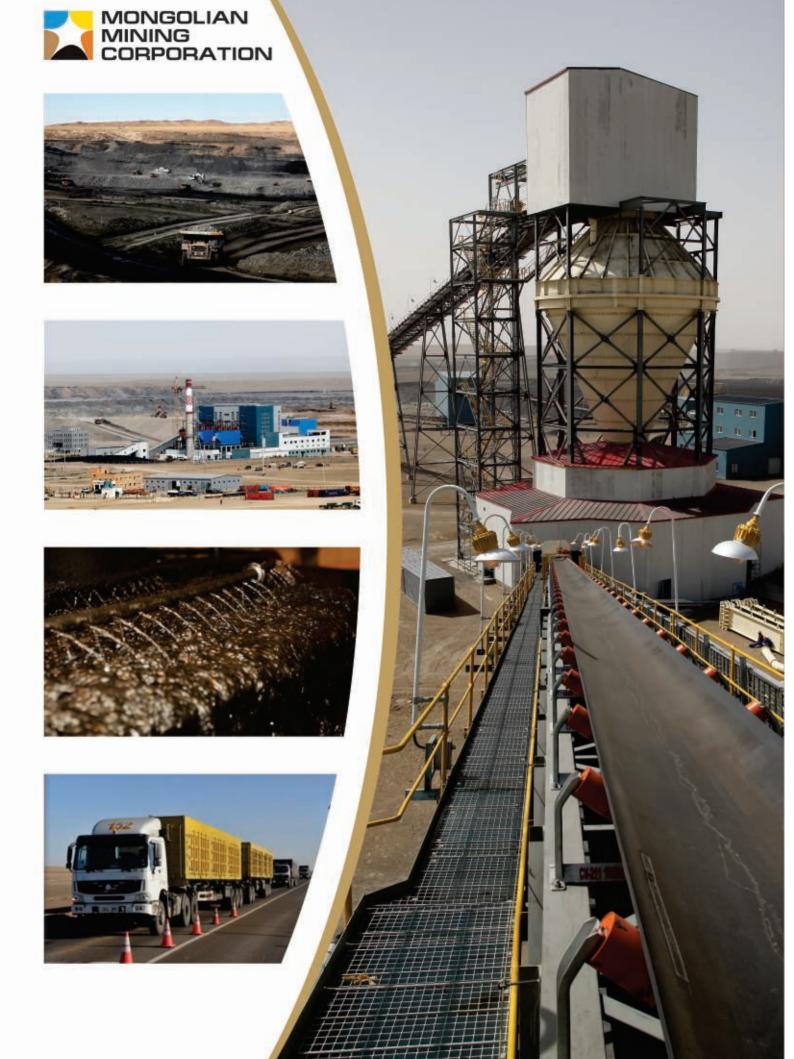
J.P. Morgan

Joint Lead Managers

Standard Bank

Standard Chartered Bank

Offering Memorandum dated March 22, 2012



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### IMPORTANT INFORMATION

You should rely only on the information contained in this offering memorandum. We have not, and ING Bank N.V., Singapore Branch, J.P. Morgan Securities Ltd., Merrill Lynch International, Standard Bank Plc and Standard Chartered Bank (the "Initial Purchasers") have not, authorized any other person to provide you with information that is different. The information in this offering memorandum is accurate only as of the date on the front cover of this offering memorandum or otherwise as of the date specifically referred to in connection with the particular information. Our business, prospects, financial condition and results of operations may have changed since that date. Neither the delivery of this offering memorandum nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in our affairs since the date hereof or that the information contained herein is correct as of any time subsequent to its date.

This offering memorandum does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities to which it relates or an offer to sell or the solicitation of an offer to buy such securities by any person in any circumstances in which such offer or solicitation is unlawful. In addition, there may be legal restrictions on the distribution of this offering memorandum, this offering and the sale of the Notes in certain jurisdictions. If you come into possession of this offering memorandum, we and the Initial Purchasers require that you inform yourself about and observe any such restrictions. For a further description of certain restrictions on the offering, and the offer, sale or resale of the Notes, see the sections headed "Plan of Distribution" and "Transfer Restrictions" in this offering memorandum.

Neither the U.S. Securities and Exchange Commission (the "SEC"), nor any state securities commission in the United States has approved or disapproved of these securities or determined if this offering memorandum is truthful, complete or adequate. Any representation to the contrary is a criminal offense.

The Notes and the Subsidiary Guarantees have not been and will not be registered under the Securities Act and may not be offered or sold in the United States or to, or for the account or benefit of, U.S. persons, except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. The Notes are not transferable except in accordance with the restrictions described herein. See the sections headed "Plan of Distribution" and "Transfer Restrictions" in this offering memorandum.

Each person receiving this offering memorandum acknowledges that: (i) such person has been afforded an opportunity to request from us and to review, and has received, all additional information considered by it to be necessary to verify the accuracy of, or to supplement, the information contained herein; (ii) such person has not relied on the Initial Purchasers, the Trustee or the Agents or any person affiliated with the Initial Purchasers, the Trustee or the Agents in connection with any investigation of the accuracy of such information or its investment decision; and (iii) no person has been authorized to give any information or to make any representation concerning us, our subsidiaries and affiliates, the Notes or the Subsidiary Guarantees (other than as contained herein and information given by our duly authorized officers and employees in connection with investors' examination of us and the terms of the offering of the Notes) and, if given or made, any such other information or representation should not be relied upon as having been authorized by us, the Initial Purchasers, the Trustee or the Agents. This offering memorandum summarizes certain material documents and other information, and we refer you to them for a more complete understanding of what we discuss in this offering memorandum.

You are hereby notified that sellers of the securities, including the Notes and the Subsidiary Guarantees, may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A.

This offering memorandum is confidential. You should not reproduce or distribute this offering memorandum, in whole or in part, and should not disclose any contents or use any information in this offering memorandum for any purpose other than considering an investment in the Notes.

We are furnishing this offering memorandum solely for the purpose of enabling you to consider the purchase of the Notes. You should not consider this offering memorandum to be legal, business or tax advice. In making an investment decision, you must rely on your own examination of us and the terms of the offering, including the merits and risks involved. If you are in any doubt about this offering memorandum, you should consult your legal counsel, professional accountant or other professional advisors. We have provided information contained in this offering memorandum and have also relied on other identified sources. The Initial Purchasers make no representation or warranty, express or implied, as to the accuracy or completeness of such information, and you should not rely on anything contained in this offering memorandum as a promise or representation by the Initial Purchasers. By accepting delivery of this offering memorandum, you agree to these terms. In making an investment decision, you should rely on your own examination of us and the terms of this offering, including the merits and risks involved. You are responsible for making your own examination of us and your own assessment of the merits and risks of investing in the Notes.

We reserve the right to withdraw the offering of the Notes at any time, and the Initial Purchasers reserve the right to reject any commitment to subscribe for or purchase the Notes in whole or in part and to allot to any prospective purchaser less than the full amount of purchase of the Notes sought by such purchaser. The Initial Purchasers and certain related entities may acquire for their own account a portion of the Notes.

IN CONNECTION WITH THIS OFFERING, ING BANK N.V., SINGAPORE BRANCH, AS STABILIZING MANAGER (THE "STABILISING MANAGER"), OR ANY PERSON ACTING FOR THE STABILISING MANAGER, MAY, SUBJECT TO ALL APPLICABLE LAWS AND REGULATIONS, PURCHASE AND SELL THE NOTES IN THE OPEN MARKET WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL. THESE TRANSACTIONS MAY, TO THE EXTENT

PERMITTED BY APPLICABLE LAWS AND REGULATIONS, INCLUDE SHORT SALES, STABILIZING TRANSACTIONS AND PURCHASES TO COVER POSITIONS CREATED BY SHORT SALES. HOWEVER, NEITHER THE STABILIZING MANAGER NOR ANY PERSON ACTING ON BEHALF OF THE STABILISING MANAGER IS OBLIGATED TO COMMENCE SUCH TRANSACTIONS. IF THESE ACTIVITIES ARE COMMENCED, THEY MAY BE DISCONTINUED AT ANY TIME AND MUST IN ANY EVENT BE BROUGHT TO AN END AFTER A LIMITED TIME THAT IS NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE OF THE NOTES AND 60 DAYS AFTER THE DATE OF ALLOTMENT OF THE NOTES.

### NOTICE TO NEW HAMPSHIRE RESIDENTS

NEITHER THE FACT THAT A REGISTRATION STATEMENT OR AN APPLICATION FOR A LICENSE HAS BEEN FILED UNDER CHAPTER 421-B OF THE NEW HAMPSHIRE REVISED STATUTES WITH THE STATE OF NEW HAMPSHIRE NOR THE FACT THAT A SECURITY IS EFFECTIVELY REGISTERED OR A PERSON IS LICENSED IN THE STATE OF NEW HAMPSHIRE CONSTITUTES A FINDING BY THE SECRETARY OF STATE OF THE STATE OF NEW HAMPSHIRE THAT ANY DOCUMENT FILED UNDER CHAPTER 421-B OF THE NEW HAMPSHIRE REVISED STATUTES IS TRUE, COMPLETE AND NOT MISLEADING. NEITHER ANY SUCH FACT NOR THE FACT THAT AN EXEMPTION OR EXCEPTION IS AVAILABLE FOR A SECURITY OR A TRANSACTION MEANS THAT THE SECRETARY OF STATE HAS PASSED IN ANY WAY UPON THE MERITS OR QUALIFICATIONS OF, OR RECOMMENDED OR GIVEN APPROVAL TO, ANY PERSON, SECURITY OR TRANSACTION. IT IS UNLAWFUL TO MAKE, OR CAUSE TO BE MADE, TO ANY PROSPECTIVE PURCHASER, CUSTOMER, OR CLIENT ANY REPRESENTATION INCONSISTENT WITH THE PROVISIONS OF THIS PARAGRAPH.

## CERTAIN DEFINITIONS, CONVENTIONS AND CURRENCY PRESENTATION

In this offering memorandum, all references to "we", "us", "our" and "Company" refer to Mongolian Mining Corporation and, as the context requires, its subsidiaries; all references to "US\$" and "U.S. dollars" are to United States dollars; all references to "HK\$" are to Hong Kong dollars; all references to "MNT" and "Togrog" are to Mongolian Togrog, the official currency of Mongolia; and all references to "RMB" are to the Renminbi, the official currency of China.

Certain financial numerical figures, including financial information and percentages, contained in this offering memorandum have been rounded for convenience. As a result, discrepancies may exist in the numerical figures shown as total in some tables as they may not be exact arithmetic aggregations of the figures that precede them.

### PRESENTATION OF FINANCIAL INFORMATION

Our financial results are reported in U.S. dollars. For convenience only and unless otherwise noted, all translations from Togrogs into U.S. dollars in this offering memorandum were made at the rate of MNT1,394.00 to US\$1.00, which translation represents the basic exchange rate published by Bloomberg on December 30, 2011. On March 21, 2012 the translation of Togrogs into U.S. dollars published by Bloomberg was MNT1,322.50 to US\$1.00. Further information on exchange rates is set forth in "Exchange Rates and Exchange Controls" in this offering memorandum. These are provided by way of illustration only and no representation is made that the Togrog amounts could have been, or could be, converted into any U.S. dollar amounts, at the rates indicated or at all. Certain financial amounts presented in this offering memorandum may not correspond directly to our financial statements included elsewhere in this offering memorandum or may not add up due to rounding.

Our financial information is prepared and presented in accordance with International Financial Reporting Standards, or IFRS, which differ in certain respects from accounting principles generally accepted in the United States, or U.S. GAAP, which might be material to the financial information

herein. We have made no attempt to quantify the impact of those differences. In making an investment decision, investors must rely upon their own examination of us, the terms of this offering and the financial information. Potential investors should consult their own professional advisors for an understanding of the differences between IFRS and U.S. GAAP, and how those differences might affect the financial information herein.

### NON-IFRS FINANCIAL MEASURE

Earnings before interest, tax, depreciation and amortization ("Consolidated Adjusted EBITDA") and the related ratios presented in this offering memorandum are supplemental measures of our performance and liquidity that are not required by, or presented in accordance with, IFRS. Consolidated Adjusted EBITDA is not a measurement of financial performance or liquidity under IFRS and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with IFRS or as an alternative to cash flows from operating activities as a measure of liquidity. In addition, Consolidated Adjusted EBITDA is not a standardized term; hence, a direct comparison of Consolidated Adjusted EBITDA as reported by different companies may not be possible or meaningful.

We believe that Consolidated Adjusted EBITDA facilitates comparisons of operating performance from period to period and company to company by eliminating potential differences caused by variations in capital structures (affecting interest and finance charges), tax positions (such as the impact on periods or companies of changes in effective tax rates or net operating losses), the age and booked depreciation and amortization of assets (affecting relative depreciation and amortization expenses), foreign exchange gains or losses and allowance for doubtful debts. Consolidated Adjusted EBITDA has been presented because we believe that it is frequently used by securities analysts, investors and other interested parties in evaluating similar companies, many of whom present such non-IFRS financial measures when reporting their results. Finally, Consolidated Adjusted EBITDA is presented as a supplemental measure of our ability to service our debt. Nevertheless, Consolidated Adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation from, or as a substitute for, analysis of our financial condition or results of operations, as reported under IFRS. Because of these limitations, Consolidated Adjusted EBITDA should not be considered as a measure of discretionary cash available to us to invest in the growth of our businesses. The term "Consolidated EBITDA," as used in the section titled "Description of the Notes" summarizing certain provisions of the Indenture, the Notes and the Subsidiary Guarantees, is calculated differently from Consolidated Adjusted EBITDA and is not a measurement of financial performance or liquidity under IFRS.

## INDUSTRY AND MARKET DATA

We have commissioned Shanxi Fenwei Energy Consulting Co., Ltd., or Shanxi Fenwei, as our industry consultant, to prepare an independent expert report on the energy sector in China, or the Shanxi Fenwei Report, for use in whole or in part in the "Industry Overview" section of this offering memorandum. Shanxi Fenwei prepared its report based on Shanxi Fenwei's in-house database, independent third-party reports and publicly available data from reputable industry organizations. Where necessary, Shanxi Fenwei visits companies operating in the industry to gather and synthesize information about the market, prices and other relevant information. Shanxi Fenwei has assumed that the information and data which it relied on are complete and accurate.

Shanxi Fenwei has provided part of the statistical and graphical information contained in the "Industry Overview" section and other sections of this offering memorandum. The Industry Overview includes tables of historical data and estimated future supply, demand and market trends created by compiling, interpreting and analyzing engineering, production, economic, statistical and technical information from many third-party sources. The information contained herein has been obtained from sources believed by Shanxi Fenwei to be reliable, but there can be no assurance as to the accuracy or completeness of included information. Unless otherwise specified, all of the data presented in this section with respect to the Chinese energy sector has been extracted from the Shanxi Fenwei Report.

We have commissioned Wood Mackenzie (Australia) Pty Ltd, or Wood Mackenzie, to prepare a cost curve of global hard coking coal producers which appears on page 137 of this offering memorandum. Wood Mackenzie prepared the cost curve based on its in-house database, independent third-party reports and publicly available data from reputable industry organizations. The information contained herein has been obtained from sources believed by Wood Mackenzie to be reliable, but there can be no assurance as to the accuracy or completeness of included information.

This offering memorandum includes market share and industry data and forecasts that we have obtained from industry publications and surveys, reports of governmental agencies, publicly available corporate information and internal company surveys or estimates. Industry publications and surveys and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy or completeness of the information. While we have taken reasonable care to ensure that the information is extracted accurately and in its proper context, we have not independently verified any of the data from third party sources or ascertained the underlying economic assumptions relied upon therein. None of us or the Initial Purchasers make any representation as to the accuracy and reliability of such information. Due to possible inconsistent data collection and consolidation methods and other associated data collection difficulties, the statistics and estimates herein may be inaccurate and should not be unduly relied upon.

### ENFORCEABILITY OF CIVIL LIABILITIES

We are an exempted company incorporated under the laws of the Cayman Islands with limited liability. All or a substantial portion of our assets are located in Mongolia. In addition, most of our directors and officers are residents of Mongolia or Hong Kong, and all or a substantial portion of their assets are or may be located in Mongolia or Hong Kong. As a result, it may be difficult for you to effect service of process upon us or such persons, or to enforce against us or them judgments obtained in courts or arbitral tribunals outside Mongolia, Hong Kong or the Cayman Islands predicated upon the laws of jurisdictions other than Mongolia, Hong Kong or the Cayman Islands, including the civil liability provisions of the United States federal or state securities laws.

We have been advised by our Mongolian legal counsel, Economic & Legal Consultancy LLC, that there is uncertainty as to whether the courts of Mongolia would enforce judgments (i) of U.S. courts obtained against us, our directors or officers predicated upon the civil liability provisions of the U.S. federal or state securities laws or (ii) in original actions brought in Mongolia, of liabilities against us, our directors or officers predicated upon the U.S. federal or state securities laws.

We have been advised by our Cayman Islands legal adviser, Conyers Dill & Pearman, that the courts of the Cayman Islands would recognize as a valid judgment, a final and conclusive judgment in personam obtained in the federal or state courts in the United States against us under which a sum of money is payable (other than a sum of money payable in respect of multiple damages, taxes or other charges of a like nature or in respect of a fine or other penalty) or, in certain circumstances, an in personam judgement for non-monetary relief, and would give a judgment based thereon provided that (a) such courts had proper jurisdiction over the parties subject to such judgment; (b) such courts did not contravene the rules of natural justice of the Cayman Islands; (c) such judgment was not obtained by fraud; (d) the enforcement of the judgment would not be contrary to the public policy of the Cayman Islands; (e) no new admissible evidence relevant to the action is submitted prior to the rendering of the judgment by the courts of the Cayman Islands; and (f) there is due compliance with the correct procedures under the laws of the Cayman Islands.

We have been advised by our Hong Kong legal adviser, Davis Polk & Wardwell, that Hong Kong has no statutory or other arrangement for the reciprocal enforcement of judgments between Hong Kong and the United States. A judgment obtained in the courts of New York cannot be enforced by registration in Hong Kong. Subject to the Foreign Judgments (Restriction on Recognition and Enforcement) Ordinance (Cap 46 of the Laws of Hong Kong), a judgment given by the courts of New York could form the basis of a claim in the Hong Kong courts in respect of the judgment debt if: (a) the judgment was not obtained by fraud, misrepresentation or mistake nor obtained in proceedings which contravene the rules of natural justice; (b) enforcement of the judgment would not be contrary to public policy in Hong Kong; (c) the relevant court of United States had jurisdiction in accordance with the Hong Kong rules on the conflict of laws; (d) the judgment is for a definite sum of money which is not payable in respect of taxes or other charges of a similar nature or in respect of a fine or other penalty; and (e) the judgment is final and conclusive between the parties, but if it is capable of being appealed or an appeal is pending, the proceedings in Hong Kong are likely to be stayed by the courts of Hong Kong pending any such appeal being heard.

We have been advised by our Luxembourg counsel, Loyens & Loeff, that the United States and the Grand Duchy of Luxembourg ("Luxembourg") are not currently bound by a treaty providing for reciprocal recognition and enforcement of judgments, other than arbitral awards rendered in civil and commercial matters. According to such counsel, an enforceable judgment for the payment of monies rendered by any U.S. federal or state court based on civil liability would not directly be enforceable in Luxembourg. However, a party who received such favourable judgment in a U.S. court may initiate enforcement proceedings in Luxembourg by requesting enforcement of the U.S. judgment rendered in civil or commercial matters by the Luxembourg District Court pursuant to the relevant provisions of the New Luxembourg Code of Civil Procedure. The Luxembourg District Court will authorize the enforcement in Luxembourg of the U.S. judgment if it is satisfied that the following conditions are met:

- the U.S. court awarding the judgment has jurisdiction to adjudicate the respective matter according to its applicable laws, and Luxembourg private international and local law;
- the judgment is final and enforceable in the U.S.:
- the U.S. court has applied the substantive law which would have been applied in Luxembourg;
- the principles of natural justice have been complied with and the judgement was granted following proceedings where the counterparty had the opportunity to appear, and it appeared to present a defense;
- the U.S. court has acted in accordance with its own procedural laws;
- the judgment must not have been obtained by fraud; and
- the judgment does not contravene the Luxembourg public policy as understood under Luxembourg law or has been given in proceedings of a criminal or tax nature.

If an original action is brought in Luxembourg, Luxembourg courts may refuse to apply the designated law among others and notably if its application contravenes Luxembourg public policy. In an action brought in Luxembourg on the basis of U.S. Federal or state securities laws, Luxembourg courts may not have the requisite power to grant the remedies sought. Also, an enforcement proceeding may be refused in respect of punitive damages.

Further, in the event of any proceedings being brought in a Luxembourg court in respect of a monetary obligation expressed to be payable in a currency other than Euro, a Luxembourg court would have power to give judgment expressed as an order to pay a currency other than Euro. However, enforcement of the judgment against any party in Luxembourg would be available only in Euro and for such purposes all claims or debts would be converted into Euro.

Subject to the foregoing, purchasers of the Notes may be able to enforce judgments in civil and commercial matters obtained from U.S. federal or state courts in Luxembourg. We cannot, however, assure you that attempts to enforce judgments in Luxembourg will be successful.

### FORWARD-LOOKING STATEMENTS

This offering memorandum contains forward-looking statements that are, by their nature, subject to significant risks and uncertainties. Statements that are not historical facts, including statements about our intentions, beliefs, expectations or predictions for the future, are forward-looking statements. These forward-looking statements include, without limitation, statements relating to:

- our business strategies;
- our capital expenditure plans;
- our future production targets;
- our operations and business prospects;
- our financial performance;
- our dividend policy;
- the regulatory environment as well as the industry outlook generally;
- the changes in the amount of recoverable reserves and resources;
- fluctuations in the market prices of our products;
- future developments in our industry, including but not limited to the statements in the "Industry" section of this offering memorandum; and
- general economic trends in China and Mongolia.

This offering memorandum contains certain statements that are "forward-looking" and uses forward-looking terminology such as "anticipate", "believe", "expect", "estimate", "may", "ought to", "should", "will", "can", "could", "continue", "going forward", "intend", "plan", "potential", "seek" and similar expressions. Those statements include, among other things, the discussion of our growth strategy and expectations concerning our future operations, liquidity and capital resources. Purchasers of the Notes are cautioned that reliance on any forward-looking statement involves risks and uncertainties and that, although we believe the assumptions on which the forward-looking statements are based are reasonable, any or all of those assumptions could prove to be inaccurate and as a result, the forward-looking statements based on those assumptions could also be incorrect. The risks and uncertainties in this regard include those identified in the "Risk Factors" section in this offering memorandum. Actual results may differ materially from information contained in forward-looking statements as a result of numerous factors, including, without limitation, those described in the "Risk Factors" section in this offering memorandum and the following:

- supply and demand changes in steel and coking coal;
- changes in prices for coal;
- our production capabilities;
- our plans and objectives for future operations, including expansion or consolidation;
- our relationship with, and other conditions affecting, our customers;
- risks inherent to our mining and production;
- delays in the construction of our UHG-GS railway;
- · competition;
- inflationary trends and interest rate changes;
- the effects of changes in currency exchange rates;
- environmental laws and regulations;
- regulatory and court decisions;
- future legislation, including regulations and rules as well as changes in enforcement policies;
- changes in political, economic, legal and social conditions in Mongolia and China, including their respective governments' specific policies with respects to the coal industry, economic growth, inflation, foreign exchanges and the availability of credit;
- economic conditions in Asia, the United States, Europe and elsewhere in the world;
- weather conditions or catastrophic weather-related damage; and
- our liquidity and financial condition.

We do not undertake and are under no obligation to publicly update or revise any forward-looking statements contained in this offering memorandum, whether as a result of new information, future events or otherwise, except as required by applicable laws, rules and regulations. All forward-looking statements contained in this offering memorandum are qualified by reference to this cautionary statement.

In light of these and other risks and uncertainties, the inclusion of forward-looking statements should not be regarded as representations by us that our plans and objectives will be achieved.

# CAUTIONARY NOTE REGARDING RESERVES AND RESOURCES

We have estimated the coal reserves and resources reported in this offering memorandum in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves ("JORC Code") which governs such disclosures by companies listed on the Australian Stock Exchange.

The JORC Code recognizes two types of classification, reserves and resources, based on the nature of the technical and economic evaluation carried out.

- Mineral reserves as defined by the JORC Code are the economically mineable part of measured or indicated resources. Mineral reserves are designated as proved and probable, and are derived from the corresponding measured and indicated resource estimates by including allowances for dilution and losses during mining. In addition to geological considerations, other modifying economic, mining, metallurgical, marketing, legal, environmental, social and governmental factors are taken into account in determining the extent to which resources could be converted to reserves.
- Resources are based on mineral occurrences quantified on the basis of geological data and quality, and are divided into measured, indicated and inferred categories reflecting decreasing confidence in geological and quality continuity. No allowances are included for dilution and losses during mining, but the reporting of resource estimates carries the implication that there are reasonable prospects for eventual economic exploitation. Resources may therefore be viewed as the estimation stage prior to the application of more stringent economic criteria for reserve definition, such as a rigorously defined cut-off grade and mine design outlines, along with allowances for dilution and losses during mining. Under this system of reporting, it is common practice for companies to include in the resource category material with a high expectation of conversion to reserves, but for which final technical and economic viability has not been determined.

The reserve and resource estimates provided in this offering memorandum comply with the reserve and resource definitions of the JORC Code. The resource estimates shown include that portion separately assigned to, and presented as, proved and probable reserves.

## Cautionary Note to U.S. Investors Concerning Estimates of Reserves

There are differences between reporting regimes for reserve estimates in the United States and in Australia. A key difference between the reporting regimes in Australia under the JORC Code and in the United States under the requirements as adopted by the SEC in its Industry Guide 7-Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations ("Industry Guide 7") is the absence in the United States of any provision for the reporting of estimates other than proved (measured) or probable (indicated) reserves. There is, therefore, no equivalent for "resources" under the SEC's Industry Guide 7.

The SEC has applied the following reporting definitions to reserves under Industry Guide 7:

- A "reserve" is "that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. Reserves are customarily stated in terms of "ore" when dealing with metalliferous minerals; when other materials such as coal, oil, shale, tar, sands, limestone, etc. are involved, an appropriate term such as "recoverable coal" may be substituted."
- "Proven (measured) reserves" are defined as reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling; and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established.
- "Probable (indicated) reserves" are defined as reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.

This offering memorandum uses the terms "measured," "indicated" and "inferred" resources. United States investors are advised that while some investors recognize such terms, the SEC does not recognize them. "Inferred resources" have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred resource will ever be upgraded to a higher category. Under SEC rules, estimates of inferred mineral resources may not form the basis of feasibility or other economic studies. You should not assume that all or any part of measured or indicated resources will ever be converted into reserves. You are also cautioned not to assume that all or any part of an inferred resource exists or is economically or legally mineable.

#### Coal Resource and Reserve Statement

Information contained in this offering memorandum relating to estimates of (i) reserves and resources of our UHG deposit as of December 31, 2011, was prepared by Norwest, (ii) resources of our BN deposit as of February 2010 was prepared by MBGS and (iii) reserves of our BN deposit as of February 2011 was prepared by SRK Consulting, each according to the JORC Code.

You should be aware that the reserves we declare are estimates of the material we believe we will be able to profitably mine taking into account the economic, legal and technical factors in its extraction and sale, while the resources classification is primarily based on geological factors (although such a declaration implies that there are reasonable prospects for the eventual economic extraction of the resource). Accordingly, you should not assume that we will be able to profitably extract the mineral resources estimated in this offering memorandum, particularly that portion of the estimated mineral resources identified as "inferred resources". When reserves and resources are reported under the JORC Code, the mineral reserve figures (tonnage and coal quality) are included within the mineral resource figures (tonnage and coal quality). In addition, Industry Guide 7 differs from the JORC Code in that it requires reserves to be calculated on the basis of current legal and economic conditions at the time of the reserve determination, whereas the JORC Code permits reporting companies to make "realistic" assumptions about such matters.

Estimates of coal reserves and resources depend significantly on the interpretation of geological data obtained from drill holes and other sampling techniques, which is extrapolated to produce estimates of the size, shape, depth and quality of coal deposits. In addition, to calculate our reserves, we make estimates and assumptions regarding a number of economic and technical factors, such as production rates, coal quality, production and transport costs and prices. These economic and technical estimates and assumptions may change in future in ways that affect the quantity of our reserves. We generate additional geological data as we mine, which may not be consistent with the data on which we based our reserve and resources estimates, resulting in changes to those estimates. No assurance can be given that the reserves and resources presented in this offering memorandum will be recovered at the quality or yield presented.

### AVAILABLE INFORMATION

During any period in which we are not subject to Section 13 or 15(d) of the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, or exempt from reporting pursuant to Rule 12g3-2(b) under the Exchange Act, we will furnish, upon request, to each noteholder, or any prospective purchaser designated by any such noteholder, information satisfying the requirements of Rule 144A(d)(4) under the Securities Act to permit compliance with Rule 144A in connection with resales of the Notes for so long as any such Notes are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act.

# **DEFINITIONS**

In this offering memorandum, unless the context otherwise requires, the following terms shall have the meanings set forth below. Certain other terms are explained in the section headed "Glossary" in this offering memorandum.

"2006 Minerals Law"	the Minerals Law of Mongolia, enacted on July 8, 2006, and effective from August 26, 2006, and as amended and supplemented from time to time
"affiliate(s)"	any other person, directly or indirectly, controlling or controlled by or under direct or indirect common control with a specified person
"aimag"	the highest level of Mongolian administrative subdivision (essentially equivalent to a province), of which there are 21 in Mongolia
"ADB"	Asian Development Bank
"Anun"	Anun LLC is a wholly owned subsidiary of MCS Holding that operates MCS Holding's commercial and residential furnishing business
"Aquaterra"	Aquaterra Engineering LLC (Australia), an international water and environmental consultancy and is now part of the RPS Group, a United Kingdom based international consultancy group that provides advice and support in the planning, environment, energy and water sector development and management
"Audit Committee"	the audit committee of the Board
"BN"	Baruun Naran
"BN deposit"	means our BN deposit located in South Gobi Province which includes both aboveground (<300m) and underground (>300m) deposits
"BN mine"	means the aboveground (<300m) portion of our BN deposit
"Board"	the board of directors of the Company
"BOT"	Build-Operate-Transfer agreement, a type of contract arrangement in which a private sector entity builds an infrastructure project, operates it and eventually transfers ownership of the project to the government

"BOT Agreement"	Build-Operate-Transfer Agreement executed by and between Gobi Road LLC and the Ministry of Road, Transportation and Urban Development of Mongolia on June 9, 2010
"CAGR"	Compound Annual Growth rate
"CFR"	Cost and Freight, meaning the seller must pay the costs and freight to bring the goods to the port of destination. The risk is transferred to the buyer once the goods are loaded on the vessel
"CHPP"	coal handling and preparation plant
"China"	the People's Republic of China, and for the purposes of this offering memorandum, excluding Hong Kong, Macau and Taiwan
"Collateral"	the capital stock of Mongolia Coal Corporation Limited and Mongolian Coal Corporation S.à.r.l., owned by the Company and Mongolian Coal Corporation Limited, respectively
"Company", "our Company", "Group", "our Group", "we", "us", "our" or "Mongolian Mining Corporation"	Mongolian Mining Corporation, an exempted company incorporated in the Cayman Islands with limited liability on May 18, 2010 and except where the context indicates otherwise (i) our subsidiaries; and (ii) with respect to the period before our Company became the holding company of our present subsidiaries, the business operated by our present subsidiaries or (as the case may be) their predecessors
"daf basis"	Dry Ash Free basis, a form of coal analysis that excludes all moisture and ash
"DAP"	Delivered At Place, the seller delivers the goods to the buyer on the arriving means of transport, ready for unloading at the named place of destination, pays for carriage to the named place, except for costs related to import clearance, and assumes all risks prior to the point that the goods are ready for unloading by the buyer
"DEG"	Deutsche Investitions-und Entwicklungsgesellschaft mbH (the German Investment and Development Company)
"Deutsche Bahn"	DBI, GmbH, a provider of consultancy, management and planning services for infrastructure and transport projects, from project development to acceptance/commissioning and operational management

"DGMC"	the Department of Geological and Mining Cadaster, a subordinate agency of MRAM responsible for registration of exploration licenses and mining license rights in Mongolia
"Director(s)"	director(s) of our Company
"EBRD"	European Bank for Reconstruction and Development, an international financial institution that supports projects in 29 countries, from central Europe to central Asia
"EBRD, FMO and DEG Loan Agreements"	an aggregate of US\$180 million loan facility agreements with (i) EBRD dated May 12, 2010, amended and restated on August 11, 2010 and further amended on October 8, 2010, (ii) FMO dated August 11, 2010 and further amended on October 13, 2010, and (iii) DEG dated August 11, 2010 and further amended on October 13, 2010, and each of the them further amended on March 5, 2012
"EPCM"	Engineering, Procurement, Construction and Management, a form of contract where the contractor will design and install the equipment, procure and install the necessary materials, and be responsible of managing the process of the installation
"ER LLC"	Energy Resources LLC, a limited liability corporation organized under Mongolian law on April 22, 2005
"Erdenes MGL"	Erdenes MGL LLC, a state-owned enterprise
"Erdenes Tavan Tolgoi"	Erdenes Tavan Tolgoi Joint Stock Company, a subsidiary of Erdenes MGL, which was established on October 20, 2010 by the Government by Resolution No. 272
"Exchange Act"	the U.S. Securities and Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder
"Existing Standard Bank Facilities Agreement"	the US\$400 million loan facility agreement we entered into with Standard Bank dated June 24, 2011
"FMO"	Nederlandse Financierings-Maatschappij Voor Ontwikkelingslanden N.V. (Entrepreneurial Development Bank of Netherlands)
"FOB"	Free on Board, meaning the risk passes to the buyer, including payment of all transportation and insurance costs, once goods are delivered on board of the ship by the seller

"FOR"	Free on Rail, meaning the risk passes to the buyer, including payment of all transportation and insurance costs, once goods are delivered on the wagon of rail by the seller
"FOT"	Free on Truck, meaning the risk passes to the buyer, including payment of all transportation and insurance costs, once goods are delivered on a truck at a named loading point
"GDP"	gross domestic product
"GM"	Ganqimaodu or Gants Mod, the Chinese side of the Sino- Mongolian border crossing
"Government of Mongolia" or "Government"	the Government of Mongolia
"Group"	the Company and its subsidiaries
"GS"	Gashuun Sukhait, the Mongolia side of the Sino-Mongolian border crossing
"Hong Kong" or "HK"	the Hong Kong Special Administrative Region of China
"Huanghua"	located in the Bohai Gulf coastal regions of Hebei province in northeastern China, and home to the Huanghua Port
"IDR"	issuer default ratings
"IFRS"	International Financial Reporting Standards
"IMF"	International Monetary Fund
"Initial Purchasers"	ING Bank N.V., Singapore Branch, J.P. Morgan Securities Ltd., Merrill Lynch International, Standard Bank Plc and Standard Chartered Bank
"Investment Agreement"	an agreement that a mining license holder may, at its option, enter into with the Government of Mongolia concerning stability of tax rates, the right to sell products at international market prices, a guarantee that the license holder may receive and dispose of income from such sales, and provisions with respect to the amount and term of the license holder's investment
"Khan Bank Loan Agreement"	the US\$13 million loan agreement ER LLC entered into with Khan Bank dated December 26, 2011
"Law on VAT"	Law on Value-Added Tax
"Leighton"	Leighton Asia Limited (Hong Kong), a contract mining company

"LIBOR"	the London Interbank Offered Rate, the rate charged by one bank to another for lending money
"Listing Rules"	Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited
"MAK"	Mongolyn Alt Corporation
"MBGS"	McElroy Bryan Geological Services Pty Ltd, a provider of consulting services to the coal mining industry
"MBGS Resource Report"	the JORC Resource Report dated February 2010 prepared by MBGS
"MCS Electronics"	MCS Electronics LLC is a wholly owned subsidiary of MCS Holding that operates MCS Holding's information and communication technology business
"MCS Group"	MCS Holding and its subsidiaries (other than our Group)
"MCS Holding"	MCS Holding LLC, a limited liability corporation organized under Mongolian law on March 29, 2001
"MCS Property"	MCS Property LLC is a wholly owned subsidiary of MCS Holding that operates MCS Holding's construction management and real estate management business
"Mineral Deposit of Strategic Importance"	under the 2006 Minerals Law, a deposit that may have the potential to impact national security, or the economic and social development of Mongolia at the national and regional levels, or that is generating, or has the potential to generate, more than 5% of Mongolia's GDP product in any given year
"Minerals License Transfer Agreement"	the minerals license transfer agreement entered into between ER LLC and the Government of Mongolia on March 21, 2008, pursuant to which ER LLC agreed to transfer all of the mining licenses held by it at the time, except for the one covering our UHG deposit, to a state owned enterprise at nil consideration
"MMRE"	the Ministry of Mineral Resources and Energy, a cabinet-level ministry of the Government of Mongolia
"MNT"	togrog, the lawful currency of Mongolia
"Moody's"	Moody's Investors Services Inc
"MPP"	Mongolian People's Party

"MPRP"	Mongolian People's Revolutionary Party
"MRAM"	the Mineral Resources Authority of Mongolia, a subordinate agency of the MMRE, under which the DGMC operates
"New Standard Bank Facilities Agreement"	the US\$300 million term loan facilities agreement we entered into with Standard Bank dated March 8, 2012
"NIC"	NIC LLC, an oil import and distribution company in Mongolia. It is majority owned by Petrovis LLC
"Nomination Committee"	the nomination committee of the Board
"Norwest"	Norwest Corporation, a provider of consulting services to the energy, mining, and natural resources industries and our independent technical expert
"Notes"	8.875% Guaranteed Senior Notes due 2017
"NS"	Nariin Sukhait, located in Gurvan tes soum of South Gobi Province, approximately 56 km north of Shivee Khuren-ceke crossing point of the Sino-Mongolian border and 110 km east of Ulaanbaatar
"Operations Management Contract"	the contract for operations management services we entered into with Sedgman in December 2010 for operations management of the first module of our CHPP
"OT"	Ovoot Tolgoi, located in the southwest corner of South Gobi Province, approximately 45 km north of the Sino-Mongolian border and 950 km south of Ulaanbaatar
"Parliament" or "State Great Hural"	the legislature in Mongolia
"PPP"	public-private partnerships
"QIBs"	"qualified institutional buyers" within the meaning contained in Rule 144A
"Qinghua"	Inner Mongolia Qinghua Group
"Qinhuangdao"	a city in Hebei province in northeastern China and home to the Qinhuangdao Port, which is a strategically important port in China and is the largest coal shipping port in China

"QGX Convertible Bonds"	convertible bonds in the aggregate principal amount of US\$85 million as part of the consideration paid for our acquisition of BN
"Regulation S"	Regulation S under the Securities Act
"Remuneration Committee"	the remuneration committee of the Board
"Risun"	Risun Coal Chemicals Group
"RMB"	Renminbi, the lawful currency of China
"Rule 144A"	Rule 144A under the Securities Act
"SACMS"	State Administration of Coal Mine Safety
"SEC"	the U.S. Securities and Exchange Commission
"Securities Act"	the U.S. Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder
"Sedgman"	Sedgman Consulting (China) and Sedgman Limited, a provider of multi-disciplinary engineering, project delivery and operations services
"Shanxi Fenwei"	Shanxi Fenwei Energy Consulting Co., Ltd., our industry consultant
"Shanxi Fenwei Report"	an independent expert report on the energy sector in China and Mongolia prepared by Shanxi Fenwei
"Shenhua"	Shenhua Bayannaoer Energy Co., Ltd.
"SK"	Shivee-Khuren, the Mongolian side of the Shivee-Khuren and Ceke Sino-Mongolian border
"Small TT"	the existing so-called "Small" Tavan Tolgoi mine owned by Company Joint Stock Tavan Tolgoi
"soum"	the second level of Mongolian administrative subdivisions (essentially equivalent to a sub-province or district)
"South Gobi Province"	Umnugobi Aimag, a province located in southern Mongolia
"SRK Consulting"	SRK Consulting (Australasia) Pty Ltd, a provider of consulting services to the earth and water resources industries
"SRK Reserve Report"	the JORC Reserve Report for BN dated March 23, 2011 prepared by SRK Consulting

"Standard and Poor's"	Standard and Poor's Rating Services
"State Professional Inspection Agency"	an agency of the Government of Mongolia that is in charge of laws and regulations of the State, including labor, safety and health
"Strategic Deposits List"	a list of 15 deposits designated by the Parliament to be Mineral Deposits of Strategic Importance by Resolution No. 27, adopted on February 6, 2007 (Tier 1 Deposits List)
"Subsidiary Guarantors"	Mongolian Coal Corporation Limited, Mongolian Coal Corporation S.à.r.l., Energy Resources Corporation LLC, Energy Resources LLC, Energy Resources Mining LLC and Transgobi LLC
"Tavan Tolgoi"	means the coal formation located in South Gobi, Mongolia, which includes our UHG deposit
"Tier 2 Deposits List"	a list of 39 deposits designated in Resolution No. 27, adopted on February 6, 2007, to be further evaluated and determined if one or more of such deposits should be recommended by the Government of Mongolia to Parliament for designation as a Mineral Deposit of Strategic Importance
"TKH"	Tsagaan Khad, located in Khanbogd soum of South Gobi Province, approximately 21 km from GM
"TMR"	target market region, including Inner Mongolia, Hebei, Shandong and Jiangsu provinces
"Tsogttsetsii"	Tsogttsetsii soum is the location where Tavan Tolgoi sits
"UHG"	Ukhaa Khudag, located in Tsogttsetsii soum of South Gobi Province
"UHG deposit"	means our Ukhaa Khudag deposit located in the Tavan Tolgoi coalfield which includes both aboveground (<300m) and underground (>300m) deposits
"UHG mine"	means the aboveground (<300m) portion of our UHG deposit and its related infrastructure
"Uniservice Solution"	a wholly owned subsidiary of MCS Holding that provides ancillary services, such as consultancy and cleaning
"UK"	the United Kingdom
"United States" or "U.S."	the United States of America

"US\$"	U.S. dollar, the lawful currency of the United States
"VAT"	value added tax
"Wood Mackenzie"	Wood Mackenzie (Australia) Pty Ltd, a provider of consulting services to the energy and metal industries
"Winsway"	Winsway Resources Holdings Private Limited

# **GLOSSARY**

The glossary of technical terms contains explanation of certain terms used in this offering memorandum as they relate to our Company and as they are used in this offering memorandum in connection with our Group and our business. These terms and their given meanings may not correspond to standard industry definitions.

"1/2 ZN"	1/2 sticky coal
"1/3 JM"	1/3 coking coal or semi-soft coking coal
"assay"	qualitative or quantitative analysis of a substance to determine its components; the result of such an analysis
"BCM"	bank cubic meter
"broad gauge"	1,520 mm rail track gauge, also known as "Russian gauge"
"coke"	bituminous coal from which the volatile components have been removed
"coking coal"	coal used as a raw material in the process of manufacturing steel and iron. It is also known as metallurgical coal
"CSN"	Crucible Swelling Number. This number is used to compare the shape and the coking volume increase of a finely ground coal sample when 1 gram is heated in a closed crucible quickly over a brief time period. Results are only used as a comparative indication of the coking potential of the coal and not a measure of strength. Values for CSN range from 1-9
"CSR"	Coke Strength after Reaction, a quantitative measurement of the strength of the coke produced by a particular coking coal. This strength rating is evaluated in a laboratory setting, with a high CSR value being highly regarded in the market, primarily because this measurement is related to blast furnace performance
"Environmental Impact Assessment" or "EIA"	a feasibility study by international standards which assesses in detail the environmental impact of an undeveloped mining project
"feasibility study"	a feasibility study by international standards which assesses in detail the technical soundness and economic viability of an undeveloped mining project, and serves as the basis for the investment decision and as a bankable document for project financing. The study is based on a detailed mine plan and constitutes an audit of all geological, engineering, environmental, legal and economic information accumulated on the project. Generally, a separate environmental impact study is required

"FM"	fat coal, a form of hard coking coal
"G Index"	a measure of caking or cohesive behavior of bituminous coal. The caking behavior is critical to making coke strong and not powdry
"HCC"	hard coking coal; see "Business - Coal Products"
"indicated mineral resource"	that part of a mineral resource for which tonnage, densities, shape, physical characteristics, quality and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or quality continuity but are spaced closely enough for continuity to be assumed
"Industry Guidance 7"	Industry Guide 7 – Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations, adopted by the SEC
"inferred mineral resource"	that part of a mineral resource for which tonnage, quality and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and of assumed but not verified geological and/or quality continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability
"JM"	primary coking coal, a form of hard coking coal
"JORC"	Joint Ore Reserves Committee of The Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
"JORC Code"	Australasian Code for Reporting of Mineral Resources and Ore Reserves
"km"	kilometer
"lignite"	the lowest rank of coal with the lowest energy content, typically containing 25-35% carbon. Lignite tends to be found in relatively young coal deposits that were not subjected to extreme heat or pressure, is crumbly, has high moisture content and is mainly used as fuel at power plants to generate electricity

"Liulin Coking"..... Liulin Coking is a mine owned by the Huajin Coking Coal Company. Located in the Hedong coalfield in Shanxi province, Liulin Coking supplies low sulphur, low ash and low volatile matter coking and lean coal, which are considered as benchmark metallurgical coal types in China "m" ..... meter "metallurgical coal" ..... see "coking coal" "metric tonne" ..... 1,000 kilograms "middlings".... secondary thermal product from processing of coking coal "mine plan/mine planning" ..... by international standards includes the current documentation of the state of development and projected exploitation of a deposit during its economic life including current mining plans. It is generally made by the operator of the mine. The study takes into consideration the quantity and quality of the minerals extracted during the reporting time, changes in economic viability categories due to changes in prices and costs, development of relevant technology, newly imposed environmental or other regulations, and data on exploration conducted concurrently with mining. A map of the deposit is included showing the roadway layout, production cell areas and the projected annual sequence of extraction "mineral reserve"..... the economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes diluting materials and allowances for 8 losses that may occur when the material is mined "mineral resource"..... a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, quality, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral resources are sub-divided, in order of increasing geological confidence, into inferred, indicated and measured categories "mining rights"..... the rights to mine mineral resources and obtain mineral products in areas where mining activities are licensed "Mt"..... million tonnes

"Mtpa"	million tonnes per annum
"MW"	megawatt
"open-pit"	the main type of mine designed to extract minerals close to the surface; also known as "open cut"
"overburden"	barren rock material, either loose or consolidated, overlying a mineral deposit, which must be removed prior to mining
"PCI coal"	the term refers to coal that is used for Pulverized Coal Injection. PCI coal is characterized by its high rank, low volatile matter and generally has ash levels of less than 10.5%. PCI coal is fired directly into the lower level of the blast furnace as an effective means of injecting carbon, thereby reducing the quantity of coke required per tonne of hot metal produced. The higher the volume of PCI coal that can be utilized, the lower the volume of coke required. A wide range of coal is suitable for PCI, including thermal and semi-soft coking coal and as such it is cheaper than most coal purchased for producing coke
"Permian"	a geological period from around 299 million years ago to around 251 million years ago
"probable reserve"	the economically mineable part of an indicated and, in some circumstances, a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified
"productivity"	measurements of worker efficiency usually expressed in terms of tonnes per unit of time
"proven reserve"	the economically mineable part of a measured mineral resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified
"PS"	meager lean coal

"qualified person/qualified personnel"	an individual who: (a) is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation, or mineral project assessment, or any combination of these; (b) has experience relevant to the subject matter of the mineral project and the technical report; and (c) is a member or licensee in good standing of a professional association
"QF"	gas fat coal
"QM"	gas coal
"raw coal"	generally means coal that has not been washed and processed
"recoverable reserve"	the part of the reserve base which could be economically extracted or produced at time of determination
"resource recovery rate"	quantity of recovered resources divided by (the quantity of recovered resources plus the final quantity of processed waste)
"ROM"	run-of-mine, the as-mined coal, that includes out-of-seam dilution material which is processed through our CHPP
"seam"	a stratum or bed of coal; generally applied to large deposits of coal
"SHCC"	semi-hard coking coal; see "Business - Coal Products"
"SM"	lean coal
"standard gauge"	1,435 mm rail track gauge
"steel industry supply chain"	industries involved in the steel producing process (including iron ore and coking coal)
"strip ratio" or "stripping ratio"	the ratio of the amount of waste removed (in bank cubic meters) to the amount of coal (in tonnes) extracted by open-pit mining methods
"thermal coal"	also referred to as "steam coal" or "steaming coal," thermal coal is used in combustion processes by power generation plants and industrial users to produce steam for power and heat. Thermal coal tends not to have the carbonization properties possessed by coking coal and generally has lower heat value and higher volatility than coking coal
"tonne"	metric tonne
"tpa"	tonnes per annum

"t	ransshipment"	transfer of shipment from one carrier to another
"ເ	underground mining"	refers to a group of underground mining techniques used to extract coal
"'	washed coal"	hard coking coal that has been washed and processed to reduce its ash content
"	Y Index"	indicates the maximum thickness of gelinite (or plastic layer) in bituminous coal. Plasticity refers to the melting and bonding behavior of the coal and is an important requirement in the coke blend. Plasticity is also required for end product coke strength
""	yield"	the percentage of saleable portion of coking coal recovered from processed material

### **SUMMARY**

This summary highlights information contained elsewhere in this offering memorandum and does not contain all the information that may be important to you in deciding to invest in the Notes. You should read the entire offering memorandum, including the section entitled "Risk Factors" and financial statements and related Notes thereto included elsewhere in this offering memorandum, before making an investment decision. This offering memorandum includes forward-looking statements that involve risks and uncertainties. See "Forward-looking Statements".

### Overview

We are a leading Asian coking coal mining company. We are engaged in the open-pit mining of coking coal at our UHG deposit which forms the northern branch of the Tavan Tolgoi coal formation and our BN deposit, both located in South Gobi Province, Mongolia. Our UHG mining license permits us to engage in coal mining activities on 2,960 hectares of land at our UHG mine for an initial period of 30 years starting from August 29, 2006. Our UHG mine had 570.8 Mt and 275.0 Mt of JORC-compliant measured, indicated and inferred coal resources and proven and probable coal reserves, respectively, as of December 31, 2011. On June 1, 2011, we completed the acquisition of our BN mine, which is located approximately 30 km southwest of our UHG mine. Our BN mine had 282.2 Mt of JORC-compliant measured, indicated and inferred coal resources as of February 2010 and 185.3 Mt of JORC-compliant proven and probable reserves as of February 2011.

We are the largest producer and exporter of raw and washed coal in Mongolia. Most of our coal is transported by trucks to our customers in China, while a small portion is shipped on the Trans-Siberian railway to explore alternative markets, such as European and other Asian markets. According to Shanxi Fenwei, our coking coal is of high quality that is comparable to the quality of hard coking coal produced in Shanxi, China and the Bowen Basin, Australia.

We commenced mining at our UHG mine in April 2009 and became profitable in our first year of operations. For the years ended December 31, 2009, 2010 and 2011, we produced 1.8 Mt, 3.9 Mt and 7.1 Mt of ROM coal, respectively. We plan to produce approximately 10.7 Mt, 14.7 Mt and 15.2 Mt of ROM coal at our UHG mine in the three years ending December 31, 2014, respectively.

Our UHG mine is strategically located approximately 240 km from the Sino-Mongolian border and approximately 600 km from Baotou, China. Baotou is an important railway transportation hub providing access from Mongolia to the largest steel producing provinces in China, including Inner Mongolia, Hebei, Shandong and Jiangsu provinces. We, together with our contract trucking companies, haul most of our coal by truck to GM, located on the Chinese side of the Sino-Mongolian border crossing, where our customers pick up and further transport the coal to their final destinations in China. The total length of transportation is approximately 250 km between our UHG mine and GM, including a transshipment and handling stopover at TKH, which is located approximately 21 km from GM.

In October 2011, we completed the construction of a paved road, with coal transportation capacity of 18.0 Mtpa from our UHG mine to GS, parallel to the existing coal transport gravel road from our UHG mine to GS. In January 2012, we, together with Erdenes MGL, completed and commissioned an expansion of the GS border crossing, which we expect will increase the border crossing capacity from 10 Mtpa to approximately 20-30 Mtpa. We maintain our own fleet of trucks, which is supplemented by contract trucking companies, to ship our coal from UHG to GM. In 2011, we increased the size of our own fleet from 100 to 400 trucks. In order to further lower transportation costs and increase reliability and operational efficiency, we plan to commence construction of a railway directly from our UHG mine to GS in 2012. See "Risk Factors – Risks Relating to our

Business and Industry – Our UHG-GS railway is subject to various risks and uncertainties; we are not sure when we can commence and complete construction of the railway, what the actual cost of the project will be, or whether the project will be successful".

As part of our strategy to improve our margins, we have completed construction of and commissioned the first and second modules of our CHPP to produce high-quality washed coal. The first and second modules of our CHPP, each with ROM coal nameplate processing capacity of 5.0 Mtpa, have been in operation since June 2011 and February 2012, respectively. We began constructing the third module with ROM coal nameplate processing capacity of 5.0 Mtpa in August 2011 and expect to complete construction by the end of 2012, which will increase the capacity of our CHPP from 10.0 Mtpa to 15.0 Mtpa. The ramp-up of our CHPP capacity coincides with the ramp-up of our coal production. With the commencement of operations of our CHPP, we have shifted our production from raw coal to washed coal, and we plan to sell only washed coal and middlings beginning in the second quarter of 2012. In 2011, the yield of washed coal from raw coal processed at our CHPP was approximately 63.3%.

We sell most of our coking coal into China pursuant to long-term agreements with iron and steel mills and coke and chemical plants. We have already contracted to sell all of our scheduled production of coal for the year ending December 31, 2012 pursuant to the terms of our long-term agreements. However, our customers are allowed to adjust the amount of coal they will purchase, subject to mutual agreement. According to Shanxi Fenwei, the selling prices of our coal are the highest among our competitors in Mongolia and are considered the benchmark for the price of Mongolian coking coal. In the years ended December 31, 2009, 2010 and 2011, we sold our coking coal at an average selling price of US\$48.2, US\$70.8 and US\$113.9 per tonne, respectively. Washed coal is sold at a substantial premium to raw coal. In 2011, the average selling price of our raw coal was US\$95.0 per tonne and the average selling price of our washed coal was US\$155.6 per tonne, representing approximately a 63.8% premium to that of raw coal.

We work with a number of industry-leading experts throughout the planning, development and operations of our business. We work closely with our mining contractor, Leighton, a world-class mining operator with over 30 years of experience in Asia, in all aspects of our coal mining operations. We have entered into a long-term contract with them to train and supervise our employees to conduct mining operations at our UHG mine and, in addition, Leighton has agreed to work with us to build out our coal production capacity to 15.0 Mtpa. We have communicated our expansion plans to our other major contractors and suppliers and are working with them to ensure they have sufficient resources to support our expansion.

On June 1, 2011, we completed the acquisition of our second mine, BN, through the acquisition of 100% of the equity interests in Baruun Naran Limited (formerly named QGX Coal Limited). The acquisition provided us with a unique opportunity to purchase a coking coal asset strategically located in close proximity to our UHG mine and which is in an advanced development stage, and allowed us to expand our existing footprint in Mongolia. We expect the sizable coking coal resources and reserves at our BN mine will allow us to target a larger customer base and to expand our product offerings to include semi-soft coking coal and high calorific value thermal coal. In addition, we believe the proximity between our BN mine and our UHG mine will enable us to benefit from synergies such as sharing of mining, processing and transportation infrastructure and marketing resources. We commenced operations at our BN mine in February 2012.

Our revenue for the years ended December 31, 2009, 2010 and 2011 was US\$67.0 million, US\$277.5 million and US\$542.6 million, respectively, representing a CAGR of 184.6%. Our net profit for the years ended December 31, 2009, 2010 and 2011 was US\$10.3 million, US\$60.1 million and US\$119.1 million, respectively, representing a CAGR of 240.0%.

# **Our Competitive Strengths**

We believe that we have the following competitive strengths:

- World-class coking coal assets with abundant resources
- One of the lowest cost coking coal producers in the world
- Closest coking coal exporter to major Chinese steel mills
- Most advanced coking coal operations in Mongolia supported by internationally recognized experts
- Higher profitability driven by washed coal sales and integrated infrastructure
- Stable revenue streams underpinned by off-take agreements with diversified customer base
- Strong management team with proven execution track record

Please see "Business - Our Competitive Strengths" for a detailed description of these strengths.

## **Our Strategy**

We intend to pursue the following key strategies to maintain and enhance our position as a leading Asian coking coal mining company.

- Expand coal mine production
- Expand our coal handling and processing capacity
- Improve our transportation infrastructure
- · Continue to develop and diversify our long-term customer base and promote our own brand
- Expand and diversify our business operations through acquisitions, investments and joint ventures
- Continued strong commitment to safety, the environment and social responsibility

Please see "Business - Our Strategy" for a detailed description of these strategies.

# **Recent Developments**

### New Standard Bank Facilities Agreement

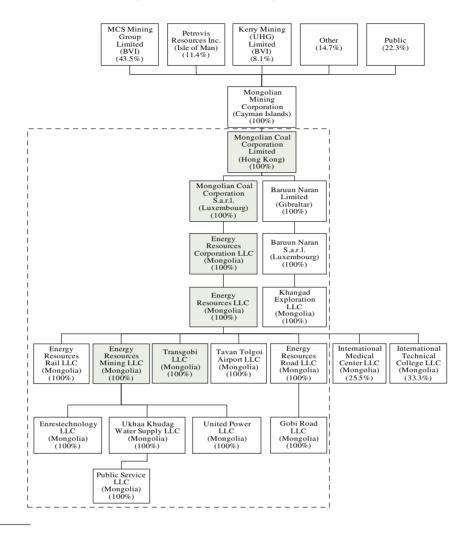
On March 8, 2012, we entered into the New Standard Bank Facilities Agreement, pursuant to which Standard Bank and potentially a syndicate of lenders have agreed to make available to us term loan facilities of up to US\$300.0 million. On March 14, 2012, we drew down US\$50.0 million under the facilities for our cash needs. We plan to draw down US\$150.0 million on March 23, 2012 to repay a portion of the outstanding amount under the Existing Standard Bank Facilities Agreement. On or before March 29, 2012, we will provide notice to Standard Bank to reduce the size of the New Standard Bank Facilities Agreement to US\$200.0 million.

# Petrovis Launch Block Sale

On March 22, 2012, Petrovis LLC, which currently owns approximately 11.4% our share capital, launched a block sale of shares of our company. It is offering 83,000,000 to 86,000,000 shares, representing approximately 2.2% to 2.3% of our outstanding share capital, at HK\$7.35 to HK\$7.65 per share. The transaction is expected to close on March 27, 2012.

### **Corporate Structure**

As of the date of this offering memorandum our corporate structure is as follows:



Notes:

- (1) The Subsidiary Guarantors are shaded.
- (2) Entities inside the dotted lines are Restricted Subsidiaries.

#### **Corporate Information**

We were incorporated in the Cayman Islands on May 18, 2010 as an exempted company with limited liability. Our principal place of business in Mongolia is at 15th Floor, Central Tower, 2 Sukhbaatar Square, 8th Khoroo, Sukhbaatar District, Ulaanbaatar 210620a, Mongolia. Our place of business in Hong Kong is at Level 28, Three Pacific Place, 1 Queen's Road East, Hong Kong. Our registered office is located at Cricket Square, Hutchins Drive, PO Box 2681, Grand Cayman KY1-1111 Cayman Islands. Our shares were listed for trading on the Hong Kong Stock Exchange on October 13, 2010. Our website is www.mmc.mn. Information contained on our website does not constitute part of this offering memorandum.

#### SUMMARY OF THE OFFERING

The following is a brief summary of the term of this offering and is qualified in its entirety by the remainder of this offering memorandum. Terms used in this summary and not otherwise defined shall have the meanings given to them in "Description of the Notes."

Issuer ...... Mongolian Mining Corporation

Notes Offered ....... US\$600,000,000 aggregate principal amount of 8.875%

Guaranteed Senior Notes due 2017 (the "Notes").

Maturity Date...... March 29, 2017

at the rate of 8.875% per annum, payable semi-annually in

arrears.

Interest Payment Dates ...... March 29 and September 29 of each year, commencing

September 29, 2012.

Ranking of the Notes ...... The Notes are:

• general obligations of the Company;

- effectively subordinated to secured obligations of the Company (other than to the extent of the Collateral securing the Notes), to the extent of the value of the assets serving as security therefor;
- senior in right of payment to any existing and future obligations of the Company expressly subordinated in right of payment to the Notes;
- at least *pari passu* in right of payment with all other unsecured, unsubordinated Indebtedness of the Company (subject to any priority rights of such unsubordinated Indebtedness pursuant to applicable law);
- guaranteed by the Subsidiary Guarantors on a senior basis, subject to the limitations described in "Description of the Notes – The Subsidiary Guarantees" and in "Risk Factors – Risks Relating to the Guarantees and the Collateral"; and
- effectively subordinated to all existing and future obligations of the Non-Guarantor Restricted Subsidiaries.

Subject to the limitations described in "Risk Factors – Risks Relating to the Guarantees and the Collateral," the Notes will:

- be entitled to a first priority lien on the Collateral (subject to any Permitted Liens and the Intercreditor Agreement) shared on a *pari passu* basis among the holders of the Notes, the lenders of the New Standard Bank Facilities Agreement and any other creditors with respect to Permitted Pari Passu Secured Indebtedness incurred by the Company; and
- rank effectively senior in right of payment to unsecured obligations of the Company with respect to the value of the Collateral pledged by the Company securing the Notes (subject to any priority rights of such unsecured obligations pursuant to applicable law).

Subsidiary Guarantees.....

Each of the Subsidiary Guarantors will jointly and severally guarantee the due and punctual payment of the principal of, premium, if any, and interest on, and all other amounts payable under, the Notes. On the Original Issue Date, all of the Company's subsidiaries will be restricted subsidiaries, and the initial Subsidiary Guarantors will consist of Mongolian Coal Corporation Limited, Mongolian Coal Corporation S.à.r.l., Energy Resources Corporation LLC, Energy Resources LLC, Energy Resources Mining LLC and Transgobi LLC. All of the Restricted Subsidiaries that are not Subsidiary Guarantors are collectively referred to as the "Non-Guarantor Restricted Subsidiaries."

A Subsidiary Guarantee given by a Subsidiary Guarantor may be released in certain circumstances. See "Description of the Notes – The Subsidiary Guarantees – Release of the Subsidiary Guarantees."

The Company will cause each of its future Wholly Owned Restricted Subsidiaries which, directly or indirectly, own any mining deposits or reserves or any mining license (other than with respect to the Baruun Naran mine), as soon as practicable but in any event within five days after becoming a Restricted Subsidiary, to execute and deliver to the Trustee a supplemental indenture to the Indenture pursuant to which such Restricted Subsidiary will guarantee the payment of the Notes.

Notwithstanding the foregoing, the Company will not be obligated to cause any Restricted Subsidiary to guarantee the Notes to the extent such guarantee could reasonably be expected to give rise to or result in any conflict with or violation of applicable law (or risk of personal or criminal liability for the officers, directors, managers or shareholders of such Restricted Subsidiary).

### Ranking of the Subsidiary

Guarantees.....

The Subsidiary Guarantee of each Subsidiary Guarantor:

- is a general obligation of such Subsidiary Guarantor;
- is effectively subordinated to secured obligations of such Subsidiary Guarantor (if any, other than to the extent of the Collateral securing the Notes), to the extent of the value of the assets serving as security therefor;
- is senior in right of payment to all future obligations of such Subsidiary Guarantor expressly subordinated in right of payment to such Subsidiary Guarantee;
- ranks at least pari passu with all other unsecured, unsubordinated Indebtedness of such Subsidiary Guarantor (subject to any priority rights of such unsecured, unsubordinated Indebtedness pursuant to applicable law);
   and
- is effectively subordinated to all existing and future obligations of the Non-Guarantor Restricted Subsidiaries.

Subject to the limitations described in "Risk Factors – Risks Relating to the Guarantees and the Collateral," the Subsidiary Guarantee of each Subsidiary Guaranter Pledgor will:

- be entitled to a first-ranking security interest in the Collateral (subject to any Permitted Liens and the Intercreditor Agreement) pledged by such Subsidiary Guarantor Pledgor, as described below under "Description of the Notes Security" and shared on a pari passu basis by holders of the Notes, the lenders of the New Standard Bank Facilities Agreement and any other creditors with respect to Permitted Pari Passu Secured Indebtedness incurred by such Subsidiary Guarantor Pledgor; and
- rank effectively senior in right of payment to the unsecured obligations of such Subsidiary Guarantor
   Pledgor with respect to the value of the Collateral securing such Subsidiary Guarantee (subject to any priority rights of such unsecured obligations pursuant to applicable law).

Security.....

The Company has agreed, for the benefit of the holders of the Notes, to pledge all of the Capital Stock of Mongolian Coal Corporation Limited owned by the Company and to cause the initial Subsidiary Guarantor Pledgor to pledge all of the Capital Stock of Mongolian Coal Corporation S.à.r.l. owned by the initial Subsidiary Guarantor Pledgor, in each case on a first-priority basis (subject to Permitted Liens and the Intercreditor Agreement) on the Original Issue Date pursuant to share charges or share pledges on the applicable Capital Stock of such Restricted Subsidiaries in order to secure the obligations of the Company under the Notes and the Indenture and of such initial Subsidiary Guarantor Pledgor under its Subsidiary Guarantee. The initial Subsidiary Guarantor Pledgor is Mongolian Coal Corporation Limited.

The Company has also agreed, for the benefit of the holders of the Notes, to pledge, or cause each Subsidiary Guarantor to pledge, the Capital Stock owned directly by the Company or such Subsidiary Guarantor of any Person that is a Restricted Subsidiary and that directly or indirectly holds the mining license in relation to the Ukhaa Khudag mine (other than Persons organized under the laws of Mongolia) (each such Person, an "Ukhaa Khudag Restricted Subsidiary") after the Original Issue Date, promptly upon such Person becoming an Ukhaa Khudag Restricted Subsidiary, to secure the obligations of the Company under the Notes and the Indenture, and of such Subsidiary Guarantor under its Subsidiary Guarantee.

Intercreditor Agreement .....

To regulate the application of proceeds of enforcement of the Collateral and the application of proceeds of enforcement of the guarantees provided by the Subsidiary Guarantors with respect to the Notes and the Company's and the Subsidiary Guarantors' obligations under the New Standard Bank Facilities Agreement (together the "Shared Guarantees"), the Company, the Subsidiary Guarantors, Standard Bank, the trustee of the Notes and the Shared Security Agent (among others) will enter into on or prior to the Original Issue Date an intercreditor agreement (as amended, waived, restated, replaced and/or supplemented from time to time, the "Intercreditor Agreement"). The Intercreditor Agreement sets out, among other things, the application of proceeds of enforcement of the Collateral and the Shared Guarantees and customary intercreditor provisions governing similar debt instruments. See "Description of the Notes -Security – Intercreditor Agreement." Pursuant to the intercreditor agreement, other than with respect to enforcement instructions and other circumstances as described under the Intercreditor Agreement, creditors representing 50% or more of the indebtedness subject to the Intercreditor Agreement shall be entitled to give any instruction (other than enforcement

instruction) which will override any conflicting instruction given by any other party. If the indebtedness of the Notes at such time constitutes less than 50% of the indebtedness subject to the Intercreditor Agreement, the holders of the Notes will not be able to override any prevailing instruction, and such prevailing instruction may not be in the best interest of the holders of the Notes.

Optional Redemption .....

At any time and from time to time on or after March 29, 2015, the Company may at its option redeem the Notes, in whole or in part, at redemption prices specified under "Description of the Notes - Optional Redemption." At any time and from time to time prior to March 29, 2015, the Company may at its option redeem the Notes, in whole or in part, at a redemption price equal to 100% of the principal amount of the Notes plus the Applicable Premium as of, plus accrued and unpaid interest on the Notes redeemed, if any, to (but not including) the redemption date. In addition, at any time and from time to time prior to March 29, 2015, the Company may at its option redeem up to 35% of the aggregate principal amount of the Notes with the Net Cash Proceeds of one or more sales of Common Stock of the Company in an Equity Offering at a redemption price of 108.875% of the principal amount of the Notes, plus accrued and unpaid interest on the Notes redeemed, if any, to (but not including) the redemption date; provided that at least 65% of the aggregate principal amount of the Notes issued on the Original Issue Date remains outstanding after each such redemption and any such redemption takes place within 60 days after the closing of the related Equity Offering.

Repurchase of Notes Upon a Change of Control.....

Not later than 30 days following a Change of Control, the Company will make an Offer to Purchase all outstanding Notes at a purchase price equal to 101% of the principal amount thereof plus accrued and unpaid interest, if any, to (but not including) the Offer to Purchase Payment Date. See "Description of the Notes – Repurchase of Notes upon a Change of Control".

Redemption for Tax Reasons ........

Subject to certain exceptions and as more fully described herein, the Company may redeem the Notes, in whole but not in part, at a redemption price equal to 100% of the principal amount thereof, together with accrued and unpaid interest, if any, to the date of redemption, if the Company or a Subsidiary Guarantor would be obligated to pay certain Additional Amounts (as defined in the "Description of the Notes") as a result of certain changes in specified tax laws. See "Description of the Notes – Redemption for Tax Reasons."

Covenants .....

The Notes, the indenture governing the Notes and the Subsidiary Guarantees will limit the Company's ability and the ability of its Restricted Subsidiaries to, among other things:

- incur additional Indebtedness;
- make investments or other Restricted Payments;
- pay dividends or make other distributions;
- enter into agreements that restrict the Company's Restricted Subsidiaries' ability to pay dividends;
- issue or sell Capital Stock of Restricted Subsidiaries;
- guarantee Indebtedness;
- enter into certain transactions with affiliates;
- create Liens;
- enter into Sale and Leaseback Transactions;
- sell assets;
- effect a consolidation or merger; and
- engage in different business activities.

All of these limitations are subject to a number of important qualifications and exceptions. See "Description of the Notes – Certain Covenants."

Transfer Restrictions.....

The Notes will not be registered under the Securities Act or under any state securities laws of the United States and will be subject to customary restrictions on transfer and resale. See "Transfer Restrictions."

Form, Denomination and Registration .....

The Notes sold within the United States in reliance on Rule 144A and outside the United States in reliance on Regulation S will be issued only in fully registered form, without coupons, in denominations of US\$200,000 and integral multiples of US\$1,000 in excess thereof and will be initially represented by one or more global notes registered in the name of a nominee of The Depository Trust Company.

Book-Entry ..... The Notes sold within the United States in reliance on Rule 144A and outside the United States in reliance on Regulation S will be issued in book-entry form through the facilities of DTC for the accounts of its participants, including Euroclear and Clearstream, Luxembourg. For a description of certain factors relating to clearance and settlement, see "Description of the Notes - Book - Entry; Delivery and Form." Delivery of the Notes ..... The Company expects to make delivery of the Notes, against payment in same-day funds on or about March 29, 2012 which is expected to be the fifth business day following the date of this offering memorandum. See "Plan of Distribution." Deutsche Bank Trust Company Americas. Trustee ..... Shared Security Agent ..... DB Trustee (Hong Kong) Limited. Principal Paying and Transfer Agent and Registrar ..... Deutsche Bank Trust Company Americas. Listing..... Approval in-principle has been received for the listing and quotation of the Notes on the Official List of the SGX-ST. Governing Law ..... The Notes, the Subsidiary Guarantees and the Indenture will be governed by and will be construed in accordance with the laws of the State of New York. The Intercreditor Agreement will be governed by, and construed in accordance with, the laws of England. The pledge of the Capital Stock of Mongolian Coal Corporation Limited will be governed by, and construed in accordance with, the laws of Hong Kong. The pledge of the Capital Stock of Mongolian Coal Corporation S.à.r.l. will be governed by, and construed in accordance with, the laws of Luxembourg. Risk Factors..... For a discussion of certain factors that should be considered in evaluating an investment in the Notes, see "Risk Factors."

#### SUMMARY FINANCIAL INFORMATION AND OTHER DATA

The following summary consolidated statement of comprehensive income data and summary consolidated cash flow data for the years ended December 31, 2009, 2010 and 2011 and the summary consolidated balance sheet data as of December 31, 2009, 2010 and 2011 set forth below have been derived from our consolidated financial statements which have been prepared in accordance with IFRS. You should read the summary historical financial information below in conjunction with our financial statements and the accompanying notes included in this offering memorandum.

### Summary consolidated statement of comprehensive income data

	Year ended December 31,		
	2009	2010	2011
	(in US\$'000, except earnings per share)		
Revenue	66,983	277,502	542,568
Cost of revenue	(38,682)	(164,368)	(336,368)
Gross profit	28,301	113,134	206,200
Other revenue	70	511	435
Other net (expenses)/income	(35)	(187)	76
Administrative expenses	(10,427)	(38,685)	(60,303)
Profit from operations	17,909	74,773	146,408
Finance income	342	12,335	22,236
Finance costs	(3,860)	(4,214)	(13,785)
Net finance (costs)/income	(3,518)	8,121	8,451
Share of (losses)/profits of associates	(10)	2	(119)
Profit before taxation	14,381	82,896	154,740
Income tax	(4,111)	(22,757)	(35,650)
Profit for the year	10,270	60,139	119,090
Exchange differences on re-translation	31	7,601	(79,153)
Total comprehensive income for the year	10,301	67,740	39,937
Profit attributable to the equity shareholders	10.270	60 120	110,000
of the Company	10,270	60,139	119,090
the equity shareholders of the Company	10,301	67,740	39,937
Basic earnings per share	0.34 cents	1.91 cents	3.21 cents
Diluted earnings per share	0.34 cents	1.91 cents	3.07 cents

#### Summary consolidated balance sheet data

	As of December 31,		
	2009	2010	2011
		(in US\$'000)	
Total non-current assets	83,162	338,137	1,233,194
Total current assets	30,068	715,133	394,821
Total assets	113,230	1,053,270	1,628,015
Total current liabilities	42,102	131,679	553,511
Total non-current liabilities	27,287	194,310	305,640
Total liabilities	69,389	325,989	859,151
Total shareholders' equity	43,841	727,281	768,864
Total liabilities and shareholders' equity	113,230	1,053,270	1,628,015

#### Summary consolidated cash flow data

	Year ended December 31,		
	2009	2010	2011
		(in US\$'000)	
Net cash (used in)/generated from operating activities	(4,024)	69,641	20,985
Net cash used in investing activities	(62,061)	(564,380)	(215,417)
Net cash generated from/(used in) financing activities	62,683	823,495	(79,871)

#### Other financial data

Year ended December 31,		
2009	2010	2011
(in US\$'000,		
except otherwise indicated)		
19,774	77,977	169,923
29.5%	28.1%	31.3%
1.7x	3.2x	3.3x
5.1x	18.5x	12.3x
	except 19,774 29.5% 1.7x	2009 2010 (in US\$'000, except otherwise ind 19,774 77,977 29.5% 28.1% 1.7x 3.2x

Notes:

<sup>(1)</sup> We calculate Consolidated Adjusted EBITDA by adding income tax, share of losses of associates, finance costs, depreciation and amortization and allowance for doubtful debts and subtracting share of profits of associates, finance income from profit attributable to the equity shareholders of the Company for the year as calculated under IFRS. We have included Consolidated Adjusted EBITDA data because such data is commonly used by investors to measure a company's ability to service debt. Consolidated Adjusted EBITDA is not, and should not be used as, an indicator or alternative to profit from operations, profit for the year or cash flow as reflected in our consolidated financial statements, is not intended to represent funds available for debt service, dividends or other discretionary uses, is not a measure of financial performance under IFRS and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. Investors should not compare Consolidated Adjusted EBITDA to EBITDA presented by other companies because not all companies use the same definition. For example, we subtract the depreciation expense associated with mining equipment while other competitors who own their equipment do not subtract this cost. Investors should also note that the Consolidated Adjusted EBITDA as presented herein is calculated differently from Consolidated EBITDA as defined and used in the Indenture governing the Notes. See "Description of the Notes -Definitions" for a description of the manner in which Consolidated EBITDA is defined for purposes of the Indenture governing the Notes. The following table reconciles our profit attributable to the equity shareholders of the Company for the year under IFRS to the definition of Consolidated Adjusted EBITDA for the periods indicated:

	Year ended December 31,		
	2009	2010	2011
	(in US\$'000)		
Profit attributable to the equity shareholders of the Company	10,270	60,139	119,090
Adjustments			
Income tax	4,111	22,757	35,650
Share of losses/(profits) of associates	10	(2)	119
Net finance costs/(income)	3,518	(8,121)	(8,451)
Depreciation and amortization	1,865	3,204	19,370
Allowance for doubtful debts	_	_	4,145
Consolidated Adjusted EBITDA	19,774	77,977	169,923

- (2) Consolidated Adjusted EBITDA margin is calculated by dividing Consolidated Adjusted EBITDA by revenue.
- (3) Total debt consists of interest-bearing borrowings (both current and non-current) and our US\$85.0 million QGX Convertible Bonds.
- (4) Interest expense represents the finance costs amounts in the consolidated statement of comprehensive income.

Our total debt and interest expense will increase significantly as a result of the offering of the Notes. See "Risk Factors – Risks Relating to the Notes – We have substantial indebtedness and may incur substantial additional indebtedness in the future, which could adversely affect our financial health and our ability to generate sufficient cash to satisfy our outstanding and future debt obligations".

#### **Operation Data**

	Year ended December 31,		
	2009	2010	2011
ROM coal production (Mt)	1.8	3.9	7.1
Average stripping ratio (actual) (BCM/t)	3.4	5.1	5.2
Total coal sales (Mt)	1.4	3.9	4.8
Average sales price per tonne of raw coal (US\$ per tonne) <sup>(1)</sup> Average sales price per tonne of washed coal	48.2	70.8	95.0
(US\$ per tonne) <sup>(2)</sup>	_	_	155.6

Notes:

- (1) See "Management's Discussion and Analysis of Financial Condition and Results of Operations Factors Affecting Results of Operation and Financial Condition Average selling prices" for a description of the factors affecting average sales prices of our coal.
- (2) We began selling washed coal in 2011 after the completion of the first module of our CHPP.

#### RISK FACTORS

In addition to other information in this offering memorandum, you should carefully consider the following risk factors before making any investment decision in relation to the Notes. If any of the events described below occurs, our business, prospects, financial condition and results of operations could be materially and adversely affected and the market price of the Notes could decline. See "Definitions" and "Glossary" for specific or specialized vocabulary used in this section.

#### Risks Relating to our Business and Industry

The Government of Mongolia could determine that any one or more of our projects in Mongolia is a Mineral Deposit of Strategic Importance and could take an equity, production, profit sharing or other interest in any of our projects.

Pursuant to the 2006 Minerals Law, the Parliament has wide discretion to designate mineral deposits to be Mineral Deposits of Strategic Importance. The Government of Mongolia is entitled to participate on an equity basis with the license holder in the exploitation and/or mining of each Mineral Deposit of Strategic Importance on terms to be negotiated between the Government of Mongolia and such license holder. Details of any minerals reserves must be filed by the relevant license holder with the Government of Mongolia, and those deposits on the Strategic Deposits List represent most of the largest and highest profile deposits in Mongolia. In addition to deposits currently on the Strategic Deposits List and the additional Tier 2 Deposits List, the Parliament may at any time designate other deposits not yet currently on either list to be Mineral Deposits of Strategic Importance, add such deposits to either the Strategic Deposits List or the Tier 2 Deposits List and, in the former case, commence negotiations with the relevant license holder with respect to the terms under which the Government of Mongolia will take an interest in such deposit. While the Government of Mongolia is in the process of adding the exact location and coordinates for each Mineral Deposit of Strategic Importance, a number of deposits on the Strategic Deposits List are identified by name only with no indication of the latitude and longitude coordinates for the deposit, and it is therefore not always possible to precisely determine the intended geographic area covered by each designated Mineral Deposit of Strategic Importance or to accurately determine whether or not any given license area is within, or overlaps with a Mineral Deposit of Strategic Importance.

Under the 2006 Minerals Law, the size of the Government of Mongolia's participation is determined largely by the level of state funding which has been provided for the exploration of any deposit, with the Government of Mongolia entitled to participate up to 50% in the event that there has been state funding. However, the 2006 Minerals Law is vague as to the details and method by which the Government of Mongolia will take its interest and the final arrangements in respect of the Government of Mongolia's interest in each Mineral Deposit of Strategic Importance, including the amount of compensation to be paid to the license holder and the actual form of the Government of Mongolia's interest are subject to negotiation between the Government of Mongolia and the license holder. In the past, state funds were used to conduct some of the exploration activities of our deposit. On September 12, 2008, we entered into an agreement with the MRAM and agreed to repay US\$1.18 million of state funds used in the historical exploration activities associated with our UHG mine on June 11, 2010. The 2006 Minerals Law also contains provisions requiring any company which holds a Mineral Deposit of Strategic Importance to list no less than 10% of its shares on the Mongolian Stock Exchange. This particular provision of the 2006 Minerals Law has not yet been enforced and it is not clear how it will be enforced in practice.

In recent years there have been a number of proposed amendments to the 2006 Minerals Law suggested by various parties, many of which have centered on amending the 2006 Minerals Law to increase the Government of Mongolia's participating interest in excess of 50%. While the 2006

Minerals Law provides that the interest of the Government of Mongolia should take the form of an equity interest, based on past practice, and depending on the results of individual negotiations, the interest may be in the form of production or profit sharing or some other arrangement negotiated between the license holder and the Government of Mongolia. There can be no assurance that legislation will not be enacted which further strengthens the Government of Mongolia's right to participate in privately held mineral resources in Mongolia.

In February 2007, the Parliament declared the six mining licenses originally held by us to be Mineral Deposits of Strategic Importance under the 2006 Minerals Law. After taking into consideration the economic development policies of Mongolia, we decided to sign the Minerals License Transfer Agreement, pursuant to which we agreed to transfer five of our six mining licenses to the Government of Mongolia. We assumed no liability after these five mining licenses were transferred to the Government of Mongolia. We received no cash consideration for the transfer of five of the six mining licenses to the Government of Mongolia. Our UHG deposit was on the list of Mineral Deposits of Strategic Importance, but having entered into the Minerals License Transfer Agreement with the Government of Mongolia, the Government of Mongolia guaranteed that our mining license would not be terminated or amended by requiring state equity participation on the development. Our Mongolian counsel, Economic & Legal Consultancy LLC, has confirmed that the Minerals License Transfer Agreement is valid, binding and enforceable in accordance with its terms and is binding on the Government of Mongolia. Economic & Legal Consultancy LLC has also confirmed that the Government of Mongolia has under the Minerals License Transfer Agreement waived its right under the 2006 Minerals Law to participate jointly with us (by compulsorily taking a 50% or other ownership interest in ER LLC or the relevant minerals) in the exploitation of the minerals deposit covered by Mining License MV-11952, or withhold any further permits or licenses or access to infrastructure necessary for such exploitation provided that we apply for the same in accordance with relevant rules. However, no assurance can be made that the Government will not take an equity or other interest in our UHG mine.

As of the date of this offering memorandum, our BN mine has not been designated as a Mineral Deposit of Strategic Importance or included on the Strategic Deposit List or the Tier 2 Deposits List as delineated in the Mongolian Parliamentary Resolution No. 27 dated February 6, 2007. However, there can be no assurance that our BN mine will not be designated as a Mineral Deposit of Strategic Importance or included on either list.

#### Our licenses are subject to termination, renewal and other uncertainties.

Our most significant licenses are the license covering our UHG deposit located in the Tavan Tolgoi coal formation located in South Gobi Province, which gives us the right to mine coal within the licensed area through August 29, 2036, and our BN mine license covering our BN deposit located in Umnugobi Aimag in South Gobi, which gives us the right to mine coal within the licensed area through December 1, 2038, both of which are extendable twice, each for an additional 20 years, subject to certain conditions. The Government of Mongolia could revoke either of our licenses if we fail to satisfy our obligations, including payment of royalties and taxes to the Government of Mongolia and the satisfaction of certain mining, environmental, health and safety requirements. As we conduct operations through contractors, any failure by these contractors to perform under their operating agreements may result in our failure to satisfy our obligations under our licenses. As a result, our mining licenses could be terminated by the Government of Mongolia, which will materially and adversely affect our business, prospects, financial condition and results of operations. In addition, we will require additional licenses or permits to conduct our mining or exploration operations in Mongolia. There can be no assurance that we will be able to obtain and maintain such licenses or permits on terms favorable to us, or at all, for our future intended mining or exploration targets in Mongolia, or that such terms would not be subject to various changes.

#### Coking coal prices are cyclical and subject to significant fluctuation.

Our results of operations are highly dependent on world coal prices, which tend to be highly cyclical and subject to significant fluctuations. The world coal markets are sensitive to changes in coal mining capacity and output levels, patterns of demand and consumption of coal from the steel industry and other industries, for which coal is the principal raw material, and changes in the world economy. Improved distribution of Australian coking coal, an economic downturn in China, India or Asia in general or a change in Chinese government policy restricting coking coal imports could reduce world coal prices from current levels. The occurrence of any of these events can have a significant impact on selling prices for our coal. Although we have entered into supply agreements with terms ranging from one to ten years with several of our customers, most of these agreements provide that the price of coal sold is determined quarterly based on market prices and therefore do not protect against declines in world coal prices. An extended or substantial decline in world coal prices or the price for our coal may materially and adversely affect our business, prospects, financial condition and results of operations.

Historically, the Chinese coking coal and coal-related product markets have at times experienced alternating periods of increased demand that caused production capacity, volumes, prices and margins to increase, followed by periods of excess supply that caused prices and margins to decline. For example, due to floods in the state of Queensland in Australia in 2008, which negatively impacted the coking coal supply, and the high demand for coking coal products from Chinese state-owned steel manufacturing companies, the selling prices of washed coal and coke reached historically high levels in the first half of 2008. The average selling prices of washed coal and coke dropped significantly by the end of 2008 due to the effects of the global credit crisis and economic slowdown. In an effort to tackle the global financial crisis, China launched a stimulus package aiming at further expanding domestic demand and promoting economic growth which led to heightened domestic structural steel consumption. In 2010, China's urbanization continued to be one of the key growth drivers for construction steel, and by the end of 2010, washed coal and coke prices rebounded significantly. In 2011, the robust demand and tight supply of coking coal in China offset the effects of a slowdown in world economic growth, which resulted in a stabilized trend in the prices of washed coal and coke.

During the past 20 years, a growing world coal market and increased demand for coal worldwide have attracted new investors to the coal industry, spurred the development of new mines and expansion of existing mines in various countries, including Mongolia, Indonesia, China, Australia and Colombia, and resulted in added production capacity throughout the world. Increases in coal prices could encourage new or existing international coal producers to expand their production capacity. Any oversupply of coal in the world markets could reduce world coal prices in the future and the selling prices of our coal products, which could materially and adversely affect our business, prospects, financial condition and results of operations.

There is no assurance that Chinese demand for coking coal and coal-related products will continue to grow, or that the Chinese coking coal and coal-related markets will not experience excess supply in the future. A significant increase in the supply of or decrease in the demand for coking coal and coal-related products may cause the average selling prices of our coal products to decrease and therefore would have a material adverse effect on our business, prospects, financial condition and results of operations.

The accuracy of our resources and reserves estimates is based on a number of assumptions and we may produce less coal than our current estimates.

Our resources and reserves estimates are based on a number of assumptions in accordance with the JORC Code. There can be no assurance that our resources and reserves will be recovered in the quantities, qualities or yields presented in this offering memorandum. Coal resources and reserves estimates are inherently prone to variability. They involve expressions of judgment with regard to the presence and quality of mineralization and the ability to extract and process the mineralization economically. These judgments are based on a variety of factors, such as knowledge, experience and industry practice. The accuracy of these estimates may be affected by many factors, including the quality of the results of drilling and sampling of the coal deposits and analysis of the coal samples and the procedures adopted and experience of the person(s) making the estimates. There are risks associated with such estimates, including that coal mined may be of a different or inferior quality, volume, overburden strip ratio or stripping cost from the resource estimates. Such estimates may also be revised following further exploration or analysis.

We may at any time commission a new report to estimate the resources and reserves of our deposits. We are currently obtaining a new reserve report for our BN deposit which we expect to be completed by the end of 2012.

If we encounter mineralization or geological or mining conditions different from those predicted by historical drilling, sampling and similar examinations, we may have to adjust our mining plans in a way that may materially and adversely affect our business, prospects, financial condition and results of operations and reduce the estimated amount of coal resources and reserves available for production and expansion plans.

You should not assume that the resources estimated are capable of being directly reclassified as reserves under the JORC Code. The inclusion of resources estimates should not be regarded as a representation that these amounts could be exploited economically. You are cautioned not to place undue reliance on resources and reserves estimates.

We have significant levels of indebtedness, which could adversely affect us or the holders of the Notes.

As of December 31, 2011, we had US\$561.7 million in outstanding short-term and long-term borrowings, including indebtedness incurred under (i) our US\$180 million facility agreements with EBRD, FMO and DEG, (ii) our US\$400 million Existing Standard Bank Facilities Agreement, (iii) our US\$85 million QGX Convertible Bonds and (iv) our US\$13 million facility agreement with Khan Bank. See "Capitalization and Indebtedness" for a description of our outstanding short-term and longterm borrowings as of December 31, 2011 or on as adjusted basis giving effect to the issuance of the Notes. In addition, on March 8, 2012, we entered into the New Standard Bank Facilities Agreement. See "Description of Other Material Indebtedness - New Standard Bank Facilities Agreement". There can be no assurance that we will be able to obtain extensions of our credit facilities in the future as they mature or alternative sources of financing as our convertible bonds become due. In the event that we are unable to obtain extensions of these facilities, or if we are unable to obtain sufficient alternative funding at reasonable terms, we will have to repay these borrowings with cash generated by our operating activities. There can be no assurance that our business will generate sufficient cash flow from operations to repay these borrowings. In addition, repaying these borrowings with cash generated by our operating activities will divert our financial resources from the requirements of our ongoing operations and growth, and may have a material adverse effect on our business, prospects, financial condition and results of operations. Furthermore, we are subject to interest rate fluctuations on our financial indebtedness which may adversely impact our cash flow if prevailing interest rates

increase. See "Management's Discussion and Analysis of Financial Condition and Results of Operations – Quantitative and Qualitative Disclosures About Market Risk – Interest Rate Risk".

Our credit facilities and convertible bonds contain covenants that restrict us and our subsidiaries from engaging in various transactions. Certain breaches, misrepresentations or defaults by, or an insolvency of, us or our subsidiaries could trigger an event of default under these financing agreements, which in turn would trigger an event of default under the Notes. This could materially and adversely affect us and the holders of the Notes. Any acceleration of indebtedness may cause defaults and cross defaults under our current and future financing agreements, and as well as significant reductions in our liquidity and may have a material adverse effect on our business, prospects, financial condition and results of operations. As of December 31, 2011, we had US\$561.7 million of outstanding bank borrowings and convertible bonds, all of which contained cross-default provisions. As of the date of this offering memorandum, the Subsidiary Guarantors have pledged certain accounts, our construction agreement with Sedgman for our CHPP, our coal mining agreement with Leighton, our offtake agreements, our CHPP, our water supply infrastructure assets, our 3x6 MW power plant and certain motor vehicles as collateral in connection with our EBRD, FMO and DEG Loan Agreements, our Existing Standard Bank Facilities Agreement and our Khan Bank Facility Agreement. In addition, ER LLC and we have granted a security interest in favor of Standard Bank over certain accounts, coal collateral and our rights under certain of our coal sales contracts to secure the New Standard Bank Facilities Agreement and, substantially simultaneous with the issuance of the Notes contemplated hereunder, the Collateral will be charged to secure both our obligations under the Notes and the New Standard Bank Facilities Agreement, on a pari passu basis. We may lose part or all of these pledged property and assets if we default on these secured borrowings, which would have a material adverse effect on our business, prospects, financial condition and results of operations. See "Description of Other Material Indebtedness".

#### Coal markets are highly competitive and are affected by factors beyond our control.

We sell substantially all of the coal we produce into China. We compete with Chinese, Mongolian and other foreign coal producers (primarily from Australia) in the Chinese coal market. Competition in the Chinese coal market is based on many factors, including, among others, price, production capacity, coal quality and characteristics, transportation capability and costs, blending capability and brand name. Due to their location, some of our Chinese competitors may have lower transportation costs than we do. The Chinese coal market is highly fragmented and we face price competition from some small local coal producers that produce coal for significantly lower costs than we do, due to various factors, including their lower expenditure on safety and regulatory compliance. In addition, there was a slight decline in Chinese coal imports in 2011 due to a dramatic increase in the Chinese coking coal supply after the consolidation of the Chinese coal mining industry and high international coking coal prices. Some of our international competitors may have greater coal production capacity as well as greater financial, marketing, distribution and other resources than we do, and may benefit from more established brand names in international markets. As Mongolia is a landlocked country sharing borders only with China and Russia, we may be unable to access other markets if there is reduced demand for coal from China. Our inability to maintain our competitive position as a result of these or other factors could materially and adversely affect our business, prospects, financial condition and results of operation.

We may be adversely affected by future economic downturns that reduce the demand for steel, in particular, any economic downturn in China, including as a result of the financial crisis in Europe.

Any future economic downturn that reduces the demand for steel will have a negative impact on the demand for steel in China. While year-on-year growth rates in China's demand for steel have historically fluctuated dramatically, demand has continued to increase on an aggregate basis. Despite the Chinese government's recent efforts to cool down the overheating economy, particularly the real estate sector, China's apparent steel use in 2011 is still expected to have risen by approximately 7.5% year-on-year to 643.2 Mt according to the World Steel Association, mostly supported by growth in domestic infrastructure projects. As substantially all of our coking coal is currently sold to China and we believe is principally used in the manufacture of steel in China, a reduction in the demand for steel in China would directly reduce the demand for our coking coal. The financial crises in Europe could further weaken global demand for manufactured products and thereby indirectly weaken the Chinese economy and reduce the demand for steel in China. Construction has been one of the principal uses of steel in China, and any slowdown in the construction sector of the Chinese economy, whether as a result of falling housing prices or otherwise, could significantly reduce the demand for steel in China. As Mongolia is a landlocked country sharing borders only with China and Russia, we may be unable to access other markets if there is reduced demand for coal in China. This would have a material and adverse impact on our business, prospects, financial condition and results of operations.

### Disruptions in transportation could adversely affect the demand for our coal.

Substantially all of our coal production is exported into China. Inadequate transportation infrastructure on both the Mongolia and Chinese sides of the border affects the pricing terms under which we sell our coal to customers and the willingness and ability of our customers to purchase coal from us. Our customers factor in any delays and the costs and availability of transportation in determining whether to purchase coal products from us and the prices they are willing to pay.

Our mining operations are highly dependent on road and rail services in Mongolia and in China. A bottleneck in the transportation of coal from our UHG mine to customers in China may arise if the road connecting our UHG mine to the GS border crossing does not have sufficient capacity to support the increased amount of cargo traffic or is affected by external factors such as disruptions caused by bad weather or delays or closures by governmental authorities for any reason. Our coal hauling operations on the road from the Tavan Tolgoi area to TKH were suspended for 23 days between April 21, 2011 to May 14, 2011 by the Inspector of the Umnugobi Aimag (South Gobi Province) Professional Inspection Agency to improve safety standards and reduce negative environmental impact on the area surrounding, what was at the time, a gravel road which was the cause of air pollution due to traffic-generated dust. While we began using our paved road with 18.0 Mtpa capacity of coal transportation from UHG mine to GS in October 2011 and we have significantly increased our trucking fleet to support our coal transport, there can be no assurance that our coal hauling operations on any part of our paved road will not be suspended in the future.

The hours of operation, the handling capacity and the potential closure of the GS border crossing also affect our ability to expedite the movement of our coal transportation. In January 2012, we together with Erdenes MGL, completed and commissioned an expansion of the GS border crossing to increase the throughput capacity and efficiency. However, there can be no assurance that the Mongolian and Chinese governments will continue to support further development and expansion of border-crossing handling capacity or that the respective customs authorities will handle our coal shipments in an efficient manner or in priority over other coal or freight being transported by other parties. In addition, the tariff for railway use may be set by the Government of Mongolia at a level that makes future railway transportation uneconomical when and if our UHG-GS railway is completed. There can be no assurance that, in such situations, there would be any other cost effective means of transporting the coal to our primary markets in China. As a result, our coal sales may be constrained and our results of operation adversely affected. See "— Our paved road connecting our UHG mine to the border crossing at GS is subject to a BOT license."

In China, rail and road infrastructure and capacity have in the past been affected by extreme weather conditions, earthquakes, delays caused by major rail accidents, the diversion of rolling stock

needed to deliver emergency food relief and seasonal congestion during public holidays. There can be no assurance that these events, or other new events will not occur in the future. In any of these circumstances, customers may not be able to take delivery of our coal, which may lead to delays in payment or refusal to pay for our coal and, as a result, our business, prospects, financial condition and results of operations could be materially and adversely affected.

Our UHG-GS railway is subject to various risks and uncertainties; we are not sure when we can commence and complete construction of the railway, what the actual cost of the project will be, or whether the project will be successful.

In order to lower our transportation costs and increase reliability and operational efficiency, we intend to commence construction of a railway directly from our UHG mine to GS in 2012. See "Business – Logistics and Transport – Railway". We are not sure when we can commence construction of our UHG-GS railway or whether our investment in the railway project will be successful as a result of many factors, including:

- In June 2010, the Parliament passed Resolution No. 32 announcing its railway development policy. According to the policy, railway development will be conducted in three stages: (1) Tavan Tolgoi-Sainshand-Choibalsan railway, (2) our UHG-GS railway and other railways that go directly to the border of Mongolia and (3) railways going to western Mongolia from Tayan Tolgoi. The policy also specified that broad gauge rails would be used for crossing or connecting to existing railways, and use of standard gauge rails at the border will be discussed and decided by the Parliament at a later time. The policy left uncertain the starting time for construction and the gauge of those railways for the second stage. In June 2011, the Government of Mongolia announced that construction of second stage railways may proceed simultaneously with construction of the first stage. As of the date of this offering memorandum, the Government of Mongolia has not selected which gauge to use for our UHG-GS railway. While we expect the Parliament to support the construction of our UHG-GS railway, there can be no assurance that the Government of Mongolia will permit us to construct our UHG-GS railway in accordance with its railway development policy. We will not be able to begin constructing our UHG-GS railway until after the Government of Mongolia announces which rail gauge must be used for our UHG-GS railway.
- The Government of Mongolia issued Resolution 252 dated June 18, 2008 granting us the license to build our UHG-GS railway base infrastructure between UHG and GS for an initial three-year term beginning from January 19, 2009 and subsequently extended for three years beginning January 19, 2012. We entered into the license agreement for railway construction with the Railway Authority of Mongolia on September 5, 2008 and a detailed supplement to the license agreement on January 19, 2009. After the Government of Mongolia determines which gauge must be used in our UHG-GS railway, we plan to apply to the Railway Authority of Mongolia to amend the license agreement to comply with current Mongolian laws and policies. We will also be required to obtain a permit before we can commence and continue construction of our UHG-GS railway. There can be no assurance that we will be able to amend our license agreement or obtain the necessary construction permit on a timely basis or at all.
- There can be no assurance that we will own 100% of our UHG-GS railway as the Government of Mongolian and other third-parties may seek ownership stakes in the railway. In 2010, the Government of Mongolia announced its intention to develop one of its own deposits located in the Tavan Tolgoi coal formation and subsequently commenced production at the deposit in January 2011. While we do not expect this development to interfere with the construction of our UHG-GS railway, there can be no assurance that the

Government of Mongolia will not reevaluate our railway project in light of its decision to develop its own deposit in the Tavan Tolgoi coal formation.

- In the event that the Government of Mongolia or other parties develop an alternative railway project to connect the Tavan Tolgoi coal formation to the national railway network and beyond, we may decide to participate or be encouraged to participate in such alternative project or a portion thereof. One such alternative route would be a railway from Tavan Tolgoi to Sainshand and then to Choibalsan in eastern Mongolia. Any such investment or involvement may require significant capital investment and management resources. Even if we were to invest in any such alternative project, we may not have significant control or influence over the management of such project. There can be no assurance that our investment and involvement in such project, if any, would provide us with an economically attractive transportation route in a timely manner or at all or that our investment in such a project will not be lost.
- Pursuant to a feasibility study we conducted in 2009, we estimated the total cost of constructing our UHG-GS railway using standard gauge track will be approximately US\$700 million. The cost estimate does not include capitalized interests or working capital costs. In addition, we estimate that construction costs will be approximately US\$100 million higher if we use broad gauge rail. The actual total construction cost of the railway if we use broad gauge rail may be significantly higher than our estimates due to various factors, including delays, cost overruns, lack of financing, governmental policies, and many other factors. We cannot assure you that we will generate sufficient cash flows from operations or obtain the required financing on acceptable terms or at all to meet the capital expenditure requirements to construct our UHG-GS railway.
- We will engage third-party contractors to build our UHG-GS railway. There can be no
  assurance we will be able to contract with contractors on acceptable terms or at all. In
  addition, difficulties encountered by our contractors to fulfill their contractual obligations
  may require us to make alternative arrangements, cause delays and potentially increase
  costs.
- Our contractors may face difficulty in fulfilling their capital expenditure and operating plans, which are subject to risks, contingencies and other factors, some of which are beyond their control, such as increases in costs of equipment and materials and their ability to secure necessary approvals, recruit a sufficient number of qualified employees and obtain required financing on acceptable terms or at all.
- We expect that it will take approximately two to three years from the construction commencement date to complete construction of our UHG-GS railway. Various factors could substantially delay the construction of our UHG-GS railway, including inclement weather, shipping delays, safety issues and equipment and machinery malfunctions once operations commence.
- We have no experience constructing or operating a railway and may not be able to acquire, or contract with contractors who have, sufficient experience operating railways.
- Our UHG-GS railway will be a single-line heavy-haul freight railway approximately 240 km in length and will be used to transport our coal. Based on the feasibility study conducted by Deutsche Bahn, we expect to use approximately 500 wagons and 20 locomotives on our UHG-GS railway and support up to 15.0 Mtpa of coal transportation. We cannot assure you that our UHG-GS railway will operate up to our planned specifications.

- We currently transport our coal from our UHG mine to GM by truck. While we expect the
  opening of our UHG-GS railway will be more cost effective compared to our current
  transportation methods, there can be no assurance our transportation costs will decrease or
  not increase after we commission our UHG-GS railway.
- Mongolia's railways are mostly broad gauge and use Russian railway technology, while China's railways are standard gauge. We currently plan to construct our UHG-GS railway using standard gauge to allow easier connectivity with Chinese railways. However, the Government of Mongolia may require us to use broad gauge rail, in which case we would encounter greater difficulty connecting to the Chinese railway system.
- The Government of Mongolia will set a formula to determine the access fee (tariff) for use of our UHG-GS railway base infrastructure. The formula to be used to calculate the fee has not been set and there is no assurance that it will be set at a rate that makes use of our UHG-GS railway economical.
- Under the BOT license agreement, the Government of Mongolia may at any time take control of our UHG-GS railway. There can be no assurance that we would be adequately compensated or compensated at all if the Government of Mongolia took control of our UHG-GS railway or that we would be able to use an alternative transportation method to deliver our coal that is economical.
- An interconnecting railway to the Sino-Mongolian border from the Chinese side will be important to link our UHG-GS railway to the Chinese railway system, as our coking coal must pass through Baotou in order to reach the largest steel producing provinces of China. The Chinese Ministry of Railway has commenced construction of a railway connecting GM to Xixiaozhao that passes through Jinquan, Inner Mongolia. The Chinese Ministry of Railway already operates a railway between Xixiaozhao and Baotou. Completion of the GM-Xixiaozhao railway would allow our coal to travel from GM to Baotou using the Chinese Ministry of Railway's railway. Shenhua Group also has commenced construction of a railway connecting GM to Baotou. In order to use the Shenhua Group railway, we would need to obtain the consent of the Shenhua Group. There can be no assurance that the GM to Xixiaozhao railway will be completed or that we will obtain the consent of the Shenhua Group to use its railway, either of which could make the anticipated economic benefits of our UHG-GS railway unobtainable.

The factors described above or other factors could prevent or delay the construction of our UHG-GS railway, increase costs or result in our UHG-GS railway not achieving intended economic benefits, which could have a material adverse effect on our business, prospects, financial condition and results of operations.

We need additional capital to fund our operations and growth which we may not be able to obtain on acceptable terms, or at all.

We need capital to fund our current expansion and infrastructure development plans. There can be no assurance that we will generate sufficient cash flows for our intended expansion and infrastructure development plans. In the event that we are unable to generate sufficient operating cash flows from operating activities, we will need to obtain alternative financing.

Whether we will be able to obtain adequate financing on acceptable terms, or at all, will be subject to a variety of uncertainties, including, but not limited to:

• investor and lender perceptions of and appetite for securities and borrowings of companies engaged in the coal mining and production;

- conditions in the capital and financial markets in which we may seek to raise funds;
- our future results of operations, financial condition and cash flows;
- Mongolian regulation of foreign investment in companies engaged in the coal mining and production;
- economic, political and other conditions in Mongolia, China and the rest of the world;
- the amount of capital that other Mongolian entities may seek to raise in the foreign capital markets; and
- Mongolian government policies relating to foreign currency borrowings.

The terms of any future debt facilities may impose restrictive covenants that may limit our business and operations. In the event that we breach any of these covenants, we may not be able to obtain waivers from our lenders. Our inability to raise additional funds in a timely manner and on terms favorable to us, or at all, may have a material adverse effect on our business, prospects, financial condition and results of operations. See "– We have significant levels of indebtedness, which could adversely affect us or the holders of the Notes".

We may have limited ability to obtain financing to fund our future growth plans. The global financial markets have experienced significant deterioration and volatility in the past few years, which may adversely affect our financial condition and results of operations.

Recent difficulties affecting the global financial sectors, adverse conditions and volatility in the United States and worldwide credit and financial markets, fluctuations in oil and commodity prices and the general weakness of the global economy have increased the uncertainty of global economic prospects in general. In 2007, credit markets in the United States began to experience difficult conditions and volatility that in turn affected worldwide financial markets. In 2008, liquidity and credit concerns and volatility in the global credit and financial markets increased significantly with the bankruptcy or acquisition of, and government assistance to, several major U.S. and European financial institutions. These developments resulted in reduced liquidity and greater volatility in the United States and global credit and financial markets. In 2009, these concerns and volatility were heightened by government assistance and incentives to several major non-financial U.S. and European companies, and additional requests for such assistance.

In addition, in 2010, a financial crisis emerged in Europe, triggered by high budget deficits and rising direct and contingent sovereign debt in Greece, Ireland, Italy, Portugal and Spain, which created concerns about the ability of these European nations to continue to service their sovereign debt obligations. These conditions impacted financial markets and resulted in high and volatile bond yields on the sovereign debt of many European nations. Certain European nations continue to experience varying degrees of financial stress, and yields on government-issued bonds in Greece, Ireland, Italy, Portugal and Spain have risen and remain volatile. Despite assistance packages to Greece, Ireland and Portugal, the creation of a joint European Union-IMF European Financial Stability Facility in May 2010, and other European Union actions aimed at addressing the financial challenges, uncertainty over the outcome of the European Union governments' financial support programs and worries about sovereign finances persist.

As a result of these worldwide economic conditions, growth and demand for coking coal may diminish in China, our primary sales market. In addition, the credit tightening environment may affect our ability to obtain financing, or banks may even reduce the amount of or discontinue the banking facilities currently available to us. An environment of credit tightening can adversely affect our ability to secure sufficient financing to fund our projects. In the short to medium-term, we plan to expand our CHPP capacity, build a railway from our UHG mine to the GS border crossing and expand capacity at our water supply facility. These expansion and development projects are capital intensive and will require substantial expenditures. For further details regarding our capital expenditure plans, please see "Management's Discussion and Analysis of Financial Condition and Results of Operations – Capital Expenditures". Any expansion of our capacity will be highly dependent upon our ability to obtain additional financing, which is subject to a variety of uncertainties, including:

- our future financial condition and credit rating;
- general market conditions for financing activities;
- our share price; and
- Government of Mongolia policies and regulations relating to coal mining enterprises and lending in general.

External financing may not be available in a timely manner, on acceptable terms, or at all. If we are unable to expand our capacity, we may be unable to grow our business and remain competitive, or provide services to companies with significant capacity requirements, which may have a material adverse effect on our ability to grow our revenue.

There can be no assurance that actions taken by international organizations and various governments will be effective in addressing the global financial and economic crisis. In the event that the recent financial crisis becomes more severe, or lasts longer than currently estimated, our business, liquidity, financial condition, results of operations and prospects could be materially and adversely affected.

### Our mining activities are subject to operational risks, hazards and unexpected disruptions.

Our mining activities are subject to a number of operational risks and hazards, some of which are beyond our control, and could delay the production and delivery of our coal, increase our cost of mining or result in accidents in our mine. These risks and hazards include unexpected maintenance or technical problems, periodic interruptions due to inclement or hazardous weather conditions, natural disasters such as earthquakes, industrial accidents, power, water or fuel supply interruptions or increase in price of such supplies, critical equipment failure, malfunction and breakdowns of information management systems, fires, and unusual or unexpected variations in mineralization, geological or mining conditions. These risks and hazards may result in personal injury, damage to or destruction of properties or production facilities, environmental damage, business interruption, possible legal liability, damage to our business reputation and corporate image and, in severe cases, fatalities. In the years ended December 31, 2009, 2010 and 2011, there were 20 reported traffic accidents in connection with our coal transportation, which resulted in three traffic accident fatalities. As of December 31, 2011, none of these accidents resulted in a significant financial or operational impact to our operations. While we believe the opening of our UHG-GS railway, if constructed, will reduce accidents related to our coal trucking operations, there can be no assurance that accidents will not occur in the future. Such accidents may have a material adverse effect on our reputation, business, prospects, financial conditions and results of operations.

Our limited operating history may not serve as an adequate measure of our future prospects and results of operations.

We have only limited historical operating data and financial information available upon which you can base your evaluation of our business and prospects. We commenced mining operations in April 2009. As a result, we may not have sufficient experience to address the risks frequently encountered by companies with a limited operating history, including our potential failure to:

- increase our mining capacity significantly beyond current levels;
- maintain profitability;
- acquire and retain customers;
- attract, train, motivate and retain qualified personnel;
- keep up with evolving industry standards and market developments;
- manage our expanding operations, including the integration of any future acquisitions;
- anticipate and adapt to any changes in government regulation, mergers and acquisitions involving our competitors and other significant competitive and market dynamics;
- manage the logistics, utility and supply needs of our expanded operations; or
- maintain adequate control over our costs and expenses.

If we fail to address any of these risks, our business and financial results would be materially and adversely affected. Accordingly, you should consider our business and prospects in light of the risks, expenses and challenges that we will face as a company with limited operating history.

# We are experiencing a period of rapid growth and may not be able to manage our growth effectively.

We are experiencing a period of rapid growth and expansion that has placed, and continues to place, significant constraints on our management personnel, systems and resources. For the years ended December 31, 2009, 2010 and 2011, we produced 1.8 Mt, 3.9 Mt and 7.1 Mt of ROM coal, respectively. We intend to increase our coal production capacity to approximately 15.2 Mtpa in the year ending December 31, 2014. In addition, we have completed the construction of and commissioned the first and second modules of our CHPP to produce high-quality washed coal. The first and second modules of our CHPP, each with ROM coal nameplate processing capacity of 5.0 Mtpa, have been in operation since June 2011 and February 2012, respectively. We began constructing the third module with ROM coal nameplate processing capacity of 5.0 Mtpa in August 2011 and expect to complete construction by the end of 2012. In connection with this expansion, we are expanding our water supply by another 100 liters per second to accommodate the increase of our coal processing capacity. In addition, we are planning to build a railway from our UHG mine to the GS border and we may participate in an alternative railway project led by the Government of Mongolia that connects the Tayan Tolgoi coal formation to the national railway network. To accommodate this growth, we anticipate that we will need to implement a variety of new and upgraded operational and financial systems, procedures and controls, including the improvement of our accounting and other internal management systems, all of which require substantial management effort and significant additional expenditures. There can be no assurance that we will be able to manage our growth effectively, and failure to do so may have a material adverse effect on our business, prospects, financial condition and results of operations.

We are dependent on future cash flows generated from our business and obtaining additional financing to support our business operations and expansion plans, and to continue as a going concern.

We have cash requirements for ongoing operating expenses, working capital, general corporate purposes and for interest and principal payments on our outstanding borrowings. As of December 31, 2011, we recorded net current liabilities of US\$158.7 million. If we are unable to generate sufficient revenue and cash flows from our operations or secure additional financing to meet our obligations, we may be forced to reduce expenditures or not be able to continue as a going concern. Reduction of expenditures could have a negative impact on our business and would make it more difficult for us to execute our strategy, including our expansion plans in accordance with our expectations. We may be required to make additional payments pursuant to the acquisition agreement for our BN mine, thereby impacting our cash requirements. See "— We may have to make additional payments under the acquisition agreement for our BN mine".

In addition, our financial statements included in this offering memorandum have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. Our ability to continue as a going concern is substantially dependent on our profits and cash flows from operations and our ability to obtain continued bank financing to meet our working capital and financing requirements. If there is an adverse change to our profits, cash flow or ability to obtain additional financing, our financial statements may need to be prepared on an alternative authoritative basis and adjustments relating to the recoverability and classification of recorded asset amounts or the classification of liabilities may need to be made.

#### We face risks under our expansion program.

We intend to expand our coal production capacity to approximately 15.2 Mtpa in the year ending December 31, 2014. Our contractors are responsible for obtaining any additional equipment required for them to increase the production capacity to comply with our expansion plans and their contractual obligations.

We may not be able to increase our coal production capacity as a result of many factors, including:

- the failure of equipment and machinery installed to perform according to specifications or our expectations;
- difficulties encountered by our contractors in obtaining or financing the purchase of
  machinery, equipment and spare parts, particularly coal hauling trucks, excavators and tires
  for such equipment, required to increase production, due to capacity and supply constraints
  in the world steel and rubber markets and high global demand for those materials and other
  mining equipment;
- the failure of any of our contractors to fulfill its contractual obligations, which would require us to make alternative arrangements, may cause delays and potentially increase the costs of our expansion plans;
- the failure of our contractors to fulfill their capital expenditure and operating plans, which
  are subject to risks, contingencies and other factors, some of which are and will be beyond
  their control, such as increases in costs of equipment and materials and their ability to
  secure necessary approvals, recruit a sufficient number of qualified employees and obtain
  required financing on acceptable terms or at all; and

 unforeseen conditions or developments that could substantially delay our planned expansion, including adverse weather conditions and equipment and machinery malfunctions once operations commence.

### We may not be successful in developing and operating our BN mine.

We acquired our BN mine in June 2011 and commenced operations at our BN mine in February 2012. The development and operation of coal mines is subject to a broad range of operational, regulatory, geological and economic risks. There can be no assurance that we will be able to successfully develop and operate this mine or that the economics and scope of coal production from this mine will meet our expectations or be economical at all. We are currently engaged in owner mining at our BN mine. We have engaged contractors to mine coal at our UHG mine since its opening and therefore have no direct experience mining coal. We cannot assure you that we will be able to successfully conduct our own mining operations at our BN mine. In addition, while we may undertake a tendering process to engage a contractor for our coal mining operations at our BN mine, there can be no assurance that we would be able to engage a contractor on satisfactory terms, or at all. If we fail to successfully develop and operate our BN mine, we may have to write off all or a portion of the consideration paid in connection with the acquisition and capitalized exploration expenses, which amounted to US\$626.0 million as of December 31, 2011.

#### We may have to make additional payments under the acquisition agreement for our BN mine.

The total consideration was US\$464.5 million for the acquisition of our BN mine on June 1, 2011, consisting of US\$100.0 million in cash, the promissory note of US\$279.5 million and the issuance of the QGX Convertible Bonds in the aggregate principal amount of US\$85 million. This consideration is subject to adjustments as a result of the total reserves of such mine exceeding 150 Mt or the production exceeding certain amounts as described in more detail in "Business – BN Mine-Consideration". The maximum amount of additional consideration payable by us pursuant to such adjustments is US\$485.5 million, including up to US\$105.0 million for the reserve adjustment which will be determined by the results of a new reserve report that is expected to be completed by the end of 2012. To the extent that any such amounts become payable, particularly at a time when our BN mine does not contribute corresponding amounts of free cash flow to our business, payment of such amounts could adversely affect our financial condition. A failure to pay such amounts would constitute a default under the acquisition agreement and potentially cross defaults under our other existing and future contractual arrangements. See "Business – BN Mine".

# The development of any new technology or the use of alternative supply sources in the production of iron and steel may directly impact the demand for coking coal.

The demand for coking coal is directly correlated with the production of crude steel. As a result, any alternative energy source, such as PCI coal, or any heavy fuel oil injection into blast furnaces, or any new technology in steel production, such as electric arc furnace which omits coke from the steel production process, if adopted by steel manufacturers in China, would negatively affect the demand for coking coal. This could, in turn, materially and adversely affect our business, prospects, financial condition and results of operations.

# We may not be successful in future acquisitions or may encounter difficulties in integrating and developing the acquired assets or businesses.

We plan to increase our mineral resources through acquisitions of companies with existing exploration rights and additional mining assets. In addition to mining licenses and mining assets, if we are presented with strategically attractive opportunities, we may acquire other businesses or assets that

are complementary to our business. We do not have specific timetables for these plans and there can be no assurance that we will be successful in these acquisitions. In addition, we must receive various regulatory approvals or permits in order to develop new reserves or businesses. Our inability to successfully acquire companies with existing exploration rights and additional mining assets, develop mineral resources or obtain necessary governmental approvals may have a material adverse effect on our business, prospects, financial condition and results of operations.

In June 2011, we completed the acquisition of our BN mine. While we believe the acquisition provides us with a unique opportunity to purchase a coking coal asset strategically located approximately 30 km to the southwest of our UHG mine in an advanced development stage and allows us to expand our existing footprint in Mongolia, there can be no assurance that we will be able to generate profits through the operation of our BN mine.

Future acquisitions may also expose us to potential risks and unforeseen operating difficulties and expenditures, including risks associated with the assimilation of new technologies, businesses and personnel, unforeseen or hidden liabilities, the diversion of management attention and resources from our existing business and the inability to generate sufficient revenues to offset the costs and expenses of an acquisition. Any difficulties encountered in the acquisition and integration process may have a material adverse effect on our business, prospects, financial condition and results of operations.

#### We may acquire and develop non-coal assets.

As part of our mineral resource expansion strategy, we are considering opportunities to acquire or invest in companies or assets in the steel industry supply chain. If an attractive opportunity presents itself, we may acquire and develop other resources. We have experience only in coal mining, and our experience with coking coal may not be directly relevant to the development of other non-coal resources. There can be no assurance that we will be successful in developing any non-coal assets. Failure to successfully develop non-coal assets, if acquired, could have a material adverse effect on our business, prospects, financial condition and results of operations.

#### We may dispose of our assets or sell majority or minority stakes in our subsidiaries.

We may dispose of some of our assets or sell majority or minority stakes in our subsidiaries, including our BN mine and our paved road from UHG to GS, if we are presented with strategically attractive opportunities or seek funding opportunities. If we take on joint venture partners, we will be subject to risk associates with jointly owning and managing projects. No assurance can be given that we will or will not engage in, or as to the timing of, any such disposals or joint venture activities and there can be no assurance that we will be successful in these dispositions should they occur.

#### We currently rely on a single source of water for all of our operations.

Our operations currently depend on a single source of water in the Naimant Depression which is located approximately 20 kilometers north of our UHG mine. We have the right to extract water from the aquifer for 20 years, extendable by an additional five years subject to certain conditions, under the Water Use Agreement signed in May 2011 between the Governor of Tsogttsetsii soum and Ukhaa Khudag Water Supply LLC. Water is piped from the aquifer to our water supply plant at our UHG mine which can supply up to 117 liters per second. The majority of our water use is by our CHPP to wash coal.

We plan to expand capacity by approximately 100 liters per second in 2012 from a second water supply in Naimdain Khundii. We have conducted a survey of the Naimdain Khundii area and expect to extract approximately 25% of the water in the aquifer. There can be no assurance that these aquifers

will provide stable and uninterrupted sources of water in the future, and if these sources were interrupted temporarily or permanently for any reason, including regulatory or practical reasons, there can be no assurance that we would be able to source a sufficient amount of water from another location.

If we are unable to operate our CHPP due to a shortage of water, we would not be able to sell washed coal and would have to revert to selling raw coal, which may have less attractive economics or may not be economically viable.

#### Our mining operations are mainly concentrated at one mining site.

Our mining operations are currently mainly concentrated at our UHG mine. Though we commenced operations at our BN mine in February 2012, we expect operations at our UHG mine to continue to provide substantially all of our production in the near future while we expect to begin producing a small amount of raw coal from our mine. Therefore, all of our current operating cash flows and sales are derived from the sale of coal produced from a single mine. Any significant operational or other difficulties in the mining, processing, storing or transporting of coal at or from our UHG mine could reduce, disrupt or halt our coal production, which would materially and adversely affect our business, prospects, financial condition and results of operations.

#### We rely on our contractors to perform key aspects of our operations.

Currently, we cooperate with Leighton, our mining contractor, and work closely with them in all aspects of our coal mining operations at our UHG mine. We entered into a long-term contract with Leighton to undertake overburden removal, coal extraction and mine reclamation activities. Substantially all of the principal mining equipment used in our UHG mine is sourced through Leighton and their expatriate personnel supervise our mining operations. Actual mining activities are conducted by our employees who have been trained by Leighton personnel. In addition, Leighton has agreed to work with us to build out our coal production capacity to 15.0 Mtpa. See "Business – Mining Operation".

We are currently engaged in owner mining at our BN mine. We may undertake a tendering process to engage a contractor for our coal mining operations at our BN mine.

We have contracted with Sedgman to engineer, procure the equipment for the building of, manage the construction of and train personnel to operate our CHPP, in order to produce washed coal products without the need to rely on coal traders and customers to wash our own coal. The first and second modules of our CHPP, each with ROM coal nameplate capacity of 5.0 Mtpa, began operations in June 2011 and February 2012, respectively. We began constructing the third module in August 2011 and expect to complete construction by the end of 2012. See "Business – Coal Handling and Preparation Plant".

Failure by Leighton, Sedgman or any of our other contractors to perform their respective contractual obligations or the loss of their services could materially and adversely affect our business, prospects, financial condition and results of operations. If Leighton or Sedgman terminates their contracts with us, the amount of remedies we will be able to receive may not be sufficient to cover losses we may sustain. There can be no assurance that replacement contractors could be found in a timely manner or at all, or would be able to perform at the same levels, at the same prices or on the same terms as our current contractors if any of our contractors cease to perform their services or terminate their contracts with us. In addition, if we decide to terminate our agreement with Leighton, we will be required to pay a termination fee.

Our paved road connecting our UHG mine to the border crossing at GS is subject to a BOT license.

We constructed a 245 km paved road parallel to the existing coal transport gravel road from our UHG mine to GS which commenced operations in October 2011. The paved road was built under the license awarded to Gobi Road LLC, an indirect wholly owned subsidiary of us, by the Government of Mongolia under Government Resolution No. 83 of 2010 dated March 31, 2010 and subsequent Build-Operate-Transfer Agreement (the "BOT Agreement") whereby Gobi Road LLC was granted a right to build, operate and use the paved road for a period of ten years after the date on which it is commissioned for service. All coal originated from our UHG mine is now being transported on the paved road. Upon the expiration of the BOT Agreement, we will transfer all of our rights and obligations with respect to the operation and maintenance of the paved road under the BOT Agreement to the Government of Mongolia for no consideration.

The Government of Mongolia may at any time take control of the road. If the Government of Mongolia takes control of the road prior to the expiration of the BOT Agreement or otherwise adversely affects our rights under the BOT Agreement, the Government of Mongolia is required, under the BOT Agreement, to compensate us for all costs and expenses incurred for the construction, operation and maintenance of the paved road. However, no assurance can be given that the Government will compensate us or that any such compensation will be adequate. While we expect to be able to continue to use the paved road by paying the tolls and tariffs determined by the Government of Mongolia until the expiration or early termination of the BOT Agreement and transfer of all the rights and responsibilities with respect to the operation and maintenance of the paved road to the Government of Mongolia, there can be no assurance that we would have access to enough capacity on the road to transport all of our current coal output, and any future increases, on the road. See "Business – Logistics and Transportation – Road Paving."

In addition, on August 24, 2011, the Government of Mongolia passed Resolution No. 257 which assigned to Erdenes Tavan Tolgoi the right to build a parallel paved road from Tavan Tolgoi coal deposit to GS under a build and transfer arrangement. At the same time, the Government of Mongolia authorized the Minister of Road, Transportation, Construction and Urban Development, Minister for Environment and Tourism and Head of State Property Commission to determine public utilization tariffs, including the tariffs for the paved roads. As of the date of this offering memorandum, we still hold the right to define tariffs on our paved road in accordance with our BOT Agreement, but there can be no assurance that the Government will not interfere with our right to determine the tariffs for our paved road, which may impact our transportation cost in the future.

### We may face delays or cost overruns in connection with our infrastructure projects.

In order to lower transportation costs and increase reliability and operational efficiency, we currently expect to commence construction of a railway in 2012. See "– We are not sure when we can commence construction of our UHG-GS railway or whether our investment in the railway project will be successful". The opening of our UHG-GS railway is key to our production expansion and any delay in its completion will have a direct impact on the costs of transporting our coal to China. In addition, we are (i) constructing the third module of our CHPP (see "Business – Coal Handling and Preparation Plant"), (ii) constructing a road connecting our UHG and BN mines (see "Business – Logistics and Transport") and (iii) expanding the supply capacity of our water supply facility by approximately 100 liters per second (see "Business – Water Supply Facility"). Any delay in the expansion of these facilities could delay or limit our ability to produce and sell washed coal. There can be no assurance that the actual costs of these projects will not exceed their original budgets. As a result of project delays, cost overruns or other reasons, we may not be able to achieve the intended economic benefits of these projects, which may materially and adversely affect our business, prospects, financial condition and results of operations.

Our dependence on our major customers may cause significant fluctuations or declines in our revenues.

Substantially all of our coal production is exported into China and we have a concentrated group of major customers. For the years ended December 31, 2009, 2010 and 2011, our sales to our five largest customers accounted for 100.0%, 95.0% and 87.9%, respectively, of our total sales. For the years ended December 31, 2009, 2010 and 2011, our sales to our single largest customer accounted for 39.0%, 37.9% and 34.1%, respectively, of our total sales. Although we are planning to expand our customer base, we anticipate that our dependence on our major customers will continue in the near future. There can be no assurance that we will be able to retain these customers or that they will maintain current level of business with us. If there is a reduction or cessation of orders from any of these customers for any reason, our business, prospects, financial condition and results of operations will be materially and adversely affected.

We extend credit (generally for periods not exceeding 90 days) starting from January 1, 2012 to certain of our customers with whom we have long-term supply agreements. Our ability to receive payments for coal sold and delivered depends on the continued creditworthiness of our customers. Competition with other coal suppliers could force us to extend credit to customers and on terms that could increase the risk of payment default. The bankruptcy of any of our customers could materially and adversely affect our business, prospects, financial condition, and results of operations.

#### Our insurance may not be adequate to cover losses or liabilities that may arise.

We do not maintain adequate insurance against some operational and infrastructure risks and natural disasters. In particular, we do not have insurance coverage for acts or omissions of our contractors. Under the mining contracts, insurance against risks or loss to operations is provided by our mining contractors for each of the relevant mining areas. However, some of our contractors may not carry adequate liability coverage.

We have obtained insurance policies from global insurers including Zurich, Munich Re and Swiss Re covering property damage for our mining properties and business interruption. Such policies may not be adequate to cover all losses or liabilities that may be incurred by us or our contractors. Also, insurance may only be available at premium levels that are prohibitively expensive. As a result, losses incurred or payments we may be required to make may have a material adverse effect on our business, prospects, financial condition and results of operations to the extent such losses or payments are not insured or the insured amount is not adequate.

Increases in the costs, or our accessibility to sources, of fuel could negatively affect our operating costs or disrupt or delay production.

NIC supplies us with all of our fuel requirement. NIC is the largest oil product importer and retailer in Mongolia, sourcing substantially all of its fuel from Russia. While we have reserved the option to contract with other fuel suppliers, there is no assurance that we would be able to source the requisite amounts of fuel necessary to run our operations from other suppliers if there were an interruption in the fuel supply from Russia to Mongolia or from NIC to us.

In May and June 2011, Mongolia faced a shortage of Russian fuel supply, which provides more than 98% of the entire Mongolian fuel usage. We have agreed with NIC to increase the capacity of onsite fuel storage facilities at our UHG mine to 6 million liters by September 2012. However, there can be no assurance that Mongolia or we will not face a shortage of fuel in the future.

We directly bear the costs of fuel. We do not engage in any fuel hedging arrangements to cover our fuel price risk. Any significant increases in the price or shortage of fuel would cause a corresponding increase in our costs or limit our operations, either of which could result in termination of sales contracts by our customers and materially and adversely affect our business, prospects, financial condition and results of operations.

#### Issues with local communities may materially and adversely affect our business.

Issues with the local communities surrounding the areas where we operate might arise from the implementation of our business activities, including disputes related to settlement relocation. These issues may result in community protests, blocking of road and third party claims. The failure to successfully settle any local community issues could divert our management's attention and resources and have a material and adverse effect upon our business, reputation, prospects, financial condition and results of operations.

Our business depends substantially on the continuing efforts of our executive officers and our mining contractors and our ability and the ability of our mining contractors to attract and retain qualified technical personnel.

Our business depends substantially on the continued services of our executive officers and, to a significant extent, on our ability to attract, train and retain qualified technical personnel, particularly those with expertise in coal mining and production. There can be no assurance that we will be able to attract or retain qualified technical personnel. If one or more of our executive officers or key employees were unable or unwilling to continue their service with us, we might not be able to replace them with persons of equivalent expertise and experience within a reasonable period of time or at all. If any of our executive officers or key employees joins a competitor or forms a competing company, we may lose customers, suppliers, know-how and key personnel and staff members. If any dispute arises between such employees and us, there can be no assurance as to the extent to which any non-competition undertakings of such employees could be enforced in our favor or at all. These executive officers and key employees primarily include Mr. Odjargal Jambaljamts, Dr. Battsengel Gotov, Ms. Enkhzaya Nyamdori, Ms. Ulemi Baskhuu, Mr. Enkhtuvshin Dashtseren, Mr. Oyunbat Lkhagvatsend, Ms. Uurtsaikh Dorjgotov, Mr. Davaakhuu Chultem, Ms. Ariunaa Baldandorj, Mr. Andrew Little, Mr. Gary Ballantine, Mr. Bayarbayasgalan Dorjderem, Ms. Baigalmaa Shurka and Mr. Batbold Khorloo. If we lose any of the foregoing executive officers and key employees, our business may be severely disrupted, our financial condition and results of operations may be materially and adversely affected, and we may incur additional expenses to recruit, train and retain personnel. Furthermore, some of our technical personnel are trained by our contractors. If our contractors cease to train our technical personnel, we may not be able to train or find qualified parties to train our technical personnel. In addition, we believe our future success will depend on our contractors' continued ability to attract and retain their own skilled and qualified personnel. Any difficulty in our contractors' ability to attract, recruit, train and retain skilled and qualified personnel could materially and adversely affect our operations. As our business has grown and is expected to continue to grow rapidly, our ability to train and integrate new employees into our operations may not meet the growing demands of our business.

The interests of our principal shareholder, MCS Holding, may differ from those of our other shareholders or of the holders of the Notes.

As of December 31, 2011, MCS Holding indirectly owned approximately 43.5% of our issued share capital. Accordingly, MCS Holding has substantial influence over our business, including decisions regarding mergers, consolidations and the sale of all or substantially all of our assets, election of directors and other significant corporate actions, timing and amount of our dividend

payments, and otherwise controls or influences actions that require the approval of our shareholders and may impact the holders of the Notes. These actions may be taken even if they are opposed by our other shareholders or are not in line with the interests of the holders of the Notes. We believe that third parties may be discouraged from making a tender offer or bid to acquire us because of this concentration of ownership. For further information on the ownership of the Shares, see the section headed "Corporate Structure" and "Principal Shareholders" in this offering memorandum.

#### Foreign currency fluctuations could affect expenses and any future earnings.

We are exposed to foreign exchange fluctuations with respect to the MNT, the RMB and the U.S. dollar. Our financial results are reported in U.S. dollars. The salaries for local laborers in Mongolia are paid in MNT. Sales of coal into China have been and may continue to be settled in RMB and U.S. dollars. Since our headquarters is in Ulaanbaatar, Mongolia, a portion of our expenses are in MNT. As a result, our financial position and results are impacted by the exchange rate fluctuations between the aforementioned currencies and the U.S. dollars. See "Management's Discussion and Analysis of Financial Condition and Results of Operations – Quantitative and Qualitative Disclosures About Market Risk – Foreign Currency Exchange Risk".

#### Our results of operations are subject to economic, political and legal developments in China.

We expect that substantially all of our sales will be made to customers based in China. Accordingly, the economic, political and social conditions, as well as government policies, of China may affect our business. The Chinese economy differs from the economies of most developed countries in many respects, including: (i) structure; (ii) level of government involvement; (iii) level of development; (iv) growth rate; (v) control of foreign exchange; and (vi) allocation of resources. The Chinese economy has been transitioning from a planned economy to a more market-oriented economy. For the past three decades, the Chinese government has implemented economic reform measures emphasizing the utilization of market forces in the development of the Chinese economy. Changes in Chinese political, economic and social conditions, laws, regulations and policies could materially and adversely affect our business, prospects, financial condition and results of operations.

The growth of the Chinese economy has been uneven across different geographic regions and different economic sectors. In order to stabilize national economic growth, the Chinese government may adopt macroeconomic policies that include measures to restrict excessive growth in specific sectors of the economy, such as the steel industry. We cannot predict future economic reforms or the effects that any such measure may have on our business, prospects, financial condition or results of operations. The Chinese government exercises significant control over the growth of the Chinese economy through the allocation of resources, controlling payment of foreign currency-denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies as it deems fit. In the past, the Chinese government has implemented a number of measures, such as raising bank reserves against deposit rates to place additional limitations on the ability of commercial banks to make loans and raise interest rates, in order to suppress the growth of specific segments of the Chinese economy which it believed to be overheating. These actions, as well as future actions and policies of the Chinese government to exert influence over certain segments of the economy, could materially and adversely affect the level of overall economic activity and our Chinese customers' liquidity and access to capital and hence, in turn, affect our ability to operate our business.

In addition, there can be no assurance that the Chinese economy will continue to grow, or that its growth will be steady or in geographic regions or economic sectors to our benefit. Since substantially all of our sales will be made into China, we depend heavily on general economic conditions in China for our continued growth. A downturn in China's economic growth or a decline in its economic conditions may have a material adverse effect on our business, prospects, financial condition and results of operations.

## The Chinese government may impose restrictions on the import of Mongolian coal or adopt policies favorable to Chinese coal producers.

As of the date of this offering memorandum, we believe that the Chinese government has not imposed restrictions on the import of Mongolian coal or adopted any preferential policies that favor Chinese coal producers over Mongolian producers. However, there can be no assurance that the Chinese government will not directly or indirectly implement any restrictions or adopt any preferential policies in the future. The Chinese government may do so for a number of reasons, including but not limited to, a policy to support domestic Chinese coking coal producers. If we are unable to sell our coal into China on commercially viable terms or at all, there can be no assurance that we will be able to sell our coal to customers in any other jurisdiction. Furthermore, as all our coal currently passes through China, any restriction on the transport of Mongolian coal through China will effectively prohibit our coal from reaching any of our Chinese customers or potential overseas customers.

#### Our mining operations are exposed to environmental risks.

All phases of our operations are subject to environmental regulations in the various jurisdictions in which we operate. For example, our UHG and BN mines are subject to a requirement to meet environmental protection obligations. We must complete an environmental protection plan for the Government of Mongolia's approval and complete a report prepared by an independent expert on environmental compliance every year.

Failure to comply with applicable laws, regulations and to obtain the necessary permits may result in enforcement actions, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Environmental legislation is evolving in a manner which will likely require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. There can be no assurance that future changes in environmental regulation, if any, will not materially and adversely affect our business, prospects, financial condition and results of operations. The Government of Mongolia's approvals and permits are also often required in connection with various aspects of our operations. To the extent such approvals or permits are required and not obtained, we may be delayed or prevented from proceeding with planned exploration or development of our mineral properties.

In December 2011, the Government of Mongolia submitted to the Parliament eleven draft laws related to the renewal and moderation of the environmental legal framework, which include the imposition of new fees for water pollution and increases in other fees. Changes to the current laws, regulations and permits governing operations and activities of mining companies, including more stringent implementation or increases in or imposition of new fees, could have a material adverse impact on us including increases in our capital expenditures or production costs, reductions in our production and abandonment or delays in development of new mining properties.

# Information in this offering memorandum regarding future plans reflects current intentions and is subject to change.

Whether we ultimately implement the business plans described in this offering memorandum, and whether we achieve the objectives described in this offering memorandum, will depend on a number

of factors including, but not limited to, the availability and cost of capital; current and projected coal prices; coal markets; availability of heavy equipment, supplies and personnel; success or failure of activities in areas similar to those in which our projects are situated; and changes in estimates of project completion costs. We will continue to gather information about our projects, and it is possible that additional information will cause us to alter our schedule or determine that a project should not be pursued at all. Accordingly, our plans and objectives may change from those described in this offering memorandum.

#### Inclement weather may adversely affect our operations.

Inclement weather may require us to evacuate personnel or curtail operations and may cause damage to our mine site, transportation roads and loading facilities. This could result in the temporary suspension of operations or generally reduce our productivity. Since our commencement of operations at our UHG mine in 2009, we have suspended our mining operations for a total of eight days due to inclement weather. We suffered no material losses due to the inclement weather, but there can be no assurance that inclement weather will not cause significant losses in the future. Any damage to our mine site, transportation roads and loading facilities caused by prolonged periods of inclement weather could materially and adversely affect our business, prospects, financial condition and results of operations.

#### Destabilizing events in other parts of the world could interrupt our business.

Events related to the terrorist attacks in the United States that took place on September 11, 2001, the war in Afghanistan, developments in the Middle East, Libya and Egypt, natural disasters and the general weakness of the global economy have increased the uncertainty of global economic prospects in general. We cannot assure you that further terrorist acts or other destabilizing events will not occur in the future. In addition, although such acts and events have not been targeted at or directly affected Mongolia, our assets or those of our customers, we cannot assure you that they will not do so in the future. Our current insurance policies do not cover terrorist attacks or other such destabilizing events. Any terrorist attack, natural disaster or other such event including damage to our infrastructure or that of our customers, could cause interruption to our business and materially and adversely affect our business, financial condition, results of operations, cash flows and prospects.

#### We face risks related to health epidemics and other outbreaks of contagious diseases.

Our business could be adversely affected by the outbreaks of severe acute respiratory syndrome ("SARS") or other contagious diseases. Mongolia experienced an outbreak of the H1N1 strain of swine influenza in November 2009. The Government imposed a curfew on shops and restaurants, halted long distance transport services and closed schools. Additionally, there have been reports of outbreaks of a highly pathogenic avian flu, caused by the H5N1 virus, in certain regions of Asia and Europe since 2003. In 2010, there were a limited number of reported cases of avian flu in Mongolia although to date there have not been any confirmed cases of human infection. There have been reports on the occurrences of avian flu in various parts of China, including a few confirmed cases of human infection. An outbreak of avian flu in the human population of China could result in a widespread health crisis that has the potential to spread to Mongolia and could adversely affect the economies and financial markets of many countries, particularly in Asia. Additionally, any recurrence of swine influenza or SARS, a highly contagious form of atypical pneumonia, similar to the occurrence in 2003 which affected China, Hong Kong, Taiwan, Singapore, Vietnam and certain other countries, would also have similar adverse effects. As a significant portion of Mongolia's economy relies on trade with China and as many of our customers have business interests in China, these outbreaks of contagious diseases, or the fear of these outbreaks, and other adverse public health developments in China, could have a material adverse effect on our business, financial condition and results of operations. We have not adopted any written preventive measures or contingency plans to combat any future outbreak any epidemic or outbreak of disease.

#### Risks Relating to Mongolia

#### Our ability to conduct our business activity in Mongolia is subject to political risk.

Our ability to efficiently conduct our business activities is subject to changes in government policy or shifts in political attitudes within Mongolia that are beyond our control. Government policy may change to discourage foreign investment, nationalization of mining industries may occur or other government limitations, restrictions or requirements not currently foreseen may be implemented. There can be no assurance that our assets will not be subject to nationalization, requisition or confiscation, whether legitimate or not, by any authority or body. The provisions under Mongolian law for compensation and reimbursement of losses to investors under such circumstances may not be effective to restore the value of our original investment. In addition, Mongolia may experience political instability. Such instability could have a material adverse effect on economic or social conditions in Mongolia and may result in outbreaks of civil unrest, terrorist attacks or threats or acts of war in the affected areas, any of which could materially and adversely affect our business, prospects, financial condition and results of operations.

#### Legislation in Mongolia may be subject to conflicting interpretations.

The Mongolian legal system exhibits several of the qualitative characteristics typically found in a developing country and many of its laws, particularly with respect to matters of taxation, are still evolving. The legal framework in Mongolia is, in many instances, based on recent political reforms or newly enacted legislation, which may not be consistent with long-standing local conventions and customs. Local institutions and bureaucracies responsible for administrating laws may lack a proper understanding of the laws or the experience necessary to apply them in a modern business context. Many laws have been enacted, but in many instances they are neither understood nor enforced and may be applied in an inconsistent, arbitrary manner, while legal remedies may be uncertain, delayed or unavailable. A transaction or business structure that would likely be regarded under a more established legal system as appropriate and relatively straightforward might be regarded in Mongolia as outside the scope of existing Mongolian law, regulation or legal precedent. As a result, certain business arrangements or structures and certain tax planning mechanisms may carry significant risks. In particular, when business objectives and practicalities dictate the use of arrangements and structures that, while not necessarily contrary to settled Mongolian law, are sufficiently novel within a Mongolian legal context, it is possible that such arrangements may be invalidated. The legal system in Mongolia has inherent uncertainties that could limit the legal protections available to us, which include: (i) inconsistencies between laws; (ii) limited judicial and administrative guidance on interpreting Mongolian legislation; (iii) substantial gaps in the regulatory structure due to delay or absence of implementing regulations; (iv) the lack of established interpretations of new principles of Mongolian legislation, particularly those relating to business, corporate and securities laws; (v) a lack of judicial independence from political, social and commercial forces; and (vi) bankruptcy procedures that are not well developed and are subject to abuse.

The Mongolian judicial system has relatively little experience in enforcing the laws and regulations that currently exist, leading to a degree of uncertainty as to the outcome of any litigation. It may be difficult to obtain swift and equitable enforcement, or to obtain enforcement of a judgment by a court of another jurisdiction. In addition, while legislation has been enacted to protect private property against expropriation and nationalization, due to the lack of experience in enforcing these provisions and political factors, these protections may not be enforced in the event of an attempted expropriation or nationalization. Expropriation or nationalization of any of our assets, or portions thereof, potentially without adequate compensation, could materially and adversely affect our business, prospects, financial condition and results of operations.

Application of and amendments to legislation could adversely affect our mining rights or make it more difficult or expensive to develop our projects and continue mining.

The Government of Mongolia has, in the past, expressed its strong desire to foster, and has to date protected the development of, an enabling environment for investments in the mining sector. However, there are political constituencies within Mongolia that have espoused ideas that would not be regarded by the mining industry as conducive to investment if they were to become law or official government policy. There can be no assurance that the present government or a future government will refrain from enacting legislation or adopting government policies that are adverse to our interests or that impair our ability to develop and operate our UHG and BN mines.

Mining operations in Mongolia are subject to extensive laws and regulations. These relate to production, development, exploration, exports, imports, taxes and royalties, labor standards, occupational health, waste disposal, protection and remediation of the environment, mine safety, transportation safety and other matters. Compliance with these laws and regulations increases the costs of exploring, drilling, developing, constructing, operating and closing mines and other facilities. It is possible that the costs, delays and other effects associated with these laws and regulations may impact our decision as to whether to continue to proceed with the development of our UHG and BN mines. Since Mongolian legal requirements change frequently, are subject to interpretation and may be enforced to varying degrees in practice, we are unable to predict the ultimate cost of complying with these requirements or their effect on our operations. Although we believe our property ownership interests are valid and in accordance with all applicable rules and regulations, there can be no assurance that the underlying agreements, licenses or legislation upon which our property ownership interests is based will not be interpreted and enforced in a way that materially and adversely affects our rights and obligations. Furthermore, changes in governments, regulations and policies and practices could have an adverse impact on our future cash flows, earnings, results of operations and financial condition.

For example, in 2006, the Government of Mongolia enacted the 2006 Minerals Law. The 2006 Minerals Law preserves to a limited extent some of the substance of the former 1997 minerals legislation, which was drafted with the assistance of legal experts in the area of mining legislation and was widely regarded as progressive, internally consistent and effective. However, the 2006 Minerals Law contains new provisions that have increased the potential for political interference and weakened the rights and security of title holders of mineral licenses in Mongolia. Certain provisions of the 2006 Minerals Law are ambiguous and it is unclear how they will be interpreted and applied in practice. Examples of such provisions include those relating to the designation of a mineral deposit as a Mineral Deposit of Strategic Importance. See "– The Government of Mongolia could determine that any one or more of our projects in Mongolia is a Mineral Deposit of Strategic Importance and could take an equity, production, profit sharing or other interest in any of our projects".

In addition, the introduction of new Mongolian laws and regulations and the interpretation of existing ones may be subject to policy changes reflecting domestic political or social changes. For example, on July 16, 2009, the Parliament enacted the Mining Prohibition in Specified Areas Law which prohibits minerals exploration and mining in areas such as headwaters of rivers and lakes, forest areas as defined in the Forest Law of Mongolia and areas adjacent to rivers and lakes as defined in the Water Law of Mongolia. New exploration licenses and mining licenses overlapping with the defined prohibited areas will not be granted and previously granted licenses that overlap with the defined prohibited areas will be terminated within five months following the adoption of the Mining Prohibition in Specified Areas Law. It is not clear whether such termination will only apply to the overlap areas. The Mining Prohibition in Specified Areas Law provides that affected license holders shall be compensated according to the Government Resolution No. 299 dated November 17, 2010. MRAM has prepared a draft list of licenses that overlap with the prohibited areas described in the new

law based on information submitted by Water Authority Agencies, Forest Authority Agencies and local authorities for submission to MMRE. Subsequent to MMRE's approval of this preliminary list, the Government of Mongolia must still give its final approval before the final list can be published. During MMRE's and the Government of Mongolia's review of the draft list of licenses prepared by MRAM, licenses may be added to or removed from the list at any time prior to approval and publication of the final list. Government Resolution No. 174, dated June 8, 2011, has determined a portion of the boundaries of certain areas containing gold deposits where exploration and mining operations are prohibited according to the Mining Prohibition in Specified Areas Law. On February 9, 2011, the Parliament enacted the Law on Prohibition of Granting New Exploration Licenses which prohibited the granting of new exploration licenses until April 30, 2011. The prohibition was subsequently extended to December 31, 2012. On October 20, 2011, the Supreme Court of Mongolia ruled that the Government must take action to enforce the Mining Prohibition in Specified Areas Law.

As of the date of this offering memorandum, draft laws, which may affect our mining activities including new land and environmental laws and amendments to existing laws are under discussion in the Parliament. A working group is currently drafting amendments to the 2006 Minerals Law. In addition, a new Parliament will be elected in June 2012, adding uncertainty to whether these new laws and amendments will be adopted.

There can be no assurance that future political and economic conditions in Mongolia will not result in the Government of Mongolia adopting different policies in relation to foreign development and ownership of mineral resources. Any such changes in government or policy may result in changes in laws affecting ownership of assets, environmental protection, labor relations, repatriation of income, return of capital, investment agreements, income tax laws, royalty regulation, government incentive and other areas, each of which may materially and adversely affect our ability to undertake exploration and development activities in the manner currently contemplated. Similarly, any restrictions imposed, or Government of Mongolian charges levied or raised (including royalty fees), under Mongolian law on the export of coal could harm our competitiveness.

# Uncertainties regarding VAT reimbursement and possible revisions to the Mongolian royalty fee system could adversely affect our financial position.

VAT at a rate of 10% is payable in respect of all goods sold, work performed and services provided within Mongolia. VAT is also payable in respect of goods imported into Mongolia and in respect of certain service fee payments made by Mongolian taxpayers to non-resident service providers. If a legal entity is registered as a value-added taxpayer, it can obtain credits for such tax paid to its suppliers of goods and services and can use such credits to offset value-added, or other, taxes owed in Mongolia. However, the Law on VAT provides certain conditions which can limit the ability of a legal entity to register as a value-added taxpayer. On July 21, 2009, the Parliament passed an amendment to the Law on VAT of Mongolia (the "Amendment") pursuant to which only exported "finished mineral products" are subject to zero-rate VAT. Before the Amendment, there was no distinction between finished and unprocessed mineral products, and all mineral products that were exported were subject to zero-rate VAT regardless of their level of processing. As such, an exporter or producer of mineral products could have the VAT paid on its purchases of services and goods for its operation to produce exported minerals refunded. After the enactment of the Amendment, only finished (processed) mineral products are subject to zero-rate VAT, and sales of other minerals are exempted from the payment of VAT under newly introduced Article 13.1.16 of the Law on VAT. An exporter or producer of mineral products, other than "finished mineral products" for export, is not entitled to have the VAT paid on the purchases of goods and services used for its mining operation refunded. As a result, operating costs of an exporter or producer of non-finished mineral products, which are types of mineral ores or unprocessed minerals will increase. The Amendment does not define what constitutes exported "finished mineral products". Instead, it provides that the Government shall adopt a regulation

on the list and category of the finished mineral products. On November 10, 2010, the Government issued Resolution No. 286 on the List of Final Mining Products, which includes washed and processed coal, briquette and compressed coal generated from the coal and similar solid fuel, coal coke and semi-coke, and lignite coke and semi-coke. However, no assurance can be given that the regulations concerning VAT will not be changed, or interpreted in a way, that could adversely affect us.

As of December 31, 2009, 2010 and 2011, our VAT receivables were US\$5.7 million, US\$23.9 million and US\$43.7 million, respectively.

On November 25, 2010, the Parliament amended the 2006 Minerals Law. Effective from January 1, 2011, we pay a flat 5% royalty on the sale value of all extracted minerals that are sold, shipped for sale or otherwise used, and an additional royalty which is calculated based on the degree to which coal is processed. The additional royalty is based on the monthly comparative price stipulated on the website of the MMRE and is applied at a progressive rate. The level of the progressive royalty rate depends on the level of processing of the minerals. The more processed the minerals are, the lower the progressive royalty rate will be. For example, the progressive royalty rate for raw coal is from 1% to 5% if coal price is above the threshold price of US\$25 per tonne. If coal is processed, the progressive royalty rate will be lower, being 1% to 3%. See "Regulation – Mongolian Laws and Regulations Relating to Exploration for Minerals and Mining – Royalties". We incurred US\$3.3 million, US\$10.1 million and US\$48.2 million as royalty to the Government of Mongolia for the years ended December 31, 2009, 2010 and 2011, respectively. There can be no assurance that the Government of Mongolia will not further increase royalty rates on the sale value of extracted minerals.

## Weaknesses relating to the Mongolian legal system and Mongolian legislation create an uncertain environment for investment and business activity.

The legal system in Mongolia is at an early stage of development and has various uncertainties that could limit the full legal protections that may be available to holders of the Notes in more developed countries. The following risks relating to the Mongolian legal system create uncertainties, many of which rarely exist in countries with more developed market economies:

- inconsistencies among, or uncertainties in the application or official interpretation of, laws, decrees, orders and regulations, and regional and local rules and regulations, as a result of limited judicial guidance, lack of stare decisis or established precedents and other factors;
- limited judicial guidance on interpreting Mongolian legislation;
- gaps in the regulatory structure due to delay in, or absence of, implementing regulations;
- the lack of experience of judges and courts in interpreting new principles of Mongolian legislation, particularly those relating to securities laws;
- a relatively high degree of discretion on the part of governmental authorities; and
- bankruptcy procedures that are not well developed and are subject to abuse.

In general, the Mongolian judicial system is relatively inexperienced in enforcing the laws and regulations that currently exist, leading to a degree of uncertainty as to the outcome of any litigation. The Mongolian judicial system may also favor Mongolian parties over foreign companies and individuals. Further, it may be difficult to obtain swift and equitable enforcement, or to obtain enforcement of a judgment by a court of another jurisdiction. The introduction of new Mongolian laws and regulations and the application or interpretation of existing ones may be subject to policy changes

reflecting domestic political or social changes. As the Mongolian legal system continues to develop, we cannot assure you that changes in such legislation or application or interpretation thereof will not have a material adverse effect on our business, financial condition, results of operations and future prospects.

In addition, while legislation has been enacted to protect private property against expropriation and nationalization, due to the lack of experience in enforcing these provisions and political factors, these protections may not be enforced in the event of an attempted expropriation or nationalization. Expropriation or nationalization of any of our businesses, our assets or portions thereof, potentially without adequate compensation, could have a material adverse effect on our business and prospects and on the trading price of the Notes.

Certain facts and statistics contained in this offering memorandum have come from official government sources or other industry publications, the reliability of which cannot be assumed or assured.

Certain facts and statistics in this offering memorandum related to Mongolia, its economy and the industries in which we operate, are derived directly or indirectly from official government sources generally believed to be reliable. While we have taken reasonable care to reproduce such information, we cannot guarantee the quality and reliability of such source material. These facts and statistics have not been independently verified by us, the Initial Purchasers or any of our or their respective affiliates or advisors or any other parties involved in this offering and, therefore, we make no representation as to the accuracy of such facts and statistics, which may not be consistent with other information compiled within or outside Mongolia and may not be complete or up-to-date. Due to possibly flawed or ineffective collection methods or discrepancies between published information and market practice, the facts and statistics in this offering memorandum may be inaccurate and the statistics may not be comparable to statistics produced for other economies. Further, there can be no assurance that they are stated or compiled on the same basis or with the same degree or accuracy as may be the case elsewhere. In all cases, investors should give consideration as to how much weight or importance they should attach to or place on all such facts and statistics.

#### Mongolia may experience political and social instability.

Since the collapse of communism in 1990, Mongolia has experienced a process of democratic change, resulting in political and social events that have highlighted the unpredictable nature of Mongolia's changing political landscape. Such events have resulted in political instability as well as general social and civil unrest on certain occasions in the past few years. Prior to 1990, Mongolia was a socialist country and the only functioning political party was the Mongolian People's Revolutionary Party (the "MPRP"). In March 1990, due to extended street protests carried out in public and popular demands for faster reform, the political bureau of the MPRP resigned. In May 1990, the constitution was amended, which removed the MPRP's role as the guiding force in the country, legalized opposition parties, created a standing legislative body and established the office of president.

The MPRP and the Democratic Party are two of the main political parties in Mongolia. The MPRP was the ruling party for the first half of the 1990s and was succeeded by the Democratic Party until it regained control of the Parliament in 2000. Following a political realignment in 2006, when a new coalition government was formed, the MPRP won the majority of seats in Parliament again in 2008. However, there were allegations of fraudulent practices in the elections made by the chairman of the Democratic Party. The Mongolian General Committee of Elections dismissed these allegations and confirmed that the MPRP had won the majority of seats in Parliament. The election results also triggered strong protests and riots and the Government declared a state of emergency, which was lifted after four days.

Although Mongolia's transition to democracy has been relatively peaceful and there is representation of various political parties in the Government, tension continues to exist between the governing coalition partners. We cannot assure you that events similar to those described above will not occur in the future and on a wider scale, or that such disturbances will not, directly or indirectly, have a material adverse effect on our business. Elections will be held in June 2012 and May 2013 to elect a new Parliament and president, respectively. Future changes in the Government, the ruling party, major policy shifts or lack of consensus between the various political groups could lead to political instability could also have a material adverse effect on our business. In addition, the possibility of political instability and uncertainty could adversely affect trading in the Notes and have a significant adverse impact on the economy of Mongolia, and investors may adopt a more cautious approach towards Mongolia's securities markets or investments in Mongolia in general, and such factors could adversely affect trading in the Notes.

#### Risks Relating to the Notes

We are a holding company and payments with respect to the Notes are structurally subordinated to liabilities, contingent liabilities and obligations of our subsidiaries that do not guarantee the Notes.

We are a holding company with no material operations. We conduct our operations through our Mongolian subsidiaries. The Notes will not be guaranteed by certain current or future subsidiaries. Accordingly, our ability to pay principal and interest on the Notes will depend upon our receipt of principal and interest payments on the intercompany loans and distributions of dividends from our subsidiaries.

Creditors, including trade creditors of non-guarantor subsidiaries and any holders of preferred shares in such entities, would have a claim on the assets of the non-guarantor subsidiaries that would be prior to the claims of holders of the Notes. As a result, our payment obligations under the Notes will be effectively subordinated to all existing and future obligations of our subsidiaries that do not guarantee the Notes, including their obligations under guarantees they have issued or will issue in connection with our business operations, and all claims of creditors of our non-guarantor subsidiaries will have priority as to the assets of such entities over our claims and those of our creditors, including holders of the Notes. As of December 31, 2011, our non-guarantor subsidiaries had nil indebtedness, capital commitments of US\$54.2 million and nil contingent liabilities arising from guarantees. The Notes and the indenture permit us, the guarantors and our non-guarantor subsidiaries to incur additional indebtedness and issue additional guarantees, subject to certain limitations.

Our secured creditors or those of any Subsidiary Guarantor would have priority as to our assets or the assets of such Subsidiary Guarantor securing the related obligations over claims of holders of the Notes.

The Notes and the Subsidiary Guarantees will constitute unsubordinated obligations and will rank pari passu in right of payment with all other existing and future unsubordinated indebtedness and senior in right of payment to all subordinated indebtedness, if any, of the Company and the Subsidiary Guarantors, as applicable. The Notes and each Subsidiary Guarantee will be issued as a general obligation of the relevant company. However, the Notes and the Subsidiary Guarantees will be effectively subordinated to any of our or the Subsidiary Guarantors' secured obligations to the extent of the assets serving as security for such secured obligations (other than to the extent of the Collateral securing the Notes). In bankruptcy, the holder of a security interest with respect to any assets of us or the Subsidiary Guarantors (other than to the extent of the Collateral securing the Notes) would be entitled to have the proceeds of such assets applied to the payment of such holder's claim before the remaining proceeds, if any, are applied to the claims of the holders of the Notes. As of the date of this

offering memorandum, the Subsidiary Guarantors have pledged certain accounts, our construction agreement with Sedgman for our CHPP, our coal mining agreement with Leighton, our offtake agreements, our CHPP, our water supply infrastructure assets, our 3x6 MW power plant and certain motor vehicles as collateral in connection with our EBRD, FMO and DEG Loan Agreements, our Existing Standard Bank Facilities Agreement and our Khan Bank Facility Agreement. In addition, ER LLC and we will grant a security interest in favor of Standard Bank over certain accounts, coal collateral and our rights under certain of our coal sales contracts to secure the New Standard Bank Facilities Agreement and, substantially simultaneous with the issuance of the Notes contemplated hereunder, the Collateral will be charged to secure both our obligations under the Notes and the New Standard Bank Facilities Agreement, on a pari *passu basis*. In addition, the Collateral may also be pledged to secure Permitted Pari Passu Secured Indebtedness, see "Description of the Notes – Security – Permitted Pari Passu Secured Indebtedness." We or the Subsidiary Guarantors may pledge additional collateral in the future.

We have substantial indebtedness and may incur substantial additional indebtedness in the future, which could adversely affect our financial health and our ability to generate sufficient cash to satisfy our outstanding and future debt obligations.

We now have, and will continue to have after the offering of the Notes, a substantial amount of indebtedness. Our total borrowings, including both current and non-current borrowings, as of December 31, 2011 was US\$561.7 million. See "Capitalization and Indebtedness" for a description of our outstanding short-term and long-term borrowings as of December 31, 2011 or on as adjusted basis giving effect to the issuance of the Notes. See "Description of Other Material Indebtedness". Our substantial indebtedness could have important consequences to you. For example, it could:

- limit our ability to satisfy our obligations under the Notes and other debt;
- increase our vulnerability to adverse general economic and industry conditions;
- require us to dedicate a substantial portion of our cash flow from operations to servicing and repaying our indebtedness, thereby reducing the availability of our cash flow to fund working capital, capital expenditures and for other general corporate purposes;
- limit our flexibility in planning for or reacting to changes in our businesses and the industry in which we operate;
- limit, along with the financial and other restrictive covenants of our indebtedness, our ability to borrow additional funds; and
- increase the cost of additional financing.

We may from time to time incur substantial additional indebtedness and contingent liabilities. Although the Indenture restricts us and our Restricted Subsidiaries from incurring additional debt and contingent liabilities, these restrictions are subject to important exceptions and qualifications. If we or our subsidiaries incur additional debt, the risks that we face as a result of our existing indebtedness and leverage could intensify.

Our ability to generate sufficient cash to satisfy our outstanding and future debt obligations will depend upon our future operating performance, which will be affected by prevailing economic conditions and financial, business and other factors, many of which are beyond our control. We anticipate that our operating cash flow will be sufficient to meet our anticipated operating expenses and to service our debt obligations as they become due. However, we may not generate sufficient cash

flow for these purposes. If we are unable to service our indebtedness, we will be forced to adopt an alternative strategy that may include actions such as reducing or delaying capital expenditures, selling assets, restructuring or refinancing our indebtedness or seeking equity capital. These strategies may not be instituted on satisfactory terms, if at all.

In addition, the indenture prohibits us from incurring additional indebtedness unless (i) we are able to satisfy a certain financial ratio or (ii) we are able to incur such additional indebtedness pursuant to any of the exceptions to the financial ratio requirement, and meet any other applicable restrictions. Our ability to meet our financial ratio requirement may be affected by events beyond our control. We might not be able to meet this ratio. Such restrictions in the Notes and our other financing arrangements may impair our ability to react to changes in market conditions, take advantage of business opportunities we believe to be desirable, obtain future financing, fund required capital expenditures, or withstand a continuing or future downturn in our business. Any of these factors could materially and adversely affect our ability to satisfy our obligations under the Notes and other debt.

# To service our indebtedness, we will require a significant amount of cash. Our ability to generate cash depends on many factors beyond our control.

Our ability to make payments on and to refinance our indebtedness, including these Notes, and to fund planned capital expenditures and project development will depend on our ability to generate cash. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

Our business might not generate cash flow from operations in an amount sufficient to enable us to pay our indebtedness, including the Notes, or to fund our other liquidity needs. We may need to refinance all or a portion of our indebtedness, including the Notes, on or before maturity. We might not be able to refinance any of our indebtedness on commercially reasonable terms or at all.

# Our subsidiaries are subject to restrictions on the payment of dividends and the repayment of intercompany loans or advances to us and our subsidiaries.

As a holding company, we depend on the receipt of dividends and the interest and principal payments on intercompany loans or advances from our subsidiaries to satisfy our obligations, including our obligations under the Notes. The ability of our subsidiaries to pay dividends and make payments on intercompany loans or advances to their shareholders is subject to, among other things, distributable earnings, cash flow conditions, restrictions contained in the articles of association of our subsidiaries, applicable laws and restrictions contained in the debt instruments of such subsidiaries. The EBRD, FMO and DEG Loan Agreements prohibit ER LLC from paying dividends if we are in default under any of those loans, including in default of certain financial covenant ratios. In the year ended December 31, 2011, ER LLC was in violation of the debt service coverage ratio, the current ratio and the total liabilities to tangible net worth ratio. While EBRD, FMO and DEG each waived these breaches of the EBRD, FMO and DEG Loan Agreements, there can be no assurance we will be able to obtain waivers for a violation of these financial covenants or other covenants in the future. See "Description of Other Material Indebtedness - EBRD, FMO and DEG Loan Agreements". In addition, if any of our subsidiaries raises capital by issuing equity securities to third parties, dividends declared and paid with respect to such shares would not be available to us to make payments on the Notes. These restrictions or legal requirements could reduce the amounts that we receive from our subsidiaries, which would restrict our ability to meet our payment obligations under the Notes and the guarantees for the Notes.

Mongolian laws and regulations permit payment of dividends only out of accumulated profits as determined in accordance with Mongolian accounting standards and regulations and such profits differ

from profits determined in accordance with IFRS in certain respects, including the use of different bases of recognition of revenue and expenses. Dividends paid by our Mongolian subsidiaries (i) to their Mongolian parent companies are subject to a 10% withholding tax and (ii) to us and to non-Mongolian parent companies are subject to a 20% withholding tax, unless there is a tax treaty between Mongolia and the jurisdiction in which the non-Mongolian parent company is incorporated which specifically exempts or reduces such withholding tax.

Pursuant to the tax treaty between Mongolia and Luxembourg, any dividend paid by our Mongolian subsidiary to its Luxembourg parent company is not subject to withholding tax in Mongolia, so long as (i) the parent company has directly held, for a consecutive period of at least 12 months (preceding the payment date of the dividend), 25% or more of the share capital of the Mongolian subsidiary, and (ii) the dividend is derived from the income of industrial and commercial activities and investment and investment managing activities (except for banking and insurance activities) in Mongolia. As of the date of this offering memorandum, our Mongolian subsidiaries qualify for the exemptions under the treaty.

As a result of the foregoing, we may not have sufficient cash flow from dividends or payments on intercompany loans or advances from our subsidiaries to satisfy our obligations under the Notes or the obligations of the guaranters under the guarantees.

If we are unable to comply with the terms of the indenture or our existing or future debt agreements, there could be a default under those agreements, which could cause repayment of our debt to be accelerated.

If we are unable to comply with the terms in the indenture or our existing or future debt obligations and other agreements, there could be a default under those agreements. If that occurs, the holders of the debt could terminate their commitments to lend to us, accelerate repayment of the debt and declare all outstanding amounts due and payable or terminate the agreements, as the case may be. Furthermore, the indenture contains, and our future debt agreements are likely to contain, cross-acceleration or cross-default provisions. As a result, our default under one debt agreement may cause the acceleration of repayment of not only such debt but also other debt, including the Notes, or result in a default under our other debt agreements, including the indenture. If any of these events occur, our assets and cash flow might not be sufficient to repay in full all of our indebtedness and we might not be able to find alternative financing. Even if we could obtain alternative financing, it might not be on terms that are favorable or acceptable to us.

Our operations are restricted by the terms of the Notes, which could limit our ability to plan for or to react to market conditions or meet our capital needs, which could increase your credit risk.

The indenture includes a number of significant restrictive covenants. These covenants restrict, among other things, our ability, and the ability of our Restricted Subsidiaries, to:

- incur or guarantee additional indebtedness and issue disqualified or preferred stock, including, with respect to the Subsidiary Guarantors, layering of debt;
- make investments, capital expenditures or other specified restricted payments;
- declare dividends on capital stock or purchase or redeem capital stock;
- issue or sell capital stock of Restricted Subsidiaries;
- guarantee indebtedness of Restricted Subsidiaries;

- prepay or redeem subordinated debt or equity;
- sell, lease or transfer assets;
- create liens:
- enter into sale and leaseback transactions;
- engage in any business other than permitted business;
- enter into agreements that restrict the Restricted Subsidiaries' ability to pay dividends, transfer assets or make intercompany loans;
- enter into transactions with shareholders or affiliates; and
- effect a consolidation or merger.

These covenants could limit our ability to plan for or react to market conditions or to meet our capital needs. Our ability to comply with these covenants may be affected by events beyond our control, and we may have to curtail some of our operations and growth plans to maintain compliance.

## ER LLC may be required to list no less that 10% of its shares on the Mongolian Stock Exchange which would result in an event of default.

The 2006 Minerals Law contains provisions requiring any company which holds a Mineral Deposit of Strategic Importance to list no less than 10% of its shares on the Mongolian Stock Exchange. This particular provision of the 2006 Minerals Law has not yet been enforced and it is not clear how it will be enforced in practice. If it is enforced, we may be required to reduce our indirect shareholding percentage in ER LLC to 90.0% or less, which would result in an event of default.

We may reallocate the use of proceeds of this offering in response to changing market conditions or circumstances and other factors, including, without limitation, the timing of our UHG-GS railway project.

We intend to use the proceeds of this offering as set forth in "Use of Proceeds". However, we may reallocate the use of proceeds of this offering in response to changing market conditions or circumstances and other factors, including, without limitation, the timing of our UHG-GS railway project. For example, if there is a change in the timing of our UHG-GS railway project, we may decide not to allocate proceeds to our UHG-GS railway project and instead may refinance our existing debt or allocate the proceeds for other purposes.

The insolvency laws of the Cayman Islands and other local insolvency laws may differ from U.S. bankruptcy law or those of another jurisdiction with which holders of the Notes are familiar.

Because we and some of the guarantors are incorporated under the laws of the Cayman Islands, Hong Kong, Mongolia or Luxembourg, an insolvency proceeding relating to us or any such guarantor, even if brought in the United States, would likely involve Cayman Islands, Hong Kong, Mongolian or Luxembourg insolvency laws, the procedural and substantive provisions of which may differ from comparable provisions of United States federal bankruptcy law or other jurisdictions with which the holders of the Notes are familiar. We conduct substantially all of our business operations through Mongolian-incorporated subsidiaries in Mongolia. You should analyze the risks and uncertainties carefully before you invest in our Notes.

## We may not be able to repurchase the Notes upon a change of control.

We must offer to purchase the Notes upon the occurrence of a change of control, at a purchase price equal to 101% of the principal amount plus accrued and unpaid interest. See "Description of the Notes". The source of funds for any such purchase would be our available cash or third-party financing. However, we may not have enough available funds at the time of the occurrence of any change of control to make purchases of outstanding Notes. Our failure to make the offer to purchase or purchase the outstanding Notes would constitute an event of default under the Notes. The event of default may, in turn, constitute an event of default under other indebtedness, any of which could cause the related debt to be accelerated after any applicable notice or grace periods. If our other debt were to be accelerated, we may not have sufficient funds to purchase the Notes and repay the debt.

In addition, the definition of change of control for purposes of the indenture does not necessarily afford protection for the holders of the Notes in the event of some highly leveraged transactions, including certain acquisitions, mergers, refinancings, restructurings or other recapitalizations, although these types of transactions could increase our indebtedness or otherwise affect our capital structure or credit ratings. The definition of change of control for purposes of the indenture also includes a phrase relating to the direct or indirect sale, lease, transfer, conveyance or other disposition of "all or substantially all" of the properties or our assets taken as a whole. Although there is a limited body of case law interpreting the phrase "substantially all," there is no precise established definition under applicable law. Accordingly, our obligation to make an offer to purchase the Notes and the ability of a holder of the Notes to require us to purchase its Notes pursuant to the offer as a result of a highly-leveraged transaction or a sale of less than all of our assets may be uncertain.

## The liquidity and price of the Notes following the offering may be volatile.

The price and trading volume of the Notes may be highly volatile. Factors such as variations in our revenues, earnings and cash flows and proposals for new investments, strategic alliances and acquisitions, interest rates, the general state of the securities market and fluctuations in price for comparable companies could cause the price of the Notes to change. Any such developments may result in large and sudden changes in the trading volume and price of the Notes. We cannot assure you that these developments will not occur in the future.

## A trading market for the Notes may not develop, and there are restrictions on resale of the Notes.

The Notes are a new issue of securities for which there is currently no trading market. Although we have received approval in-principle for listing the Notes on the SGX-ST, we cannot assure you that we will be able to obtain or maintain a listing on the SGX-ST and, even if listed, a liquid trading market might not develop. If no active trading market develops, you may not be able to resell your Notes at their fair market value or at all. Future trading prices of the Notes will depend on many factors, including prevailing interest rates, our operating results and the market for similar securities, which are beyond our control. We have been advised that the initial purchasers intend to make a market in the Notes, but the initial purchasers are not obligated to do so and may discontinue such market making activity at any time without notice. In addition, the Notes are being offered pursuant to exemptions from registration under the Securities Act and, as a result, you will only be able to resell your Notes in transactions that have been registered under the Securities Act or in transactions not subject to or exempt from registration under the Securities Act. See "Transfer Restrictions". We cannot predict whether an active trading market for the Notes will develop or be sustained. If an active trading market for the Notes does not develop or is not sustained, the market price and liquidity of the Notes may be adversely affected.

The transfer of the Notes and the Subsidiary Guarantees is restricted, which may adversely affect their liquidity and the price at which they may be sold.

The Notes and the Subsidiary Guarantees have not been registered under, and we are not obligated to register the Notes or the Subsidiary Guarantees under, the Securities Act or the securities laws of any other jurisdiction and, unless so registered, may not be offered or sold except pursuant to an exemption from, or a transaction not subject to, the registration requirements of the Securities Act or the Securities and Futures Act (Chapter 289 of Singapore) (the "SFA") and any other applicable laws. See "Plan of Distribution" and "Transfer Restrictions". We have not agreed to or otherwise undertaken to register the Notes and the Subsidiary Guarantees with the SEC or the Monetary Authority of Singapore or the securities regulatory authority of any other jurisdiction, and we have no intention of doing so.

### The ratings provisionally assigned to the Notes may be lowered or withdrawn.

The Notes have been provisionally assigned a rating of "B1" by Moody's and "B+" by Standard and Poor's. The ratings address our ability to perform our obligations under the terms of the Notes and credit risks in determining the likelihood that payments will be made when due under the Notes. In addition, we have been assigned a rating of "B1" with a stable outlook by Moody's and "B+" with a stable outlook by Standard and Poor's. A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time. A rating might not remain for any given period of time and could be lowered or withdrawn entirely by the relevant rating agency. We have no obligation to inform holders of the Notes of any such revision, downgrade or withdrawal. A suspension, reduction or withdrawal at any time of the rating assigned to the Notes may adversely affect the market price of the Notes.

The Notes will initially be held in book-entry form, and therefore you must rely on the procedures of the relevant clearing systems to exercise any rights and remedies.

The Notes will initially only be issued in global certificated form and held through DTC and Euroclear and Clearstream as participants in DTC. Interests in the global notes representing the Notes will trade in book-entry form only, and notes in definitive registered form will be issued in exchange for book-entry interests only in very limited circumstances. Owners of book-entry interests will not be considered owners or holders of the Notes for purposes of the indenture. The nominee for DTC will be the sole registered holder of the global notes. Accordingly, you must rely on the procedures of DTC, and if you are not a participant in DTC, on the procedures of the participant through which you own your interest, to exercise any rights and obligations of a holder of the Notes under the indenture. Upon the occurrence of an Event of Default under the Indenture, unless and until definitive registered notes are issued with respect to all book-entry interests, if you own a book-entry interest, you will be restricted to acting through DTC. The procedures to be implemented through DTC may not be adequate to ensure the timely exercise of rights under the Notes. See "Description of the Notes – Book-Entry; Delivery and Form".

We will follow the applicable corporate disclosure standards for debt securities listed on the SGX-ST, which standards may be different from those applicable to debt securities listed in certain other countries.

We will be subject to reporting obligations in respect of the Notes to be listed on the SGX-ST. The disclosure standards imposed by the SGX-ST may be different from those imposed by securities exchanges in other countries such as the United States or Hong Kong. As a result, the level of information that is available may not correspond to what investors in the Notes are accustomed to.

Certain transactions that constitute "connected transactions" under the Listing Rules will not be subject to the "Limitation on Transactions with Shareholders and Affiliates" covenant in the Description of the Notes.

Our shares are listed on the Hong Kong Stock Exchange and we are required to comply with the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (the "Listing Rules"), which provide, among other things, that a "connected transaction" exceeding the applicable de minimis value thresholds will require certain procedures requirements to be completed or approvals to be obtained. However, the "Limitation on Transactions with Shareholders and Affiliates" covenant set forth in the "Description of the Notes" does not capture transactions between the Company or any Restricted Subsidiary, on the one hand, and an Affiliate of any Restricted Subsidiary, on the other hand. As a result, we are not required by the terms of the Notes to ensure that any such transactions are on terms that are fair and reasonable, and we will not need to deliver officer's certificates or procure the delivery of fairness opinions of accounting, appraisal or investment banking firms to the trustee of the Notes for any such transactions.

Disclosure standards that apply to us may differ from those in the United States or other jurisdictions.

Our consolidated financial information is prepared in accordance with IFRS, which differs in certain respects from U.S. GAAP. As a result, our consolidated financial information and reported earnings could be significantly different if they were prepared in accordance with U.S. GAAP. We have made no attempt to quantify the impact of those differences. This offering memorandum does not contain reconciliation of our consolidated financial information to U.S. GAAP, and there is no assurance that such reconciliation would not reveal material differences. Potential investors should consult their own professional advisors for an understanding of the differences between IFRS and U.S. GAAP, and how these differences might affect the financial information herein. In addition, our shares are listed on the Hong Kong Stock Exchange. There may be less publicly available information about us than is regularly made available by public companies listed on certain other stock exchanges.

#### Risks Relating to the Guarantees and the Collateral

We cannot assure you that a guarantee issued by Mongolian company in favor of a parent company will not be challenged or will not have its enforceability impaired.

Few Mongolian-incorporated companies have participated in international financing transactions, especially transactions where a Mongolian company has provided a guarantee with respect to the payment obligations of its offshore parent company. Furthermore, the Mongolian legal system is young and exhibits several of the characteristics typically found in a developing country and its judicial system has relatively little experience in enforcing the laws and regulations that currently exist. See "Risk Factors – Risks Relating to Mongolia – Legislation in Mongolia may be subject to conflicting interpretations" and "Risk Factors – Risks Relating to Mongolia – Weaknesses relating to the Mongolian legal system and Mongolian legislation create an uncertain environment for investment and business activity". There can be no assurance that a guarantee provided by a Mongolian entity will not be voided or claims in respect of a guarantee provided by a Mongolian entity will not be subordinated to other debt of that entity whether pursuant to law or governmental or judicial mandate. See " – The guarantees may be challenged under applicable bankruptcy, fraudulent transfer insolvency or similar laws, which could impair the enforceability of the guarantees".

If a court voids a guarantee, subordinates such guarantee to other indebtedness of the guarantor, or holds the guarantee unenforceable for any other reason, holders of the Notes would cease to have a claim against that guarantor based upon such guarantee, would be subject to the prior payment of all

liabilities (including trade payables) of such guarantor, and would solely be creditors of us and any guarantors whose guarantees have not been voided or held unenforceable. In such an event, after providing for all prior claims, there might not be sufficient assets to satisfy the claims of the holders of the Notes.

The guarantees may be challenged under applicable bankruptcy, fraudulent transfer, insolvency or similar laws, which could impair the enforceability of the guarantees.

Under bankruptcy, fraudulent transfer, insolvency or similar laws in Hong Kong, Luxembourg or Mongolia and other jurisdictions where future guarantors may be established, a guarantee could be voided, or claims in respect of a guarantee could be subordinated to all other debts of that guarantor if, among other things, the guarantor, at the time it incurred the indebtedness evidenced by, or when it gives, its guarantee:

for guarantors incorporated in Mongolia:

- was liquidated by a court decision due to bankruptcy based on voluntary or involuntary insolvency;
- was liquidated or reorganized due to intentional arrangement between guarantor and obligor prior to the obligation term, or liquidated on grounds provided by other laws;
- became insolvent even if not liquidated or bankrupt;
- had its license revoked, pledged or suspended, or had guarantor's assets sealed or confiscated due to the guarantor's illegal action or based a government organization decision;
- fraudulently appeared to be financially insolvent;
- was unable to fulfill its obligation due to the occurrence of conditions that makes the issuance of the guarantee impossible (if stated in the guarantee agreement); or
- was unable to fulfill its obligation due to the occurrence of other conditions (such as change of laws and regulations and consequences caused by force majeure events).

for guarantors incorporated in other jurisdictions:

- incurred the debt with the intent to hinder, delay or defraud creditors or was influenced by a desire to put the beneficiary of the guarantee in a position which, in the event of the guarantor's insolvency, would be better than the position the beneficiary would have been in had the guarantee not been given;
- received less than reasonably equivalent value or fair consideration for the incurrence of such guarantee;
- was insolvent or rendered insolvent by reason of the incurrence of such guarantee;
- was engaged in a business or transaction for which the guarantor's remaining assets constituted unreasonably small capital; or
- intended to incur, or believed that it would incur, debts beyond its ability to pay such debts as they mature.

In addition, for guarantors or collateral providers incorporated in Luxembourg:

The insolvency laws of Luxembourg may not be as favorable to holders of the Notes as insolvency laws of jurisdictions with which investors may be familiar. For any Subsidiary Guarantor incorporated and having its center of main interests in Luxembourg, insolvency proceedings with respect to that Subsidiary Guarantor may proceed under, and be governed by, Luxembourg insolvency laws. The following is a brief description of certain aspects of insolvency laws in Luxembourg.

Under Luxembourg law, the following types of proceedings (altogether referred to as insolvency proceedings) may be opened against a company incorporated in Luxembourg having centre of main interests within the meaning of EU Council Regulation No. 1346/2000 of May 29, 2000 on insolvency proceedings (the "EU Insolvency Regulation") (respectively its central administration, if different, and if the centre of main interest is located in a jurisdiction where the EU Insolvency Regulation is not applicable) or an establishment in Luxembourg (in latter case assuming that the center of main interests is located in a jurisdiction where the EU Insolvency Regulation is applicable):

- bankruptcy proceedings, the opening of which may be requested by the company, by any of its creditors or by the courts ex officio. Following such a request, the Luxembourg courts having jurisdiction may open bankruptcy proceedings if the company: (i) is in a state of cessation of payments and (ii) has lost its creditworthiness. The main effect of such proceedings is the suspension of all measures of enforcement against the company, except, subject to certain limited exceptions, for enforcement by secured creditors and the payment of the secured creditors in accordance with their rank upon realization of the assets. In addition, the managers or directors of a Luxembourg company that ceases its payments (i.e. is unable to pay its debts as they fall due with normal means of payment) must within a month of them having become aware of the company's cessation of payments, file a petition for bankruptcy with the court clerk of the district court of the company's registered office. If the managers or directors fail to comply with such provision they may incur civil and/or criminal liability;
- controlled management proceedings, the opening of which may only be requested by the company and not by its creditors and under which a Luxembourg court may order provisional suspension of payments, including a stay of enforcement of claims by secured creditors; or
- composition proceedings, the opening of which may only be requested by the company (subject to obtaining the consent of the majority of its creditors) and not by its creditors themselves. The Luxembourg court's decision to admit a company to the composition proceedings triggers a provisional stay on enforcement of claims by creditors.

In addition to these proceedings, the ability of a holder of the Notes to call the guarantee may be affected by a decision of a Luxembourg court to grant a stay on payments or to put a Luxembourg company into judicial liquidation. Judicial liquidation proceedings may be opened at the request of the public prosecutor against companies pursuing an activity violating criminal laws or that are in serious breach or violation of the Luxembourg Commercial Code or of the Luxembourg law dated August 10, 1915 on commercial companies, as amended. The management of such liquidation proceedings will generally follow similar rules as those applicable to Luxembourg insolvency proceedings.

Liability of the Luxembourg companies in respect of the guarantee will, in the event of a liquidation of the company following bankruptcy or judicial liquidation proceedings, only rank after the cost of liquidation (including any debt incurred for the purpose of such liquidation) and any claims that are preferred under Luxembourg law. Preferential claims under Luxembourg law include, among others:

- liquidation or insolvency fees;
- certain amounts owed to the Luxembourg Revenue and value-added tax and other taxes and duties owed to the Luxembourg Customs and Excise;
- social security contributions; or
- remuneration owed to employees.

Assets over which a security interest has been granted will not, in principle, be available for distribution to unsecured creditors (except after enforcement and to the extent a surplus is realized).

Favorable rules apply in relation to security interests of claims or financial instruments securing monetary claims (or claims for the delivery of financial instruments). Article 20 of the Luxembourg law dated August 5, 2005 on financial collateral arrangements as amended (the "Luxembourg Collateral Law") provides that all Luxembourg law collateral arrangements (pledges, security assignments and repo agreements) over claims and financial instruments, as well as all enforcement measures and valuation and enforcement measures agreed upon by the parties in accordance with this law, are valid and enforceable even if entered into during the hardening period against third parties, commissioners, receivers, liquidators and other similar persons notwithstanding the opening of insolvency or similar proceedings (save in the case of fraud).

Article 21 (2) of the Luxembourg Collateral Law provides that, where a financial collateral arrangement has been entered into after the opening of liquidation proceedings or the coming into force of reorganization measures or the entry into force of such measures, such arrangement is enforceable against third parties, administrators, insolvency receivers, liquidators and other similar organs if the collateral taker proves that it was unaware of the fact that such proceedings had been opened or that such measures had been taken or that it could not reasonably be aware of it.

Article 24 of the Luxembourg Collateral Law provides that foreign law security interests over claims or financial instruments granted by a Luxembourg security provider will be valid and enforceable as a matter of Luxembourg law notwithstanding any Luxembourg insolvency proceedings, if such foreign law security interests are similar in nature to a Luxembourg security interest falling within the scope of the Luxembourg Collateral Act 2005. If Article 24 applies, Luxembourg suspect period rules are disapplied (save the case of fraud).

During insolvency proceedings in Luxembourg, all enforcement measures by unsecured creditors are suspended. Other than as described above, the ability of certain secured creditors to enforce their security interest may also be limited, in particular in the event of controlled management proceedings providing expressly that the rights of secured creditors are frozen until a final decision has been taken by a Luxembourg court as to the petition for controlled management, and may be affected thereafter by a reorganization order given by the court. A reorganization order requires the prior approval by more than 50% of the creditors representing more than 50% of the relevant Luxembourg company's liabilities in order to take effect. Furthermore, declarations of default and subsequent acceleration (such as acceleration upon the occurrence of an event of default) may not be enforceable during controlled management proceedings.

- Luxembourg insolvency laws may affect transactions entered into, or payments made, by a Luxembourg company during the suspect period which is a maximum of six months preceding the judgment declaring bankruptcy, except that in certain specific situations the court may set the start of the suspect period at the ten days preceding it. In particular:
  - some specific transactions (in particular, the granting of a security interest for antecedent debts, save in respect of financial collateral arrangements within the

meaning of the Luxembourg law on financial collateral arrangements of August 5, 2005 (as amended); the payment of debts which have not fallen due, whether payment is made in cash or by way of assignment, sale, set-off or by any other means; the payment of debts which have fallen due by any means other than in cash or by bill of exchange; the sale of assets without consideration or with substantially inadequate consideration) entered into during the suspect period must be set aside or declared null and void, if so requested by the insolvency receiver;

- payments made for matured debts as well as other transactions concluded for consideration during the suspect period are subject to cancellation by the court upon proceedings instituted by the insolvency receiver if they were concluded with the knowledge of the bankrupt's cessation of payments; and
- the insolvency receiver (acting on behalf of the creditors) has the right to challenge
  any fraudulent payments and transactions, including the granting of security with an
  intent to defraud, made prior to the bankruptcy, without any time limit;
- Insolvency proceedings may hence have a material adverse effect on the relevant Luxembourg company's business and assets and the Luxembourg company's respective obligations under the Notes.
- Finally, international aspects of Luxembourg insolvency proceedings may be subject to the EU Insolvency Regulation. In particular, rights in rem over assets located in another jurisdiction where the EU Insolvency Regulation is applicable will not be affected by the opening of insolvency proceedings, without prejudice however to the applicability of rules relating to the voidness, voidability or unenforceability of legal acts detrimental to all the creditors (subject to the application of Article 24 of the Luxembourg Collateral Law as described above and Article 13 of the EU Insolvency Regulation).

The measure of insolvency for purposes of the foregoing discussion of the legal regimes of Hong Kong, Luxembourg, Mongolia and other jurisdictions will vary depending on the laws of the applicable jurisdiction. Generally, however, a guarantor would be considered insolvent at a particular time if it were unable to pay its debts as they fell due or if the sum of its debts was then greater than all of its properties at a fair valuation or if the present fair saleable value of its assets was then less than the amount that would be required to pay its probable liabilities in respect of its existing debts as they became absolute and matured.

In addition, a guarantee may be subject to review under applicable bankruptcy, fraudulent transfer, insolvency or similar laws in certain jurisdictions or subject to a lawsuit by or on behalf of creditors of the guarantor. In such case, the analysis set forth above would generally apply, except that the guarantee could also be subject to the claim that, since the guarantee was not incurred for the benefit of the guarantor, the obligations of the guarantor thereunder were incurred for less than reasonably equivalent value or fair consideration.

In an attempt to limit the applicability of bankruptcy, fraudulent transfer, insolvency and other laws in certain jurisdictions, the obligations of the guarantors under the guarantees will be limited to the maximum amount that can be guaranteed by the applicable guarantor without rendering the guarantee, as it relates to such guarantor, voidable under such applicable bankruptcy, fraudulent transfer, insolvency or similar laws.

If a court voids a guarantee, subordinates such guarantee to other indebtedness of the guarantor, or holds the guarantee unenforceable for any other reason, holders of the Notes would cease to have a

claim against that guarantor based upon such guarantee, would be subject to the prior payment of all liabilities (including trade payables) of such guarantor, and would solely be creditors of us and any guarantors whose guarantees have not been voided or held unenforceable. In such an event, after providing for all prior claims, there might not be sufficient assets to satisfy the claims of the holders of the Notes.

Corporate benefit, capital maintenance laws and other limitations on the Subsidiary Guarantees and the Collateral may adversely affect the validity and enforceability of the Subsidiary Guarantees and the Collateral.

The laws of certain of the jurisdictions in which the Subsidiary Guarantors are incorporated, including Luxembourg, may limit their ability to guarantee the debt of a parent or sister company or to grant security on account of a related company's debts. These limitations arise from principles of corporate law, which include rules governing capital maintenance, under which, among others, the risks associated with the guaranteeing or granting of security on account of a parent or sister company's debt need to be reasonably, economically and operationally appreciated in the global context of the case and in a perspective of continuity from the Subsidiary Guarantor's perspective, as well as financial assistance, thin capitalization and fraudulent transfer principles. If these limitations were not considered, observed or justified, the guarantees and the grant of security interests by those Subsidiary Guarantors could be subject to legal challenge and be declared invalid. In these jurisdictions, the Subsidiary Guarantees usually contain language limiting the amount of debt that can be guaranteed or secured by the relevant Subsidiary Guarantor to mitigate the risk of legal challenge, which could cause the Guarantee to be voidable or otherwise ineffective under applicable laws. In Luxembourg, the granting of a guarantee or security in absence of sufficient corporate benefit for the guarantor or security provider may constitute a misappropriation of corporate assets and the law makes it a criminal offense. See "Description of the Notes - The Subsidiary Guarantees".

The amount recoverable under the Subsidiary Guarantees and, as the case may be, the Collateral may be limited to a certain maximum amount that can be guaranteed or secured, by a particular Subsidiary Guarantor without rendering such Subsidiary Guarantee or Collateral, as it relates to such Subsidiary Guarantor, voidable or otherwise ineffective under applicable law, or without creating liability risks for its management.

Our Subsidiary Guarantors may not have the funds necessary to satisfy our financial obligations under the Subsidiary Guarantees.

Certain of our current and future subsidiaries will not provide any guarantee for the Notes now or at any time in the future. As a result, the Notes will be effectively subordinated to all the debt and other obligations, including contingent obligations and trade payables, of such non-guarantor subsidiaries.

We cannot assure you that the initial guarantors or any subsidiaries that may become guarantors in the future will have the funds necessary to satisfy our financial obligations under the Notes if we are unable to do so.

#### The pledge of certain Collateral may in some circumstances be voidable.

The pledge of the Collateral may be voidable as a preference under insolvency or fraudulent transfer or similar laws of Hong Kong at any time within six months of the creation of the pledge or, under some circumstances, within a longer period. Pledges of shares of future Subsidiary Guarantors may also be voidable as a preference under relevant insolvency or fraudulent transfer or similar laws.

If the pledges of the Collateral were to be voided for any reason, holders of the Notes would have only an unsecured claim against us.

The value of the Collateral will likely not be sufficient to satisfy the Company's obligations under the Notes, the New Standard Bank Facilities Agreement and other Permitted Pari Passu Secured Indebtedness.

The Collateral will initially consist only of the capital stock of Mongolian Coal Corporation Limited and Mongolian Coal Corporation S.à.r.l.

Security over the Collateral for our obligations under the Notes and the Indenture will not be granted directly to the holders of the Notes but will be granted only in favor of the Shared Security Agent for the benefit of the Trustee. As a consequence, holders of the Notes will not have direct security and will not be entitled to take enforcement action in respect of the security for the Notes, except through the Shared Security Agent, which has agreed to apply any proceeds of enforcement on such security towards such obligations, subject to equal and ratable sharing with the finance parties under the New Standard Bank Facilities Agreement and the holders of the Permitted Pari Passu Secured Indebtedness, if any, in accordance with the Intercreditor Agreement.

The ability of the Trustee or the Shared Security Agent, as the case may be, on behalf of the holders of the Notes, to foreclose on such Collateral upon the occurrence of an Event of Default or otherwise will be subject in certain instances to perfection and priority issues. Although procedures will be undertaken to support the validity and enforceability of the security interests granted in relation to the Collateral, we cannot assure you that the Shared Security Agent, will be able to enforce such security interests granted in relation to the Collateral.

The value of the Collateral in the event of a liquidation will depend upon market and economic conditions, the availability of buyers and other factors. No independent appraisals of any of the Collateral have been prepared by or on our behalf in connection with this offering of the Notes. Accordingly, we cannot assure you that the proceeds of any sale of the Collateral following an acceleration of the Notes would be sufficient to satisfy, or would not be substantially less than, amounts due and payable on the Notes, the New Standard Bank Facilities Agreement and other Permitted Pari Passu Secured Indebtedness. By their nature, some or all of the Collateral, in particular, the capital stock of the existing or any future Subsidiary Guarantor, may be illiquid and may have no readily ascertainable market value. Likewise, we cannot assure you that the Collateral will be saleable or, if saleable, that there will not be substantial delays in its liquidation.

The Collateral will be shared on a pari passu basis by the holders of the Notes and finance parties under the New Standard Bank Facilities Agreement and may be shared on a pari passu basis with other Permitted Pari Passu Secured Indebtedness. Accordingly, in the event of a default on the Notes, the New Standard Bank Facilities Agreement or the other Permitted Pari Passu Secured Indebtedness and an enforcement of the Collateral, any enforcement proceeds would be shared by the holders of secured indebtedness in proportion to the outstanding amounts of each class of such secured indebtedness. The value of the Collateral may not be sufficient to satisfy the full repayment of the indebtedness under the Notes, the indebtedness under the New Standard Bank Facilities Agreement and any other Permitted Pari Passu Secured Indebtedness, and the Collateral securing the Notes and the guarantees may be reduced or diluted under certain circumstances, including as a consequence of the issuance of additional Notes or the incurrence of other pari passu indebtedness and the disposition of assets comprising the Collateral, subject to the terms of the Indenture. If the proceeds of the sale of the Collateral were insufficient to repay the amounts due under the Notes, the New Standard Bank Facilities Agreement and any additional Permitted Pari Passu Secured Indebtedness, holders of the Notes would have only an unsecured claim against the remaining assets of the Company and the remaining assets of the Subsidiary Guarantors.

Pursuant to the Intercreditor Agreement, the Trustee, the facility agent under the New Standard

Bank Facilities Agreement and the representative of any Permitted Pari Passu Secured Indebtedness will be entitled to give instructions to the Shared Security Agent to foreclose the Collateral, upon the occurrence of a continuing event of default under the applicable finance document. In the event of any conflict between any enforcement instructions, the Shared Security Agent shall act in accordance with the first enforcement instruction it receives. If the preference of the holders of the Notes at such time is not to foreclose the Collateral, or if foreclosure may not at such time be in the best interest of the holders, the holders will not be able to instruct the Shared Security Agent to refrain from acting. In addition, other than with respect to enforcement instructions and other circumstances as described under the Intercreditor Agreement, creditors representing 50% or more of the indebtedness subject to the Intercreditor Agreement shall be entitled to give any instruction (other than enforcement instruction) which will override any conflicting instruction given by any other party. If the indebtedness of the Notes at such time constitutes less than 50% of the indebtedness subject to the Intercreditor Agreement, the holders of the Notes will not be able to override any prevailing instruction, and such prevailing instruction may not be in the best interest of the holders of the Notes.

The guarantees from the Subsidiary Guarantors will be shared on a pari passu basis with the other creditors.

The proceeds from the enforcement of the guarantees from the Subsidiary Guarantors will be shared on a *pari passu* basis among the holders of the Notes, the finance parties under the New Standard Bank Facilities Agreement and may be shared on a *pari passu* basis with other indebtedness ranking *pari passu* with the Notes that we may issue or incur in the future. Accordingly, in the event of a default on the Notes, the New Standard Bank Facilities Agreement or such other indebtedness and an enforcement of such guarantees, any proceeds so recovered would be shared by the holders of such indebtedness in proportion to the outstanding amounts of each class of such indebtedness. Since certain of the Subsidiary Guarantors are holding companies with no substantial assets, the proceeds of recovery resulting from such enforcement are likely to be insufficient to discharge the obligations under the Notes, the New Standard Bank Facilities Agreement and other *pari passu* indebtedness.

#### USE OF PROCEEDS

We estimate that we will receive net proceeds from the offering of approximately US\$587.2 million, after deducting the underwriting fees and commissions and estimated expenses payable by us in relation to the offering. We intend to use such net proceeds as follows:

- approximately 67% for financing transportation infrastructure improvement and development projects, including, without limitation, for our UHG-GS railway project; and
- approximately 33% for working capital and other general corporate purposes, including, without limitation, for exploration and debt refinancing.

We may reallocate the use of proceeds in response to changing market conditions or circumstances and other factors, including, without limitation, the timing of our UHG-GS railway project. For example, if there is a change in the timing of our UHG-GS railway project, we may decide not to allocate proceeds to our UHG-GS railway project and instead we may refinance our existing debt or allocate proceeds for other purposes.

#### EXCHANGE RATES AND EXCHANGE CONTROLS

This offering memorandum contains translations of Togrog amounts into U.S. dollar amounts at specific exchange rates solely for the convenience of the reader. For convenience only and unless otherwise noted, all translations from Togrogs into U.S. dollars in this offering memorandum were made at the rate of MNT1,394.00 to US\$1.00, which translation represents the basic exchange rate published by Bloomberg on December 30, 2011. On March 21, 2012 the translation of Togrogs into U.S. dollars published by Bloomberg was MNT1,322.50 to US\$1.00.

The following table sets forth the mid-closing exchange rates from Bloomberg, in Togrogs per US\$1.00, as at and for each of the periods indicated:

	Mid-Closing Exchange Rate				
Period	Low <sup>(2)</sup>	Average <sup>(1)</sup>	High <sup>(2)</sup>	Period End	
		(MNT per	US\$1.00)		
2007	1,162.20	1,170.33	1,190.50	1,169.60	
2008	1,143.95	1,167.76	1,283.76	1,283.76	
2009	1,291.25	1,451.69	1,665.00	1,445.00	
2010	1,208.00	1,355.99	1,472.50	1,259.00	
2011	1,191.00	1,263.93	1,394.00	1,394.00	
September	1,240.50	1,258.33	1,287.50	1,287.50	
October	1,268.50	1,288.55	1,299.50	1,297.00	
November	1,298.00	1,322.17	1,344.00	1,344.00	
December	1,336.00	1,372.82	1,394.00	1,394.00	
2012					
January	1,365.50	1,392.99	1,436.50	1,365.50	
February	1,325.00	1,340.12	1,361.50	1,340.00	
March (through March 21, 2012)	1,332.50	1,334.80	1,343.50	1,322.50	

<sup>(1)</sup> Determined by averaging the rates on the last business day of each month during the relevant period for annual periods and each business day for monthly periods.

#### **Exchange Controls**

There are no restrictions on repatriation of foreign currencies from Mongolia and there are no foreign exchange controls. Foreign currency is generally freely transferable within or from Mongolia. Foreign exchange policy is under the supervision of the Bank of Mongolia and the Financial Regulatory Commission and is subject to modification.

<sup>(2)</sup> The high and low figures for each period are determined based on the daily middle exchange rates during the period indicated.

#### CAPITALIZATION AND INDEBTEDNESS

The following table sets forth our borrowings, equity and capitalization as of December 31, 2011:

- on an actual basis under IFRS; and
- as adjusted to give effect to the issuance of the Notes of US\$600 million and underwriting fees and commissions and estimated expenses of US\$12.8 million.

The as adjusted information below is illustrative only and does not take into account any changes in our borrowings and capitalization after December 31, 2011.

	As of December 31, 2011	
	Actual	As adjusted
	US\$'000	US\$'000
Current borrowings: (1)		
Existing Standard Bank Facilities Agreement <sup>(2)</sup>	298,750	298,750
Other current bank borrowings <sup>(3)</sup>	34,818	34,818
Convertible bonds	83,508	83,508
Total current borrowings	417,076	417,076
Non-current borrowings: (4)		
Bank loans <sup>(5)</sup>	144,661	144,661
Notes to be issued	_	587,231 <sup>(6)</sup>
Total non-current borrowings <sup>(5)</sup>	144,661	731,892
Equity:		
Profit attributable to the equity shareholders of the Company	119,090	119,090
Total equity	768,864	768,864
Total capitalization <sup>(7)</sup>	913,525	1,500,756

## Notes:

- (1) Includes nil of borrowings incurred by our subsidiaries who are not guaranteeing the Notes. See "Description of Other Material Indebtedness Existing Standard Bank Facilities Agreement" and "Description of Other Material Indebtedness Khan Bank Loan Agreement" for a description of the security interests granted pursuant to our Existing Standard Bank Facilities Agreement and our Khan Bank Loan Agreement, respectively.
- (2) On March 23, 2012, we plan to repay the aggregate principal amount of US\$300.0 million of the Existing Standard Bank Facilities Agreement. As of December 31, 2011, the amount outstanding under this facility was US\$298.8 million after netting off attributable transaction costs, all of which was recorded as current bank borrowings. The table above has not been adjusted for this repayment.
- (3) Current borrowings also include the current portion of long-term debt.
- (4) Includes nil of borrowings incurred by our subsidiaries who are not guaranteeing the Notes. See "Description of Other Material Indebtedness US\$180 Million EBRD, FMO and DEG Loan Agreements" for a description of the security interests granted pursuant to our EBRD, FMO and DEG Loan Agreements.
- (5) On March 8, 2012, we entered into the New Standard Bank Facilities Agreement with Standard Bank, pursuant to which Standard Bank and potentially a syndicate of lenders have agreed to make available to us term loan facilities of up to US\$300.0 million. See "Description of Other Material Indebtedness New Standard Bank Facilities Agreement". On March 14, 2012, we drew down US\$50.0 million under the facilities for our cash needs. We plan to draw down US\$150.0 million on March 23, 2012 to repay a portion of the outstanding amount under the Existing Standard Bank Facilities Agreement. On or before March 29, 2012, we will provide notice to Standard Bank to reduce the size of the New Standard Bank Facilities Agreement to US\$200.0 million. See "Description of Other Material Indebtedness New Standard Bank Facilities Agreement" for a description of the security interests granted pursuant to our New Standard Bank Facilities Agreement. The table above has not been adjusted for this borrowing.
- (6) Estimated net proceeds to our Company, after deducting underwriting fees and commissions and estimated expenses.
- (7) Total capitalization includes total equity and total non-current borrowings.

Except as disclosed above, there has been no material change in our capitalization since December 31, 2011.

## SELECTED HISTORICAL CONSOLIDATED FINANCIAL INFORMATION AND OTHER DATA

The following selected summary consolidated statement of comprehensive income data and selected summary consolidated cash flow data for the years ended December 31, 2009, 2010 and 2011 and the selected summary consolidated balance sheet data as of December 31, 2009, 2010 and 2011 set forth below have been derived from our consolidated financial statements which have been prepared in accordance with IFRS. You should read the selected historical financial information below in conjunction with our financial statements and the accompanying notes included in this offering memorandum.

## Summary consolidated statement of comprehensive income data

	Year ended December 31,			
	2009	2010	2011	
	except	(in US\$'000, earnings per	share)	
Revenue	66,983 (38,682)	277,502 (164,368)	542,568 (336,368)	
Gross profit	28,301	113,134	206,200	
Other revenue	70 (35) (10,427)	511 (187) (38,685)		
Profit from operations	17,909	74,773	146,408	
Finance income	342 (3,860)	12,335 (4,214)	22,236 (13,785)	
Net finance (costs)/income	(3,518)	8,121	8,451	
Share of (losses)/profits of associates	(10)	2	(119)	
Profit before taxation	14,381	82,896	154,740	
Income tax	(4,111)	(22,757)	(35,650)	
Profit for the year	10,270	60,139	119,090	
Exchange differences on re-translation	31	7,601	(79,153)	
Total comprehensive income for the year	10,301	67,740	39,937	
Profit attributable to the equity shareholders of the Company	10,270	60,139	119,090	
the equity shareholders of the Company	10,301	67,740	39,937	
Basic earnings per share	0.34 cents	1.91 cents	3.21 cents	
Diluted earnings per share	0.34 cents	1.91 cents	3.07 cents	

## Summary consolidated balance sheet data

	As of December 31,		
	2009	2010	2011
		(in US\$'000)	
Total non-current assets	83,162	338,137	1,233,194
Total current assets	30,068	715,133	394,821
Total assets	113,230	1,053,270	1,628,015
Total current liabilities	42,102	131,679	553,511
Total non-current liabilities	27,287	194,310	305,640
Total liabilities	69,389	325,989	859,151
Total shareholders' equity	43,841	727,281	768,864
Total liabilities and shareholders' equity	113,230	1,053,270	1,628,015

## Summary consolidated cash flow data

	Year ended December 31,		
	2009	2010	2011
		(in US\$'000)	
Net cash (used in)/generated from operating activities	(4,024)	69,641	20,985
Net cash used in investing activities	(62,061)	(564,380)	(215,417)
Net cash generated/(used in) from financing activities	62,683	823,495	(79,871)

## Other financial data

	Year ended December 31,			
	2009	2010	2011	
	except otherwise indicated)			
Consolidated Adjusted EBITDA <sup>(1)</sup>	19,774	77,977	169,923	
Consolidated Adjusted EBITDA margin <sup>(2)</sup>	29.5%	28.1%	31.3%	
Total debt/Consolidated Adjusted EBITDA <sup>(3)</sup>	1.7x	3.2x	3.3x	
Consolidated Adjusted EBITDA/Interest expense <sup>(4)</sup>	5.1x	18.5x	12.3x	

Notes:

We calculate Consolidated Adjusted EBITDA by adding income tax, share of losses of associates, finance costs, depreciation and amortization and allowance for doubtful debts and subtracting share of profits of associates, finance income from profit attributable to the equity shareholders of the Company for the year as calculated under IFRS. We have included Consolidated Adjusted EBITDA data because such data is commonly used by investors to measure a company's ability to service debt. Consolidated Adjusted EBITDA is not, and should not be used as, an indicator or alternative to profit from operations, profit for the year or cash flow as reflected in our consolidated financial statements, is not intended to represent funds available for debt service, dividends or other discretionary uses, is not a measure of financial performance under IFRS and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. Investors should not compare Consolidated Adjusted EBITDA to EBITDA presented by other companies because not all companies use the same definition. For example, we subtract the depreciation expense associated with mining equipment while other competitors who own their equipment do not subtract this cost. Investors should also note that the Consolidated Adjusted EBITDA as presented herein is calculated differently from Consolidated EBITDA as defined and used in the Indenture governing the Notes. See "Description of the Notes -Definitions" for a description of the manner in which Consolidated EBITDA is defined for purposes of the Indenture governing the Notes. The following table reconciles our profit attributable to the equity shareholders of the Company for the year under IFRS to the definition of Consolidated Adjusted EBITDA for the periods indicated:

	Year ended December 31,			
	2009	2009 2010		
		(in US\$'000)		
Profit attributable to the equity shareholders of the company	10,270	60,139	119,090	
Adjustments				
Income tax	4,111	22,757	35,650	
Share of losses/(profits) of associates	10	(2)	119	
Net finance costs/(income)	3,518	(8,121)	(8,451)	
Depreciation and amortization	1,865	3,204	19,370	
Allowance for doubtful debts	_	_	4,145	
Consolidated Adjusted EBITDA	19,774	77,977	169,923	

- (2) Consolidated Adjusted EBITDA margin is calculated by dividing Consolidated Adjusted EBITDA by revenue.
- (3) Total debt consists of interest-bearing borrowings (both current and non-current) and our US\$85.0 million QGX Convertible Bonds.
- (4) Interest expense represents the finance costs amounts in the consolidated statement of comprehensive income.

Our total debt and interest expense will increase significantly as a result of the offering of the Notes. See "Risk Factors – Risks Relating to the Notes – We have substantial indebtedness and may incur substantial additional indebtedness in the future, which could adversely affect our financial health and our ability to generate sufficient cash to satisfy our outstanding and future debt obligations".

	Year ended December 31,			
Operation Data	2009	2010	2011	
ROM coal production (Mt)	1.8	3.9	7.1	
Average stripping ratio (actual) (BCM/t)	3.4	5.1	5.2	
Total coal sales (Mt)	1.4	3.9	4.8	
Average sales price per tonne of raw coal (US\$ per tonne) <sup>(1)</sup> Average sales price per tonne of washed coal	48.2	70.8	95.0	
(US\$ per tonne) <sup>(2)</sup>	_	_	155.6	

Notes:

- (1) See "Management's Discussion and Analysis of Financial Condition and Results of Operations Factors Affecting Results of Operation and Financial Condition Average selling prices" for a description of the factors affecting average sales prices of our coal.
- (2) We began selling washed coal in 2011 after the completion of the first module of our CHPP.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis in conjunction with our financial statements prepared in conformity with IFRS, which may differ in certain material aspects from generally accepted accounting principles in other jurisdictions, together with the accompanying notes, set forth in the audited consolidated financial statements included in this offering memorandum. You should read the whole of the audited consolidated financial statements included in this offering memorandum and not rely merely on the information contained in this section.

The following discussion contains certain forward-looking statements that involve risks and uncertainties. Our actual results reported in future periods could differ materially from those discussed below. Factors that could cause or contribute to such differences include those discussed in the sections headed "Risk Factors" and "Business" and elsewhere in this offering memorandum.

For the purpose of this section, unless the context otherwise requires, references to 2009, 2010 and 2011 refer to our financial year ended December 31 of such year. Unless the context otherwise requires, financial information described in this section is described on a consolidated basis.

#### Overview

We are a leading Asian coking coal mining company. We are engaged in the open-pit mining of coking coal at our UHG deposit which forms the northern branch of the Tavan Tolgoi coal formation and our BN deposit, both located in South Gobi Province, Mongolia. Our UHG mining license permits us to engage in coal mining activities on 2,960 hectares of land at our UHG mine for an initial period of 30 years starting from August 29, 2006. Our UHG mine had 570.8 Mt and 275.0 Mt of JORC-compliant measured, indicated and inferred coal resources and proven and probable coal reserves, respectively, as of December 31, 2011. On June 1, 2011, we completed the acquisition of our BN mine, which is located approximately 30 km southwest of our UHG mine. Our BN mine had 282.2 Mt of JORC-compliant measured, indicated and inferred coal resources as of February 2010 and 185.3 Mt of JORC-compliant proven and probable reserves as of February 2011. We commenced operations at our BN mine in February 2012.

We are the largest producer and exporter of raw and washed coal in Mongolia. We commenced mining at our UHG mine in April 2009 and became profitable in our first year of operations. For the years ended December 31, 2009, 2010 and 2011, we produced 1.8 Mt, 3.9 Mt and 7.1 Mt of ROM coal, respectively. We, together with our contract trucking companies, haul most of our coal by truck to GM, located on the Chinese side of the Sino-Mongolian border crossing, where our customers pick up and further transport the coal to their final destinations in China. In October 2011, we completed the construction of a paved road, with coal transportation capacity of 18.0 Mtpa from our UHG mine to GS. In January 2012, we, together with Erdenes MGL, completed and commissioned an expansion of the GS border crossing, which we expect will increase the border crossing capacity from 10 Mtpa to approximately 20-30 Mtpa.

We sell most of our coking coal into China pursuant to long-term agreements with iron and steel mills and coke and chemical plants. According to Shanxi Fenwei, the selling prices of our coal are the highest among our competitors in Mongolia and are considered the benchmark for the price of Mongolian coking coal. In the years ended December 31, 2009, 2010 and 2011, we sold our coking coal at an average selling price of US\$48.2, US\$70.8 and US\$113.9 per tonne, respectively. In June 2011 and February 2012, we commenced operations of the first and second modules, respectively, of our CHPP with ROM coal nameplate processing capacity of 5.0 Mtpa to produce high-quality washed coal. With the commencement of operations of our CHPP, we have shifted our production from raw

coal to washed coal. Washed coal is sold at a substantial premium to raw coal. In 2011, the average selling price of our raw coal was US\$95.0 per tonne and the average selling price of our washed coal was US\$155.6 per tonne, representing approximately a 63.8% premium to that of raw coal.

Our revenue for the years ended December 31, 2009, 2010 and 2011 was US\$67.0 million, US\$277.5 million and US\$542.6 million, respectively, representing a CAGR of 184.6%. Our net profit for the years ended December 31, 2009, 2010 and 2011 was US\$10.3 million, US\$60.1 million and US\$119.1 million, respectively, representing a CAGR of 240.0%.

#### Factors Affecting Results of Operations and Financial Condition

Our business and historical financial condition and results of operations have been, and will continue to be, affected by a number of important factors, including the following:

## Production and Expansion

Since April 2009, we have been principally engaged in open-pit coking coal mining at our UHG mine, which is located in the Tavan Tolgoi coal formation. We produced 1.8 Mt, 3.9 Mt and 7.1 Mt of ROM coal for the years ended December 31, 2009, 2010 and 2011, respectively, from our UHG mine.

On June 1, 2011, we completed the acquisition of our BN mine, our second mine, through the acquisition of 100% of the equity interests in Baruun Naran Limited (formerly named QGX Coal Limited). and which is located approximately 30 km southwest of our UHG mine. We commenced coking coal production at our BN mine in February 2012.

The following table sets forth our actual and projected ROM coal production volume for the periods indicated:

	Year ended December 31,							
	2009	2010	2011	2012	2013	2014		
	(Mt)							
		(Actual)			(Projected)			
UHG mine	1.8	3.9	7.1	10.7	14.7	15.2		
BN mine	_	_	_	1.0	$1.0^{(1)}$	$3.0^{(1)}$		
Total	1.8	3.9	7.1	11.7	15.7	18.2		

Note:

The projected ROM coal production volumes in the table above are subject to various risks and other factors. See "Risk Factors – Risks Relating to our Business and Industry – The accuracy of our resources and reserves estimates is based on a number of assumptions and we may produce less coal than our current estimates".

We have completed construction of and commissioned the first and second modules of our CHPP to produce high-quality washed coal. The ramp-up of our CHPP coincides with the ramp-up of our coal mine production. The first and second modules of our CHPP, each with ROM coal nameplate processing capacity of 5.0 Mtpa, have been in operation since June 2011 and February 2012, respectively. The first module processed approximately 2.5 Mt of ROM coal and produced approximately 1.6 Mt of washed coal in 2011. We began constructing the third module with ROM coal nameplate processing capacity of 5.0 Mtpa in August 2011 and expect to complete construction by the end of 2012.

<sup>(1)</sup> ROM coal production figures at our BN mine for 2013 and 2014 are subject to completion of a life-of-mine study which is expected to be completed by the end of 2012.

#### Average Selling Prices

Our contracts have pricing terms that are denominated in RMB and U.S. dollars and are adjustable periodically. Most of our coal is currently sold into the Chinese market. Unlike seaborne coking coal prices, which tend to rigidly follow settlements between Australian producers and Japanese consumers over the fiscal year in Japan, domestic Chinese prices are subject to ongoing negotiation and adjustment according to market dynamics. The far larger size and highly fragmented nature of the Chinese market results in a more fluid pricing system. Our average selling prices are affected by various market factors such as discovery and development of new deposits, expansion of current mine operations, closure of old mines, transportation infrastructure bottlenecks and specific demand of end users. Pursuant to our customer contracts, our selling prices are based on existing market prices and reviewed from time to time. In determining the price of coal sold under our customer agreements, we take into account the delivery point of the coal sold. In 2009, we sold most of our coal at our UHG mine gate, while in 2010, the main delivery point was TKH and, in 2011, it was GM. Our average selling prices have also increased as a result of shifting the delivery point of our coal sold further away from our UHG mine. See "- Transportation Costs".

Historically, the Chinese coking coal and coal-related product markets have at times experienced alternating periods of increased demand that caused production capacity, volumes, prices and margins to increase, followed by periods of excess supply that caused prices and margins to decline. For example, due to floods in the state of Queensland in Australia in 2008 that negatively impacted the coking coal supply, and the high demand for coking coal products from Chinese state-owned steel manufacturing companies, the selling prices of washed coal and coke reached historically high levels in the first half of 2008. The average selling prices of washed coal and coke dropped significantly by the end of 2008 due to the effects of the global credit crisis and economic slowdown. In an effort to tackle the global financial crisis, China launched a stimulus package aiming at further expanding domestic demand and promoting economic growth which led to heightened domestic structural steel consumption. In 2010, China's urbanization continued to be one of the key growth drivers for construction steel, and by the end of 2010, washed coal and coke prices rebounded significantly. In 2011, the robust demand and tight supply of coking coal in China offset the effects of a slowdown in world economic growth, which resulted in a stabilized trend in the prices of washed coal and coke. See "Risk Factors - Risks Relating to our Business and Industry - Coking coal prices are cyclical and subject to significant fluctuation".

In the years ended December 31, 2009, 2010 and 2011, we sold our coking coal at an average selling price of US\$48.2, US\$70.8 and US\$113.9 per tonne, respectively. Sales of washed coal, an increase in market price and a shift in our primary delivery point further away from our UHG mine were the main drivers of the increase in average selling price in 2011. We believe the increase in our average selling prices reflects the proven quality of our coking coal products, and our ability to consistently produce, market, and deliver our coking coal products to our customers.

We began selling washed coal in 2011 after the completion of the first module of our CHPP. Washed coal is sold at a substantial premium to raw coal. In 2011, the average selling price of our washed coal was approximately 63.8% higher than that of raw coal. The following table sets forth the average selling price of our raw and washed coal for the periods indicated:

	Year ended December 31,		
	2009	2010	2011
		(US\$ per tonne)	
Raw coal	48.2	70.8	95.0
Washed coal	_	_	155.6
Blended	48.2	70.8	113.9

### Mining Costs

We cooperate with Leighton, our mining contractor, and work closely in all aspects of our coal mining operations at our UHG mine. We entered into a long-term contract with it to undertake overburden removal, coal extraction and mine reclamation activities. We have two components of mining costs: (1) costs directly incurred by us and (2) costs related to our mining contractor. Costs directly incurred by us primarily include fuel costs, power generation costs, labor costs, employee-related expenses (onsite accommodations) and drilling and blasting expenses. Costs related to our mining contractor include capital expenditures, plant rate, wages of our mining contractor's expatriate staff and overhead and a contractor fee. Plant rate primarily includes costs related to the depreciation, repair and maintenance of the mining equipment used at our UHG mine as well as costs associated with major repair provisions, insurance and financing. The contractor fee is proportional to the mining contractor's agreed investment in the mining equipment, supplies and infrastructure used at our UHG mine.

Mining costs represent and will continue to represent a significant portion of our cost of revenue. Our mining costs were US\$24.5 million, US\$78.8 million and US\$120.3 million for the years ended December 31, 2009, 2010 and 2011, respectively. In 2011, approximately 38.4% of our mining costs were primarily fuel, labor and other employee-related costs, as well as drilling and blasting expenses directly incurred by us. The remainder was incurred by Leighton, the majority of which was related to plant rates.

## Ownership of Mining Equipment

Pursuant to our agreement with Leighton, we do not own any of the principal mining equipment at our UHG mine. Therefore, we do not directly incur depreciation expenses related to the excavators, loaders, graders, bulldozers, dump trucks and other principal mining equipment. Depreciation expenses associated with the Leighton-sourced equipment are covered by the plant rate under mining costs.

#### Transportation Costs

Transportation costs are costs associated with the transportation of our coal from UHG to TKH and GM by our own fleet as well as contractors' trucks. In October 2011, we completed the construction of a paved road parallel to the existing gravel road from our UHG mine to GS and by the end of 2011, we transported all of the coal produced at our UHG mine to the Sino-Mongolian border on this road. In 2011, we also expanded our truck fleet by acquiring 300 heavy haul double-trailer trucks, each capable of carrying up to 140 metric tonnes of coal using a double trailer road train configuration. Costs associated with the operation, repair, maintenance and depreciation of our paved and gravel roads and our coal hauling trucks are also included in the transportation costs. Transportation costs associated with coal sold were approximately \$5.8, \$15.5 and \$22.7 per tonne, respectively, for the years ended December 31, 2009, 2010 and 2011. In 2009, we sold most of our coal at our UHG mine gate, while in 2010, the main delivery point was TKH. In 2011, the main delivery point was GM. Our transportation costs have increased in each of the last three years as the primary delivery point of our coal sold has moved further away from our UHG mine.

#### Fuel Costs

We directly bear the costs related to the use of fuel in our mining operations and for the coal hauling trucks owned by us for coal transport from our UHG mine to TKH and GM. Fuel costs are included in both mining costs and transportation costs. For the years ended December 31, 2009, 2010 and 2011, fuel costs relating to our mining operations represented approximately 20.5%, 19.1% and 20.2% of mining costs, respectively. During the same period, fuel costs associated with the transportation of our coal were approximately 36.5%, 27.8% and 31.2% of transportation costs, respectively. Our fuel costs for the years ended December 31, 2009, 2010 and 2011 was US\$7.9 million, US\$17.7 million and US\$31.9 million. The average price for fuel in the years ended December 31, 2009, 2010 and 2011 was US\$1.06, US\$1.06 and US\$1.25 per liter, respectively. We signed a fuel supply contract with NIC in July 2011. Under this contract, NIC has agreed to supply, store and distribute fuel to our UHG mine. We expect NIC to complete a 6 million liter fuel storage facility at UHG by September 2012, which will provide backup fuel for approximately one month of operations at our UHG mine. NIC also stores 20 million liters of fuel at its own storage facility to provide two to three months of backup fuel in the event of a fuel shortage or significant price increase. The fuel price is adjusted monthly in accordance with the change in the monthly fuel import price on a DAP basis. All other costs, such as taxes, transportation and service fees, are fixed under the contract.

#### Increased Headcount

Our headcount has increased over the last three years as our mine production and infrastructure has expanded. As of December 31, 2009, 2010 and 2011, we had 704, 1,161 and 2,177 employees, respectively. Total staff costs for the years ended December 31, 2009, 2010 and 2011 were US\$3.0 million, US\$10.7 million and US\$21.4 million, respectively.

## **Critical Accounting Policies**

Critical accounting policies are those that require our management to exercise judgment and to make estimates that would yield materially different results if our management applied different assumptions or made different estimates. These accounting policies are set forth in note 2 to our financial statements included elsewhere in this offering memorandum. The preparation of our financial information pursuant to IFRS requires our management to adopt accounting policies and make estimates and assumptions that affect the amount reported in our financial information. These estimates and assumptions are continually evaluated by management and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results may differ from those estimates and assumptions. We have identified the following accounting policies as critical to an understanding of our financial condition and results of operations.

In determining the carrying amounts of certain assets and liabilities, we make assumptions of the effects of uncertain future events on those assets and liabilities at the balance sheet date. These estimates involve assumptions about such items as risk adjustment to cash flows or discount rates used, future changes in salaries and future changes in prices affecting other costs. Our estimates and assumptions are based on the expectations of future events and are reviewed periodically. In addition to assumptions and estimations of future events, judgements are also made during the process of applying our accounting policies.

## Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Provided it is probable that the economic benefits will flow to us and the revenue and costs, if applicable, can be

measured reliably. Revenue associated with the sale of coal is recognized when the risks and rewards of ownership of the goods have been passed to the customer. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts and volume rebates.

#### Reserves

Engineering estimates of our coal reserves are inherently imprecise and represent only approximate amounts because of the subjective judgements involved in developing such information. Reserve estimates are updated at regular basis and have taken into account recent production and technical information about the relevant coal deposit. In addition, as prices and cost levels change from year to year, the estimate of coal reserves also changes. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in related depreciation and amortization rates.

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation and amortization expenses. Depreciation and amortization rates are determined based on estimated coal reserve quantity (the denominator) and capitalized costs of mining structures and mining rights (the numerator). The capitalized cost of mining structures and mining rights are depreciated and amortized based on the units produced.

### Useful Lives of Property, Plant and Equipment

We determine the estimated useful lives of and related depreciation charges for our property, plant and equipment. This estimate is based on the actual useful lives of assets of similar nature and functions. It could change significantly as a result of significant technical innovations and competitor actions in response to industry cycles. We will increase the depreciation charges where useful lives are less than previously estimated lives, and will write-off or write-down technically obsolete or non-strategic assets that have been abandoned or sold.

#### Impairment of Assets

We review the carrying amounts of the assets at each balance sheet date to determine whether there is objective evidence of impairment. When indication of impairment is identified, we prepare discounted future cash flow to assess the differences between the carrying amount and value in use and provide for impairment loss. Any change in the assumptions adopted in the cash flow forecasts would increase or decrease the provision of the impairment loss and affect our net asset value.

In relation to trade and other receivables (including VAT receivables), a provision for impairment is made and an impairment loss is recognized in profit and loss when there is objective evidence (such as the probability of insolvency or significant financial difficulties of the debtor) that we will not be able to collect all of the amounts due under the original terms of the invoice. We use judgment in determining the probability of insolvency or significant financial difficulties of the debtor.

An increase or decrease in the above impairment loss would affect the net profit in future years.

#### Obligation for Reclamation

The estimation of the liabilities for final reclamation and mine closure involves the estimates of the amount and timing for the future cash spending as well as the discount rate used for reflecting current market assessments of the time value of money and the risks specific to the liabilities. We consider the factors including future production volume and development plan, the geological structure of the mining regions and reserve volume to determine the scope, amount and timing of reclamation

and mine closure activities to be performed. Determination of the effect of these factors involves judgements by us and the estimated liabilities may turn out to be different from the actual expenditure to be incurred. The discount rate used by us may also be altered to reflect the changes in the market assessments of the time value of money and the risks specific to the liability, such as change of the borrowing rate and inflation rate in the market. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in timing of the performance of reclamation activities), the revisions to the obligation will be recognized at the appropriate discount rate.

#### Recognition of Deferred Tax Assets

Deferred tax assets in respect of unused tax losses and tax credit carried forward and deductible temporary differences are recognized and measured based on the expected manner of realization or settlement of the carrying amount of the assets, using tax rates enacted or substantively enacted at the balance sheet date. In determining the carrying amounts of deferred assets, expected taxable profits are estimated which involves a number of assumptions relating to our operating environment and requires a significant level of judgement exercised by the directors. Any change in such assumptions and judgement would affect the carrying amounts of deferred tax assets to be recognized and hence the net profit in the future years.

#### **Derivative Financial Instruments**

In determining the fair value of the derivative financial instruments, considerable judgment is required to interpret market data used in the valuation techniques. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts.

#### Exploration and Evaluation Expenditure

The application of our accounting policy for exploration and evaluation expenditure requires judgement in determining whether it is likely that future economic benefits will flow to us. It requires us to make certain estimates and assumptions about future events or circumstances, in particular, whether an economically viable extraction operation can be established. Estimates and assumptions made may change if new information becomes available. If, after expenditure is capitalized, information becomes available suggesting that the recovery of expenditure is unlikely, the amount capitalized is written off in profit or loss in the period when the new information becomes available.

## Capitalized Stripping Costs

We capitalize stripping (waste removal) costs incurred during the production phase to the extent that the actual waste to ore ratio is higher than the estimated ratio. This calculation requires the use of judgements and estimates relating to the expected tonnes of waste to be removed over the life of the mining area and the expected economically recoverable reserves to be extracted as a result. Changes in a mine's life and design will usually result in changes to the average life of mine strip ratio. These changes are accounted for prospectively.

## Translation of Foreign Currencies

Our reporting currency is U.S. dollars. The functional currency of our offshore holding companies is U.S. dollars and the functional currency of other group entities located in Mongolia is the Togrog. Foreign currency transactions during the year are translated at the foreign exchange rates as at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates as at the balance sheet date. Exchange gains and losses are recognized in profit or loss.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates.

The results of operations in Mongolia are translated into U.S. dollars at the exchange rates approximating the foreign exchange rates as at the dates of the transactions. Balance sheet items are translated into U.S. dollars at the foreign exchange rates as at the balance sheet date. The resulting exchange difference is recognized directly in a separate component of equity.

#### **Description of Selected Statement of Comprehensive Income Line Items**

#### Revenue

We are principally engaged in the mining, processing, transportation and sale of coking coal. Revenue represents the sales value of goods sold to customers, exclusive of value added or sales taxes and after deduction of any trade discounts and volume rebates. In 2011, we derived more than 10% of our revenue from three customers, who were invoiced US\$185.0 million, US\$148.6 million and US\$73.6 million, respectively. In 2010, we derived more than 10% of our revenue from four customers, who were invoiced US\$105.2 million, US\$92.7 million, US\$33.5 million and US\$27.3 million, respectively. In 2009, we derived more than 10% of our revenue from four customers, who were invoiced US\$26.1 million, US\$15.4 million, US\$15.2 million and US\$10.2 million, respectively.

The table below sets forth the volume and average selling prices of our coking coal sold for the periods indicated:

	Year ended December 31,		
	2009	2010	2011
ROM coal production (Mt)	1.8	3.9	7.1
Average stripping ratio (actual) (BCM/t)	3.4	5.1	5.2
Total Coal sales (Mt)			
Raw coal	1.4	3.9	3.3
Washed coal	_	_	1.5
Average selling price (US\$/Mt)			
Raw coal	48.2	70.8	95.0
Washed coal	_	_	155.6
Blended	48.2	70.8	113.9

## Cost of Revenue

Our cost of revenue consists primarily of mining costs, transportation costs, processing costs and others. See "- Factors Affecting Results of Operation and Financial Condition - Mining costs" and "- Factors Affecting Results of Operation and Financial Condition - Transportation costs". Processing costs primarily include the costs associated with the operations of our CHPP, which commenced operations in June 2011.

The following table presents, for the periods indicated, individual costs of revenue in terms of amount and percentages of our total cost of revenue:

	Year ended December 31,									
	2009				2010			2011		
	US\$'000	%	US\$ per tonne	US\$'000	%	US\$ per tonne	US\$'000	%	US\$ per tonne	
Mining costs	24,500	63.3	17.6	78,759	47.9	20.1	120,326	35.8	25.3	
Transportation										
costs	8,000	20.7	5.8	60,626	36.9	15.5	107,928	32.1	22.7	
Processing										
$costs^{(i)} \dots$	_	_	_	_	_	_	21,738	6.4	4.5	
Others <sup>(ii)</sup>	6,182	16.0	4.5	24,983	15.2	6.3	86,376	25.7	18.1	
$Total^{(iii)}$	38,682	100.0	27.9	164,368	100.0	41.9	336,368	100.0	70.6	
Sales volume										
$(Mt)\ldots\ldots$			1.4			3.9			4.8 <sup>(iv)</sup>	

#### Notes:

- (i) Processing costs included handling costs of US\$12.4 million incurred by our CHPP, power generation and distribution costs of US\$7.4 million incurred by our power plant and water extraction and distribution costs of US\$1.9 million incurred by our water supply facility in 2011. The unit handling cost, unit power generation and distribution cost and unit water extraction and distribution cost associated with washed coal sold during 2011 was approximately US\$8.3, US\$4.8 and US\$1.3 per tonne, respectively.
- (ii) Others included royalties, customs fees, road maintenance expenses and others.
- (iii) In addition to mining cost which is reflected in the income statement, the balance sheet contains capitalized cost of prestripped overburden. Pre-stripped overburden is coal to be mined, processed, transported and sold in the future.
- (iv) Sales volume includes 1.5 Mt of washed coking coal sold in 2011.

On November 25, 2010, the Parliament amended the 2006 Minerals Law. Effective from January 1, 2011, we pay a flat 5% royalty on the sale value of all extracted minerals that are sold, shipped for sale or otherwise used, and an additional royalty which is calculated based on the degree to which coal is processed. The additional royalty is based on the monthly comparative price stipulated on the website of the MMRE and is applied at a progressive rate. The level of the progressive royalty rate depends on the level of processing of the minerals. The more processed the minerals are, the lower the progressive royalty rate will be. For example, the progressive royalty rate for raw coal is from 1% to 5% if coal price is above the threshold price of US\$25 per tonne. If coal is processed, the progressive royalty rate will be lower, being 1% to 3%. See "Regulation – Mongolian Laws and Regulations Relating to Exploration for Minerals and Mining – Royalties". We incurred US\$3.3 million, US\$10.1 million and US\$48.2 million as royalty to the Government of Mongolia for the years ended December 31, 2009, 2010 and 2011, respectively.

#### Gross Profit

Gross profit is equal to revenue less cost of revenue.

#### Other Revenue

Other revenue mainly includes transportation income related to transportation services provided to third parties and our Tavan Tolgoi airport fee income.

### Administrative Expenses

Our administrative expenses relate primarily to a management fee, staff costs, consultancy and professional fees, depreciation and amortization of office equipment and other expenses. The following table presents, for the periods indicated, individual administrative expenses in terms of amount and as a percentage of our total administrative expenses:

	Year ended December 31,					
	2009		2010		2011	
	US\$'000	%	US\$'000	%	US\$'000	%
Management fee <sup>(1)</sup>	2,357	22.6	6,262	16.2	10,406	17.2
Staff costs	1,423	13.6	6,593	17.0	8,980	14.9
Consultancy and professional fees	2,520	24.2	9,110	23.5	17,413	28.9
Depreciation and amortization	506	4.9	1,375	3.6	3,427	5.7
Allowance for doubtful debts	_	_	_	_	4,145	6.9
Others <sup>(2)</sup>	3,621	34.7	15,345	39.7	15,932	26.4
Total	10,427	100.0	38,685	100.0	60,303	100.0

#### Notes:

#### Other Net (Expenses)/income

Other net (expenses)/income included write-off of construction in progress and the net (loss)/gain on disposal of property, plant and equipment.

#### Net Finance (Costs)/Income

Net finance (costs)/income are the sum of finance income primarily derived from interest received on bank deposits and net foreign exchange gains minus finance costs primarily consisting of interest paid on borrowings less capitalized interest and net foreign exchange losses. Interest expenses were capitalized at a rate of approximately 4%, 8% and 5% per annum for the years ended December 31, 2009, 2010 and 2011, respectively. Interest expenses related primarily to our loans from domestic Mongolian banks, international banks and shareholders. Foreign exchange gains and losses are related to the fluctuations in exchange rates between MNT, RMB and U.S. dollar denominated payables, receivables and cash at bank and in hand.

## Income Tax

We are subject to income tax on an entity basis on profit arising in or derived from the tax jurisdictions in which we or our subsidiaries operate. The general income tax rate applicable to business entities with Mongolian source income is 10% on the first MNT3 billion of taxable income and 25% on amounts in excess thereof.

<sup>(1)</sup> The management agreement with MCS Holding expired on December 31, 2011. We therefore will not be obligated to pay a management fee under this agreement in 2012.

<sup>(2)</sup> Others included meal allowances, travelling expenses, rental fees, community support expenses and other expenses.

#### Results of Operations and Financial Condition

#### 2011 Compared to 2010

Revenue. Our revenue increased 95.5% from US\$277.5 million in 2010 to US\$542.6 million in 2011. The increase in revenue was primarily attributable to increases in our sales volume from 3.9 Mt in 2010 to 4.8 Mt in 2011 and our average selling price from US\$70.8 per tonne in 2010 to US\$113.9 per tonne in 2011. The increase in our average selling price was due to (i) our commencing sales of washed coal in 2011, in which year we sold 1.5 Mt of washed coal, while the sales volume of our raw coal decreased from 3.9 Mt in 2010 to 3.3 Mt in 2011, (ii) an increase in the market price for coal and (iii) the shifting of our primary delivery point from TKH to GM in 2011.

Cost of Revenue. Our cost of revenue increased by 104.6% from US\$164.4 million in 2010 to US\$336.4 million in 2011. The increase in cost of revenue was mainly due to an increase in mining and transportation volume, an increase in transportation costs as a result of the shifting of our primary delivery point further away from UHG and the commencement of coal processing at our CHPP.

In 2011, our mining costs increased by 52.8% from US\$78.8 million to US\$120.3 million. This was primarily due to increased production volume, VAT expenses on cost of sales associated with raw coal exports and progressive royalty fees.

In 2011, we produced 7.1 Mt of ROM coal with a strip ratio of approximately 5.2 BCM/tonne and per BCM total movement cost of US\$4.52 compared to 3.9 Mt produced in 2010 with a strip ratio of approximately 5.1 BCM/tonne and per BCM total movement cost of US\$4.00.

In 2011, we sold 4.8 Mt of raw and washed coal primarily at GM compared to approximately 3.9 Mt of raw coal primarily at TKH in 2010. Due to increased sales volume at the Sino-Mongolian border as a result of the change in our primary delivery point from TKH to GM, our transportation costs increased 78.1% from US\$60.6 million in 2010 to US\$107.9 million in 2011.

Gross Profit and Gross Profit Margin. As a result of the foregoing, our gross profit increased 82.3% from US\$113.1 million in 2010 to US\$206.2 million in 2011. Our gross profit margin was 38.0% in 2011 compared to 40.8% in 2010.

Administrative Expenses. Our administrative expenses increased 55.8% from US\$38.7 million in 2010 to US\$60.3 million in 2011. The increase in our administrative expenses were mainly due to (i) expenses related to geology exploration activities at our UHG mine, (ii) costs directly attributable to the acquisition of our BN mine, which was one-off, (iii) allowance for the doubtful debts, being provision for past-due trade receivables, (iv) an increase in the amount of the management fees and (v) an increase in headcount.

Net Finance (Costs)/Income. Our net finance income increased 4.9% from US\$8.1 million in 2010 to US\$8.5 million in 2011. The increase in net finance income was primarily due to increased interest income on time deposits partially offset by increased interest expenses arising from borrowings and foreign exchange loss arising from the depreciation of the Togrog against the U.S. dollar.

*Income Tax Expenses*. Our income tax expenses increased 56.6% from US\$22.8 million in 2010 to US\$35.7 million in 2011. The increase in our income tax expenses was due to an increase in taxable income.

*Profit for the Year*. As a result of the foregoing, our profit attributable to our equity shareholders increased 98.2% from US\$60.1 million in 2010 to US\$119.1 million in 2011. Our net profit margin was 21.9% in 2011, compared to 21.7% in 2010.

#### 2010 Compared to 2009

Revenue. Our revenue increased 314.2% from US\$67.0 million in 2009 to US\$277.5 million in 2010. The increase was primarily attributable to increases in sales volume and average selling price. Our sales volume increased 178.6% from 1.4 Mt of raw coal in 2009 to 3.9 Mt of raw coal in 2010. Our average selling price also rose significantly from US\$48.2 per tonne in 2009 to US\$70.8 per tonne in 2010, a 46.9% year-on-year increase.

Cost of Revenue. Our cost of revenue increased by 324.8% from US\$38.7 million in 2009 to US\$164.4 million in 2010. The increase in cost of revenue was mainly due to increases in mining and transportation volume. In 2010, we produced 3.9 Mt of ROM coal with a strip ratio of approximately 5.1 BCM/tonne and per BCM total movement cost of US\$4.00 compared to 1.8 Mt produced in 2009 with a strip ratio of approximately 3.4 BCM/tonne and per BCM total movement cost of US\$4.01.

In 2010, we sold 3.9 Mt of raw coal primarily at TKH compared to approximately 1.4 Mt coal in 2009 primarily at our UHG mine gate and TKH. Due to the increase of sales volume and the change in our primary delivery point to TKH from our UHG mine gate, transportation cost increased 657.8% from US\$8.0 million in 2009 to US\$60.6 million in 2010.

*Gross Profit and Gross Profit Margin.* As a result of the foregoing, our gross profit increased 299.6% from US\$28.3 million in 2009 to US\$113.1 million in 2010. Our gross profit margin was 40.8% in 2010 compared to 42.3% in 2009.

Administrative Expenses. Our administrative expenses increased 272.1% from US\$10.4 million in 2009 to US\$38.7 million in 2010. Our higher administrative expenses were mainly due to the following factors: (i) the extensive expansion of our operations, (ii) our hiring of additional staff, (iii) costs related to the initial public offering of the Company's shares on the main board of the SEHK in October 2010, (iv) social and environmental expenses, and (v) domestic inflation.

*Net Finance (Costs)/Income.* We had a net finance cost of US\$3.5 million in 2009 as compared to net finance income of US\$8.1 million in 2010. The change was primarily due to foreign exchange gains caused by the appreciation of the Togrog against the U.S. dollar.

*Income Tax Expenses*. Our income tax expenses increased 456.1% from US\$4.1 million in 2009 to US\$22.8 million in 2010. The substantial increase in our income tax expenses was due to the increase of taxable income.

*Profit for the Year.* As a result of the foregoing, our profit attributable to equity shareholders of the Company increased 483.5% from US\$10.3 million in 2009 to US\$60.1 million in 2010. Our net profit margin was 21.7% in 2010 compared to 15.3% in 2009.

#### Liquidity and Capital Resources

Historically, our cash needs have been related primarily to costs associated with mining and infrastructure development which included, construction of our CHPP, our coal fired 3x6 MW power plant, our water supply facility, our 245 km paved road from our UHG mine and supporting infrastructure, as well as expert studies conducted in connection with the development of our mines and related infrastructure. We also acquired our BN mine in the first half of 2011. Our cash resources have come from shareholder financings, proceeds of our initial public offering and bank loans and operating activities. We regularly monitor current and expected liquidity requirements and compliance with loan covenants to ensure that we maintain sufficient reserves of cash and adequate committed lines of funding from major financial institutions to meet our liquidity requirements in the short and

long term. For more details related to risks associated with our liquidity and capital resources, see "Risk Factors – Risks Relating to our Business and Industry – We are dependent on future cash flows generated from our business and obtaining additional financing to support our business operations, capital expenditure and to continue as a going concern". Taking into consideration the financial resources available to us, including cash generated from our operating activities and the proceeds of this offering, we believe that we will have sufficient liquidity to meet our working capital and operating requirements for at least the next 12 months.

The following table sets forth certain information regarding our consolidated cash flows for the periods indicated:

	Year ended December 31,		
	2009	2010	2011
		(US\$'000)	
Net cash (used in)/from operating activities	(4,024)	69,641	20,985
Net cash used in investing activities	(62,061)	(564,380)	(215,417)
Net cash generated from/(used in) financing activities	62,683	823,495	(79,871)
Net (decrease)/increase in cash and cash equivalents	(3,402)	328,756	(274,303)
Cash and cash equivalents at beginning of the year	3,791	371	328,262
Effect of foreign exchange rate changes	(18)	(865)	(12,953)
Cash and cash equivalents at end of the year	371	328,262	41,006

#### Cash Flows from Operating Activities

Net cash (used in)/from operating activities was US\$(4.0) million, US\$69.6 million and US\$21.0 million in the years ended December 31, 2009, 2010 and 2011, respectively.

In 2011, we generated net cash from operating activities of US\$21.0 million, primarily due to profit before taxation of US\$154.7 million, mainly adjusted by depreciation and amortization of US\$19.4 million, net finance income of US\$8.5 million, transaction costs of US\$4.3 million in relation to the acquisition of BN, allowance for doubtful debts of US\$4.1 million and equity-settled share-based payment expenses of US\$1.6 million, and the effects of changes in working capital and income taxes paid of US\$26.0 million. Changes in working capital mainly included (i) an increase in trade receivables of US\$41.4 million and other receivables of US\$47.0 million, primarily due to an increase in coal sales receivables of US\$41.4 million and VAT receivables of US\$29.2 million, (ii) an increase in trade and other payables of US\$15.0 million due to our expansion and our scaled-up operations and (iii) an increase in inventories of US\$55.9 million mainly relating to the production of washed coal in 2012.

In 2010, we generated net cash from operating activities of US\$69.6 million, primarily due to profit before taxation of US\$82.9 million, mainly adjusted by depreciation and amortization of US\$3.2 million and net finance income of US\$8.3 million, and the effects of changes in working capital, and income tax paid of US\$15.1 million. Changes in working capital mainly included (i) an increase in trade and other receivables of US\$8.1 million, primarily due to higher production and sales volume in 2010 compared to 2009 and (ii) an increase in trade and other payables of US\$15.1 million mainly due to increased prepayment for coal sales by customers by US\$10.3 million. In ordinary course of business, we receive advance payments from customers with balance of receipt in advance amounting to US\$18.8 million as at December 31, 2010.

In 2009, we used net cash in operating activities of US\$4.0 million, primarily due to the effects of changes in working capital, and income tax paid of US\$1.3 million, which was partially offset by a profit before taxation of US\$14.4 million representing approximately nine months of the production

and sale of coking coal from our UHG mine mainly adjusted for depreciation and amortization of US\$1.9 million. Changes in working capital mainly included (i) an increase in trade and other receivables of US\$7.0 million, primarily due to increased trade receivables, (ii) an increase in coking coal inventories of US\$6.9 million and (iii) a decrease in trade and other payables of US\$4.6 million, primarily due to the decrease in prepayments by customers. Normally, according to the respective sales contracts, we demand prepayment in advance from our customers. During the year ended December 31, 2009, we received prepayments of US\$31.6 million in aggregate from Qinghua, Winsway, Puxing and Huazhen and utilized US\$37.7 million.

#### Cash Flows from Investing Activities

Net cash used in investing activities was US\$62.1 million, US\$564.4 million and US\$215.4 million for the years ended December 31, 2009, 2010 and 2011, respectively.

In 2011, net cash used in investing activities was US\$215.4 million primarily as a result of payments for the acquisition of our BN mine of US\$103.5 million, payments for construction in progress and purchases of property and plant and equipment of US\$292.2 million, which was partially offset by net time deposits withdrawn of US\$160.0 million. The total consideration for the acquisition of our BN mine was US\$464.5 million, including the cash of US\$100.0 million immediately paid by the Group to Kerry Mining (Mongolia) Limited on June 1, 2011, the promissory note of US\$279.5 million which was paid by Standard Bank directly to Kerry Mining (Mongolia) Limited under the Existing Standard Bank Loan Agreement and the convertible bond of US\$85.0 million. Therefore, the net payments for the acquisition of our BN mine of US\$103.5 million represented the cash of US\$100.0 million and the transaction costs of US\$4.3 million, netting off the cash acquired of US\$0.8 million from our BN mine. The major expenditures for construction in progress and property, plant and equipment were our CHPP, our coal fired 3x6 MW power plant, 4x2 MW generators, our water supply facility, our paved road, our purchase of 300 double trailer coal hauling trucks, our mining main office building and township housing apartment for employees.

In 2010, net cash used in investing activities was US\$564.4 million primarily as a result of payments for construction in progress and purchases of property, plant and equipment of US\$220.2 million and time deposits of US\$344.6 million. The major expenditures and construction in progress were our CHPP, our coal fired 3x6 MW power plant, our water supply facility, our paved road, our mine camp and our mining workshop.

In 2009, net cash used in investing activities was US\$62.1 million primarily as a result of payments for construction in progress and purchases of property, plant and equipment of US\$58.6 million, time deposits of US\$2.0 million and loan to a shareholder of US\$2.3 million. The major expenditures for property, plant and equipment were temporary offices/housing at our mine site, loaders used in our coal stockpile, small and light transport vehicles, diesel generators, weighing station equipment and mining structures.

## Cash Flows from Financing Activities

Net cash generated from/(used in) financing activities was US\$62.7 million, US\$823.5 million and US\$(79.9) million for the years ended December 31, 2009, 2010 and 2011, respectively.

In 2011, net cash used in financing activities was US\$79.9 million primarily as a result of repayments of bank borrowings of US\$201.7 million, interest paid of US\$19.6 million and other borrowings costs paid of US\$2.4 million, which was partially offset by proceeds from bank borrowings of US\$143.9 million. The net proceeds from bank borrowings during 2011 were mainly from the proceeds from Standard Bank of US\$115.4 million in relation to US\$400 million Existing

Standard Bank Facilities Agreement among which US\$279.5 million was paid to Kerry Mining (Mongolia) Limited directly to settle the promissory note, netting off the transaction costs by US\$5.1 million for under Existing Standard Bank Loan Agreement.

In 2010, net cash generated from financing activities was US\$823.5 million primarily as a result of our initial public offering which generated net proceeds of US\$617.7 million (partially offset by transaction costs of US\$2.0 million) and proceeds from bank borrowings of US\$232.3 million, which was partially offset by repayments of bank borrowings of US\$11.5 million, interest paid of US\$6.8 million and other borrowing costs paid of US\$6.2 million.

In 2009, net cash generated from financing activities was US\$62.7 million primarily as a result of proceeds from new borrowings of US\$53.3 million and proceeds from share issuances of US\$18.8 million and advanced payments from customers of US\$14.7 million, which was partially offset by the repayment of borrowings of US\$22.1 million and interest paid of US\$1.9 million. In 2009, we entered into an agreement with one of our customers and received advances of US\$14.7 million as funding of mine project development.

#### **Taxation**

Income tax expenses for the years ended December 31, 2009, 2010 and 2011 can be reconciled to profit before income tax as follows:

	Year Ended December 31,		
	2009	2010	2011
	(US\$'000, except tax rate)		
Profit before income tax	14,381	82,896	154,740
Notional tax on profit before taxation <sup>(i)(ii)</sup>	2,990	19,642	35,725
Tax effect of non-deductible items <sup>(iii)</sup>	1,135	1,258	1,508
Tax effect of non-taxable items <sup>(iv)</sup>	(83)	(242)	(2,588)
Tax loss not recognised	69	2,099	1,005
Actual tax expenses	4,111	22,757	35,650
Effective tax rate	28.6%	27.5%	23.0%

- (i) Pursuant to the Mongolian Enterprise Income Tax, we paid tax at a rate of 10% for the first MNT3 billion taxable income and 25% of the remaining taxable income for the years ended December 31, 2009, 2010 and 2011.
- (ii) We are not subject to any income tax in the Cayman Islands. We are not subject to Hong Kong and Luxembourg profits tax as we had no assessable income arising in or derived from Hong Kong and Luxembourg during the years ended December 31, 2009, 2010 and 2011.
- (iii) Non-deductible items mainly represent the non-deductible expenses and the unrealized exchange losses which is non-deductible pursuant to the Mongolian Enterprise Income Tax.
- (iv) Non-taxable items mainly represent the unrealized exchange gains which is non-taxable pursuant to the Mongolian Enterprise Income Tax.

The effective tax rate of 28.6% for the year ended December 31, 2009 was higher than the statutory rate of 25%, which was mainly due to the impact of unrealized exchange losses which was a non-deductible expense.

The effective tax rate of 27.5% for the year ended December 31, 2010 was higher than the statutory rate of 25%, which was mainly due to the impact of tax losses not recognized from some of our subsidiaries and unrealized exchange losses.

The effective tax rate of 23.0% for the year ended December 31, 2011 was mainly because we earned interest income of US\$22.2 million which was subject to income tax at the rate of 10% pursuant to the income tax rules and regulations of Mongolia.

#### Indebtedness

The following table sets forth our borrowings as of the dates indicated and the maturity profile of such borrowings:

	As of December 31,		
	2009	2010	2011
		(US\$'000)	
Indebtedness			
Bank loans (Secured)	31,200	255,000	482,091 <sup>(1)</sup>
Bank loans (Unsecured)	3,000		
Sub-total	34,200	255,000	482,091
Less: unamortized transaction costs		(3,877)	(3,862)
Sub-total	34,200	251,123	478,229
Convertible bond (Unsecured)			83,508
Total	34,200	251,123	561,737
Maturity Profile of Bank loans:			
Due within one year	24,200	85,909	334,818
Due after one year, but within two years	10,000	21,818	21,818
Due after two years	_	147,273	125,455
Total	34,200	255,000	482,091

Note:

(1) As of December 31, 2011, the outstanding principal amount of the Existing Standard Bank Facilities Agreement was US\$298.8 million. We plan to repay the outstanding principal amount on March 23, 2012.

As of December 31, 2011, we had US\$561.7 million in outstanding short-term and long-term borrowings, including indebtedness incurred under (i) our EBRD, FMO and DEG Loan Agreements, (ii) our Existing Standard Bank Facilities Agreement, (iii) our US\$85 million 2.0% QGX Convertible Bonds and (iv) our Khan Bank Loan Agreement. See "Description of Other Material Indebtedness".

The EBRD, FMO and DEG Loan Agreements bear interest semi-annually at the rate of six-month LIBOR plus a margin of 4.75%-6.85% per annum as of December 31, 2011. Interest is now payable semi-annually at the rate of six-month LIBOR plus a margin of 3.25% to 3.75% per annum. US\$120 million principal amount of the loans are repayable in 11 semi-annual installments ending on May 15, 2016 and US\$60 million principal amount of the loans are repayable in two equal installments on May 15, 2015 and May 15, 2016. As of December 31, 2011, the outstanding principal amount was US\$169.1 million.

The Existing Standard Bank Facilities Agreement bears interest at the rate of six-month LIBOR plus a margin of 3.25% per annum. The loan matures on March 23, 2012. As of December 31, 2011, the outstanding principal amount was US\$298.8 million. We plan to repay the outstanding principal amount on March 23, 2012. On March 8, 2012, we entered into the New Standard Bank Facilities

Agreement with Standard Bank, pursuant to which Standard Bank and potentially a syndicate of lenders have agreed to make available to us term loan facilities of up to US\$300.0 million. On March 14, 2012, we drew down US\$50.0 million under the New Standard Bank Facilities Agreement for our working capital requirements. We plan to draw down US\$150.0 million on March 23, 2012 to repay a portion of the outstanding amount under the Existing Standard Bank Facilities Agreement. On or before March 29, 2012, we will provide notice to Standard Bank to reduce the size of the New Standard Bank Facilities Agreement to US\$200.0 million.

The US\$85 million 2.0% QGX Convertible Bonds will mature on December 1, 2012. The maturity date is extendable to March 1, 2013 subject to a reserve adjustment. The QGX Convertible Bonds are convertible into our shares at the bondholder's option in the four days prior to the maturity date at a conversion rate of HK\$10.92 per share.

The US\$13.0 million Khan Bank Loan Agreement bears interest at the rate of 11% per annum. As of December 31, 2011, the outstanding principal amount was US\$13.0 million.

## **Capital Commitments and Capital Expenditures**

Capital commitments outstanding at respective balance sheet dates not provided for in the financial statements were as follows:

	As of December 31,		
	2009	2010	2011
	US\$'000	US\$'000	US\$'000
Contracted for	81,097	80,079	14,827
Authorized but not contracted for		102,592	80,075
	81,097	182,671	94,902

The following table sets forth our historical and forecast capital expenditures for the periods indicated:

	Year ended December 31,					
	2009	2010	2011	2012	2013	2014
					(Forecast)	
			(US\$	(000)		
Capital Expenditures:						
BN coal mine	_	_	11,740	11,795	9,521	61,663
CHPP	13,573	80,218	142,252	95,210	38,675	53,669
Road	_	47,929	49,470	35,688	8,279	13,693
Railway	5,543	2,135	7,256	249,505	374,454	20,108
Water supply facility	8,024	20,658	7,718	51,500	_	_
Power plant	8,137	34,190	15,501	5,175	_	_
Property (camp, airport and						
workshop)	12,607	8,118	11,850	40,673	19,828	498
Trucks and equipment	7,893	4,957	44,081	_	_	_
Others <sup>(1)</sup>	7,182	6,836	6,266			
Total	62,959	205,041	296,134	489,546	450,757	149,631

Note:

<sup>(1)</sup> Others include capital expenditures for exploration and expert studies.

Our forecast capital expenditures set forth in the table above represent our current estimates. We will reassess our capital expenditures from time to time in light of the then current circumstances, including without limitation our operational requirements and our financial capacity, and there can be no assurance that our actual capital expenditure will correspond to our current forecast set forth in the table above.

### **Contingent Liabilities**

The total consideration as of June 1, 2011 was US\$464.5 million for the acquisition of our BN mine, consisting of US\$100.0 million in cash, the promissory note of US\$279.5 million and the issuance of the QGX Convertible Bonds in the aggregate principal amount of US\$85.0 million. This consideration is subject to adjustments as a result of the total reserves of such mine exceeding 150 Mt or the production exceeding certain amounts as described in more detail in "Business – BN Mine – Consideration". The maximum amount of additional consideration payable by us pursuant to such adjustments is US\$485.5 million, including up to US\$105.0 million for the reserve adjustment which will be determined by the results of a new reserve report that is expected to be completed by the end of 2012. See "Risk Factors – Risks Relating to our Business and Industry – We may have to make additional payments under the acquisition agreement for our BN mine" and "Business – BN Mine".

# Quantitative and Qualitative Disclosures About Market Risk

We are, in the normal course of business, exposed to market risks relating primarily to credit risk, foreign currency exchange risk, interest rate risk, liquidity risk and commodity price risk.

#### Credit Risk

Our credit risk is primarily attributable to our cash at bank and trade and other receivables. Our management monitors the exposures to these credit risks on an ongoing basis. See "Risk Factors – Our dependence on our major customers may cause significant fluctuations or declines in our revenues".

With regard to trade receivables, we have established a credit management committee which is comprised of members of our senior management. The committee has established a policy for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the committee evaluates and reviews the credit quality and the recoverable amount of each individual trade debt on an ongoing basis. At the end of the reporting period, we believe that adequate allowance for doubtful debts has been made in the consolidated financial statements and we consider that our credit risk is significantly reduced. Nevertheless, management continues to monitor the exposures, including but not limited to the current ability to pay, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates, on an ongoing basis. In 2012, we began extending credit generally not exceeding a period of 90 days to certain of our customers with whom we have long-term supply agreements and expect to extend credit to more customers as we develop long-term relationships.

Our other receivables are primarily VAT receivables, deposits and prepayments. We believe that no impairment allowance is necessary for our other receivables based on past experiences.

### Foreign Currency Exchange Risk

During the years ended December 31, 2009, 2010 and 2011, 100.0% of our revenue and approximately 49.9%, 36.0%, 27.7% of our purchases, respectively, were denominated in currencies other than Togrogs, the functional currency of our Mongolian entities. Cash and cash equivalents

denominated in the currency other than the functional currency of the entity to which they are related as of December 31, 2009, 2010 and 2011 amounted to US\$2.2 million, US\$273.6 million and US\$119.9 million, respectively. Total borrowings denominated in the currency other than the functional currency of the entity to which they related as of December 31 2009, 2010 and 2011 amounted to US\$34.2 million, US\$251.1 million and US\$179.5 million, respectively.

For the years ended December 31, 2009, 2010 and 2011, approximately 77.0%, 62.1% and 66.6% of our revenues, respectively, were denominated in U.S. dollars with the remaining denominated in RMB. For the year ended December 31, 2009, approximately 79.1%, 12.7% and 87.5% of our cost of revenue, operating expenditures and capital expenditures were denominated in U.S. dollars, respectively, with the remaining denominated in Togrogs. For the year ended December 31, 2010, approximately 33.5%, 28.0% and 25.7% of our cost of revenue, operating expenditures and capital expenditures were denominated in U.S. dollars, respectively, 5.1% and 1.4% of operating expenditures and capital expenditures were denominated in RMB, respectively, with the remaining denominated in Togrogs. For the year ended December 31, 2011, approximately 27.6%, 27.2% and 23.4% of our cost of revenue, operating expenditures and capital expenditures were denominated in U.S. dollars, with the remaining denominated in Togrogs.

Although the majority of our assets and operational expenses are denominated in Togrogs, a large portion of those, including fuel and capital expenditures were denominated in U.S. dollar and RMB prices. Therefore, we believe that there exists a natural hedge that partially offsets foreign exchange risk.

We have not entered into any derivative instruments to manage foreign currency exchange fluctuations. However, our management monitors foreign exchange exposure and will consider hedging significant foreign currency exposure should the need arise.

Our presentation currency is U.S. dollars. The functional currency of our Mongolian entities is Togrogs and of our overseas entities is U.S. dollars. Due to the depreciation of Togrogs against U.S. dollars by approximately 11% in 2011, the significant negative exchange reserve arose during 2011 when translating the financial statements of other group entities with Togrogs as their functional currency to our presentation currency.

To the extent that we decide to do so in the future, we cannot assure you that any such hedging activities will protect us from fluctuations in exchange rates. See "Risk Factors – Risks Relating to our Business and Industry – Foreign currency exchange fluctuations could affect expenses and any future earnings".

#### Interest Rate Risk

Our exposure to interest rate risk relates primarily to our floating rate bank borrowings, which totaled US\$465.2 million as of December 31, 2011. In addition, an increase in prevailing interest rates would lead to an increase in interest cost on our short-term borrowings when such debt is rolled over. To date, we have not entered into any type of interest rate agreements or derivatives to hedge against interest rate fluctuations. To the extent that we decide to do so in the future, we cannot assure you that any such hedging activities will protect us from fluctuations in interest rates.

# Liquidity Risk

Liquidity risk is the risk that we will not be able to meet our financial obligations as they fall due. To manage our liquidity risk, we maintain a balance between continuity of funding and the flexibility through the use of borrowings. Our management closely monitors our liquidity position and

expects to have adequate sources of funding to finance our projects and operations. We maintain a suitable level of liquidity to finance daily operations, capital expenditures and repayments of borrowings. We regularly monitor current and expected liquidity requirements to ensure that we maintain sufficient reserves of cash and adequate committed lines of funding from major financial institutions to meet our liquidity requirements in the short and longer terms.

### Commodity Price Risk

Our profitability depends on coal prices. Prices of bulk commodities such us coal are affected by numerous factors such as interest rates, exchange rates, inflation or deflation and global and regional supply and demand. We have not entered into any commodity derivative instruments or futures to hedge against fluctuations of coal prices. Therefore, fluctuations in the prices of coal will have a direct effect on our results of operations.

#### Effects of Inflation

According to the Bank of Mongolia, Mongolia's annual inflation, as measured by the consumer price index, was 4.0% in 2009, 13.0% in 2010 and 10.2% in 2011. We do not consider inflation in Mongolia, where all of our operations are located, to have had a material impact on our results of operations.

### Seasonality

Our site is fully operational throughout the year. The infrastructure and equipment used in our operations are designed to work during most weather conditions. Occasional inclement weather conditions, such as dust storms, have had no significant effect on our operations. However, our transportation and sales volume slow down during the winter period due to scheduled maintenance and the holiday seasons, such as the Chinese New Year.

#### **New Accounting Pronouncements**

The International Accounting Standards Board has released revisions to existing and new accounting standards that may have a material impact on our future financial statements. We are currently evaluating the potential impact that the adoption of such accounting standards may have on our financial statements. See note 35 to our financial statements included elsewhere in this offering memorandum.

#### THE MONGOLIAN ECONOMY

Unless otherwise expressly stated, the information set out in this section is derived from publicly available sources. Such information and statistics have been not verified by us or any of the Initial Purchasers or their or our respective affiliates or advisers. The information may not be consistent with other information compiled within or outside Mongolia.

As the world's second-largest landlocked country, Mongolia is located in northern Asia bordered by Russia in the north and China in the south, east and west. Its strategic location, providing direct access to markets in neighboring countries, has enabled Mongolia to serve as a transit country with a long history of international trade, dating from the Silk Road in the 13th century to modern export activity.

Mongolia has a diverse and abundant supply of natural resources, including some of the world's largest known reserves of coal, copper and gold. Of the 86 minerals discovered thus far in Mongolia, only 20 minerals are being exported commercially. One of the Government of Mongolia's main objectives is to use modern technology and international mine planning and exploitation strategies to transform Mongolia's mining industry from extraction and export of unprocessed commodities to the domestic production of value-added mining products. The mining sector contributed approximately 22.7% and 20.2% of Mongolia's gross domestic product ("GDP") in 2010 and the first half of 2011, respectively, and is expected to grow rapidly as various Government-approved projects become operational in coming years and new development projects are approved.

Mongolia is geographically diverse. It has forested mountain ranges in the north; desert steppe and steppe areas with low mountains in the south; high mountains and glaciers in the west; and vast plains in the east. Mongolia has approximately 3,000 rivers with a combined length of approximately 67,000 kilometers, over 3,000 lakes, 6,900 springs, 190 glaciers and 250 mineral water springs. Situated at an average altitude of 1,500 meters above sea level, Mongolia experiences an extreme continental climate with long winters and short summers. Its average annual rainfall measures 200-220 millimeters and it has approximately 250 cloudless days each year, earning it the nickname "country of blue sky."

Ulaanbaatar is Mongolia's capital. It is also Mongolia's largest city – home to approximately 45% of the country's population. Ulaanbaatar has the lowest average temperature of any national capital in the world. Mongolia is divided into 21 aimags (provinces) which are further divided into 329 soums (districts). The Government of Mongolia administers its capital city, Ulaanbaatar, as an independent municipality separate from Tov aimag, in which it is located.

As of December 31, 2011, Mongolia had a population of approximately 2.8 million people, of which approximately 1.9 million people were of working age. Ethnic Mongols comprise approximately 80% of the population (of which the Khalkha makes up approximately 90%) and Turkic, Tungusic, Chinese and Russians make up the remaining population. Approximately 200,000 ethnic Mongols live outside Mongolia. Buddhism is the most prominent religion in Mongolia, though a small number of Christians, Muslims and Shamans reside in Mongolia. The official language is Khalkic Mongolian and is spoken by 90% of the population. English is replacing Russian as the most popular foreign language. Many Mongolians also speak Korean, Japanese, Chinese and other Western European languages.

#### History

The Mongol tribes were united as a single nation in 1206 by Temujin, who took the title Chinggis Khan. His series of successful military campaigns through Asia formed the Mongol empire, which represented the largest contiguous land empire in history. Under Chinggis Khan's successors the Mongol empire stretched from present-day Poland in the west to the Korean peninsula in the east, from Siberia in the north to the Arab peninsula and Vietnam in the south, covering approximately 33 million square kilometers. After Chinggis Khan's death, the Mongol empire was subdivided into four kingdoms. One of these, encompassing the Mongolian homeland and China, was controlled by Kublai Khan, who established his capital on the site of present-day Beijing. Kublai Khan's empire fell to the Chinese Ming dynasty in 1368. After expulsion from China, the Mongols continued to control the Mongolian homeland, but subsequent centuries were marked by power struggles and repeated Chinese invasions. In the 17th century, the Chinese Qing dynasty, after conflicts with the Mongols, brought all of present-day Mongolia under its control.

With the fall of the Chinese Qing Dynasty in 1911, Mongolia sought assistance from Russia to gain independence and established a theocratic government under the leadership of the Bogd Khan, the spiritual leader of Mongolia's Tibetan Buddhism. In 1919, after the October Revolution in Russia, Chinese troops occupied Mongolia again. In 1920, the Russian White Guard, aided by Japan, took control of Mongolia's capital city, Ulaanbaatar. Mongolia sought assistance from the Russian Bolsheviks who regained control of the capital city in July 1921. Ultimately, the Russian Bolsheviks supported the establishment of a communist government in Mongolia.

Under heavy influence from the former Soviet Union, Mongolia's independence was declared in 1921 and a "people's republic" established in 1924. The new government under Choibalsan Khorloo took control of the economy which became a centrally planned economy based on state and cooperative ownership. For the next 65 years, Mongolia closely aligned itself with the former Soviet Union, especially after the Sino-Soviet split in the late 1950s. In the 1980s, an estimated 55,000 Soviet troops were based in Mongolia. The ruling MPRP, established on 1 March, 1921, was modeled closely on the organizational structure of the Communist Party of the former Soviet Union. The concepts of Glasnost and Perestroika in the Soviet Union influenced Mongolian policies, leading to a peaceful revolution and the introduction of a market economy in 1990. A new constitution was framed in 1992, followed by a new election law and the appointment of the first unicameral legislature.

The MPRP was the ruling party of Mongolia from 1921 to 1996 (until 1990 in a one-party system) and from 2000 to 2004. From 2004 to 2006, it was part of a coalition government with the Democratic Party and two other parties, and since 2006 it has been the dominant party in two other coalition governments. The MPRP won the last round of parliamentary elections in June 2008.

# **Recent Political Development**

The Mongolian political system is established under the framework of parliamentary democracy. The State Great Hural (Parliament) holds legislative power and elects the Prime Minister of Mongolia who heads the executive branch and appoints the Cabinet Ministers. The President of Mongolia is the Head of State and the Commander-in-Chief of Mongolia's armed forces with limited executive powers.

There have been six parliamentary presidential elections since 1991, each election being held once every four years. Although the MPRP won the parliamentary and presidential elections in 1992, MPRP was defeated by the Democratic Party in the subsequent parliamentary election in 1996. The MPRP won the 2000 election, but its representation in the Parliament was subsequently reduced in 2004.

After the 2004 election, a coalition government was formed and the leader of the Democratic Party, Mr. Elbegdorj Tsakhia, was elected as the Prime Minister. He was replaced by MPRP leader Mr. Enkhbold Miyeegombo in January 2006. On November 7, 2007, the Prime Minister submitted a letter of resignation to the Parliament following his failure to be re-elected as the Chairman of the MPRP. Subsequent to Mr. Enkhbold Miyeegombo's resignation, Mr. Bayar Sanjaa was appointed Prime Minister and a new government, comprised of the Prime Minister, ministers from the MPRP and ministers from other parties, was formed in November 2007. Mr. Bayar held the position of the Prime Minister until October 2009 and was replaced by the previous Minister of Foreign Affairs, Mr. Batbold Sukhbaatar.

The next parliamentary elections were held in June 2008, in which the MPRP won the majority of the parliamentary seats. Accusations of electoral fraud brought forward by the opposition led to the first-ever riots in Mongolia causing a number of deaths and property damages. Subsequently, despite of MPRP's majority position in the Parliament, it invited opposition politicians to the Cabinet, forming a coalition government. The MPRP changed its name to the Mongolian People's Party ("MPP") in 2010 and remains the ruling party.

In May 2009, the Democratic Party member Elbedorj Tsakhia was elected President of Mongolia, ending the long tenure of MPRP politicians in the presidential seat.

Elections will be held in June 2012 and May 2013 to elect a new Parliament and president, respectively.

#### Overview of the Mongolian Economy

Mongolia operated as a Soviet-style centrally planned economy until the establishment of a new coalition government in 1990, which undertook a sustained transition to a free market economy with the private sector constituting over 70% of the nation's GDP in 2010, as compared to only 4% in 1990. The Government relinquished its role as the central planner of Mongolia's economy and began limiting itself to making policies supporting a market-oriented economy. Main objectives of the Government include:

- increasing mining sector development, revising mining legislation and using a portion of mining revenues from strategic mining deposits for distribution among Mongolian citizens;
- developing and implementing Mongolia's industrial program, planning and developing mining-based industries and small and medium enterprises which use locally produced raw materials;
- improving agricultural production in particular, production of meat, milk, flour, potatoes and vegetables;
- providing health services and employment opportunities to Mongolian citizens and providing vocational training; and
- providing transparency and accountability in public administration.

Today, Mongolia's economy is one of the fastest-growing economies in the region, largely due to its rapidly developing mining industry and related increasing foreign investment. ADB in its report Asian Development Outlook 2011 expects Mongolia's economic growth to accelerate in 2012, supported by high global mineral prices, development of new mines, and fiscal spending, while the IMF estimates that Mongolia will be the fourth-fastest growing economy in the world over the next

five years. Mongolia's GDP growth averaged nearly 9% annually from 2004 to 2008, underpinned by an increase in foreign direct investment, with capital inflows predominantly directed to the mining industry and assisted by upward price trends for commodities such as copper, gold and iron. In 2010 and 2011, the country's economy continued to expand and achieved nominal GDP of approximately MNT8,414.5 billion and MNT10,829.7 billion, respectively. Nominal GDP per capita was approximately MNT3,045.0 in 2011, a 35% increase from 2010.

Fitch's outlook for Mongolia in November 2011 was "Stable," its long-term foreign and local currency issuer default ratings ("IDR") was "B+" and short-term IDR was "B." In December 2011, Standard & Poor's revised the outlook for Mongolia to "Positive" from "Stable" and affirmed its "BB-" rating. In May 2011, Moody's outlook for Mongolia was "Stable" and its rating was "B1."

	Year ended December 31,				
Macroeconomic data	2007	2008	2009	2010	2011
Nominal GDP (MNT billions)	4,956.6	6,555.6	6,590.4	8,414.5	10,829.7
Nominal GDP (US\$ millions)	3,554.4	4,701.0	4,726.0	6,034.1	7,766.0
Real GDP (MNT billions)	3,640.0	3,964.0	3,913.7	4,162.7	4,881.4
Real GDP (US\$ millions)	2,610.2	2,842.6	2,806.5	2,978.8	3,500.4
Nominal GDP per capita (US\$)	1,435.7	1,837.1	1,817.0	2,908.5	3,045.0
Exports (US\$ millions)	1,947.5	2,534.5	1,885.4	2,908.5	4,780.4
Imports (US\$ millions)	2,061.8	3,244.5	2,137.7	3,200.1	6,526.9
Balance of payments (US\$ millions)	288.0	(232.6)	555.5	873.1	33.7
Policy lending rate	8.4%	9.8%	10.0%	11.0%	12.3%
Unemployment rate <sup>(1)</sup>	9.2%	9.2%	11.6%	9.9%	9.0%
External debt (US\$ millions)	1,528.7	1,602.2	1,818.1	1,767.0	2,650.1
Total foreign exchange reserves (US\$ millions)	1,000.6	657.4	1,327.4	2,2287.9	2,457.0
CPI (Ulaanbaatar) (y-o-y change) <sup>(2)</sup>	14.0%	24.2%	1.9%	0.1%	11.1%
Real GDP growth	10.2%	8.9%	(1.3%)	0.1%	17.3%

Source: National Statistical Office of Mongolia, Monthly Bulletin of Statistical Yearbooks

Notes:

(1) Labour Force Survey.

(2) Bank of Mongolia - December 2011 Monthly Statistical Bulletin.

#### **Economic History**

Mongolia suffered a "transformational recession" between 1990-1993 due to restructuring and privatization of state enterprises. As a result, there were massive layoffs and most workers lost their pensions and other retirement benefits. Since 1993, however, the Mongolian economy has grown steadily.

The Government launched its free trade zone programme in 2004. Currently there are two free trade zones located along the trans-Siberian railway: one at the Russia-Mongolia border town of Altanbulag and the other at the Sino-Mongolian border town of Zamiin-Uud. The third free trade zone, the port of entry of Tsagaan Nuur in Bayan-Olgii province is under construction and is expected to be completed in 2015.

Until 2008, Mongolia was predominantly an agricultural-based economy, with heavy reliance on the growth of cereals and animal husbandry, particularly yaks, goats and sheep, but recently the focus has shifted to the mining sector as the country has some of the richest mineral deposits in the world. According to Erdenes MGL, a state-owned limited liability company, Mongolia currently has the fourth-largest copper reserves and ninth-largest coal reserves globally. It also possesses significant

deposits of uranium, gold, lead, zinc and rare earth metals. The mining sector represents the predominant source of foreign currency for the country with mineral products representing approximately 80.5% of total exports in 2010 and approximately 89.2% in 2011. Mineral products, textiles, livestock, precious metals and jewelery, raw and processed animal hides and skins, fur and related products were the main export commodities in 2011.

#### **Economic Turnaround**

Mongolia continues its transformation to a market economy notwithstanding the severe adverse impact of the global financial crisis and ensuing economic slowdown. Mongolia experienced a turnaround in late 2009 and the beginning of 2010. The last quarter of 2010 ended with a broad-based recovery, supported by transportation, construction and wholesale and retail trade. The economy recorded a 6.1% recovery in real GDP in 2010, following a contraction of 1.3% of real GDP in 2009. Total foreign exchange reserves reached US\$2.5 billion as at December 31, 2011.

Mongolia's turnaround may be attributable to the Government's policy response to the global financial crisis, supported by significant financial assistance from the international community, including a US\$229.2 million loan facility from the IMF under the 2009 Stand-By Program, of which US\$180 million was drawn down, In addition, the overall global economic recovery, continuing strong demand for natural resources from China and strong copper prices contributed to the recovery. At the same time, legislative reforms and a tightened fiscal framework, including the Fiscal Stability Law, contributed to Mongolia's stability.

The signing of an Investment Agreement in October 2009 with Rio Tinto and Ivanhoe Mines to develop the Oyu Tolgoi mine, which is considered to be one of the world's largest untapped copper and gold deposits, represents a major milestone in the development of Mongolia's mining sector. According to Asian Development Outlook 2011 by the ADB, over the next two years, it is expected that US\$4 billion will be invested in this project alone, which is approximately equivalent to Mongolia's entire GDP in 2009. The mine construction is ahead of schedule, and production is expected to start in mid-2012.

Preparations are also being made to develop the coal deposits of Tavan Tolgoi, which is one of the largest undeveloped coalfields in the world. Tavan Tolgoi's resources are located mainly in the east and west sections of the Tsankhi coalfield. Erdenes MGL has been appointed by Parliament to develop the east section of Tsankhi and a third round of negotiations is ongoing between the Government and six short-listed companies for developing the west section of Tsankhi.

As at 31 December, 2011, the fiscal deficit of Mongolia was MNT632.4 billion or approximately 5.8% of nominal GDP. In 2011, exports increased by 64.4% and imports increased by 104.0%, each as compared to 2010, reflecting the recovery in broad-based economic activity, imports and favourable commodity prices. Revenues have increased by 29% in 2011 as compared to 2010. Imports increased 104.0% in 2011 compared to 2010, primarily as a result of increased transport equipment and machinery imports for the expanding mining sector, particularly related to the Oyu Tolgoi mine. On the other hand, Mongolian exports increased 64.4% in 2011 compared to 2010 supported by the upward momentum in metal prices and large coal and copper imports by China, the export destination for 92.1% of Mongolia's exports in 2011.

Mongolia imports all of its domestic oil requirements including processed ready-to-use oil products from Russia. Mongolia consumes approximately one million tonnes of processed oil products per year. Mongolia has approximately 100 million barrels of registered oil reserves, according to the Petroleum Authority of Mongolia. It is estimated that Mongolia has approximately four to six billion barrels of recoverable oil. The Government of Mongolia is encouraging the development of domestic

oil processing industry in order to enhance Mongolia's ability to meet its future domestic oil requirements. As part of this initiative, the Government is planning to develop an oil processing plant in Darkhan Uul province.

### **Recent Economic Developments and Reforms**

Mongolia enacted tax reforms, which became effective on 1 January, 2007. In addition, several key amendments to mining laws and regulations have been made to adjust the Government of Mongolia's equity participation in mining ventures. Amendments to the mining laws in 2006 enabled the Government to acquire up to 50% equity stake in mines designated as strategic deposits if the exploration is state-financed and up to 34% equity stake if the exploration is privately financed.

In 2009, the Government of Mongolia negotiated an Investment Agreement with Rio Tinto and Ivanhoe Mines to develop the Oyu Tolgoi copper and gold deposit. The Investment Agreement came into force in October 2010.

In August 2009, following the decline in mineral prices and mining activity during the global financial crisis, Parliament amended the Windfall Profit Tax to end its application effective 1 January, 2011. Other legislative changes include the passing of state policy on public private partnerships ("PPP") in October 2009, amendments to the law relating to roads to permit private entities or individuals to construct and manage certain roads, amendments to the law relating to water to permit private entities or individuals to extract water resource and manage water supply infrastructure, and amendments to the income tax law improving the loss-carry forward provisions and making them more consistent with international practice. The State Property Committee has announced five PPP biddings of which one PPP for establishing a thermal power station in Khuvsgul aimag was signed on 11 May, 2011 and the remaining four are in various stages of the bidding process.

A new law governing the budget process was approved in 2011 spring session of the Parliament, The main objective of the new law is to make the budget process more supportive of prudent fiscal policy, sound investment planning and accountable fiscal decentralization. To achieve this objective, amendments to other laws were also approved, in particular to those that govern the procedures that define how laws that have an impact on the budget should be submitted to and approved by the Parliament.

### **Key Statistical Indicators**

The following tables set forth selected recent information on the geography, climate, population, economy and politics of Mongolia:

### Geography:

Location	Northern Asia, between China and Russia (landlocked)
Area	1,564.9 thousand square kilometers <sup>(1)</sup> (19th largest in the world)
Land boundaries	Total: 8,253 kilometers, with China (4,710 kilometers in the south), and with the Russia (3,543 kilometers in the north)
Climate	Dry continental climate with desert, steppe and mountain zones with large daily and seasonal temperature ranges

Major natural resources ..... Copper, coal, iron ore, gold, silver, fluorspar, uranium and rare earth elements People: Population growth rate...... 1.7%<sup>(2)</sup> (2008-2010) Total population average: 66.9 years<sup>(2)</sup> (2009 actual) Life expectancy at birth..... Mongol (94.9%), Kazakh (5%), others (including Chinese and Ethnic groups..... Russian) (0.1%) Religious..... Buddhist (50%), Others (6%), Muslim (4%), none (40%) **Government:** Government type..... Mixed parliamentary/presidential Capital ..... Ulaanbaatar Head of State..... President (elected by a universal popular vote for a term of four years) Prime Minister and Cabinet: Prime Minister and Cabinet Executive branch ..... appointed by the State Great Khural (Parliament) in consultation with the President (Prime Minister is usually the Chairman of the political party having majority in Parliament) Legislative branch..... State Great Khural (Unicameral, 76 seats; members elected for a term of four years) Judicial branch..... Supreme Court (serves as appeals court for people's and provincial courts; judges are nominated by the General Council of Courts for approval by the President) Political parties..... With the departure of the Democratic Party from the coalition government effective January 5, 2012, the MPP is the current ruling party Suffrage ..... 18 years of age; universal State structure..... Unitary State; territory of Mongolia is divided administratively into 21 aimags and the capital city

# **Economy:**

Nominal GDP	MNT10.8 trillion (US\$7.8 billion) (2011 actual)
Real GDP growth rate	17.3% <sup>(1)</sup> (2011 actual)
GDP per capita	US\$3,045 <sup>(1)</sup> (2011 actual)
Unemployment rate	9.0% <sup>(1)</sup> (2011 actual)
Major exports	Copper, coal, crude oil, zinc ore, iron ore, gold, cashmere
Exports	US\$4.8 billion <sup>(1)</sup> (2011 actual)
Key export partners	China (92.1%), Russia (2.0%), Canada (1.9%), Italy (1.1%), Korea (0.8%), United Kingdom (0.4%), Germany (0.3%) and United States $(0.1\%)^{(1)}$
Major imports	Oil products, machinery and equipment, vehicles, food products, chemical and metallurgical industrial products
Imports	US\$6.5 billion <sup>(1)</sup> (2011 actual)
Key import partners	China (30.8%), Russia (24.5%), USA (8.2%), Japan (7.4%), Korea (5.4%), Germany (4.2%), Ukraine (2.3%) and Singapore (1.0%) <sup>(1)</sup>
State Budget	Revenues and grants: MNT4.4 trillion (US\$3.2 billion) <sup>(1)</sup>
	Total expenditures and net lending: MNT4.8 trillion (US\$3.4 billion) <sup>(1)</sup>

Notes:

<sup>(1)</sup> National Statistical Office of Mongolia, December 2011 Monthly Bulletin.

<sup>(2)</sup> ADB, Mongolia Fact Sheet 2010.

# GDP and major financial indicators

The following table sets forth the nominal GDP composition by industry for the periods indicated:

	Year ended December 31,				
Nominal GDP composition by industry	2007	2008	2009	2010	2011
Agriculture, forestry and fishing	18.4%	19.2%	17.9%	14.3%	13.0%
Mining and quarrying	27.1%	20.2%	19.5%	22.7%	20.2%
Manufacturing	6.2%	6.6%	6.4%	6.4%	7.1%
Electricity, gas steam and air conditioning					
supply	2.0%	1.8%	2.4%	2.2%	1.9%
Construction	2.8%	2.5%	1.6%	1.7%	1.3%
Wholesale and retail trade repair of motor					
vehicles and motorcycles	6.3%	7.2%	6.6%	8.3%	9.7%
Transportation and storage	6.5%	6.4%	8.3%	7.7%	7.2%
Financial and insurance activities	3.1%	3.6%	3.2%	2.8%	2.7%
Real estate activities	3.8%	5.3%	7.3%	6.6%	6.6%
Public administration and defense;					
compulsory social security	2.9%	3.8%	4.1%	3.7%	3.5%
Education	3.4%	4.2%	4.7%	4.0%	4.0%
Human health and social work activities	1.5%	1.8%	1.9%	1.7%	1.8%
Others <sup>(1)</sup>	24.7%	27.4%	26.1%	27.2%	29.6%

Source: National Statistical Office of Mongolia, Statistical Yearbook 2010 and December 2011 Monthly Bulletin

# Note:

(1) Others is comprised of electricity, gas steam and air conditioning supply; construction; public administration and defence; compulsory social security; human health and social work activities; water supply; accommodation and food; information and communication; professional scientific activities; administrative and support; arts, entertainment; other service activities and net taxes on products.

#### INDUSTRY OVERVIEW

We commissioned Shanxi Fenwei, a leading Chinese consultancy and service provider in coal and coke industry, to prepare an independent report for use, in whole or in part, in this section. Shanxi Fenwei prepared its report based on its industry knowledge, in-house database, independent third-party reports and publicly available data from reputable industry organizations. Where necessary, Shanxi Fenwei visits companies operating in the industry to gather and synthesize information about the market, prices and other relevant information. Shanxi Fenwei has assumed that the information and data on which it relied are complete and accurate.

Forecasts and assumptions included in the Shanxi Fenwei Report are inherently uncertain because of events or combinations of events that cannot reasonably be foreseen, including, without limitation, the actions of governments, individuals, third parties and competitors. Specific factors that could cause actual results to differ materially include, among others, fluctuations in coal prices, risks inherent in the mining industry, financing risks, labor risks, uncertainty of mineral reserve and resource estimates, equipment and supply risks, regulatory risks and environmental concerns.

Shanxi Fenwei has provided part of the statistical and graphical information contained in this section, including tables of historical data and estimated future supply, demand and market trends created by compiling, interpreting and analyzing engineering, production, economic, statistical and technical information from many third-party sources. The information contained herein has been obtained from sources believed by Shanxi Fenwei to be reliable, but there can be no assurance as to the accuracy or completeness of included information. Most of the data presented in this section with respect to the Chinese coal industries has been extracted from the Shanxi Fenwei Report.

Unless otherwise specified, all of the data presented in this section with respect to Chinese coal reserves and resources refer to the Chinese national standard for the Classification of Resources/Reserves for Solid Fuels and Mineral Commodities (GB/T 17766-1999).

While we, the Initial Purchasers and the other parties involved in the offering have taken reasonable care in the extraction, compilation and reproduction of the information and statistics from the Shanxi Fenwei Report, none of us, the Initial Purchasers and the other parties involved in the offering has independently verified the information and statistics derived directly or indirectly from official government sources or made any representation as to their accuracy. Such information and statistics may be out of date and may not be consistent with other information and statistics compiled within or outside Mongolia. You should not place undue reliance on such information and statistics contained in this section.

# An Introduction to Coking Coal

Coal is one of the most abundant fossil fuels worldwide. Various types of coal exist and it depends on the degree of change undergone by the coal as it matures in terms of carbon content from its lowest form, peat, to its highest form, anthracite. This process is known as coalification and effectively "ranks" the coal in terms of its physical and chemical properties. The diagram on the next page summarizes the different types of coal and the associated end-uses, which includes electricity generation, coke production for steel making, and industrial uses such as cement manufacturing.

Low rank coal (e.g. lignite and subbituminous coal) or "brown" coal are typically softer, friable materials and are dull and earthy in appearance. Typically, these types of coal are characterised by high moisture levels and low carbon content and hence have lower energy content.

Higher rank coal or "hard" coal is generally harder and stronger with a black, vitreous lustre (e.g. bituminous coal such as coking coal and anthracite). These types of coal contain more carbon, have lower moisture content, and generate more energy than low rank coal. While anthracite has the highest carbon content and contains the fewest impurities of all types of coal, it has a lower energy content than many types of coking coal.

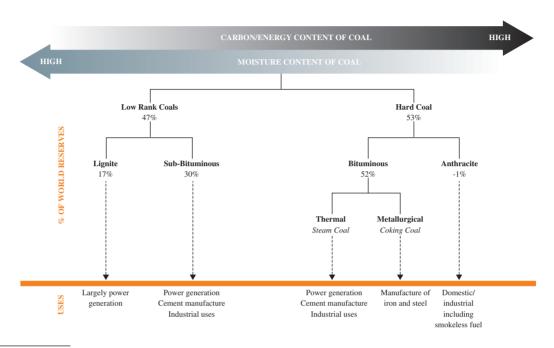


Figure 1. Types of Coal

Source: World Coal Association

While there are several systems of coal classification used in different countries of the world, coking coal can be broadly categorized into four distinct grades, namely hard coking coal, semi-hard coking coal, semi-soft coking coal and soft coking coal. Hard/semi-hard coking coal is essential for the production of coke, which is used as a reductant in the manufacturing of iron and steel. Semi-soft/soft coking coal is typically used for blending purposes to enhance certain physical and chemical parameters of the coke, but in a way that reduces costs by maximizing the proportion of less expensive hard coking coal.

#### China Coal Classification

According to the national standard of Chinese Coal Classification, coal is classified into three categories: lignite, bituminous and anthracite based on the metaphoric rank. Bituminous is further classified into several types based on volatile matter and caking index (G). Coking coal is composed of meager lean coal ("PS"), lean coal ("SM"), primary coking coal ("JM"), fat coal ("FM"), 1/3 coking coal ("1/3 JM"), gas fat coal ("QF"), and gas coal ("QM"). There is no direct correlation between the Chinese and other international classifications but generally, hard coking coal under typical international standards is equivalent to JM and FM in China, while semi-soft coking coal is similar to 1/3 JM and SM in China.

Table 1. Chinese Terminology for Coking Coal

			Volatile		
Type	Similar Chinese type	Ash	matter	CSN	CSR
		(ad, %)	(ad, %)		(%)
Premium hard coking coal.	JM, FM	< 8.5	19-38	8-9	55-74
Standard hard coking coal.		<9.7	19-38	6-9	>55
Semi-hard coking coal	1/3JM, SM	8.0-10.5	17-26	4-6	50-60
Semi-soft coking coal		8.0-11.0	25-41	3-8	45-55
Low volatility PCI	QM, PM, SM, RN	6.0-10.5	10-19	1-2	_
High volatility PCI		4.0-10.0	26-42	1-5	_

Source: Fenwei Energy

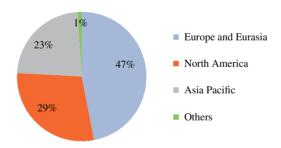
Note: RN is weakly sticky coal in the Chinese classification of coal. RN is used as thermal coal for power generation mostly, but it can also be used as PCI for making pig iron.

#### **Global Coking Coal Industry Overview**

#### Global Coal Resources and Reserves

The proven coal reserves globally is estimated to be over 860 billion tonnes as of the end of 2010, according to 2011 British Petroleum Statistical Review of World Energy report. Low rank coal accounts for approximately 47% and hard coal accounts for the remaining 53%. High quality coking coal is a scarce resource which constitutes less than 25% of total coal reserves. Currently, over 6,185 million tonnes of hard coal and 1,042 million tonnes of low rank coal are produced globally. Most of the coal production is consumed domestically and mere 15% of hard coal is available for international coal trade. The top five hard coal producers are China, U.S., India, Australia and South Africa. The chart below shows the distribution of global hard coal proven reserves by region in 2010.

Figure 2. Global Hard Coal Proven Reserves by Region in 2010



Source: 2011 British Petroleum Statistical Review of World Energy

### Global Coking Coal Supply

In 2010, world coking coal production reached a record level 891 million tonnes, an increase of 13.9% from 2009. OECD countries, coking coal production increased significantly by 21.8% in 2010 to 279 million tonnes, after a decline of 12.3% in 2009 due to the financial crisis. Non-OECD countries did not suffer a decline in coking coal production and posted an increase of 10.7% instead to 553 million tonnes in 2009. As a result, world total coking coal production posted a slight increase of 2.0% to 782 million tonnes in 2009 despite the tough economic environment.

Million tonnes World Total OECD Non-OECD 

Figure 3. Historical World Coking Coal Production, 2000-2010

Source: International Energy Agency, 2011

Coking coal is a scarce resource and its production is highly concentrated geographically. China and Australia are world's two major coking coal producers, contributing 51.0% and 17.1% respectively to 2010 global coking coal production. In 2010, China's and Australia's coking coal production increased by 9.2% and 16.9% respectively, reaching 454.8 million tonnes and 152.1 million tonnes.

Figure 4. Global Coking Coal Production by Country in 2010

Source: International Energy Agency, 2011

#### Global Coking Coal Demand

World wide steel production declined by 7.7% to 1,227 million tonnes in 2009 due to the economic slow down as a result of the 2008 financial crisis. In 2010, driven by world wide economy recovery, crude steel production reached a new record of 1,414 million tonnes, an increase of 15% compared to 2009. It is expected that to the extent the world economy maintains its growth, demand for steel and iron will also increase steadily, which bodes well for demand for coking coal. In 2010, non-OECD countries coking coal production increased by 10.7% to 612 million tonnes, whereas coking coal consumption increased by 15.8% to 696 million tonnes, which is driving the growth for future coking coal imports.

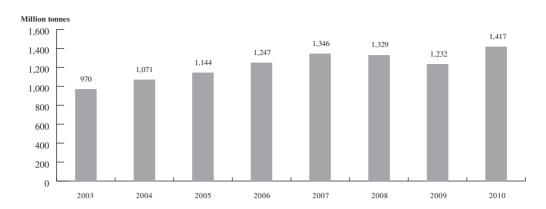


Figure 5. Historical Global Crude Steel Production, 2003-2010

Source: World Steel Association

In 2010, global coking coal consumption increased by 15.5% to 879 million tonnes. OECD countries coking coal consumption increased significantly by 14.5% to 184 million tonnes, after a sharp decline of 17.8% in 2009 due to declining steel production. On the contrary, non-OECD countries posted an increase of 10.5% in coking coal consumption. As a result, world total coking coal consumption increased by 2.8% to reach 761 million tonnes. In 2010, non-OECD countries consumption increased by 15.8% to 696 million tonnes, of which China represents 72.3% of non-OECD countries coking coal consumption and 57.2% of world coking coal consumption.

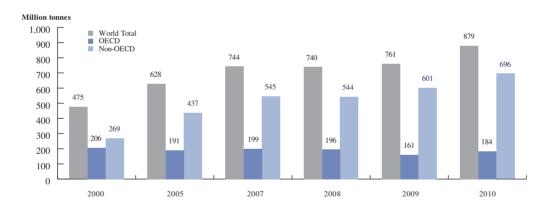
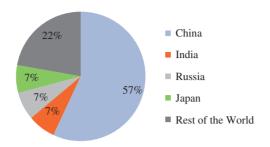


Figure 6. Historical Global Coking Coal Consumption, 2000-2010

Source: International Energy Agency 2011

China is the single largest consumer of coking coal in the world, representing 57.2% of world coking coal consumption as of 2010. China's coking coal consumption reached 502.7 million tonnes in 2010, an increase of 14.6% from 2009. In comparison, China's coking coal production increased only by 9.2%, which is much slower than its coking coal consumption. China's coking coal consumption is expected to continue increasing faster than its domestic supply as its economy continues to grow rapidly, which drives its growing demand for imported coking coal.

Figure 7. Global Coking Coal Consumption by Country in 2010



Source: International Energy Agency 2011

# Global Coking Coal Trade

In 2010, global coking coal exports increased by 28.1% to 270.9 million tonnes. Australia remains the largest coking exporter at 154.6 million tonnes, representing 57.1% of total coking coal export. The U.S. is the second largest coking coal exporter at 50.9 million tonnes, an increase of 50.6%. Mongolia currently ranks as fifth largest coking coal exporter at 10.9 million tonnes, an increase of 137.0%.

Table 2. Global Major Coking Coal Exporters in 2009 and 2010

Million Tonnes	2009	2010
Australia	125.2	154.6
U.S	33.8	50.9
Canada	21.5	27.5
Russia	13.3	13.7
Mongolia	4.6	10.9
Czech Republic	4.0	3.8
New Zealand	2.0	2.3
Indonesia	2.0	2.2
Poland	1.7	1.8
South Africa	1.4	1.4
Total	211.5	270.9

Source: World Coal Association, International Energy Agency 2011

In 2010, global coking coal imports increased by 26.3% to 256.2 million tonnes. Japan remains the largest coking importer at 57.7 million tonnes, representing 22.5% of total coking coal imports. China is the second largest coking coal importer at 48.4 million tonnes, representing 18.9% of total coking coal imports. China's coking coal imports increased by 40.7% in 2010, whereas Japan's coking coal imports increased by 9.9%. It is expected that China will continue the trend of fast growing coking coal imports due to favourable import policy and strong demand.

Table 3. Global Major Coking Coal Importers in 2009 and 2010

Million Tonnes	2009	2010
Japan	52.5	57.7
China	34.4	48.4
India	24.7	30.4
Korea	20.7	27.7
Brazil	9.1	12.5
Ukraine	5.3	10.5
Germany	6.4	7.8
Turkey	5.2	6.8
UK	5.2	6.2
Italy	3.2	5.1
Total	202.9	256.2

Source: World Coal Association, International Energy Agency 2011

### **Chinese Coking Coal Industry Overview**

#### China Coking Coal Reserves

According to Shanxi Fenwei, China has abundant coal reserves, but coking coal accounts for a distinct minority of total coal reserves, and with greater geographic concentration. According to State Administration of Coal Mine Safety ("SACMS"), the proven coking coal reserves in China stood at 280.4 billion tonnes as of the end of 2009, which represents approximately 24.2% of the national proven coal reserves.

Figure 8 shows the Chinese coking coal reserves split by coal type and by province in 2009 respectively. Although China boasts rich coking coal reserves, hard coking coal reserves, as represented by JM and FM type coal comprise only 23.6% and 12.8% respectively of this reserve base.

Shanxi alone contains the bulk of Chinese proven coking coal reserves with about 155.2 billion tonnes, or 55.3% of the total. Anhui, Shandong, Guizhou and Heilongjiang also contain a substantial portion of China's current coking coal reserves, accounting for 20.8% of the total.

Figure 8. Chinese Coking Coal Reserves by Coal Type and by Province in 2009



Source: State Administration of Coal Mine Safety, Shanxi Fenwei

### China Coking Coal Supply

Coking coal in China is mainly produced in Northern China and Eastern China, following by Southwestern and Northwestern China. According to SACMS, Shanxi is by far the largest coking coal producing province, followed by Shandong. By contrast, some of China's traditional coal mining regions, such as Jilin, Hebei and Liaoning are facing resource depletion and their output of coking coal is expected to decline.

Despite the dominance of a few large coal producers, there are thousands of small coal mines providing marginal supply to the market. This fragmentation creates a slew of problems, including safety and environmental issues, increased costs, poor mining conditions, and inefficient resource usage (small mines typically have much lower resource recovery rates). Ongoing coal mine safety campaigns and growing government pressure to close smaller, inefficient and unsafe coal mines are expected to reduce the supply of high-rank, high-quality coking coal. In the longer term, the continued depletion of Chinese hard coking coal reserves could add to China's dependence on coking coal imports. This is particularly the case for premium hard coking coal, as it accounts for around 55% to 65% of the coke blend for steel mills, according to Shanxi Fenwei.

According to the State Administration of Work Safety, the production of Chinese coking coal increased from 475.9 million tonnes in 2006 to 579.1 million tonnes in 2011, representing a CAGR of 4.0%. Shanxi Fenwei projected that China's production of coking coal will reach 661.7 million tonnes by 2015. Figure 9 provides historical and forecast on China's coking coal production for 2006 to 2015.

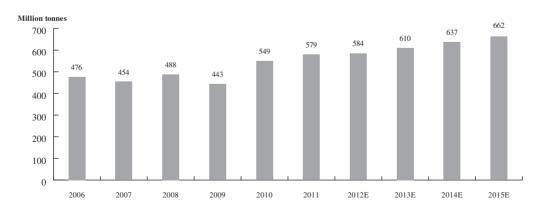


Figure 9. Historical and Forecast Chinese Coking Coal Production, 2006-2015

Source: State Administration of Coal Mine Safety, Shanxi Fenwei

### China Coking Coal Demand

According to the World Steel Association, China produced 683.3 million tonnes of steel in 2011, more than North America, Europe, and the rest of Asia combined, representing 45.9% of global crude steel production. This represents a sharp increase from 2008, when China produced 37.6% of global crude steel.

China is expected to remain the key driver of global steel industry growth in 2012 with the continued rapid development of its economy. The global financial crisis of the past two years has precipitated a structural change in the global steel industry. Steel producers used the slowdown in steel production as an opportunity to reorganize their operations, closing sub-economic blast furnace operations or moving production to lower cost regions. Closure of steel mills in Europe and the U.S. will be countered by new blast furnaces built in South-East Asia, India, China, Eastern Europe and Brazil.

According to China's 12th Five-Year Plan for the iron and steel industry, the crude steel production is set to grow from 2011 to 2015, albeit at a slower pace, with forecasts ranging from 3% to 4%. Steel demand in China will be supported by housing construction and specialty steel manufacturing as the Chinese Government intends to construct 36 million units of affordable housing and develop key infrastructure such as high-speed railways, nuclear power plants and hydropower facilities. Figure 10 shows China's historical and projected crude steel production levels from 2006 to 2015.

Million tonnes 900 810 Crude Steel 800 730 Pig Iron 720 700 683 650 700 627 630 574 <sub>549</sub> 600 500 489 477 469 500 419 412 400 300 200 100 0 2006 2007 2009 2010 2011 2012E 2013E 2014E 2015E

Figure 10. Historical and Forecast Chinese Crude Steel and Pig Iron Production, 2006-2015

Source: World Steel Association, Shanxi Fenwei

The coking coal produced in China is mainly used for the manufacturing of coke, which is used as a key input for steelmaking. Consequently, coking coal consumption in China has grown significantly since 2003, due to a significant expansion in steel production. The growth in heavy industry and steel demand is expected to continue driving coking coal consumption in China. Figure 11 following chart shows China's historical and projected washed coal consumption from 2006 to 2015.

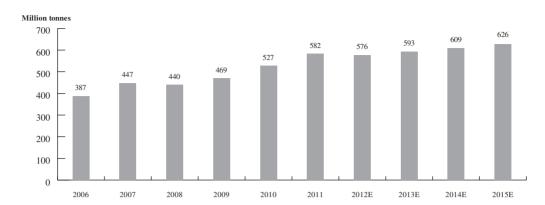


Figure 11. Historical and Forecast Chinese Washed Coal Consumption, 2006-2015

#### China Coking Coal Trade

In recent years, the increase in demand for coking coal in China has substantially outpaced domestic supply, leading to a shortage. This increased the amount of coking coal imports into China and resulted in China becoming a net importer of coking coal. Also as part of its long-term strategy to preserve its natural resources base, the Chinese Government has encouraged imports of coal, while at the same time limiting exports.

Due to a zero tariff on coal imports, the implementation of the 5% provisional export tariff on coking coal from November 1, 2006 onwards and the high increase of domestic coke production in China, the demand for imported coking coal in China increased in 2007. In 2007, China's coking coal imports were 6.2 million tonnes, an increase of 33.5% from the year before. In 2009, due to the reduction in production by the major coking coal producers in Shanxi, China's coking coal production decreased, and the price of international coking coal also fell, leading to a significant increase in Chinese coking coal imports. In 2009, China imported 34.4 million tonnes coking coal, an increase of 401.8% year on year and the increasing trend continued in 2010 as the steel industry continued to grow rapidly. However, a slight decline in imports was observed in 2011 due to a dramatic rebound in domestic coking coal supply post-consolidation of the coal mining industry and high international coking coal prices.

China's coking coal exports have significantly decreased in recent years. As China levied a 5% provisional export tariff on coking coal in 2006, the coking coal exports dropped dramatically to 2.5 million tonnes in 2007. In 2008, China's exports grew to 3.5 million tonnes of coking coal due to the high price of international coking coal. In 2011, the recovery of the global economy and the related increase in international coking coal prices fueled the growth in China's coking coal exports.

According to Shanxi Fenwei, Chinese coking coal imports are projected to continue to rise, increasing to 56.9 million by 2015, while coking coal exports are expected to remain flat at 3.5 million tonnes. Figure 12 shows the historical and projected Chinese coking coal imports and exports from 2006 to 2015.

Figure 12. Historical and Forecast Chinese Coking Coal Trade, 2006-2015

Source: General Administration of Customs, Shanxi Fenwei

2007

2008

2006

The emergence of Mongolia as a significant landborne supplier of coking coal to China is expected to displace established suppliers such as Canada and the United States and will augment seaborne supply from Australia. Shanxi Fenwei estimated that 60% of China's coal imports will come from Mongolia by 2015. Figure 13 shows the increasing trend in Mongolian exports of coking coal into China.

2010

2011

2012F

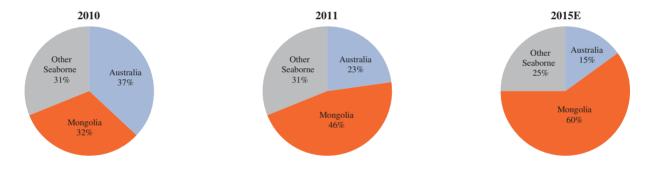
2013F

2014F

2015F

2009

Figure 13. Trend in Australian and Mongolian Exports of Coking Coal into China



Source: General Administration of Customs, Shanxi Fenwei

### China Coal Transportation Infrastructure

Rail is the main method for long distance coal transportation within China. Chinese coal production is mainly concentrated in Shanxi, Shaanxi and Inner Mongolia provinces in the northern part of China, while consumption has been relatively concentrated in the industrialized eastern and southern provinces. This defines the general movement of coal in China, which follows the west to east coal distribution routes. China's coal-dedicated rail system is shown in Figure 14, which contains the names of all the main coal carrying rail lines, as well as the main coal loading and unloading ports.

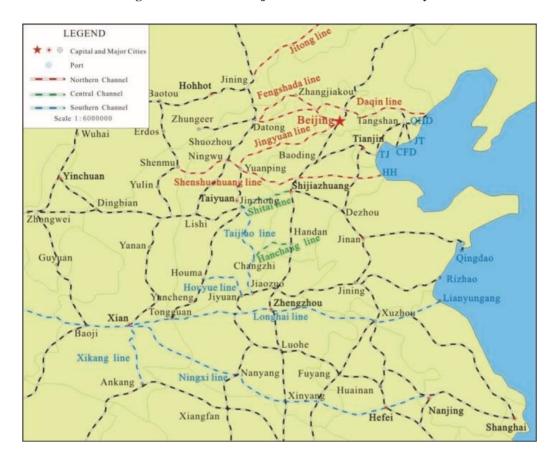


Figure 14. China's Major Coal-dedicated Railways

The 653 km Datong-Qinhuangdao railway in northern China is one of the main coal railways in the country. The railway links coal production regions in Datong and Shanxi to the Qinhuangdao port in Hebei and plays a pivotal role in meeting the coal demand of power generators in China's eastern and southern provinces. Qinhuangdao is one of the main ports for international and domestic coal imports and exports in China.

The 802 km Shenmu-Huanghua railway is another major coal railway in northern China. This railway links coal mines in Erdos and Shenmu in Inner Mongolia with Huanghua port in the coast of Hebei province. It connects with the Baotou-Shenmu railway at the north, meets with Shenmu-Yanan railway at the south, reaches Huanghua port at the east and passes through seven counties of Shanxi and Shaanxi.

The 1,000 km Jicao line extends from Jining in Inner Mongolia to Caofeidian in Hebei with near term capacity of 120 million tonnes and long term capacity of 200 million tonnes. It is expected to be the third major west to east line for coal transportation in addition to Daqin line and Shenmu-Huanghua line. It provides important access to coal resources in west Inner Mongolia linking Jining-Baotou line and related lines.

Numerous new rail lines and expansions of existing lines are under development that will impact our TMR. The Chinese government has significantly increased spending on railway development projects and has undertaken to develop the construction of special coal transportation railways in the future to increase coal transportation capacity.

Railway transportation costs vary depending on insurance fees and construction fees, and whether it is a coal dedicated and electrified railway. For example, the Datong-Qinhuangdao railway, which is a coal dedicated and fully electrified railway, currently charges an all inclusive rate of approximately RMB0.11-0.12 per km for every tonne of coal transported, while the charges for other coal-dedicated railways are approximately RMB0.18-0.25 per km for every tonne of coal transported.

Trucking is also widely used to transport coal and is considered economic for distances shorter than 300 km for thermal coal, and up to 850 km for higher value coking coal. Trucking fees vary, mainly in relation to distance as well as road conditions.

The nearest coal loading ports to our UHG mine are in the Bohai Sea region at Qinhuangdao, Tianjin and Huanghua.

### Mongolian Coking Coal Industry Overview

# Mongolian Coking Coal Resources

Mongolia has vast coal resources with significant potential, but most of it remains untapped. According to MMRE, Mongolia has an estimated 162.4 billion tonnes of total coal reserves, of which 17.6 billion tonnes are proven reserves as of end 2011.

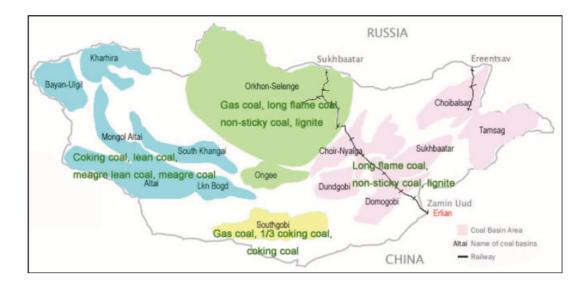


Figure 15. Distribution of Different Types of Coal Resources in Mongolia

25% of Mongolian coal resources are lignite concentrated in the central and eastern parts, 40% are thermal coal distributed in the western and northern parts, 35% are coking coal in the central and Southern Gobi areas as shown in the figure above. From eastern to western areas of Mongolia, the metallurgical grade of coal takes on a rising trend, in other words, the central and southern Mongolia produce higher quality JM, 1/3 JM and FM type coal, whereas the western part produces lower quality JM, SM and PS type coal.

Given the insufficient supply of oil and natural gas, coal is considered to be Mongolia's main energy source. As a country of an estimated 2.8 million people with relatively little industrial activity outside of agriculture and mining, growth in domestic consumption of coal, especially coking coal, is likely to be limited. Much of the locally-consumed coal is low quality lignite used in thermal power plants near the capital, Ulaanbaatar. By comparison, most of the growing Mongolian coal exports to China consist of coking coal.

# Mongolian Coking Coal Production and Exports

Prior to 2006, Mongolian coal was mainly consumed by the domestic market and nearly all of its coal production was thermal coal. In 2006, stimulated by increasing coal demand from China, the production of Mongolian coal, and coking coal in particular, began to grow rapidly. Mongolia's coal output reached 30.4 million tonnes in 2011 with a year-on-year increase of 30.4% according to Shanxi Fenwei, of which 22.4 million tonnes of coking coal was produced.

The key driver behind Mongolia's future production expansion will be demand from China and, to a lesser extent, demand from Russia, South Korea and Japan. China is currently and will likely continue to be, the main destination for Mongolian coal exports, due to Mongolia's proximity to China. As a landlocked country, the cost advantage of transportation and the relatively high demand for premium coking coal from China has driven a robust growth in exports of coking coal from Mongolia.

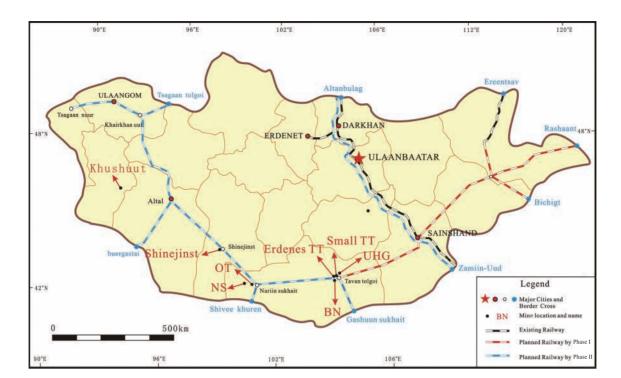


Figure 16. Locations of Major Coal Mines in Mongolia

Currently, there are four major Mongolian mines exporting significant amounts of coal to China – our UHG mine; the Nariin Sukhait ("NS") coal mine, which is a joint venture between Mongolyn Alt Corporation ("MAK") in Mongolia and the Qinhua in China; the existing Tavan Tolgoi JSC ("Small TT"), owned by Tavan Tolgoi Joint Stock Company (listed on the Mongolian Stock Exchange and 51% owned by South Gobi Province and 49% owned by private investors) and the Ovoot Tolgoi ("OT") mine owned by SouthGobi Resources Ltd. They are all located in South Gobi Province, as shown in the map above. Table 4 summarizes the major coal mines in Mongolia in 2011, listed in descending order of total coal output in 2011.

Table 4. Major Coal Mines in Mongolia and Output Levels in 2011

<b>Coal Mine Name</b>	Company Name	Coal Type	2011 Output
			(Mt)
UHG	MMC	JM	7.1
NS	Qinhua-MAK Joint Venture	1/3 JM	7.0
Small TT	Tavantolgoi JSC	JM	4.6
OT	SouthGobi Resources Ltd.	1/3 JM	3.0
		1/2 ZN	
Erdenes TT	Erdenes MGL	JM, 1/2	0.8
		ZN	

Source: Shanxi Fenwei

In addition to the coal mines listed in the above table, the Baganuur coal mine and the Shivee-Ovoocoal mine have relatively large coal output, but they only produce lignite and locate far from the Chinese border. Their coal products are supplied to the power plants in Mongolia. The other coal mines are smaller in size and produce lignite, long-flame coal and 1/2 sticky coal ("1/2 ZN") which are sold to the local power plants.

By 2015, Shanxi Fenwei expects a number of other new major projects to come online, as listed in Table 5.

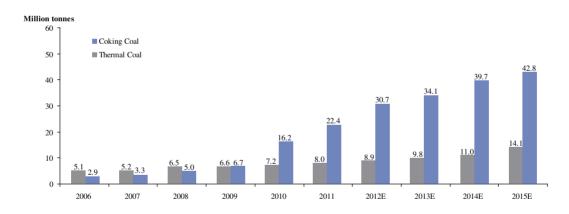
Table 5. Major Coal Mines in Mongolia Being Constructed and Planned

Coal Mine Name	Company Name	Coal Type	Scheduled Start of Operations	Designed Capacity
				(Mt)
Soumber	SouthGobi Resources Ltd.	SM	2013	4.0
Zeegt	Gobi Coal and Energy Ltd.	SM, RN	2015	3.0
OT Underground	SouthGobi Resources Ltd.	1/3 JM, 1/2 ZN	2015	2.0
BN	MMC	1/3 JM	2012	3.0

Source: Shanxi Fenwei

Based on the above analysis of coal quality and target production at each mine, Shanxi Fenwei estimated the raw coal output in Mongolia to reach 56.9 million tonnes by 2015. Figure 17 shows the historical and projected Mongolian coal output from 2006 to 2015.

Figure 17. Historical and Forecast Mongolian Coal Output, 2006-2015



Source: Shanxi Fenwei

#### Mongolia Coal Transportation Infrastructure

Mongolia is landlocked by Russian to the north and China to the south. Neither rail system in the neighbouring countries has sufficient additional capacity to cope with a large-scale expansion of Mongolian coal exports. A high proportion of Mongolia's reserves have not been developed due to the lack of infrastructure. In recent years, there have been several proposed plans for new rail line

line from UHG to GS. From GS, there are two main proposals/alignments for connecting to the existing Chinese rail system. See "Business – Logistics and Transport – Railway". Figure 18 shows the existing and planned railways in Mongolia.

Figure 18. Existing and Planned Railways in Mongolia

RUSSIA

Ulan-ude

ULAANGOM

Toggani way Khairkaan und

Chotsalsang

Chotsalsang

Chotsalsang

Chotsalsang

ULAANBAATAR

CHOIR

SAINSHAND

BARUUNURT

developments pertaining to coal mining projects inside Mongolia, including our proposed 240 km rail

Source: Shanxi Fenwei

Legend

300kg

Mongolian coal enters China through three main border crossings in China: the GM, Ceke and Mandula border points as shown in the map on the next page. Most coal exports from Mongolia are currently trucked into China, from the coal mines to the Mongolian side of the border, where it is unloaded at a stockpile facility. Border fees are paid in Mongolia and China, and the coal is then trucked over to stockpile facilities on the Chinese side of the border. From the stockpiles, some buyers truck the raw coal directly to end users. Most stockpile coal except ours, however, is trucked south to coal handling and preparation plants in China where it is processed into higher value product – that is, crushed and sized, and in some cases, washed. Transportation costs are a key issue that will determine a Mongolian coal mining project's competitiveness in the Chinese and international seaborne markets.

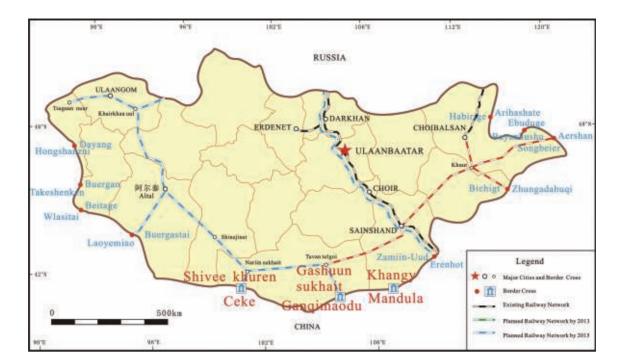


Figure 19. Locations of Sino-Mongolia Border Crossings

In Mongolia, GS is the largest border crossing that exports Mongolian coal products to China, and its coal export volume has been rapidly increasing since 2006. The Mongolian GS border crossing is 26 km from the Chinese GM border crossing. Apart from our UHG and BN mines, Small TT and other mines in the defined region will be exporting coal to China via the GS border crossing.

In Mongolia, Shivee Khuren is the second largest border crossing for raw coal exports to China. The Shivee Khuren border crossing is only 1 km from China's Ceke border crossing. OT, NS and Soumber coal mines are located in an area only 40-70 km to the north of Shivee Khuren, so these coal mines will transport their coal products to China via the Shivee Khuren border crossing.

The Khuchit border crossing in Mongolia is 25 km from China's Mandula border crossing. Currently, iron ore exports take up over 80% of the cargo volume passing through Khuchit; raw coal exports come next to iron ore.

# Target Market Region for Our Coal

By analyzing transport logistics, supply costs, demand and price levels comprehensively, the TMR for our coal products has been determined by Shanxi Fenwei. It is shaded in beige color in Figure 20 and is considered the most likely area that our coal products could be competitively sold into.

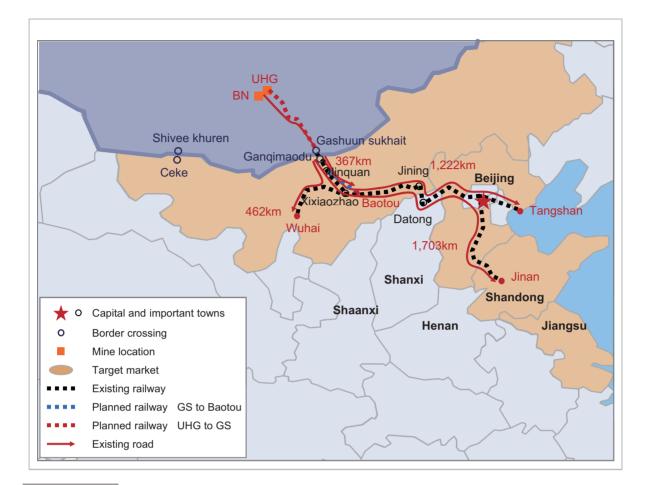


Figure 20. Our Target Market Region in China

Shanxi, Hebei, Shandong, Henan and Inner Mongolia are China's top five coke producing provinces, with a total production of 244.0 million tonnes in 2011, accounting for 57.0% of the national total.

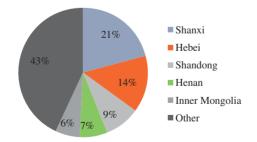
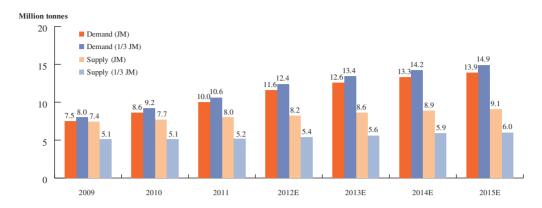


Figure 21. Coke Production by Province in 2011

Source: National Statistics of Bureau of China, Shanxi Fenwei

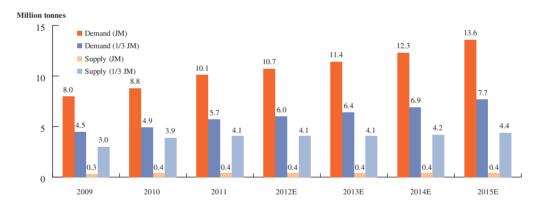
The central and western regions of Inner Mongolia are the nearest areas from the GM border crossing, with a number of new coking production facility projects under construction. The rapid growth of the coking industry in Wuhai and Baotou cities and their periphery areas in Inner Mongolia will pave the way for the expansion of the coking coal market. A coking coal supply shortage is expected to continue to increase in these areas. Figure 22 shows the historical and projected washed coal demand and supply dynamics in Inner Mongolia from 2009 to 2015.

Figure 22. Historical and Forecast Washed coal Demand and Supply in Inner Mongolia, 2009-2015



Hebei is China's second largest coke producing province and Tangshan city is the largest iron and steel producing base in China. Currently its coking coal products are mostly lower quality FM type coal, hence it has strong demand for JM and 1/3 JM type coal, which are the main products at our UHG mine. Figure 23 shows the historical and projected washed coal demand and supply dynamics in Tangshan from 2009 to 2015.

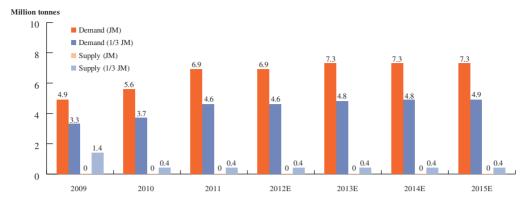
Figure 23. Historical and Forecast Washed coal Demand and Supply in Tangshan, 2009-2015



Source: Shanxi Fenwei

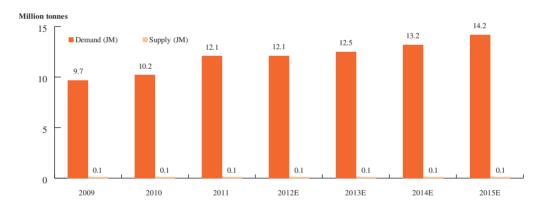
In addition, Inner Mongolia railway transportation capacity will gradually improve and the Mongolian coal imports can also be transported to Jiangsu by sea via Jingtang Port. According to Shanxi Fenwei, there is no coking coal mined in Jiangsu and the production of washed 1/3 JM will also decrease in the next few years. Figure 24 shows the historical and projected washed coal demand and supply dynamics in Jiangsu from 2009 to 2015.

Figure 24. Historical and Forecast Washed coal Demand and Supply in Jiangsu, 2009-2015



Shandong is China's third largest coke producing province, and its coking coal products are mainly 1/3JM and QF type coal, lacking in JM type coal. Currently JM type coal is primarily imported from Shanxi, Hebei, Qinghai and these could potentially be a key target market for our coal products going forward. Figure 25 shows the historical and projected washed coal demand and supply dynamics in Inner Mongolia from 2009 to 2015.

Figure 25. Historical and Forecast Washed coal Demand and Supply in Shandong, 2009-2015



Source: Shanxi Fenwei

Rail and road transport distances from GM to each of the potential target markets are shown in Table 6.

Table 6. Transport Distance from GM to TMR

		Rail Transport	Road Transport
Origin	End-Destination	Distance	Distance
		(km)	(km)
GM border crossing	Wuhai, Inner Mongolia	462	427
	Baotou, Inner Mongolia	367	355
	Tangshan, Hebei	1,222	1,150
	Jinan, Shandong	1,703	1,435

Source: National Statistics of Bureau of China, Shanxi Fenwei

### **Coal Pricing**

The information below relates to the prices of washed coal only. Raw coal is generally sold at a significant discount to washed coal.

#### Global Coking Coal Pricing

Coal is a bulk commodity commonly traded by contract. Coking coal prices are principally dependent on the coking characteristics of the coal, as compared to thermal coal prices which are dependent on the energy level of the coal. Coking coal is typically priced at a significant premium to thermal coal, with pricing differences between the different coking coal types. Hard coking coal ranks highest due to its high value in use (it is essential to make strong coke) and relatively limited sources of supply, semi-hard coking coal ranks lower due to higher ash content, soft coking coal is typically high fluidity coal and generally achieve a premium over semi-soft coking coal, and semi-soft coking coal is higher in volatility (+30%), low to medium ash (8%-10%) and with modest coking properties.

A number of factors also influence the direction and magnitude of benchmark coal prices, in particular, structural supply side changes, productivity improvements, cash cost levels, foreign exchange rates, demand and supply balances, profitability of steel companies and suppliers and consolidation within the sector. Historically, global coal export contract negotiations were held annually to establish the benchmark prices for the respective coal types. Commencing from the second quarter of 2010, the price setting mechanism is now done on a quarterly basis, helping to set the benchmark prices closer to spot prices.

#### China Coking Coal Pricing

There are three common coal pricing mechanisms in China: mine gate (also called mine mouth), free on rail ("FOR") and free on board ("FOB"). Mine gate price refers to the sales price of coal sold at the producing mines. The FOR price refers to sales where coal is loaded onto trains which is mainly impacted by the mine gate price, freight charges (usually short-distance trucking), platform fee and agent fee. The FOB price refers to the price of coal loaded onto ships for export markets. These pricing mechanisms are summarized in Figure 26:

ex-works Customers Mine gate price Production costs + Margin + Tax FOR price Mine gate price Trucking fees Platform charges Agent fee Customers FOB price FOR price Railway charges Port charges Customers Railway vessel

Figure 26. China Coal Pricing Flow

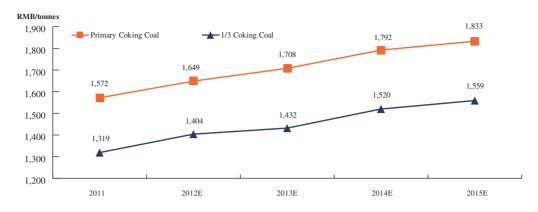
Tangshan, Hebei is China's largest iron and steel producing base as well as China's largest coking coal consumer and for this reason, its coking coal price is often used as a reference for the national price.

The coking coal price in China has generally been on an upward trend since 2005. Coking coal prices soared in 2007 with the increased demand for coking coal and prices in China reached a record level in the first half of August 2008, with the Tangshan coking coal prices reaching RMB2,100 per tonne. By the end of 2008, as a result of the global economic downturn, the coking coal price declined and the coking coal price in Tangshan dropped to RMB1,200 per tonne. In 2009/10, the Chinese Government implemented a stimulus package, which boosted the demand for coking coal. As a result, the coking coal price in Tangshan reached RMB1,500 per tonne in 2010.

The Chinese economy is expected to maintain robust growth from 2011 to 2015, and the demand for coking coal is expected to continue growing during this time. The primary coking coal FOR price in Tangshan is expected to reach RMB1,833 per tonne by 2015, representing an increase of 16.7% compared to 2011.

Shanxi Fenwei forecasts coking coal prices in Tangshan, China as shown in Figure 27.

Figure 27. Forecast Coking Coal Prices in Tangshan, 2011-2015



Source: Shanxi Fenwei

Note: Prices are inclusive of VAT

Based on the projections of coal prices in our TMR and taking into consideration the logistics costs from GM to the TMR, Shanxi Fenwei forecasts the prices of our coal products at GM as shown in Table 7.

Table 7. Forecast MMC Coking Coal Prices at GM Border Crossing, 2011-2015

Coal Product	End-Destination	2011	2012E	2013E	2014E	2015E
				(in RMB)		
UHG washed coal	Wuhai, Inner Mongolia	1,232	1,297	1,432	1,463	1,545
	Tangshan, Hebei	1,200	1,275	1,413	1,494	1,534
	Jinan, Shandong	_	_	1,443	1,529	1,571
	Suzhou, Jiangsu	_	_	1,495	1,583	1,627
BN washed SSCC	Wuhai, Inner Mongolia	892	931	1,055	1,089	1,158
	Tangshan, Hebei	885	963	1,070	1,150	1,186
	Suzhou, Jiangsu	_	_	1,059	1,143	1,180

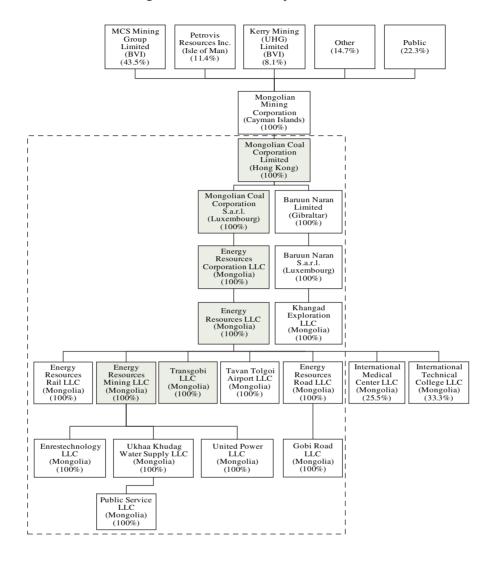
Source: Shanxi Fenwei

Note: Prices are inclusive of VAT

#### CORPORATE STRUCTURE AND HISTORY

## **Corporate Structure**

As of the date of this offering memorandum our corporate structure is as follows:



Notes:

- (1) The Subsidiary Guarantors are shaded.
- (2) Entities inside the dotted lines are Restricted Subsidiaries.

#### History

We were incorporated in the Cayman Islands as an exempted company with limited liability on May 18, 2010 in anticipation of our initial public offering. We operate our business through our subsidiary companies in Mongolia, including ER LLC and its subsidiaries. Through Mongolian Coal Corporation Limited, incorporated in Hong Kong, Mongolian Coal Corporation S.à.r.l., incorporated in Luxembourg, and Energy Resources Corporation LLC, incorporated in Mongolia, each a direct or indirect wholly-owned subsidiary of the Company, we indirectly own 100% of ER LLC.

Our current corporate structure was substantially put in place in connection with our initial public offering in October 2010. The history of our and our subsidiaries predecessors dates back to 1999, when Mine Info LLC obtained exploration licenses to conduct exploration activities in the Tavan Tolgoi area of Mongolia. In 2002, Darkhankhaan Uul LLC obtained exploration licenses to conduct exploration activities in additional areas in the Tavan Tolgoi area of Mongolia.

ER LLC was incorporated in Mongolia in 2005, and was jointly owned by the shareholders of Energoresources LLC and the shareholder of Darkhankhaan Uul LLC. On May 2, 2005, the shareholders of Energoresources LLC and Darkhankhaan Uul LLC transferred all six of their exploration licenses to ER LLC. In 2006, the exploration licenses of ER LLC were converted into mining licenses. On March 21, 2008, ER LLC entered into the Minerals License Transfer Agreement with the Government of Mongolia, pursuant to which we transferred five of our six mining licenses to the Government of Mongolia. The transfer of such mining licenses was completed on May 28, 2008. For details of the circumstances leading to the transfer of the mining licenses and details of our UHG mining license, please see "Business – Our Location and Licenses".

We entered into a share purchase agreement with Quincunx (BVI) and its then parent company, Kerry Mining (Mongolia) Limited on May 31, 2011 to acquire Baruun Naran Limited (formerly named QGX Coal Limited) incorporated in Gibraltar, Baruun Naran S.à.r.l (formerly named QGX Coal S.à.r.l) incorporated in Luxembourg, and Khangad Exploration LLC. The acquisition was completed on June 1, 2011. Khangad Exploration LLC was incorporated in 2006 and holds a mining license to conduct mining activities in our BN deposit. For details of our BN mining license, please see "Business – BN Mine".

The first and the second modules of our CHPP, each with ROM coal nameplate processing capacity of 5.0 Mtpa, have been in operation since June 2011 and February, 2012, respectively. We began constructing the third module of our CHPP with ROM coal nameplate processing capacity of 5.0 Mtpa in August 2011 and expect to complete construction by the end of 2012. In September 2011, we completed the construction of a paved road with 18.0 Mtpa capacity of coal transportation from our UHG mine to GS, which commenced operation in October 2011. In January 2012, we, together with Erdenes MGL, completed an expansion of the GS border crossing, which we expect to increase the border crossing capacity from 10 Mtpa to approximately 20-30 Mtpa.

## Our other subsidiaries include:

- Energy Resources Rail LLC, which is responsible for the implementation of the construction of the base infrastructure of UHG-GS railway.
- Energy Resources Mining LLC, which is responsible for the mining and technical operations of our UHG mine.
- Enrestechnology LLC, which is responsible for owning and operating our CHPP at our UHG mine.
- Ukhaa Khudag Water Supply LLC, which is responsible for the water exploration and supply of water to our UHG mine.
- United Power LLC, which is responsible for the construction and operation of the power plant.
- Transgobi LLC, which is responsible for the transportation of coal extracted from our UHG mine.

- Tavan Tolgoi Airport LLC, which is responsible for the operation and management of the airport in Tsogttetsii soum serving the miners' camp with several Mongolian commercial airlines.
- Energy Resources Road LLC, which is a holding company of Gobi Road LLC.
- Gobi Road LLC, which is responsible for maintenance and operation management of our UHG-GS paved road and UHG-BN road project.
- Public Service LLC, which is responsible for holding a special permit required for provision of public utility services at our UHG mine.

## Our other affiliates include:

- International Medical Center LLC, which is responsible for the construction and operation of a private general hospital.
- International Technical College LLC, which is responsible for technical education and training services.

#### **BUSINESS**

#### Overview

We are a leading Asian coking coal mining company. We are engaged in the open-pit mining of coking coal at our UHG deposit which forms the northern branch of the Tavan Tolgoi coal formation and our BN deposit, both located in South Gobi Province, Mongolia. Our UHG mining license permits us to engage in coal mining activities on 2,960 hectares of land at our UHG mine for an initial period of 30 years starting from August 29, 2006. Our UHG mine had 570.8 Mt and 275.0 Mt of JORC-compliant measured, indicated and inferred coal resources and proven and probable coal reserves, respectively, as of December 31, 2011. On June 1, 2011, we completed the acquisition of our BN mine, which is located approximately 30 km southwest of our UHG mine. Our BN mine had 282.2 Mt of JORC-compliant measured, indicated and inferred coal resources as of February 2010 and 185.3 Mt of JORC-compliant proven and probable reserves as of February 2011.

We are the largest producer and exporter of raw and washed coal in Mongolia. Most of our coal is transported by trucks to our customers in China, while a small portion is shipped on the Trans-Siberian railway to explore alternative markets, such as European and other Asian markets. According to Shanxi Fenwei, our coking coal is of high quality that is comparable to the quality of hard coking coal produced in Shanxi, China and the Bowen Basin, Australia.

We commenced mining at our UHG mine in April 2009 and became profitable in our first year of operations. For the years ended December 31, 2009, 2010 and 2011, we produced 1.8 Mt, 3.9 Mt and 7.1 Mt of ROM coal, respectively. We plan to produce approximately 10.7 Mt, 14.7 Mt and 15.2 Mt of ROM coal at our UHG mine in the three years ending December 31, 2014, respectively.

Our UHG mine is strategically located approximately 240 km from the Sino-Mongolian border and approximately 600 km from Baotou, China. Baotou is an important railway transportation hub providing access from Mongolia to the largest steel producing provinces in China, including Inner Mongolia, Hebei, Shandong and Jiangsu provinces. We, together with our contract trucking companies, haul most of our coal by truck to GM, located on the Chinese side of the Sino-Mongolian border crossing, where our customers pick up and further transport the coal to their final destinations in China. The total length of transportation is approximately 250 km between our UHG mine and GM, including a transshipment and handling stopover at TKH, which is located approximately 21 km from GM.

In October 2011, we completed the construction of a paved road, with coal transportation capacity of 18.0 Mtpa from our UHG mine to GS, parallel to the existing coal transport gravel road from our UHG mine to GS. In January 2012, we, together with Erdenes MGL, completed and commissioned an expansion of the GS border crossing, which we expect will increase the border crossing capacity at GS from 10 Mtpa to approximately 20-30 Mtpa. We maintain our own fleet of trucks, which is supplemented by contract trucking companies, to ship our coal from UHG to GM. In 2011, we increased the size of our own fleet from 100 to 400 trucks. In order to further lower transportation costs and increase reliability and operational efficiency, we plan to commence construction of a railway directly from our UHG mine to GS in 2012. See "Risk Factors – Risks Relating to our Business and Industry – Our UHG-GS railway is subject to various risks and uncertainties; we are not sure when we can commence and complete construction of the railway, what the actual cost of the project will be, or whether the project will be successful".

As part of our strategy to improve our margins, we have completed construction of and commissioned the first and second modules of our CHPP to produce high-quality washed coal. The first and second modules of our CHPP, each with ROM coal nameplate processing capacity of 5.0 Mtpa, have been in operation since June 2011 and February 2012, respectively. We began constructing the third module with ROM coal nameplate processing capacity of 5.0 Mtpa in August 2011 and expect to complete construction by the end of 2012, which will increase the capacity of our CHPP from 10.0 Mtpa to 15.0 Mtpa. The ramp-up of our CHPP capacity coincides with the ramp-up of our coal production. With the commencement of operations of our CHPP, we have shifted our production from raw coal to washed coal, and we plan to sell only washed coal and middlings beginning in the second quarter of 2012. In 2011, the yield of washed coal from raw coal processed at our CHPP was approximately 63.3%.

We sell most of our coking coal into China pursuant to long-term agreements with iron and steel mills and coke and chemical plants. We have already contracted to sell all of our scheduled production of coal for the year ending December 31, 2012 pursuant to the terms of our long-term agreements. However, our customers are allowed to adjust the amount of coal they will purchase, subject to mutual agreement. According to Shanxi Fenwei, the selling prices of our coal are the highest among our competitors in Mongolia and are considered the benchmark for the price of Mongolian coking coal. In the years ended December 31, 2009, 2010 and 2011, we sold our coking coal at an average selling price of US\$48.2, US\$70.8 and US\$113.9 per tonne, respectively. Washed coal is sold at a substantial premium to raw coal. In 2011, the average selling price of our raw coal was US\$95.0 per tonne and the average selling price of our washed coal was US\$155.6 per tonne, representing approximately a 63.8% premium to that of raw coal.

We work with a number of industry-leading experts throughout the planning, development and operations of our business. We work closely with our mining contractor, Leighton, a world-class mining operator with over 30 years of experience in Asia, in all aspects of our coal mining operations. We have entered into a long-term contract with them to train and supervise our employees to conduct mining operations at our UHG mine and, in addition, Leighton has agreed to work with us to build out our coal production capacity to 15.0 Mtpa. We have communicated our expansion plans to our other major contractors and suppliers and are working with them to ensure they have sufficient resources to support our expansion.

On June 1, 2011, we completed the acquisition of our second mine, BN, through the acquisition of 100% of the equity interests in Baruun Naran Limited (formerly named QGX Coal Limited). The acquisition provided us with a unique opportunity to purchase a coking coal asset strategically located in close proximity to our UHG mine and which is in an advanced development stage, and allowed us to expand our existing footprint in Mongolia. We expect the sizable coking coal resources and reserves at our BN mine will allow us to target a larger customer base and to expand our product offerings to include semi-soft coking coal and high calorific value thermal coal. In addition, we believe the proximity between our BN mine and our UHG mine will enable us to benefit from synergies such as sharing of mining, processing and transportation infrastructure and marketing resources. We commenced operations at our BN mine in February 2012.

Our revenue for the years ended December 31, 2009, 2010 and 2011 was US\$67.0 million, US\$277.5 million and US\$542.6 million, respectively, representing a CAGR of 184.6%. Our net profit for the years ended December 31, 2009, 2010 and 2011 was US\$10.3 million, US\$60.1 million and US\$119.1 million, respectively, representing a CAGR of 240.0%.

#### **Our Competitive Strengths**

#### World-class coking coal assets with abundant resources

We own and operate two high quality coking coal mines in South Gobi Province, Mongolia, namely our UHG and BN mines. According to Shanxi Fenwei, we have one of the largest coking coal resource bases in Asia, the quality parameters of our washed coal are comparable to those of Shanxi, China and the Bowen Basin, Australia, and our washed coal is highly marketable in the Chinese and other international markets. Our UHG mine had 570.8 Mt of JORC-compliant measured, indicated and inferred coal resources and 275.0 Mt of JORC-compliant proven and probable reserves as of December 31, 2011.

Our BN mine is located approximately 30 km southwest of our UHG mine. It is mainly comprised of sizeable semi-soft coking coal and high calorific value thermal coal resources and reserves, which we believe will create the potential to diversify our coking coal product offerings and to enhance revenue streams. We believe the proximity between our UHG and BN mines will enable us to benefit from synergies such as the sharing of mining, processing and transportation infrastructure and of marketing. Our BN mine had 282.2 Mt of JORC-compliant measured, indicated and inferred coal resources as of February 2010 and 185.3 Mt of JORC-compliant proven and probable reserves as of February 2011.

The table below shows the quality comparison between our coal and comparables from Shanxi, China and the Bowen Basin, Australia.

	HCC			SSCC		
Quality Attribute	UHG	Liulin, Shanxi	Australia	BN	Linfen, Shanxi	Australia
Ash %	9.4%	10.3%	8%	10%	8%	10.5%
Volatile Matter % (ad)	25%	21.6%	24%	30-32%	32-36%	32%
Total Sulfur % (ad)	0.6%	0.36%	0.55%	0.5-0.6%	0.6%	0.8%
G Index	85	86	85	70-90	75-85	82
Y Index	14	16	15	11-14	11-12	12
CSR	64.8	70	65	30	35	36

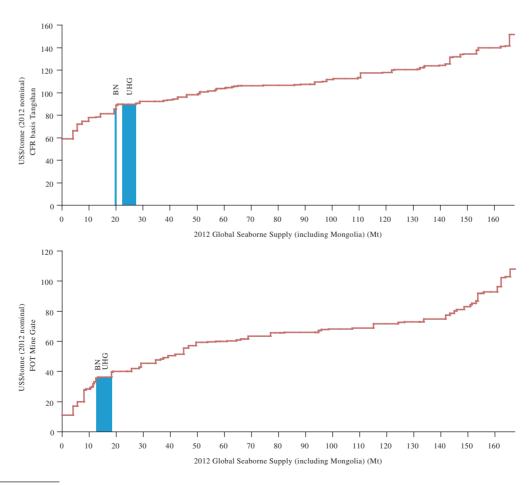
Source: Shanxi Fenwei

## One of the lowest cost coking coal producers in the world

We believe that we have one of the lowest mining and processing cash operating costs of production among coking coal producers. The cash costs per tonne of our UHG and BN mines on FOT at mine gate and CFR at Tangshan bases are forecast to be ranked in the first quartile of global hard coking coal cash cost curve for 2012, according to Wood Mackenzie.

Our low cost structure is partly attributable to the favorable geological conditions of the coal seams at our UHG mine, according to Norwest. The majority of our coal deposits are close to the surface, which enables the development of lower cost open pit mines. In terms of deposit structure, our coal seams are thick, relatively uniform and only slope slightly, which provide for low stripping ratios. The stripping ratio of our UHG mine in 2011 was 5.2. Our coal also has a high degree of friability, which means it can be easily broken into smaller pieces without drilling or blasting. This makes it easier for us to both mine and transport our coal. The yield of our washed coal from raw coal was approximately 63.3% in 2011, which compares favorably to the 55% yield that most Chinese producers are able to achieve. These characteristics increase the efficiency of our mining operations and the productivity of mining equipment, thereby enabling us to produce high quality washed coal at a low cost.

Our cost of production is lower than our principal competitors serving China, namely coking coal producers from China and Australia. Coking coal from China is predominantly produced from underground mines. In general, underground mining is significantly more capital intensive, costly and operationally challenging than open-pit mining. In the last several years, mine production costs have significantly increased in Australia due to high levels of taxation, increased labor, operational and infrastructure costs, transportation capacity bottlenecks, inflation and currency appreciation. Furthermore, mining operations in Australia normally have higher stripping ratios, and consequently higher costs per tonne of coal produced. The figures below show the forecast cash cost curves, on FOT basis at mine gate and on CFR basis at Tangshan, of washed coking coal sold at Tangshan for 2012, which illustrates our cost advantage compared to other major coking coal producers.



Source: Wood Mackenzie

#### Closest coking coal exporter to major Chinese steel mills

China is the world's largest steel producer. According to the World Steel Association, China produced 683.3 Mt of crude steel in 2011, representing 45.9% of the world's total steel production. Based on the 12th Five-Year plan (2011 to 2015) for China's iron and steel industry, the steel industry in China is expected to grow at a rate of 5-6% per annum from 2011 to 2015. As a result, China is and is expected to remain the world's largest coking coal consumer, and one of the fastest growing importers of coking coal. In 2011, China imported 44.7 Mt of coking coal, of which 44.7% was sourced from Mongolia, which surpassed Australia in 2011 to become the largest coking coal exporting country to China according to Shanxi Fenwei.

We believe that we are strategically positioned to benefit from the Chinese steel industry's strong demand for coking coal. We are the closest coking coal exporter to the largest steel producing provinces in China, including Inner Mongolia, Hebei, Shandong and Jiangsu. Our UHG and BN mines are located approximately 240 km and 230 km from the GS border crossing, respectively. We are also only approximately 600 km from Baotou, China and 1600 kilometers to Hebei, China. Proximity to Baotou is of strategic importance to Mongolian coking coal producers for its railway network, which provides access to China's large steel producing provinces. Through Baotou, our coking coal can be transported by rail to the ports of Jingtang, Caofeidian and Tianjin, which, we believe, will allow our coal to be sold in the international seaborne market subject to obtaining requisite approvals and licenses to export coal from China.

# Most advanced coking coal operations in Mongolia supported by internationally recognized experts

As of December 31, 2011, we believe we had the most advanced coking coal operations in Mongolia. We commenced mining operations in April 2009 and produced 7.1 Mt of ROM coal in 2011. We plan to produce approximately 15.2 Mt of ROM coal in 2014. See "Risk Factors – Risks Relating to our Business and Industry – We face risks under our expansion program". We have chosen to work with internationally recognized experts, such as Leighton and Sedgman, to develop and operate our mining and processing infrastructure. We have entered into contractual arrangements with Leighton as our mining contractor, who has agreed to procure and commit upfront capital expenditures for the necessary mining equipment as well as provide mine management and on-the-ground staff training for our employees to support our planned production ramp-up to approximately 15.0 Mtpa. Leighton sources a large proportion of the mining equipment from internationally recognized equipment manufacturers such as Liebherr and Caterpillar.

We have contracted with Sedgman to construct and operate our CHPP. The first and second modules of our CHPP, each with ROM coal nameplate processing capacity of 5.0 Mtpa, have been in operation since June 2011 and February 2012, respectively, and we continue to work with Sedgman to complete construction of the third module of our CHPP by the end of 2012, which will increase its current capacity from 10.0 Mtpa to 15.0 Mtpa to match our target long-term production levels. Our CHPP is designed to operate year round in Mongolia's weather conditions. According to Shanxi Fenwei, our CHPP is expected to be one of the largest coking coal processing plants in the world, the most advanced in Asia and will have one of the highest process recovery efficiencies in the industry. Based on publicly available information available at the time of this offering memorandum, we believe no other coking coal producer in Mongolia has commenced construction of a similar facility and that we are the only producer of washed coal in Mongolia. In addition, our CHPP currently uses water supplied from an aquifer located in Naimant Depression and we plan to use water from another reservoir located in Naimdain Khundii which we expect will begin supplying water by the end of 2012.

We have constructed a paved road with coal transportation capacity of 18.0 Mtpa from our UHG mine to GS to transport our coal and are permitted to charge tolls to third parties using its excess capacity under the terms of our BOT contract with the Government of Mongolia. We believe that most Mongolian coal producers still use unpaved gravel roads, which generally have smaller transportation capacities and require higher maintenance costs and result in significantly higher transportation costs. In addition, we, together with Erdenes MGL, completed an expansion of the GS border crossing, which we expect to increase the border crossing capacity from 10 Mtpa to approximately 20-30 Mtpa.

We believe working alongside international experts gives us a strategic advantage over many of our competitors as our personnel are able to acquire and apply the knowledge necessary to operate a world-class coking coal mine. We are also working with other leading contractors in their respective areas of expertise including Parsons Brinckerhoff (power plant feasibility study and design review), Deutsche Bahn and its sub-contractor Wilbur Smith Associates (railway feasibility studies), and Aquaterra (underground water exploration, water supply facility design and construction supervision).

#### Higher profitability driven by washed coal sales and integrated infrastructure

We began operation of the first and second modules of our CHPP in June 2011 and February 2012, respectively, and expect a positive contribution to our margins from the sale of washed coal and from the shift of our trucking operations to the paved road from the gravel road. Previously, we were only able to sell raw coal and had to rely on coal traders and customers to wash our coal. With the commencement of our CHPP operations, we have been able to produce washed coal at consistent quality levels. As a result, we are able to sell high-quality washed coal directly to end-use customers under our own brand, which we believe will significantly increase our market recognition, competitiveness and bargaining power. The sale of washed coal not only allows us to command a substantially higher price than raw coal, but also allows us to enjoy lower royalty tax rates and qualify for VAT refunds on our washed coal sales. In 2011, the average selling price of our raw coal was US\$95.0 per tonne and the average selling price of our washed coal was US\$155.6 per tonne, representing a 63.8% premium to that of raw coal. According to Shanxi Fenwei, the selling prices of our coal are the highest among our competitors in Mongolia and are considered the benchmark for the price of Mongolian coking coal.

In October 2011, we completed, within 10 months, the construction of a paved road parallel to the existing coal transport gravel road from our UHG mine to GS, which was a significant improvement in the transportation infrastructure necessary to support our production growth. Our paved road is sufficient to support our current expansion plans, and its excess capacity may be used by third parties for a toll fee. We believe that the paved road has indirectly improved our margins by (i) allowing us to use double-trailer trucks capable of hauling 140 tonnes each, thereby substantially increasing the amount of coal that may be transported by each truck, (ii) reducing repair and maintenance costs of our coal hauling trucks and (iii) decreasing the amount of fuel used by each coal hauling truck. Smooth operations at GS are also critical to our operational performance, and in January 2012, we, together with Erdenes MGL, completed and commissioned an expansion of the GS border crossing, which we expect will increase the border crossing capacity from 10 Mtpa to approximately 20-30 Mtpa. In addition, our 3x6 MW power plant has been fully operational since October 2011 and supplies substantially all of the power required at our UHG mine. We also operate 4x2 MW diesel power generators to provide additional power during peak use periods and as a backup source of power. Furthermore, the initial stage of the water supply facility was completed and became operational in the second quarter of 2011. It has capacity of 117 liters per second and is supplied from a reservoir located in Naimant Depression, approximately 20 km from our UHG mine.

## Stable revenue streams underpinned by off-take agreements with diversified customer base

We have already contracted to sell all of our scheduled production of coal for the year ending December 31, 2012, under long-term agreements which allow our customers to adjust the amount of their purchases, primarily to iron and steel mills, as well as coke and chemical plants, located in China. As of December 31, 2011, we have entered into off-take agreements with Chinese end-use customers, such as Baotou Steel, Shagang, Risun, Tangshan Jiahua Coke and Chemical, Qinghua, and Shenhua Bayannaoer Energy and coal traders, such as Hua Zheng and Winsway. The long-term off-take agreements have terms of one to ten years, allowing us to secure relatively stable long-term demand, and relatively predictable revenue streams and cash flows. As the only mining operator in Mongolia with a coal processing facility, we are the first exporter that is able to sell washed coal products directly to end-use customers, thereby diversifying our customer base beyond principally relying on coal traders. In the years ended December 31, 2009, 2010 and 2011, the amount of our sales of coal to iron and steel mills and coke and chemical plants was 45.8%, 61.3% and 91.0%, respectively.

## Strong management team with proven execution track record

Our directors and senior management include representatives of our shareholders and professionals who have extensive industry knowledge and experience in their respective industries, which include mining operations, exploration, development, finance and marketing resources. Mr. Odjargal Jambaljamts, our executive Director, chairman of the Board and executive chairman, has overseen the development of our business from the time of our establishment. Dr. Battsengel Gotov, our chief executive officer, has been instrumental in transforming our UHG mine from a greenfield project to a full-fledged mining operation. Building on extensive industry experience, our management team has demonstrated strong execution abilities to expand mine operations and infrastructure. We turned profitable in the first year of commercial operations in 2009 and listed on the Hong Kong Stock Exchange in the following year. Our management team has proven capable of effectively managing our operations while employing international mining practices and corporate governance standards.

#### **Our Strategy**

We intend to pursue the following key strategies to maintain and enhance our position as a leading Asian coking coal mining company.

## Expand coal mine production

For the year ended December 31, 2011, we produced 7.1 Mt of ROM coal. We plan to produce 10.7 Mt, 14.7 Mt, and 15.2 Mt of ROM coal at our UHG mine in the three years ending December 31, 2014, respectively. As of December 31, 2011, we had equipment sufficient to support production of 10.0 Mtpa. We have been working with Leighton to implement an equipment procurement and use schedule to maximize the use of their existing equipment given our mine production ramp-up plans. Leighton has agreed to work with us to provide the necessary capital and equipment to build out our coal production capacity at our UHG mine to 15.0 Mtpa. We also intend to continue to conduct exploration activities in our current mining license area in order to increase and optimize our coal resources and reserves base. We commenced operations at our BN mine in February 2012. We plan to produce approximately 1.0 Mt, 1.0 Mt and 3.0 Mt of ROM coal at our BN mine in the three years ending December 31, 2014, respectively. ROM coal production figures at our BN mine for 2013 and 2014 are subject to completion of a life-of-mine study which is expected to be completed by the end of 2012. See "Risk Factors – Risks Relating to our Business and Industry – We face risks under our expansion program".

#### Expand our coal handling and processing capacity

As part of our strategy to improve our profitability, we have completed construction of and commissioned the first and second modules of our CHPP which produces high-quality washed coal. The first and second modules of our CHPP, each with ROM coal nameplate processing capacity of 5.0 Mtpa, have been in operation since June 2011 and February 2012, respectively. Our CHPP enables us to produce and sell washed coal products directly to end-use customers under our own brand and not have to rely on coal traders, who previously washed and then sold our coal to end-use customers. We began constructing the third module of our CHPP with ROM coal nameplate processing capacity of 5.0 Mtpa in August 2011 and expect to complete construction by the end of 2012. The ramp-up of our CHPP capacity coincides with the ramp-up of our coal production at our UHG and BN mines and is planned to support our operations at maximum capacity.

Our 3x6 MW power plant has been fully operational since October 2011 and supplies substantially all of the power supply at our UHG mine. In addition, we operate 4x2 MW diesel power generators to provide additional power during peak use periods and as a backup source of power. We expect the Tavan Tolgoi area to be connected to the central power grid via transmission lines by the end of 2012, thus expanding our power source options.

The initial stage of the water supply facility was completed and became operational in the second quarter of 2011. It has capacity of 117 liters per second and is supplied from a reservoir located in Naimant Depression, approximately 20 km from our UHG mine. We have planned to use the water from a reservoir located in Naimdain Khundii, approximately 50 km from our UHG mine, as a second source of water. We plan to expand the existing capacity of our water supply facility by approximately 100 liters per second in 2012 with water from our second water supply source. A hydrogeological study of the Naimdain Khundii area indicates sufficient water resources to accommodate this additional requirement.

# Improve our transportation infrastructure

Since commencing operations in 2009, we have taken significant steps to improve our transportation infrastructure. We maintain our own fleet of trucks which is supplemented by contract trucking companies and trucks provided by our customers. In 2011, we increased the size of our own fleet from 100 to 400 trucks and may consider acquiring an additional 100 trucks in 2012 to improve the reliability and capacity of our coal transport and to reduce our dependency on contract trucking companies. See "- Logistics and Transport". In October 2011, we completed, within 10 months, the construction of a paved road between UHG and GS with coal transportation capacity of 18.0 Mtpa. In January 2012, we, together with Erdenes MGL, completed and commissioned an expansion of the GS border crossing, which we expect to increase the border crossing capacity from 10 Mtpa to approximately 20-30 Mtpa. We have commenced construction of a paved road connecting our UHG and BN mines, which we expect to complete in the fourth quarter of 2012, and will enable us to benefit from synergies such as sharing of mining, processing and transportation infrastructure and marketing resources. In order to further lower transportation costs and increase reliability and operational efficiency, we plan to commence construction of a railway directly from our UHG mine to GS in 2012. See "Risk Factors – Risks Relating to our Business and Industry – Our UHG-GS railway is subject to various risks and uncertainties; we are not sure when we can commence and complete construction of the railway, what the actual cost will be, or whether the project will be successful".

#### Continue to develop and diversify our long-term customer base and promote our own brand

In line with our production expansion initiatives, we intend to continue to expand and diversify our customer base, and have identified, and will continue to identify, new customers for our incremental coal volumes. We seek to sell high-quality washed coal under our own brand directly to end-use customers, which we believe will significantly increase our market recognition, competitiveness and bargaining power. We sell most of our washed coal into China pursuant to long-term agreements with iron and steel mills and coke and chemical plants under our own brand. Even in connection with our sales to coal traders, we have made the identification of our actual end-use customers a priority. Although we believe there is sufficient demand for our coking coal in China, we have shipped a small portion on the Trans-Siberian railway to explore alternative markets, such as European and other Asian markets.

# Expand and diversify our business operations through acquisitions, investments and joint ventures

Where suitable opportunities arise, we may acquire or invest in companies or assets in the steel industry supply chain. We may selectively pursue natural resources used in the steelmaking industry, (in particular, coking coal and iron ore), especially those that we believe will enhance our revenue growth, operational efficiency and profitability. In addition, given the importance of transportation infrastructure and a sales network as an integral part of our mining business, we may consider strategic investments and joint ventures that will enhance our existing logistics capabilities and product penetration in the TMR and new markets, thereby strengthening our leading position as Mongolia's largest producer and exporter of coal.

## Continued strong commitment to safety, the environment and social responsibility

We attach great importance to maintaining safe operations. We apply and will continue to apply international standards of industrial health and safety and work with Leighton to ensure that our mining activities are conducted in such a way as to provide a safe and healthy working environment while satisfying Mongolian legal requirements, industry best practices and clients' expectations. We have not experienced any fatalities at our UHG and BN mines since their respective commencement of operations in 2009 and 2012.

We strive to be an environmentally and socially responsible company and attach great importance to creating sustainable economic and social opportunities for the communities in which we operate. We seek to minimize the impact of our activities on the environment through carefully designing mining plans, in particular land rehabilitation and mining closure plans, and closely monitor the effects of mining. We plan to introduce an ISO 14001 environmental management system which will provide better guidance on our environmental protection activities. We have invested in various community development programs that support local community and preserve the tangible and intangible cultural heritage. We have received numerous awards and recognitions as a result of our efforts. See "– Community Development".

#### **Recent Developments**

## New Standard Bank Facilities Agreement

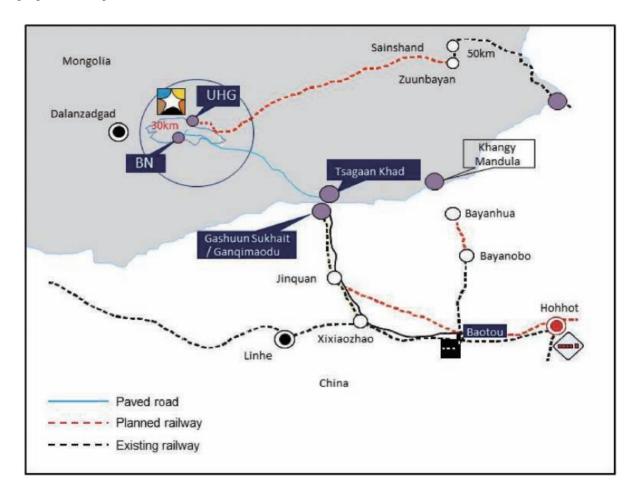
On March 8 2012, we entered into the New Standard Bank Facilities Agreement, pursuant to which Standard Bank and potentially a syndicate of lenders have agreed to make available to us term loan facilities of up to US\$300.0 million. On March 14, 2012, we drew down US\$50.0 million under the facilities for our cash needs. We plan to draw down US\$150.0 million on March 23, 2012 to repay a portion of the outstanding amount under the Existing Standard Bank Facilities Agreement. On or before March 29, 2012, we will provide notice to Standard Bank to reduce the size of the New Standard Bank Facilities Agreement to US\$200.0 million.

#### Petrovis Launch Block Sale

On March 22, 2012, Petrovis LLC, which currently owns approximately 11.4% our share capital, launched a block sale of shares of our company. It is offering 83,000,000 to 86,000,000 shares, representing approximately 2.2% to 2.3% of our outstanding share capital, at HK\$7.35 to HK\$7.65 per share. The transaction is expected to close on March 27, 2012.

#### **Our Location and Licenses**

The following map shows the location of our UHG and BN deposits and our existing and proposed transportation infrastructure. See "- BN Mine" for further information on our BN mine.



South Gobi Province, Mongolia's largest aimag by territory, has a population of approximately 60,855 and is divided into 15 soums. Our UHG deposit is located in the Tsogttsetsii soum of South Gobi Province. A small town site located approximately 7 km from our mine serves as an administrative and logistical center for our UHG mine. The mine itself is located approximately 540 km south of Ulaanbaatar and approximately 240 km from the Sino-Mongolian border.

We have constructed and operate an airstrip just north of Tsogttsetsii soum. We use this airstrip principally for staff rotations. In addition to flights operated by us, commercial airlines currently operate six scheduled flights per week from this airstrip.

We hold Mining License MV-11952 covering our UHG deposit located in the Tavan Tolgoi coal formation located in South Gobi Province, Mongolia. Our license area covers 2,960 hectares and was initially issued on August 29, 2006 by the former Mineral Resources and Petroleum Authority for a period of 30 years, extendable twice, each for an additional 20 years, subject to certain conditions. Our license does not specify what kind of mining method we are permitted to use. We pay US\$5 per hectare annually as a license fee. Our UHG deposit is one of six separate deposits of the greater Tavan Tolgoi coal formation, which consist of the Borteeg, Bortolgoi, Eastern, Southwest, Tsankhi and UHG deposits.

In July 2006, the 2006 Minerals Law was adopted, which introduced the concept of a Mineral Deposit of Strategic Importance. See "Risk Factors – Risks Relating to our Business and Industry – The Government of Mongolia could determine that any one or more of our projects in Mongolia is a Mineral Deposit of Strategic Importance and could take an equity, production, profit sharing or other interest in any of our projects". The 2006 Minerals Law stated that the Government of Mongolia had the right to participate up to 50% jointly with private entities in the exploitation of a Minerals Deposit of Strategic Importance in situations where exploration funded by the Government of Mongolia was used to determine the proven reserves of the deposit.

When we were granted our mining licenses on August 29, 2006, we paid US\$1,000 as a service fee for the conversion of each of these licenses into mining licenses. We did not pay any consideration for the acquisition of any underlying "original materials and reports on prospecting and exploration work" in relation to the six exploration licenses. In February 2007, the Parliament declared that the six mining licenses originally held by us to be Mineral Deposits of Strategic Importance under the 2006 Minerals Law. After taking into consideration the economic development policies of Mongolia, we decided to sign the Minerals License Transfer Agreement, pursuant to which we agreed to transfer five of our six mining licenses to the Government of Mongolia. We assumed no liability after these five mining licenses were transferred to the Government of Mongolia. We received no cash consideration for the transfer of five of the six mining licenses to the Government of Mongolia. In the year ended December 31, 2007, we wrote off US\$3.5 million, almost all of which relates to the write-off of the carrying amount of the relevant capitalized drilling and exploration expenditures to profit and loss. Our UHG deposit was on the list of Mineral Deposit of Strategic Importance, but having entered into the Minerals License Transfer Agreement with the Government of Mongolia, the Government of Mongolia guaranteed that our mining license would not be terminated or amended by requiring state equity participation on the development.

Our Mongolian counsel, Economic & Legal Consultancy LLC, has confirmed that the Minerals License Transfer Agreement is valid, binding and enforceable in accordance with its terms and is binding on the Government of Mongolia. Economic & Legal Consultancy LLC has also confirmed that the Government of Mongolia has under the Minerals License Transfer Agreement waived its right under the 2006 Minerals Law to participate jointly with us (by compulsorily taking a 50% or other ownership interest in ER LLC or the relevant minerals) in the exploitation of the minerals deposit covered by Mining License MV-11952, or withhold any further permits or licenses or access to infrastructure necessary for such exploitation provided that we apply for the same in accordance with relevant rules. See "Risk Factors – Risks Relating to our Business and Industry – The Government of Mongolia could determine that any one or more of our projects in Mongolia is a Mineral Deposit of Strategic Importance and could take an equity, production profit sharing or other interest in any of our projects".

#### Coal Resources and Reserves

Our coal resources and reserves are contained in our UHG deposit located within the Tavan Tolgoi coal formation and our BN deposit located in South Gobi Province. See "– BN Mine – Reserves" for a summary of our BN deposit coal resources and reserves. As of December 31, 2011, our UHG mine had 570.8 Mt and 275.0 Mt of JORC-compliant measured, indicated and inferred coal resources and proved and probable reserves, respectively. Since the commencement of mining operations, all of our coal production has been from our UHG deposit, although we expect to commence production of limited volumes of coal at our BN deposit in 2012. According to Shanxi Fenwei, we have one of the largest coking coal resource bases in Asia.

The following table sets out our estimated resources and reserves at our UHG deposit as of December 31, 2011:

# Summary of Our Coal Reserves (1)(2)

	Proved	Probable	Total
		(Mt)	
UHG deposit	180.0	95.0	275.0

# Summary of Our Coal Resources (1)(2)(3)

	Measured	Indicated	Inferred	Total
		(M	(t)	
UHG deposit (open-pit)	195.9	205.3	11.7	412.9
UHG deposit (underground)		88.6	69.3	157.9
Total UHG deposit	195.9	293.9 ====	81.0	570.8

#### Notes:

- (1) These numbers have been prepared in accordance with the JORC Code.
- (2) For our deposit, "open-pit" refers to coal deposits shallower than 300 m from the surface and "underground" refers to coal deposits deeper than 300 m from the surface.
- (3) Resources are a less accurate measure when compared to reserves. See "Risk Factors Risks Relating to our Business and Industry The accuracy of our resources and reserves estimates are based on a number of assumptions and we may produce less coal than our current estimates".

According to Norwest, bulk sampling and drill-hole sampling programs by Russian-Mongolian geologists and later by other international exploration and mining companies have accumulated sufficient data to identify significant coking coal resources in the Tavan Tolgoi coal formation. The Tavan Tolgoi coal formation is one of the few remaining largely unexploited sources of high-quality coking coal in the world. Of the 13 coal seams identified in our UHG deposit, five seams (0C, 3, 4, 8 and 9) are known to have favorable coking properties. Norwest has further distinguished between coking and thermal coal in our resource estimates. They have assumed that the traditional Tavan Tolgoi coking coal seams, namely seams 0C, 3, 4, 8 and 9, will principally be of coking quality in our UHG deposit. Additional testing and study within our UHG deposit may reveal that other seams also have coking qualities.

The following table sets out the proportion of our resources that are of coking and thermal quality, as of December 31, 2011:

	Measured	Indicated	Inferred	Total
		(N	It)	
UHG deposit (open-pit)				
Coking coal	126.1	164.2	_	290.3
Thermal coal	69.8	41.1	11.7	122.6
Subtotal	195.9	205.3	11.7	412.9
UHG deposit (underground)				
Coking coal	_	50.7	42.2	92.9
Thermal coal	_	37.9	27.1	65.0
Subtotal	_	88.6	69.3	157.9
Total	195.9	293.9	81.0	570.8

We are continuing exploration activities, such as a program to increase the drilling density across the entire UHG deposit to a 500 m by 500 m spacing, with a view to establish a more detailed understanding of our deposit and in order to determine whether additional seams contain coking coal or coal that can be blended with coal from other seams to produce hard coking coal products.

# Coal Production and Ramp-Up Schedule

The following table sets forth our production volumes, sales volumes, overburden strip and stripping ratio for the periods indicated:

	Year ended December 31,		
	2009	2010	2011
	(Mt, except for ratio)		
ROM coal production	1.8	3.9	7.1
Average stripping ratio (BCM/t)	3.4	5.1	5.2
Coal sales	1.4	3.9	4.8

The following table sets forth our ramp-up schedule for coal production capacity:

	Estimated
	ROM Coal
	Production
	(Mt)
Year Ending December 31,	
2012	10.7
2013	14.7
2014	15.2

#### **Coal Products**

The coal in our UHG deposit is Permian coal, the majority of which we wash before selling to make it more marketable. Coking coal is produced as the primary product after washing and processing, providing a quantity of thermal coal from the remainder as a secondary product, known as middlings. Thermal coal is also available without processing from seams with lesser coking qualities. We currently use the middlings we mine in our onsite power plant. In the future we may blend coal from our different seams in order to optimize the economics of the coal we sell.

The first and second modules of our CHPP, each with ROM coal nameplate processing capacity of 5.0 Mtpa, have been in operation since June 2011 and February, 2012, respectively. We began constructing the third module with ROM coal nameplate processing capacity of 5.0 Mtpa in August 2011 and expect to complete construction by the end of 2012. We are able to produce HCC, SHCC and thermal coal from our UHG mine. The type of coal we produce will depend on the specific seam being mined at the time and adjustments to our CHPP. We produce HCC from the coal mined from seams 0C, 3A, 3B, 3C, 4A, 4B, and 4C and thermal coal from our other seams and from the middlings produced by our CHPP. Our UHG deposit contains a significant amount of high quality thermal coal which we may mine and sell in the future depending on transportation costs and market prices.

We currently produce washed HCC at our UHG mine. We believe that our HCC is viewed by most consumers as high-quality coking coal and is readily used by coke manufacturers and steel producers both in China and abroad. The Chinese classification of coking coal differs from common international standards, with many of the attributes for which we test omitted. The following table compares our UHG coking coal with two well-known coking coal brands in China which share the same testing parameters as our UHG coking coal:

	нсс			SSCC		
Quality Attribute	UHG	Liulin, Shanxi	Australia	BN	Linfen, Shanxi	Australia
Ash %	9.4%	10.3%	8%	10%	8%	10.5%
Volatile Matter % (ad)	25%	21.6%	24%	30-32%	32-36%	32%
Total Sulfur % (ad)	0.6%	0.36%	0.55%	0.5-0.6%	0.6%	0.8%
G Index	85	86	85	70-90	75-85	82
Y Index	14	16	15	11-14	11-12	12
$CSR^1$	64.8	70	65	30	35	36

Source: Shanxi Fenwei

Our HCC competes directly with these (and similar) coking coal in the Chinese market. According to Shanxi Fenwei, there are no outstanding quality characteristics that justify significant discounts (or premiums) to these premium brands of Chinese coking coal.

Extensive exploration and coal quality assessment indicate that our coal compares favorably with international coal. Our HCC ranks high in the CSN parameter. Conversely, our coal ranks at the lower end of sulfur content. With the exception of phosphorus content, our coal falls within the acceptable-to-premium quality parameter ranges. According to Shanxi Fenwei, our coking coal competes favorably within a defined TMR in China which includes major steel mills which are the principal consumers of coking coal. In addition, according to Shanxi Fenwei, while our thermal coal is of high quality, it is less competitive (cost-wise) than thermal coal supplied by existing Chinese suppliers.

#### **Mining Operations**

We engage in open-pit mining at our UHG deposit with primary overburden stripping and coal mining being handled by hydraulic excavators and trucks. The typical open-pit mining process begins with land clearing. We then strip the top soil from the area to be mined and the waste dump area. We remove the top 10-15 meters of soft waste materials without drill and blasting, depending on the hardness of the waste materials. A combination of drilling and blasting is then used to fragment the overburden, which is removed by excavators and rear dump trucks. Coal is loaded by excavators into rear-dump trucks and deposited at our CHPP ROM coal stockpile for processing. Mining operations are conducted through two 12-hour shifts, 7 days a week, 365 days a year, subject to weather conditions. Since our operations commenced in 2009, our mining activities had been suspended for a total of eight days due to weather conditions.

We cooperate with Leighton, our mining contractor, and work closely with it in all aspects of our coal mining operations at our UHG mine. Leighton has over 30 years of experience in Asia and we believe it is a world-class mining operator. As of December 31, 2011, we were the largest customer of Leighton in Mongolia. In January 2009, we signed the currently effective UHG coal mining agreement with Leighton through January 31, 2016 to conduct coal mining operations at our UHG mine. Leighton provides us with consulting and support services, which include full technical review of mining proposals from any stage of development, pre-feasibility and budget mining studies, pit, dump and hauling optimization, mine design, planning and budgeting, and resources at the site, comprising of expatriate personnel, mining fleet, appliances and other equipment. Actual mining activities are supervised by Leighton and conducted by our employees who have been trained by Leighton personnel. We pay Leighton on a monthly basis for manpower, general costs incurred, equipment rent and maintenance. These fees are recorded as mining costs under our cost of revenue. See "Managements Discussion and Analysis of Financial Condition and Results of Operations - Factors Affecting Results of Operations and Financial Condition". Costs relating to Leighton include plant rate, wages of Leighton's expatriate staff and overhead, hourly usage fees and contractor fees. Plant rate primarily includes costs related to the depreciation, repair and maintenance of the mining equipment used at our UHG mine and also includes costs associated with major repair provisions, insurance and financing costs. The contractor fee is proportional to Leighton's agreed investment in the mining equipment, supplies and infrastructure used at our UHG mine. Additional incentive payments are based on key performance indicators, which may be adjusted mutually by the parties, such as safety, environment, production and costs maintenance. In addition, Leighton has agreed to work with us to build out our coal production capacity from 10.0 Mtpa to 15.0 Mtpa. The agreement may be terminated by either party for cause or after four years and includes the right to reset the contract period if our mine capacity is expanded and an equipment buyback mechanism.

Substantially all of the principal mining equipment used in our UHG mine is owned by Leighton. Leighton is one of the world's largest purchasers of mining equipment and is able to realize significant savings in equipment purchase cost. Leighton sources a large proportion of the mining equipment from internationally recognized equipment manufacturers such as Caterpillar, Liebherr and Hitachi. Leighton has agreed to acquire such additional equipment to support the production ramp-up at our UHG mine. This additional equipment will also be owned by Leighton. We pay an hourly usage fee for the use of the equipment owned by Leighton at our UHG mine on a monthly basis. Pursuant to the equipment buyback mechanism provided in the agreement with Leighton, we have the option to buy all the equipment, spare parts and consumables Leighton has provided to us for our mining operations. We are able to acquire such assets at their carrying value after depreciation and pay the break costs of the leases and other associated expenses. Our contractual arrangement with Leighton allows us the flexibility to amend and renegotiate the agreement based on our further ramp-up and increase in coal production volumes and Leighton's investment in the equipment used at our UHG mine. Critical to our production capacity expansion to approximately 15.2 Mtpa in 2014 will be the

ability to acquire sufficient mining equipment. Leighton has agreed to procure the necessary amount of equipment to support this expansion. Our arrangement with Leighton has historically allowed us to ramp up our UHG production in a relatively short period of time without having to incur equipment capital costs. See "Risk Factors – Risks Relating to Our Business and Industry – We rely on our contractors to perform key aspects of our operations".

We generally use larger excavators and mining trucks to extract and transport overburden and use smaller excavators and mining trucks for coal extraction and transport. While some of the smaller equipment will be slowly replaced, we will continue to use excavators and mining trucks of different sizes depending on practical necessity. Given our mine production ramp-up plans, we have worked together with Leighton to implement an equipment procurement and use schedule to maximize the use of the existing equipment.

Leighton is responsible for the repair and maintenance of all the equipment it procures for our operations. Leighton has signed maintenance and repair contracts with Liebherr, Caterpillar and Hitachi to provide on-ground support. The equipment manufacturers have pledged to support their products within Mongolia, and have provided Leighton with preferential maintenance and repair contract pricing.

## **Coal Handling and Preparation Plant**

We cooperate with Sedgman to operate our CHPP designed as a customized washing plant coal to maximize our coking coal product yield. We contracted with Sedgman to construct the plant in three modules each with a ROM coal nameplate processing capacity of 5.0 Mtpa. We have completed construction of and commissioned the first and second modules of our CHPP. The first and second modules of our CHPP, each with a ROM coal nameplate processing capacity of 5.0 Mtpa have been in operation since June 2011 and February 2012, respectively. We began constructing the third module with ROM coal nameplate processing capacity of 5.0 Mtpa in August 2011 and expect to complete construction by the end of 2012. The ramp-up of our CHPP coincides with the ramp-up of our coal mine production at our UHG and BN mines. Our CHPP is designed to operate year round in Mongolia's weather conditions. With the commencement of operations of our CHPP, we have shifted our production from raw coal to washed coal, which we sell directly to end-use customers under our own brand, thereby increasing our market recognition and competitiveness. According to Shanxi Fenwei, the design of our CHPP is equivalent to those of BHP and Rio Tinto in Australia.

We signed our first EPCM contract with Sedgman in March 2009 for the construction of the first module of our CHPP, and in June 2010 and August 2011, we signed contracts with Sedgman for the second and third modules of our CHPP, respectively. Our payments to Sedgman are based on the actual costs incurred, including costs relating to the front-end engineering, engineering design, procurement management, construction management and plant commissioning stage of the project. Each EPCM contract expires on the practical completion date of the respective module. We also signed a contract for operations management services ("Operations Management Contract") with Sedgman in December 2010 for the first module of our CHPP for a term of three years beginning in January 2011. Under the Operations Management Contract, our employees will be trained by Sedgman and will operate our CHPP under the management of Sedgman personnel. We have agreed to pay Sedgman fixed site-management labor costs, off-site technical support and variable costs such as management fee and disbursements. The management fee that we pay Sedgman is subject to key performance indicators that are tied to process efficiency, plant utilization rate, operation availability rate, consumables and utility rates, in-feed rates and operating hours. A production performance penalty arrangement has been included in the Operations Management Contract to incentivize Sedgman to meet and surpass our CHPP production targets. We are in the process of negotiating with Sedgman to include the second and third module of our CHPP in the Operations Management Contract.

In 2011, our CHPP processed a total of approximately 2.5 Mt of ROM coal to produce approximately 2.0 Mt of total coal products, representing an average combined yield of 78.7%. Our washed coal production was approximately 1.6 Mt and thermal coal production in the form of middlings was approximately 0.4 million, representing primary product yield of 63.3% and secondary by-product yield of 15.4%, respectively. Our washed coal product yield of 63.3% compares favorable to the 55.0% yield that most Chinese producers are able to achieve.

#### **Power Plant**

In October 2011, we commenced operation of a 3x6 MW on-site coal fired power plant, which is principally used to power our CHPP and also provide excess power to areas around the mine. We cooperate with MCS International to operate our power plant. Our power plant uses a mix of thermal coal and middlings from our CHPP and is designed to comply with applicable environmental regulations of the World Bank and other international institutions. Our power plant has been fully operational since October 2011 and supplies substantially all of the power supply at our UHG mine and is backed up by our 4x2 MW diesel power generators to provide additional power during peak use periods. The Tavan Tolgoi area is expected to be connected to the central power grid via transmission line built with government funds by the end of 2012, thus expanding our power source options.

## Water Supply Facility

We commenced operations of our water supply facility, which principally supplies water to our CHPP, in 2011. Our operations currently depend on a single source of water in the Naimant depression which is located approximately 20 kilometers north of our UHG mine. We have the right to extract water from the aquifer for 20 years (extendable for an additional five years upon the satisfaction of certain conditions) under the Water Use Agreement signed in May 2011 between the Governor of Tsogttsetsii soum and Ukhaa Khudag Water Supply LLC. Water is piped from the aquifer to our water supply plant at our UHG mine which can supply up to 117 liters per second. The majority of our water use is by our CHPP, which uses the water to wash coal. The processing scheme at our CHPP is designed to ensure optimum water use efficiency with a target of approximately 95% of the used water being recycled. We have signed a consultancy service contract with Aquaterra, under which it designs the local control measures to manage contaminated water at individual process facilities.

We plan to expand capacity by approximately 100 liters per second in 2012 to meet the increased demand of water for the third module of our CHPP, dust suppression, power stations and domestic use. We plan to extract water from a second water supply in Naimdain Khundii. We have conducted a survey of the Naimdain Khundii area and expect to extract approximately 25% of the water in the aquifer. Our subsidiary, Khangad Exploration LLC, previously held three water usage certificates. The term of one certificate (for purpose of minerals exploration) has expired and has not been extended or renewed, because Khangad Exploration LLC has not commenced washing coal. We believe the other two water usage certificates for mine camp operations are adequate for the operations of Khangad Exploration LLC. See "Risk Factors – Risks Relating to Our Business and Industry – We currently rely on a single source of water for all of our operations".

#### **Suppliers**

We have established a network of over 600 local and international suppliers who provide us with contracting services, fuel, equipment and other ancillary materials and services. For years ended December 31, 2009, 2010 and 2011, our five largest suppliers accounted for approximately 59.1%, 48.0% and 46.1%, respectively, of our total purchases, while, Leighton, our largest supplier for years ended December 31, 2009, 2010 and 2011 accounted for approximately 25.1%, 18.2% and 21.9%, respectively, of our total purchases for the same periods. Our five largest suppliers in 2011 were:

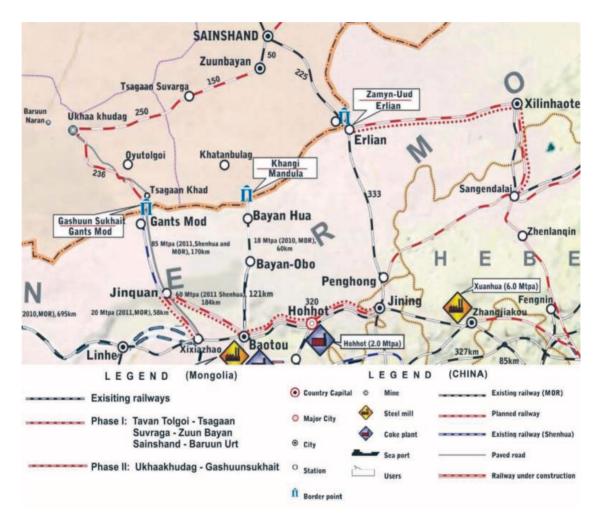
- Leighton. Leighton is our mining contractor at our UHG mine and assists in mine planning, training of mining personnel and the supervision of mining activities, and sources a large proportion of the mining equipment used to mine our coal. See "– Mining Operations" for further information on our relationship with Leighton.
- NIC. NIC, a leading oil product importer and retailer in Mongolia, supplies us with fuel. We expect NIC to complete a 6-million-liter fuel storage facility at UHG by September 2012 which will store on-site fuel required for approximately one month of our operations. NIC also stores 20 million liters of fuel at its own storage facility to provide us with two to three months of backup fuel in the event of a fuel shortage or large price increase. See "Risk Factors Risks Relating to our Business and Industry Increases in the costs, or our accessibility to sources, of fuel could negatively affect our operating costs or disrupt or delay production".
- Sedgman. We engaged Sedgman to assist in the on-going construction and operation of our CHPP. See "- Coal Handling and Preparation Plant" for further information on our relationship with Sedgman.
- SINOTRUK Export & Import Co. Sinotruk supplied us with 300 heavy haul road trucks in 2011 for our coal transportation.
- *MCS International.* MCS provides operational, maintenance and engineering services for power and heat generation and distribution, and acts as our representative for the construction and commissioning of our CHPP.

## **Logistics and Transport**

We, together with third-party trucking companies, haul our coal by truck to GM, located on the Chinese side of the Sino-Mongolian border, where our customers pick up and further transport the coal to their final destinations in China. The total length of the transportation is approximately 250 km between our UHG mine and GM.

We completed construction of a paved road parallel to the existing coal transport gravel road from our UHG deposit to GS in September 2011 and commenced operation of the road in October 2011. Our paved road is the only paved road in the Tavan Tolgoi area that connects from a mine field to the Sino-Mongolian border. The paved road has capacity for up to 18.0 Mtpa of coal per year, while we currently transport approximately 10.0 Mtpa. We have commenced construction of a paved road, which we expect to complete in the fourth quarter of 2012, that will connect our UHG and BN mines. In January 2012, we, together with Erdenes MGL, completed and commissioned an expansion of the Mongolian side of the border crossing at GS. Once operations at the border crossing are fully ramped up, we believe the border crossing capacity will increase from 10 Mtpa prior to expansion to approximately 20-30 Mtpa and it will be able to handle approximately 1,200 trucks in a single direction per day, compared to 400 per day prior to the expansion. In order to further improve

reliability and reduce transportation costs and increase transportation capacity, we plan to commence construction of a railway directly from our UHG deposit to GS in 2012. Our UHG-GS railway is expected to have a capacity of 15.0 Mtpa once completed, upgradeable to 30.0 Mtpa. While our UHG-GS railway is intended to primarily serve our own operations, any excess will also be able to serve other mines. See "Risk Factors – Risks Relating to our Business and Industry – Our UHG-GS railway is subject to various risks and uncertainties; we are not sure when we can commence and complete construction of the railway, what the actual cost of the project will be, or whether the project will be successful" and – Railway".



Once our coal crosses the Sino-Mongolian border, it is transported via Jinquan, Inner Mongolia, then to the city of Baotou, Inner Mongolia and other destinations. Proximity to Baotou is of strategic importance to Mongolian coking coal producers for its railway network which provides access to the largest steel-producing provinces of China, such as Hebei, Shandong and Jiangsu. Through Baotou, our coal can be transported by rail to the ports in Bohai Sea such as Tianjin, Qinhuangdao, and Huanghua, which potentially allows our coal to be sold in other coastal areas of China or the international seaborne market, subject to obtaining requisite approvals and licenses to export coal from China.

We have established a customs-bonded yard at our UHG mine, which allows our coking coal to clear customs onsite, greatly improving the border crossing rate at GS and increasing the total amount of coking coal we are able to sell into China. We have begun sending shipments directly from our customs-bonded yard at our UHG mine to GM and plan to gradually increase these shipments in 2012.

To assess the feasibility of expanding our product penetration to other markets, in July 2011 we conducted trial exports by railway to Germany and to the far eastern Russian port of Nachodka for shipment to seaborne markets, which in the future could possibly include Japan, South Korea and India.

## Trucking fleet

We and our hauling contractors transport most of our coal sold into China from UHG to the Mongolian side of the border at GS and then on to GM where customers are responsible for arranging transportation to their final destinations. We operate a transshipment and handling stopover at TKH, approximately 21 kilometers from GS, where a majority of the coal transported by double-trailer trucks from UHG to TKH is first stockpiled and then sent to GM in single-trailer trucks in order to maximize the efficiency of our truck fleet. A portion of our coal is delivered directly from UHG to GM in double-trailer trucks. In 2011, we expanded our truck fleet by acquiring 300 heavy haul double-trailer trucks, each capable of carrying up to 140 metric tonnes of coal. This expansion allows us to significantly increase our coal haulage capacity while reducing dependency on trucking contractors. The estimated capacity of our own trucking fleet as of December 31, 2011 for coal hauling from our UHG mine to GM was approximately 2.7 Mtpa. We may consider acquiring an additional 100 trucks in 2012.

We plan to continue to increase the amount of coal we directly haul to GM, while maintaining a stockyard and handling base at TKH in order to mitigate the risk of traffic jams at or a closure to the border crossing due to public holidays, weather conditions or other reasons. Our subsidiary Trans Gobi is permitted to carry out transportation across the Sino-Mongolian border to deliver coal to GM and our third party trucking contractors are also permitted to carry out cross-border transportation. We do not deliver our coal to any locations in China other than GM and our customers are responsible for the transportation of our coal from GM to the end destination.

## Paved Road

Prior to the completion of our paved road, we used a gravel road for coal trucking which was also used by the small coal mine operated by Small TT. In order to increase transportation capacity, improve reliability and reduce transportation costs, we constructed a 245 km paved road parallel to the existing coal transport gravel road from our UHG mine to GS. This two-lane heavy-haul coal transport road bears an axle load of 18-20 tonnes and is designed to accommodate up to 2,000 trucks of daily traffic density with 18.0 Mtpa capacity of coal transportation from our UHG mine to GS. After 10 months of construction, we completed construction of the paved road in September 2011, and it commenced operation in October 2011. All coal originated from our UHG mine is now being transported on the paved road.

We obtained land possession rights for our paved road without paying any consideration, but we are required to pay a MNT1.6 million (US\$1,134.6) land fee per annum for our paved road. The paved road was built under the license awarded to Gobi Road LLC, an indirect wholly owned subsidiary of us, by the Government of Mongolia under Government Resolution No. 83 of 2010 dated March 31, 2010 and the subsequent Build-Operate-Transfer Agreement (the "BOT Agreement") executed by and between Gobi Road LLC and the Ministry of Road, Transportation and Urban Development of Mongolia on June 9, 2010. Under the BOT Agreement, Gobi Road LLC was granted a right to build,

operate and use the paved road for a period of ten years after the date on which it is commissioned for service. Upon the expiration of the BOT Agreement, we will be required to transfer all of our rights and obligations with respect to the operation and maintenance of the paved road under the BOT Agreement to the Government of Mongolia for no consideration.

Out of the 18.0 Mtpa capacity of coal transportation of the paved road, we intend to use up to 15.0 Mtpa. If excess capacity is available, Gobi Road LLC may allow any other third parties licensed to engage in transportation activities under the relevant Mongolian laws to use the paved road on a toll fee basis. We are in negotiation with third-party users with respect to the use of excess capacity on a toll fee basis. We intend to use a portion of these tolls to offset the costs we incurred in constructing, maintaining and operating this paved road. Gobi Road LLC, its investors and contractors have the priority to use the paved road.

Upon the expiration of the BOT Agreement in 2020 and transfer of all the rights and responsibilities with respect to the operation and maintenance of the paved road to the Government of Mongolia, we expect to be able to continue to use the paved road by paying the tolls and tariffs determined by the Government of Mongolia. Prior to the completion of our UHG-GS railway project, we anticipate using the paved road as our primary transportation link to China.

The paved road has significantly increased the amount of coal we are able to transport for sale into China and reduced our transportation costs, thereby having a direct positive impact on our profitability. The paved road has also reduced the negative environmental and social impact caused by coal trucking operations on the gravel road we previously used.

We plan to transport coal from BN to our CHPP at UHG for processing. We have completed all surveys, design and licensing for an approximately 30 km paved road connecting our UHG and BN mines and commenced construction in 2011. We expect to complete construction in the fourth quarter of 2012.

# **Border Expansion**

In January 2012, we, together with Erdenes MGL, completed and commissioned an expansion of the GS border crossing, in order to alleviate bottlenecking at the border crossing and support our ramp-up plan. The expansion will increase the current border crossing capacity at GS from approximately 10 Mtpa to 20-30 Mtpa. It consisted of adding eight truck crossing lines and associated facilities and infrastructure to the existing four lines and will now be able to handle 1,200 trucks in a single direction per day, compared to 400 per day prior to the expansion. In January 2012, the expansion was commissioned by the state authorities of Mongolia and commenced operations on the Mongolian side.

## Railway

In order to lower our transportation costs and increase reliability and operational efficiency, we intend to commence construction of a railway directly from our UHG mine to GS in 2012. See "Risk Factors – Risks Relating to our Business and Industry – Our UHG-GS railway is subject to various risks and uncertainties; we are not sure when we can commence and complete construction of the railway, what the actual cost of the project will be or whether the project will be successful".

#### Government policy

In 2010, the Government of Mongolia presented a new policy paper to the Parliament regarding the proposed expansion and development of railway network in the country. The policy paper discussed the need for new railway infrastructure for new mining projects being developed or planned around the country. As Mongolia is a broad gauge country using Russian railway technology, and the railways proposed for construction at that time mainly planned to use standard gauge rail, the Ministry of Road Transport of Mongolia and Urban Development also intended to set a clear policy on the efficient interconnectivity and interoperability of the country's rail systems. Although at that time we had already obtained the key licenses to proceed with construction of our UHG-GS railway, we decided to delay construction to allow the Government of Mongolia to present its policy paper.

In June 2010, the Parliament passed Resolution No. 32 announcing its railway development policy. According to the policy, railway development will be conducted in three stages: (1) Tavan Tolgoi-Sainshand-Choibalsan railway, (2) our UHG-GS railway and other railways that go directly to the border of Mongolia and (3) railways going to western Mongolia from Tavan Tolgoi. The policy also specified that broad gauge rails would be used for crossing or connecting to existing railways, and use of standard gauge rails at the border will be discussed and decided by the Parliament at a later time. The policy left uncertain the starting time for construction and the gauge of those railways in the second stage. In June 2011, the Government of Mongolia announced that construction of second stage railways may proceed simultaneously with construction for the first stage. As of the date of this offering memorandum, the Parliament has not selected which gauge to use for our UHG-GS railway. We plan, subject to the additional requirements described in "— License and Land Use" below, to begin constructing our UHG-GS railway after the Government of Mongolia announces which rail gauge must be used for our UHG-GS railway.

## Licenses and land use

The Government of Mongolia issued Resolution 252 dated June 18, 2008 granting us the license to build our UHG-GS railway base infrastructure between UHG and GS for an initial three-year term beginning from January 19, 2009 and subsequently extended for three years beginning from January 19, 2012. We entered into the license agreement for railway construction with the Railway Authority of Mongolia on September 5, 2008 and a detailed supplement to the license agreement on January 19, 2009. The terms of such license agreement include, among others: (1) our preemptive right to use our UHG-GS railway; (2) if excess capacity is available, we have the right to allow third parties to use our UHG-GS railway; (3) tariffs for the access of infrastructure and transportation will be set by us in accordance with Mongolian laws based on commercial principles; and (4) the majority ownership of our UHG-GS railway infrastructure will be transferred to the Government of Mongolia after 30 years. After the Government of Mongolia has selected which gauge must be used in our UHG-GS railway as described in "— Government policy" above, we plan to apply to the Railway Authority of Mongolia to amend the license agreement to comply with current Mongolian laws and policies. We will also be required to obtain a construction permit before we can commence construction of our UHG-GS railway.

The commercial principles to be used to guide our tariff settings are demand, cost and competitive alternative considerations. The Government of Mongolia does not have any direct influence on the tariff, aside from stipulating that it must comply with relevant laws and regulations, such as the unfair competition law. However, the Government of Mongolia will set a formula to determine the access fee (tariff) for use of our UHG-GS railway base infrastructure. The formula to be used to calculate the fee has not been set and the Government of Mongolia intends to seek assistance from international experts to help develop such formula. Aside from this formula, railway usage fees will be set independently by us.

According to current agreed terms of such license agreement, the majority ownership of our UHG-GS railway infrastructure will be transferred to the Government of Mongolia 30 years after the date of commissioning. The amount of consideration and other terms relating to this transfer are not currently specified in such agreement, but we expect to engage directly with the Government of Mongolia when the contract term nears completion. There is no renewal clause in such agreement. In addition, the Government of Mongolia may at any time take control of our UHG-GS railway.

We hold the land possession rights for the land strip underlying our planned UHG-GS railway of 6,740 hectares for 60 years commencing August 7, 2009. Upon obtaining these land possession rights, we did not pay any consideration to the Government of Mongolia. Under relevant laws and regulations, we are obligated to pay land fees on a quarterly basis. The land fee associated with the land possession rights for our UHG-GS railway is MNT27.2 million (US\$19,288) per year.

## Design and Construction Plan

We engaged Deutsche Bahn, a German national railway company, to conduct a feasibility study for our UHG-GS railway and outline a design. We selected Snowy Mountain Engineering Corporation to develop a detailed railway design and appointed Leighton as the construction contractor for our UHG-GS railway. Our UHG-GS railway will be a single-line heavy-haul freight railway of approximately 240 km in length and will be used to transport coal into China and ultimately to other international seaborne markets through GS. Based on the feasibility study conducted by Deutsche Bahn, we expect to use approximately 500 wagons and 20 locomotives on our UHG-GS railway.

We expect that it will take approximately two to three years from the construction commencement date to complete construction of our UHG-GS railway and that it will support up to 15.0 Mtpa upon completion with the possibility of expanding the capacity up to 30.0 Mtpa in the future. We have the first right to use the capacity of our UHG-GS railway. While our UHG-GS railway is intended to primarily serve our operations, it will be able to serve other mines if excess capacity exists.

In 2011, we completed detailed designs of our UHG-GS railway and final parts of the design are being reviewed by our experts. We have also completed an exploration program for ballast and stone materials for our UHG-GS railway and the results are being analyzed by independent labs.

Pursuant to a feasibility study we conducted in 2009, we estimated the total cost of constructing our UHG-GS railway using standard gauge track will be approximately US\$700 million, which will primarily include costs associated with: (1) construction of our UHG-GS railway, (2) construction of the main terminal, workshop, depots and other ancillary buildings, (3) acquisition and installation of railway signals and communication systems and (4) the ownership or lease of 500 wagons and 20 locomotives. The cost estimate does not include capitalized interests or working capital costs. In addition, we estimate that construction costs will be approximately US\$100 million higher if we use broad gauge rail.

#### Connection to China and alternative projects

An interconnecting railway to the Sino-Mongolian border from the Chinese side is important to linking our UHG-GS railway to the Chinese railway system, as our coking coal must pass through Baotou in order to reach the largest steel producing provinces of China. However, we plan to proceed with our railway construction if the interconnecting railway to the Chinese side of the border is not built. The Chinese Ministry of Railway has commenced construction of a railway connecting GM to Xixiaozhao that passes through Jinquan, Inner Mongolia. The Chinese Ministry of Railway already operates a railway between Xixiaozhao and Baotou. Completion of the GM-Xixiaozhao railway would allow our coal to travel from GM to Baotou using the Chinese Ministry of Railway's railway. Shenhua Group also has commenced construction of a railway connecting GM to Baotou. In order to use the Shenhua Group railway, we would need to obtain the consent of the Shenhua Group.

Mongolia and China are both members of international conventions and parties to bilateral treaties and have been working together for the last 50 years on railway interconnection, border crossing and transit initiatives. Building and connecting new railway networks to the Sino-Mongolian border are a focus of both governments and they have been successful in connecting railways from both countries at the Sino-Mongolian border crossing at Erlian. A number of bilateral trade, economic and other agreements were entered into in connection with the Erlian border crossing in order to realize its value for both countries. Both the Mongolian and Chinese governments have indicated their interest in replicating the success of Erlian to other border crossings such as GS-GM and SK-Ceke. As evidenced by the commencement of construction of a railway connecting GM and Xixiaozhao by the Chinese Ministry of Railway and the Shenhua Group (as announced in January 2009), we believe the governments will continue to work together to create more railway border crossings between Mongolia and China (including the GS-GM border crossing).

The Government of Mongolia or other parties may seek to develop an alternative railway project to connect the Tavan Tolgoi coal formation to the national railway network and beyond. We may decide to participate or be encouraged to participate in such alternative project or a portion thereof. One such alternative route would be a railway from Tavan Tolgoi to Sainshand, Mongolia and then to Choibalsan in eastern Mongolia. Any such investment or involvement may require significant capital investment and management resources. Any such involvement could be in addition to or in lieu of our UHG-GS railway. Even if we were to invest in any such alternative project, we may not have significant control or influence over the management of such project. There can be no assurance that our investment and involvement in such project, if any, would provide us with an economically attractive transportation route in a timely manner or at all or that our investment in such a project will not be lost.

## **Capital Expenditures**

The following table sets forth our historical and forecast capital expenditures for the periods indicated:

	Year ended December 31,					
	2009	2010	2011	2012	2013	2014
					(Forecast)	
			(US\$	(000)		
Capital Expenditures:						
BN coal mine	_	_	11,740	11,795	9,521	61,663
CHPP	13,573	80,218	142,252	95,210	38,675	53,669
Road	_	47,929	49,470	35,688	8,279	13,693
Railway	5,543	2,135	7,256	249,505	374,454	20,108
Water supply facility	8,024	20,658	7,718	51,500	_	_
Power plant	8,137	34,190	15,501	5,175	_	_
Property (camp, airport and						
workshop)	12,607	8,118	11,850	40,673	19,828	498
Trucks and equipment	7,893	4,957	44,081	_	_	_
Others <sup>(1)</sup>	7,181	6,836	6,266			
Total	62,959	205,041	296,134	489,546	450,757	149,631

Note:

(1) Others include capital expenditures for exploration and expert studies.

Our forecast capital expenditures set forth in the table above represent our current estimates. We will reassess our capital expenditures from time to time in light of the then current circumstances, including without limitation our operational requirements and our financial capacity, and there can be no assurance that our actual capital expenditure will correspond to our current forecast set forth in the table above.

#### Marketing and Sales

Our primary activities are the mining and exploration of coal in Mongolia and the sale of coking coal. We sell our coal principally to end users which include iron and steel mills and coke and chemical plants, as well as coal traders.

For the years ended December 31, 2009, 2010 and 2011, approximately 22.8%, 39.4% and 74.0% of our coal sales were made to coke plants, respectively, 23.0%, 21.9% and 17.0% to steel mills, respectively, and 54.2%, 38.7% and 9.0% to coal traders, respectively. For the years ended December 31, 2009, 2010 and 2011, our total revenues were derived from four, nine and fourteen customers, respectively. We sell our coal mainly to China with a small amount of coal being sold on trial shipments to seaborne markets such as Japan, Korea and India and via the Transiberia railway to Germany. Our target market regions in China are Inner Mongolia, Hebei, Shandong and Jiangsu. We sell our coking coal into China pursuant to long-term agreements with a diversified group of customers by increasing the portion of end-use customers. For example, we expanded our end-user customer base in China through establishing cooperative relationship with Shenhua Bayannaoer Energy Company to supply our washed coal products to Shenhua Wuhai Energy's coke plant in Wuhai. At the same time, we recognize the importance of coal traders and will continue to cooperate with them in the future in order to support our transportation, logistics and to ensure payment settlement.

We enter into both long-term and short-term contracts with our customers. Our long-term contracts range from one to ten years with end-use customers. The duration of our short-term contracts depends on the volume and prevailing transportation capacity and typically has a term of two to three months. The principal terms of our sales and purchase contracts with customers include, among others: (1) specified volumes, (2) contract prices linked to existing market prices which are subject to periodic review and (3) delivery to TKH or GM. We may extend credit, generally for periods not exceeding 90 days, to certain of our customers with whom we have long-term contracts. In addition, our credit risk committee performs individual credit evaluations on our customers with whom we have credit exposure. Evaluations of our customers focus on each customer's financial strength, credit history, current ability to pay, as well as the economic environment in which such customer operates. The terms of our coal sales contracts result from competitive bidding and negotiations with customers. As a result, the terms of these contracts vary by customer. We have entered into long-term contracts with each of our top ten customers for the years ended December 31, 2009, 2010 and 2011, pursuant to which we and our customers determine the amount of coal to be delivered on an annual basis and the price on a quarterly or monthly basis. For a description of our key customers, see "- Customer Base" below.

We recognize revenue when ownership of the coal has passed to the customer, which is typically upon delivery of the coal to the customer. We price our coal by adopting a netback calculation of the main benchmark products with similar quality and demand sourced from Baotou, Tangshan, Shanxi and Jiangsu in China and Australia. For long-term agreements, we agree on annual target volumes and adjust prices quarterly or monthly. For one-time agreements, we adopt a netback calculation referring to the prevailing spot prices at Chinese main coal ports such as Tianjin, Caofeidian and Tangshan and the prevailing prices at the major iron and steel mills in Hebei and Jiangsu.

For the years ended December 31, 2009 and 2010, we sold only raw coal. In 2011, we sold both raw coal and washed coal. We plan to sell only washed coal and middlings beginning in the second quarter of 2012. With our CHPP, we believe we are able to produce washed coal at consistent quality levels. As a result, we are selling directly to end-use customers under our own brand. We believe this increases our average selling price and profitability compared to selling raw coal and enhances our market recognition and competitiveness.

# **Customer Base**

The table below sets forth our top five customers by revenue for the years ended December 31, 2009, 2010 and 2011. In 2009 we had fewer than five customers. All the customers in the table below are located in China.

				December 31,
Custo	omer	Customer Type	Revenue	Percentage of Total Revenue
			(US\$ in	
			millions)	%
1.	Customer 1	Coal trading company	26.1	39.0
2.	Customer 2	Iron and steel mill	15.4	23.0
3.	Customer 3	Coke plant	15.2	22.8
4.	Customer 4	Coal trading company	10.3	15.2
	Total		67.0 ====	100.0
				December 31,
				Percentage
				of Total
Custo	omer	Customer Type	Revenue	Revenue
			(US\$ in	
			millions)	%
1.	Customer 1	Coke plant	105.2	37.9
2.	Customer 2	Coal trading company	92.7	33.4
3.	Customer 3	Iron and steel mill	33.5	12.1
4.	Customer 4	Iron and steel mill	27.3	9.8
5.	Customer 5	Coal trading company	4.9	1.8
	Total		<u>263.6</u>	95.0
				December 31,
				Percentage
~ .			_	of Total
Custo	omer	Customer Type	Revenue	Revenue
			(US\$ in	67
1.	Customer 1	Coke plant	millions) 185.0	% 34.1
2.	Customer 2	Coke plant	148.6	27.4
3.	Customer 3	Iron and steel mill	73.6	13.6
<i>3</i> . 4.	Customer 4	Coke plant	44.0	8.1
5.	Customer 5	Coal trading company	25.5	4.7
٠.		coar maning company		
	Total		476.7	87.9

For the years ended December 31, 2009, 2010 and 2011, revenue from our single largest customer represented 39.0%, 37.9% and 34.1%, respectively, of our revenues for that year. For the years ended December 31, 2009, 2010 and 2011, our five largest customers accounted for approximately 100.0%, 95.0% and 87.9%, respectively, of our total revenues. Our major customers include Baotou steel, Shagang, Qinghua, Risun, Elion, Winsway and Shenhua.

As of December 31, 2011, we have entered into long-term agreements with most of our end-use customers. We have entered into ten-year sales contracts with each of Baotou Steel, Shagang and Qinghua, a five-year sales contract with Risun and a three-year sales contract with Tangshan Jiahua Coke and Chemical Plant. For the year ended December 31, 2011, we generated approximately 81.2% of our revenue from sales of coking coal under our long-term coal sales contracts, and we expect to continue selling a significant amount of our coking coal under long-term coal sales contracts in the future. We have already contracted to sell all of our scheduled production of coal for the year ending December 31, 2012 pursuant to the terms of our long-term agreements. However, our customers are allowed to adjust the amount of coal they will purchase, subject to mutual agreement. In 2011, the average selling price was US\$155.6 per tonne for our washed coal, US\$95.0 per tonne for our raw coal and US\$34.0 per tonne for our middlings.

Quality and volumes for the coal are stipulated in our coal sales contracts, and in some instances our customers have the option to vary annual or monthly volumes. All of our coal sales contracts contain provisions requiring us to deliver coal within certain ranges for specific coal characteristics such as total moisture, ash, volatile matter and sulfur content. Some of our coal sales contracts specify approved locations from which coal must be sourced. Failure to meet these specifications can result in economic penalties, suspension or cancellation of shipments or ultimately termination of the agreements. Some of our contracts set out mechanisms for temporary reductions or delays in coal volumes in the event of a force majeure, including events such as fire, flood, war, conflict, military actions, quarantine, natural disaster, strikes, uprising, rioting, demonstration, epidemic, explosion, introduction of a ban or prohibition, or any other conditions beyond the control of any party. The party who is not able to perform its obligation due to force majeure shall deliver within five working days after the occurrence of the force majeure factor a confirmation issued by a relevant authority of the relevant country to the other party in writing. Subject to notice requirements and grace periods, if we fail to honor the agreed sales volume, customers have the right to terminate the contracts.

## Competition

We sell substantially all of the coal we produce into China. Competition in the Chinese coal industry is based on many factors including, price, production capacity, coal quality and characteristics, and transportation capability and costs. There are over 600 large mines supplying coal into our TMR. Most of our competition in coking coal comes from mines in central and western Shanxi, northeast Hebei, eastern Heilongjiang, Wuhai in Inner Mongolia and Muli in Qinghai. Some of our Chinese competitors may have lower transportation costs than we do due to their location. In addition, the Chinese coal market is highly fragmented and we face price competition from some small local coal producers that produce coal for significantly lower costs than us due to various factors, including their lower expenditure on safety and regulatory compliance. Outside of China, our main competition in the Chinese coal market comes from Australia. Some of our international competitors may have greater coal production capacity as well as greater financial, marketing, distribution and other resources than we do and may benefit from more established brand names in international markets.

According to Shanxi Fenwei, our coal is likely to be most competitive and used in the following provinces in China: Inner Mongolia, Hebei, Gansu, Ningxia, Shandong and Jiangsu. These regions include the major Bohai Sea coal loading ports of Jingtang, Caofeidian and Tianjin.

We believe that our cost of production is lower than our principal competitors serving China, namely coking coal producers from China and Australia. Coking coal from China is predominantly produced from underground mines. In general, underground mining is significantly more capital intensive, costly and more operationally challenging than open-pit mining. In the last several years, mine production costs have significantly increased in Australia due to high levels of taxation, increased labor, operational and infrastructure costs, transportation capacity bottlenecks, inflation and currency appreciation. Furthermore, the mining operations in Australia are becoming increasingly mature which results in higher stripping ratios thereby yielding higher costs per tonne of coal produced.

The Government of Mongolia has publicly announced its intention to develop other coal deposits in the Tavan Tolgoi coal formation and decided to separately develop the East Tsankhi deposit and West Tsankhi deposit, which are located approximately 5 km from our UHG mine and will produce coking coal with similar qualities as our coking coal. The eastern part of the Tsankhi deposit is being developed by Erdenes Tavan Tolgoi, a subsidiary of Erdenes MGL which is a state-owned enterprise. The Government of Mongolia has announced that the western part of Tsankhi deposit is to be leased to an international consortium of miners selected through a bidding process.

#### **BN** Mine

On June 1, 2011, we completed the acquisition of our BN mine, our second mine, through the acquisition of 100% of the equity interests in Baruun Naran Limited (formerly named QGX Coal Limited).

The acquisition provided us with a unique opportunity to purchase a coking coal asset strategically located adjacent to our UHG mine in an advanced development stage and allows us to expand our existing footprint in Mongolia. We expect the sizable coking coal resources and reserves in our BN mine will allow us to target a larger customer base and to expand our product offerings to include semi-soft coking coal and high calorific value thermal coal. In addition, we believe the proximity between our BN mine and our UHG mine will enable synergies such as sharing of mining, processing and transportation infrastructure and marketing resources. We commenced operations at our BN mine in February 2012.

We acquired our BN mine from QGX Holdings Ltd., which was 90% owned by Kerry Mining (Mongolia), one of our significant shareholders, and 10% owned by MCS Minerals LLC. MCS Minerals LLC was 51% owned by Mr. Odjargal Jambaljamts (one of our executive directors and the chairman of the Board) and 49% owned by MCS Holding LLC (our controlling shareholder) at the time of the acquisition.

We hold Mining License 14493A for our BN deposit, which covers 4,486 hectares and extends for a period of 30 years from December 1, 2008 and is extendable twice, each for an additional 20 years, subject to certain conditions. We pay US\$5 per hectare annually as a license fee.

#### Consideration

The total consideration as of June 1, 2011 was US\$464.5 million, consisting of US\$100.0 million in cash, the promissory note of US\$279.5 million and the issuance of convertible bonds in the aggregate principal amount of US\$85 million (the "QGX Convertible Bonds"). See "Description of Other Material Indebtedness – QGX Convertible Bonds" for a summary of the terms thereof.

Pursuant to the acquisition agreement, the consideration may be adjusted if, approximately 18 to 21 months from the date of the acquisition agreement, May 31, 2011, an additional payment may be payable by us to the seller or a clawback may be payable by the seller to us in the amount of US\$3.00 per tonne to the extent that the total proved and probable reserves (as defined under the Australian Code for Reporting of Mineral Resources and Ore Reserves) contained in our BN deposit exceeds 150 Mt or is less than 150 Mt, respectively (the "reserve adjustment"). Pursuant to this reserve adjustment, the maximum amount payable by us to the seller will be US\$105.0 million and the maximum amount payable by the seller to us will be US\$90.0 million. We are currently obtaining a reserve report which we expect to be completed by the end of 2012 in order to determine the reserve adjustment. The consideration may also be adjusted by an additional life of mine, or royalty, payment of US\$6.00 per tonne in the event that the actual amount of coal extracted from our BN deposit exceeds a specified semiannual production target fixed on the date of the determination of total proved and probable reserves in each semiannual period after June 1, 2011 commencing on January 1 and ending on June 30 and commencing on July 1 and ending on December 31 (the "royalty provision").

Taking into account the reserve adjustment and the royalty provision, the total amount of payment we are obligated to pay to the seller for the sale of our BN mine is not to exceed US\$950.0 million over the life of our BN mine.

#### Location

Our BN deposit is located in southern Mongolia, Umnugobi Aimag (Southgobi province) approximately 500 km south of Ulaanbaatar, the capital of Mongolia, and approximately 60 km east of Dalanzadgad, the provincial center. It is located approximately 30 km southwest of our UHG mine. See "— Our Location and Licenses" for a map showing the location of our BN deposit.

#### Reserves

According to the MBGS Resource Report, as of February 2010, our BN deposit had measured, indicated and inferred resources of 209.1 Mt, 72.6 Mt and 0.5 Mt, respectively, or total JORC-compliant coal resources of 282.2 Mt. According to the SRK Reserve Report, as of February 2011, BN deposit had 148 Mt of proved reserves and 37.3 Mt of probable reserves, or total JORC-compliant coal reserves of 185.3 Mt.

CSN	6-8
Volatile Matter %	30-32 (ad)
Ash (ad,%)	10
Sulphur (%, ad)	0.5 - 0.6

#### Coal Products

We intend to produce premium semisoft coking coal at BN for processing at our CHPP at UHG. In addition, we plan to produce thermal coal for domestic and export markets at our BN mine.

According to Shanxi Fenwei, our BN coking coal is comparable to those of Shanxi and Australian 1/3 JM.

#### Status

We commenced operations at our BN mine in February 2012. We plan to manage and operate our BN mine with a combination of our own and leased mining equipment. We have engaged technical consultants to conduct a life-of-mine study, including an evaluation of equipment to be used at our BN mine to determine whether to mine ourselves or contract out to third party operators. ROM coal mined from our BN mine is transported to our CHPP at UHG for further processing. We plan to produce approximately 1.0 Mt in 2012 and 2013 and approximately 3.0 Mt in 2014 of ROM coal from our BN mine. ROM coal production figures at our BN mine for 2013 and 2014 are subject to completion of a life-of-mine study which is expected to be completed by the end of 2012.

## **Quality Control**

The ability to produce coal of a consistent high quality is critical to the success of our business. We implement quality control measures from the exploration stage through the mining, hauling and loading stages of our coal production.

We engage in mine planning activities from 500 m by 500 m exploration drilling to 50 m by 50 m field test drilling for day-to-day mine planning. Core samples taken from the holes undergo an analysis covering all major coal quality parameters. Representative samples are also chosen for trace minerals analysis. This coal quality data is then entered into the geological database and ultimately incorporated into our mining plans. We take coal quality into account when we prepare mining plans to ensure consistent coal quality throughout the life of the mine. During mining, samples are taken for short-term quality projections from coal seams exposed at each operating face to confirm the data that had been collected during the exploration phase. The data is then incorporated into our short-term mining plans, which include using selective mining methods to exclude coal that does not comply with quality specifications.

We have a quality assurance department which has established procedures and guidelines to oversee and assures the quality of our geological laboratories and their exploration data. In addition, we have engaged Alex Stewart Assay Laboratories Ulaanbaatar to conduct quarterly independent audits of our coal laboratory testing procedures and accuracy and to provide training for our laboratory personnel.

#### **Properties**

As of December 31, 2011, our principal properties consisted of (1) land possession rights of 26 parcels of land in Mongolia with an aggregate site-area of approximately 23,000 hectares, used for our mining operations and supporting infrastructure, (2) plants and office buildings developed by us and leased properties such as office and equipment and (3) the properties acquired as part of the BN acquisition.

Pursuant to land possession certificates issued by the governor of South Gobi Province and relevant soums, we are permitted to use our 26 parcels of land to conduct our mining activities and to build and operate our CHPP, airport, camp, apartments, offices, planned railway, workshops, customscontrol office, water supply pipelines, power plants, power lines, hard paved roads and cellular communication antenna. Economic & Legal Consultancy LLC, our legal advisors as to Mongolian law, has confirmed all of our land uses are in compliance with the relevant Mongolian laws and regulations.

In addition to the infrastructure mentioned elsewhere in this section, we have built a dedicated airstrip and terminal, as well as mine-site accommodations for project personnel. Our private airstrip is

fully operational and licensed with the Mongolian Civil Aviation Authority. Our employees and foreign consultants are typically transported to our mine sites from Ulaanbaatar by air.

### **Safety and Environmental Matters**

We apply international standards of industrial health and safety and work with Leighton to ensure that our mining activities are conducted in such a way as to provide a safe and healthy working environment while satisfying Mongolian legal requirements, industry best practices and clients' expectations. We have not experienced any fatalities at our UHG and BN mines since their respective commencement of operations in 2009 and 2012. Our heavy machinery operators undergo extensive on-site simulator training conducted by Leighton's personnel in order to minimize potential damage from equipment failure or accidents. We provide training and appropriate resources for our employees to work safely and effectively, and all of our employees have undertaken safety and hygiene training in compliance with Mongolian labor law. We have implemented an occupational health and safety policy that sets out standard approaches to risk minimization and operating procedures. We require our contractors and subcontractors to meet our occupational health and safety standards and policies. In addition, they are required to report all accidents and violations of occupational healthy and safety standards.

We are committed to complying with Mongolian environmental laws, regulations and international environmental standards. By carefully designing mining plans, conducting studies, implementing pollution control recommendations from internal and external sources, monitoring the effects of mining and carefully designing land rehabilitation and mine closure plans, we seek to minimize the impact of our activities on the environment. We plan to introduce an ISO 14001 environmental management system which will provide better guidance on our environmental protection activities.

We have an environmental team who are responsible for the compliance of our activities with national laws, regulations and international requirements. In addition, we have conducted over 30 studies and engaged international consultants to monitor our environmental protection activities and provide professional assistance.

According to a 2010 environmental and social impact assessment study produced by Environmental Resources Management, a leading global provider of environmental, health, safety, risk, and social consulting services, together with other national and international consulting companies, there were no major socioeconomic issues that threaten the feasibility of our mines. Nonetheless, we have taken several measures to mitigate the socioeconomic impact of our mines, which include (a) improving local healthcare and educational facilities; (b) establishing monitoring programs to ensure that pit dewatering and other water sourcing for the mine does not adversely affect shallow groundwater sources that are used by herders; (c) implementing controls to verify contracts and adjust designs and behaviors to minimize risks of depleting shallow groundwater sources that are used by herders; and (d) developing and implementing action plans to provide compensation for herders affected by the mining activities and other infrastructure construction activities.

We have also implemented several measures to specifically mitigate various aspects of our mine and supporting infrastructure. During construction of our transportation infrastructure, we ensure that quarry rock and in-fill materials are sourced from areas that will not adversely affect cultural heritage and monitor contractors to ensure that they use appropriate quarry sites to exploit construction materials. In connection with our water supply project we have developed procedures for monitoring the levels of hand-dug shallow wells to assess if our use of water sources has any impact on wells used by herders near our UHG mining area.

In general, the large amount of earthworks planned for mine expansion, including the creation of large waste rock dumps and topsoil stripping and stockpiling increases dust generation in addition to

the ambient dust level. We have implemented specific mitigation and management measures to reduce dust impact, and provide compensation for economic displacement to all those affected by our expanding mining activities.

## **Community Development**

Our community development initiatives are aimed at supporting the sustainability of the local communities where we operate. We have invested approximately MNT1 billion in each of the three years ended December 31, 2011 in community development programs, focusing mainly on community education and healthcare, cultural heritage preservation, small and medium-sized enterprises and entrepreneurship development, environment and employment generation. We invest in programs based on results of socio-economic baseline studies of impacted soums and herder households, and recommendations of social and environmental management plans and public consultation events.

We have conducted surveys on tangible and intangible cultural heritage and mining-induced population influx in Tsogttsetsii soum. In line with these surveys, we plan to develop and implement programs on cultural heritage preservation and population influx management. We conducted a social and economic baseline study and organized public consultation in Khankhongor soum prior to the start-up of our BN project. A memorandum of understanding was signed with the soum governor, which defined our main areas of cooperation in improving healthcare and education for soum residents, preserving local cultural heritage and promoting local small business development and training.

We aim to provide employment opportunities to members of local communities. Our human resource policy encourages employing local residents where possible and contributing to their capacity building. As of December 31, 2011, approximately 30% of total employees were residents of Tsogttsetsii, Bayan-Oyoo, Manlai, Dalanzadgad and Tsagaan-Oyoo soums of South Gobi Province.

We have completed several community infrastructure development projects in Tsogttsetsii soum. In order to minimize dust generation in the soum, we have built a 12 km paved road across the soum center. In addition, soum residents and businesses enjoy access to our electricity and filtered drinking water. In order to mitigate an adverse impact associated with population influx to Tsogttsetsii soum and to support local education sector, we agreed to jointly finance with South Gobi Province to build a new secondary school and kindergarten complex which will provide better access to education for more than 800 children of the local community. In recognition of our effort, the Mongolian Mining Journal awarded us its grand prize in 2011.

# **Employees**

As of December 31, 2011, we had a total of 2,177 employees. The table below sets forth the number of our employees by function as of December 31, 2011:

Functions	Total
Management and administration	286
Production	
Employees at UHG mine	1,233
Employees at BN mine	131
Sales and marketing	26
Transportation and logistics	501
Total	2,177

The total workforce of our contractors at our UHG and BN mines as of December 31, 2011 was approximately 1,000 personnel.

The majority of our employees have signed employment contracts with us which provide, among other things, the employee's responsibilities, remuneration and grounds for termination of employment. Our mine operates 24 hours a day, seven days a week and 365 days a year, subject to weather conditions. Our mine operators work 12-hour shifts and are on a three-week rotation: (1) first week, day shift; (2) second week, evening shift; and (3) third week, off.

We have maintained good working relationships with our employees and have not encountered any difficulties in recruiting and retaining experienced staff. In April 2010, we entered into a memorandum of understanding with the newly established Mine Worker's Trade Union of Mongolia, pursuant to which we agreed to cooperate with any trade union or organization existing under applicable labor laws, regulations and requirements. We believe this memorandum will further improve our relationships with employees by providing them with a formal platform through which to communicate with us about their questions and concerns.

### Employee Remuneration Policy

Our remuneration policy is designed to attract, retain and motivate highly skilled individuals to ensure the capability of our workforce to implement our business strategy. Key principles of the remuneration policy are to:

- set competitive rewards to attract, retain and motivate highly skilled people;
- provide detailed feedback to develop employees' skills and critically analyze employees' contributions;
- establish short- and long-term incentive programs, including the equity incentive plan;
- ensure remuneration planning continues to be integrated within our business planning process; and
- ensure total reward levels and performance targets are set at appropriate levels to reflect the competitive market in which we operate, the prevailing economic environment and the relevant performance of similar companies.

We seek to accomplish the above goals by conducting annual remuneration reviews which take into account individual performance, the economic environment, the unique requirement for certain employees to travel and spend time in Mongolia, particularly at mine sites and relevant job and industry comparisons. We value the contribution of both individuals and teams in achieving the goals and objectives of our business.

We adopted a share option scheme in September 2010 and granted to certain eligible participants a total of 35,200,000 share options in October 2011.

### Benefit Schemes

We maintain benefit schemes for our employees as required by relevant laws in Mongolia.

#### *Injuries*

Exploration, development and production operations on mineral properties and transportation of mineral products involve numerous risks and hazards. While we have not had any large scale accidents that material affected our results of operations, from time to time we have had transportation accidents which have resulted in fatalities to persons other than our employees. See "Risk Factors – Risks Relating to our Business and Industry – Our mining activities are subject to operational risks, hazards and unexpected disruptions".

#### Insurance

We maintain insurance coverage for our employees, officers and board of directors. As of December 31, 2011, we have obtained insurance coverage from leading global insurers including Zurich, Munich Re and Swiss Re on property damage for our mining properties and business interruption. In addition, we have the following insurance coverage:

- motor and third liability insurance for us and our subsidiaries;
- cargo insurance;
- personal accident insurance for our employees;
- truck insurance, truck driver's liability and personal accident insurance;
- Tavan Tolgoi airport liability insurance; and
- directors' and officers' liability and prospectus insurance.

The insurance policies arranged by us do not cover liability or damage arising from acts of war and terrorism, and other customary exclusions from coverage.

Under our operating agreements with our mining contractors, the contractors are responsible for their own employees and they and their employees must also be covered by appropriate insurance including insurance for property and vehicles, loss and damage and third party claims.

See "Risk Factors – Risks Relating to our Business and Industry – Our insurance may not be adequate to cover losses or liabilities that may arise".

## **Intellectual Property**

We own over 27 trademarks, including those related to our corporate logo and names, which are registered in Mongolia. We also own trademarks to three of our logos, "", "and "", which are registered in Hong Kong.

#### **Legal Proceedings**

We are not currently involved in any litigation or legal proceedings which could be expected to have a material adverse effect on our business, results of operations or financial position.

#### REGULATIONS

### Mongolian Laws and Regulations Relating to Exploration for Minerals and Mining

Between July 1997 and August 25, 2006, Mongolian minerals policies and practices were governed by the 1997 Minerals Law. On July 8, 2006, the Parliament enacted the 2006 Minerals Law, superseding and replacing the 1997 Minerals Law. The 2006 Minerals Law became effective as of August 26, 2006.

The Parliament also enacted supplementary implementation and procedural legislation (the "2006 Implementation Law") to address various technical issues, including the issues on re-registration of exploration licences under the new 2006 Minerals Law.

Under the 1997 Minerals Law, exploration licenses were granted by the DGMC, a subordinate agency of MRAM, which at the time was a subordinate agency of the former cabinet level Ministry of Industry and Trade. In 2006, the Petroleum Authority of Mongolia was merged with the MRAM – creating the Minerals Resources and Petroleum Authority of Mongolia – and the name of the DGMC was changed to the Cadastral Registration Center. To remain effective, all exploration licenses granted by the DGMC under the 1997 Minerals Law were required to be re-registered with the Cadastral Registration Center under the 2006 Minerals Law within five months following the effective date of the 2006 Minerals Law.

In December 2008, the Government of Mongolia again made changes to its regulatory bodies in connection with the mineral industry. The MRAM and the Petroleum Authority of Mongolia became separate subordinate agencies of the MMRE, and the name of the Cadastral Registration Center was changed back to the DGMC.

Registration with the DGMC is the definitive record of the holders of minerals license rights under the 2006 Minerals Law. Pledges and transfers of exploration licenses must be registered with the DGMC to be effective. Pledges, transfers and certain other transactions are recorded on endorsement sheets that are separate from, but considered to be an integral part of, each exploration license certificate. The DGMC does not maintain records of other liens or encumbrances to which a license may be subject.

Effective as of August 15, 2009 – the effective date of Mongolia's new Nuclear Energy Law – the minerals defined under the 2006 Minerals Law no longer includes radioactive minerals, i.e. minerals that contain radioactive isotopes of the uranium or thorium families. All subsequent references to minerals and licenses to explore or mine minerals will be limited to minerals other than radioactive minerals as so defined.

Note that references to "mineral reserves" and "mineral resources" in this section entitled "Mongolian Laws and Regulations Relating to Exploration for Minerals and Mining" are not references to mineral reserves and mineral resources determined in accordance with the JORC Code.

#### Mongolian Exploration Licenses

The holder of an exploration license has rights to conduct exploration activities in the license area, to construct temporary structures within the license area related to its exploration activities, and if gaining access to its exploration license area requires passing over land which is owned or possessed by others, to traverse such land subject to terms and conditions negotiated with such owners or possessors. If a mineral resource is identified by exploration activities, the exploration license

holder has the right to apply for a mining license for any part of the exploration license area. Pursuant to the 2006 Minerals Law, exploration licenses granted on or after August 26, 2006 have an initial term of three years. The holder of such an exploration licenses may apply for an extension of the license for two successive additional periods of three years each. Thus, the maximum period that an exploration license may be held by one or more holders is nine years from the date of issue. Exploration licenses granted prior to August 26, 2006 also have an initial term of three years, and the holder may apply for an extension of the license for two successive periods of two years each, for a maximum overall period of seven years. Holders of such exploration licenses that became eligible for extension following August 26, 2006 have, in many instances, been given the benefit of the longer extension terms under the 2006 Minerals Law, but the policies and practices of the DGMC in this regard have been inconsistent.

Each exploration license is subject to cancellation if applicable license fees are not paid on time or if the holder fails to comply with certain other requirements of the 2006 Minerals Law or other relevant laws. Only Mongolian legal entities are entitled to hold exploration licenses.

Annual fees are payable per hectare of exploration license area as follows:

Year	Annual fee per hectare
Initial term – Year 1	US\$0.10
Initial term – Year 2	US\$0.20
Initial term – Year 3	US\$0.30
First extension (3 years)	US\$1.00 each year
Second extension (3 years)	

Exploration license holders must spend the following minimum amounts annually on exploration activities per hectare within the license area:

Year	Annual amount per hectare
Initial term – Year 1	No expenditure required
Initial term – Year 2	US\$0.50
Initial term – Year 3	US\$0.50
First extension (3 years)	US\$1.00 each year
Second extension (3 years)	US\$1.50 each year

The tables above show the required annual fees and expenditure amounts for each of the first three years, as well as for the succeeding three years (i.e., the "first extension") and the last three years (i.e., the "second extension"). There are no applicable fees or amounts due after the second extension since the exploration license will have expired.

Exploration license holders are also subject to various environmental protection obligations. Within 30 days of receiving an exploration license, the holder must prepare, and submit to the relevant authorities, an environmental protection and reclamation plan. Once the plan has been approved by the relevant authorities, the holder of the exploration license must deposit funds equal to 50% of its environmental protection budget for that particular year in a bank account established by the governing authority of the soum (district) in which the exploration license area is located. Holders of exploration licenses must also submit to relevant authorities an exploration plan and annual reports of exploration activities.

On February 9, 2011, the Parliament enacted the Law on Prohibition of Granting New Exploration Licenses which prohibited the granting of new exploration licenses until April 30, 2011. The prohibition was subsequently extended to December 31, 2012.

#### Reserves

In Mongolia, the tonnage and coal quality of a mineral reserve that has been defined by exploration activities must be recorded in official archives. Under the 2006 Minerals Law, a mining license holder must extract all of the mineral reserves that are within the license area. The purpose of this provision is to prevent "high-grading", but the net effect is to mandate mining practices that are not consistent with practices in countries where free market principles prevail and the concept of mining mineral reserves on an economically viable basis is recognized and understood. It is unclear what consequences, if any, may follow from non-compliance with this provision.

#### Mining Licenses

If a commercially viable mineral resource is defined within the license area of an exploration license, the holder of the exploration license is entitled to apply for a mining license covering the relevant portion of the license area defined by specific longitude and latitude coordinates in the mineral exploration license. A mining license holder has the right to conduct mining activities throughout the license area and to construct structures within the license area that are related to its mining activities. All such activities must be conducted in compliance with the 2006 Minerals Law and relevant Mongolian laws pertaining to health and safety, environment protection and reclamation. Mining licenses are granted by the MRAM for an initial term of thirty years and are renewable for two successive periods of twenty years each based upon remaining reserves, for a maximum overall period of seventy years. Upon the expiration of a mining license, the license and the rights under such license revert to the Government of Mongolia. Only Mongolian legal entities are entitled to hold mining licenses. In the case of all minerals other than coal and common construction minerals (e.g., sand and gravel), annual license fees of US\$15.0 are payable per hectare of the relevant mining license area. In the case of coal and common construction minerals, the per hectare annual license fee is US\$5.00. A mining license is subject to cancellation if applicable license fees are not paid on time or other requirements under the 2006 Minerals Law or other relevant laws are not satisfied.

To receive a mining license, an exploration license holder must submit an application to the MRAM together with, among other documents, an environmental impact assessment and a resource report. Holders of mining licenses must also prepare environmental protection and reclamation plans and satisfy various reporting and security deposit requirements.

# **Pre-Mining Agreements**

After a mineral reserve has been defined and recorded, an exploration license holder may apply to the MRAM for a pre-mining agreement. During the term of this agreement, which may not exceed three years, Mongolian-law compliant final feasibility studies must be completed, mine facilities must be developed, and the mine must be brought into production.

### Local Government Approval of Exploration Licenses and Mining Licenses

Pursuant to the Licensing Law of Mongolia enacted on February 1, 2001, and effective from January 1, 2002, as the same may be amended and supplemented from time to time ("Mongolian Licensing Law"), the granting of each exploration license and mining license by the MRAM must be approved by the governor of the aimag (province) in which the relevant license area is located. The 2006 Minerals Law also provides that the holder of an exploration license has an exclusive right to obtain a mining license covering all or any relevant portion of the exploration license area, however, under the relevant Mongolian Licensing Law, obtaining a mining license by such exploration license holder is still subject to the approval of the aimag governor.

If the aimag governor wishes to deny the grant of an exploration license, he must submit his reasons to the MRAM within thirty days following receipt of notice of the license application from MRAM. The 2006 Minerals Law provides that the reasons for the denial must be based on the laws of Mongolia. However, there is no clear guidance as to what legal grounds will suffice to warrant denial of a license application. If the aimag governor does not timely submit his reasons for denial of the grant, it will be deemed that he has approved the grant.

Note that the thirty-day notice and response requirements of the 2006 Minerals Law do not apply to the grant of a mining license, but that the Mongolian Licensing Law requirements clearly apply to both exploration and mining licenses. It is not clear how these issues will be resolved in the case of mining licenses.

### Approval to Commence Mining Operations

Pursuant to the 2006 Minerals Law, before a mining license holder can bring a mine into production, the MMRE appoints a commission (the "Commission") to review and audit pre-mining requirements compliance by the mining license holder that proposes to commence operation. The Commission consists of the following members: (i) the head of the Geological and Mining Department of the MMRE; (ii) the head of the Technology and Environmental Division of MRAM; (iii) representatives from the inspection agencies of the relevant aimag in which the mine is located; and (iv) any other experts appointed by the MMRE. In particular, the Commission reviews to determine whether the license holder has all pre-mining requirements under the 2006 Minerals Law. It also reviews the following key documents (among others) to determine whether they have been prepared in compliance with applicable laws and regulations:

- a certified copy of the mining license;
- a feasibility study and mining plan complied with relevant Mongolian Law and reviewed by the relevant authority;
- the environmental impact assessment;
- the environmental protection plan;
- any minerals sales agreement and any lease agreement relating to the mining assets;
- records on establishing and marking the boundary of the mining area; and
- any agreement on land and water usage.

In addition, the Commission makes an on-site inspection of the mine and relevant supporting facilities, such as electrical power generators, mining equipment, water supply facilities, maintenance shops and health and safety equipment.

Upon completion of its review of all relevant documentation and its on-site inspection, if all requirements have been satisfied, the Commission will issue an approval (signed by all of its members) approving the commencement of mining operations by the mining license holder. After the approval is issued, the mining license holder can commence mining.

### Deposits of Strategic Importance

Either the Government of Mongolia or the Parliament may initiate proposals to declare a mineral resource as a Mineral Deposit of Strategic Importance, but the Parliament must approve any such proposal. If a deposit is designated as a Mineral Deposit of Strategic Importance, the Government of Mongolia may acquire certain percentage of the equity stake of such deposit from the license holder on terms agreed by the Government of Mongolia and the license holder under the 2006 Minerals Law. A deposit is a Mineral Deposit of Strategic Importance if (i) it may potentially impact the national security of Mongolia, or the economic and social development of the country or the relevant region, or (ii) it may generate or has the potential to generate a revenue more than 5% of Mongolia's GDP in any given year.

Pursuant to the Parliament Resolution No. 27 dated February 6, 2007, the Parliament has published the Strategic Deposits List, which identifies 15 deposits as Mineral Deposits of Strategic Importance (the "Strategic Deposits List"). This resolution also identifies a further 39 deposits in the Tier 2 Deposits List (the "Tier 2 Deposits List") and instructs the Government of Mongolia to further evaluate such deposits and determine if one or more of these deposits should be recommended by the Government of Mongolia to the Parliament for designation as a Mineral Deposit of Strategic Importance. In addition to the deposits on the Strategic Deposits List and the Tier 2 Deposits List, Parliament may at any time designate other deposits that are not currently on either list to be Mineral Deposits of Strategic Importance. The Government of Mongolia is not obligated to complete negotiation with the relevant licence holders and finalize the status of the 54 deposits currently identified as Mineral Deposits of Strategic Importance.

The 15 Mineral Deposits of Strategic Importance specified by Parliament in the Strategic Deposits List have no defined "edges". They each consist of concentrations of mineralization in a general area that is identified only by a name and not by a set of specific coordinates. License areas, on the other hand, are precisely defined by specific coordinates. Thus, it is not feasible to definitively determine whether or not any given license area is within or overlaps a Mineral Deposit of Strategic Importance. A government working group has defined the edges of 12 of the 15 Mineral Deposits of Strategic Importance listed in the Strategic Deposit List. However, the defined areas have not yet been approved and confirmed by the Government of Mongolia.

#### Funded from the State Budget

During the 1970s and 1980s, teams of geologists from the former Soviet Union and other Soviet-Bloc countries, working in conjunction with Mongolian geologists, conducted extensive exploration work throughout Mongolia. Following the collapse of the Soviet Union in 1991, Russia attributed the cost of the exploration to be part of the overall debt owed to Russia by Mongolia. Mongolia negotiated a settlement of this debt, thus the cost attributable to the exploration are deemed to have been funded from the Mongolian state budget (the "State Budget"). Mineral resources that have been explored (in whole or part) by such activities are also considered to be deposits that have been funded from the State Budget. In addition, expenses incurred by the Government of Mongolia in connection with subsequent survey and exploration activities are also deemed to be expenses funded from the State Budget. To the extent that such expenditures incurred in exploring a specified deposit, they may be regarded as debt owed to the Government of Mongolia by the relevant license holder.

Under the 2006 Minerals Law, the encumbrance issue may be claimed to have been addressed by the payment of these costs by the license holder.

Both the designation of mineral resources as Mineral Deposits of Strategic Importance and the claims that such mineral resources have been funded – at least to some extent – by the State Budget are essentially decisions that are rather arbitrary.

During the 1970s and 1980s, state fund were used by Russian-Mongolian scientific teams to conduct some of the exploration activities of our deposit. On September 12, 2008, we entered into an agreement with the MRAM, which required us to repay US\$1.18 million, being the amount of state fund used in the exploration activities of our deposit, within five years of the date of the agreement. In the year ended December 31, 2008, we repaid US\$0.28 million and in the six months ended June 30, 2010, we repaid the remaining of US\$0.9 million to the MRAM. We have no further payment obligations under the agreement.

### State Participation in Mineral Deposits of Strategic Importance

The 2006 Minerals Law provides that the Government of Mongolia may acquire up to 50% equity interest if the relevant exploration is state financed, such as funded from the State Budget or up to 34% equity interest, if the relevant exploration is privately financed. The terms and conditions of such participation are subject to negotiation between the Government of Mongolia and the license holder and may not necessarily adhere to the 50% or 34% limitations. The 2006 Minerals Law does not provide any guidelines as to the form such negotiations should take. The 2006 Minerals Law further provides that any company which holds a Mineral Deposit of Strategic Importance is required to list at least 10% of its shares on the Mongolian Stock Exchange. To our knowledge, this provision has not yet been enforced with respect to any of those companies with deposits on the Strategic Deposit List, including us, and it is not clear whether the provision would be enforced in the future.

### **Investment Agreements**

A mining license holder that undertakes to invest more than certain threshold amounts over the first five years of its activity may apply to the Government of Mongolia to enter into an Investment Agreement concerning the stability of tax rates, the right to sell products at international market prices, a guarantee that the license holder may receive and dispose of income from such sales at its own discretion, and provisions with respect to the amount and term of the license holder's investment. On April 27, 2010, we applied for an Investment Agreement with the Government of Mongolia. Under Article 30.3 of the 2006 Minerals Law, the Government of Mongolia will review the application within three months upon receipt of the draft agreement and required documents. If third party consideration or a specialist opinion is required, the review period may be extended to an additional three months. The Government reserves discretion regarding the timing of draft document review and its negotiation procedures. As of the date of this Offering Memorandum, we are waiting for the response from the Government of Mongolia relating to our application for an Investment Agreement. We anticipate that the major terms of the Investment Agreement will include the following matters: stability of tax rates, the right to sell products at international market prices, a guarantee that we may receive and dispose of income from such sales at our own discretion, and provisions with respect to the amount and term of our investment. While we voluntarily applied for an Investment Agreement, it is less essential for us now as it would be if we were at the early stage of our mine development. As our operations have developed without such an Investment Agreement in the early stage of our mine development, an Investment Agreement at this stage would be beneficial but not necessary for our future development and prospects. Without signing the Investment Agreement, we are still free to sell our products at market prices and receive and dispose our income from such sales at our own discretion.

The term of each Investment Agreement will depend on the monetary amount of the five year commitment as follows:

Minimum investment (US\$)	Agreement term
50 million	10 years
100 million	15 years
300 million	30 years

#### Royalties

A royalty at the rate of 5% is payable in respect of the sales price of all products extracted pursuant to a mining license (other than domestically sold coal and construction minerals) that are sold, shipped for sale, or otherwise used. Part of the royalty goes to the central treasury, while the remaining part goes to local governments. The royalty rate for domestically sold coal and construction minerals is 2.5%, whereas the rate for international exports of these materials is 5%.

An additional progressive royalty rate, which is calculated based on the degree to which coal is processed is also payable. The level of the progressive royalty rate depends on the level of processing of coal and is set forth in the table below.

Raw Coal Progressive Royalty Rate		Processed Coal Progressive Royalty Rate	
Price Range (US\$/tonne)	Progressive Royalty %	Price Range (US\$/tonne)	Progressive Royalty %
0-25	_	0-100	_
25-50	1.00	100-130	1.00
50-75	2.00	130-160	1.50
75-100	3.00	160-190	2.00
100-125	4.00	190-210	2.50
125+	5.00	210+	3.00

#### Sales and Transfers of Exploration Licenses and Mining Licenses

In accordance with the 2006 Minerals Law, the holder of an exploration license may not sell the license itself. The holder may, however, sell the underlying "original materials and reports on prospecting and exploration work" (the "license area data") in respect of the license. Upon completion of the sale of the license area data, and payment of applicable taxes (evidenced by a document showing payment of such tax), the holder may transfer the license, but for no consideration.

In accordance with the 2006 Minerals Law, the holder of a mining license may not sell the license itself. The holder may, however, sell "the mine, together with its machinery, equipment and documents" that is located within the relevant license area. Upon completion of the sale of the mine, and payment of applicable taxes (evidenced by a document showing payment of such tax), the holder may transfer the license, but for no consideration.

Law on Subsoil was adopted on November 29, 1988. In addition to the 2006 Minerals Law, the Law on Subsoil regulates issues regarding use and protection of subsoil. As in the Constitution of Mongolia, Article 3 of the Law on Subsoil provides that the subsoil is owned by the country or the whole nation.

The Law on Subsoil contains provisions that grant power to the State Great Hural, the Government of Mongolia, the Ministries of Geology, Nature and Environment and local authorities to protect and regulate the use of subsoil. In addition to mining and geological exploration, subsoil may

be used for building facilities underground including burying of oil, gas, other poisonous substances and industrial waste or waste water drainage system. Local authorities shall provide permits to use the subsoil depending on the nature of the project. Article 19 of the Law on Subsoil provides that the subsoil shall be allocated for use for 30 years extendable for another 20 years.

Chapter 3 of the Law on Subsoil provides requirements and procedures regarding development of design and building facilities underground and plants that would be used for mining of minerals. Even though Article 10.2 of the Law on Subsoil provides that issues regarding exploration and mining of minerals from the subsoil shall be regulated by the 2006 Minerals Law, Chapter 4 of the Law on Subsoil regulates the procedures for using the subsoil for purposes of mining of minerals and it deals with the procedures for the entity to mine the subsoil, and requirements of the legal entity during the mining operations, including effective and full use of the deposit and imposing obligations not to selectively mine not to damage the neighboring deposits and general requirements for rehabilitation, ensuring safety of the employees and the population in the area (Article 32.8).

Chapter 5 of the Law on Subsoil regulates the use of subsoil for purposes other than the mining of minerals. The Law on Subsoil also regulates issues related to the safety, use and protection of the subsoil, maintenance and registration of minerals reserve deposits and monitoring of the use and protection of subsoil and geological studies conducted in the subsoil.

### Mongolian Laws Relating to Additional Permits

Various aspects of mine construction and operation require permits from relevant central and regional governmental authorities. For example, permits must be obtained before proceeding with a general mine development plan and at various stages during the construction of mining facilities and mine start-up. A permit is similarly required for the use of water and for the use of explosives for blasting. In addition, work undertaken pursuant to permits is subject to ongoing review and verification by relevant authorities.

Under the Environmental Protection Law of Mongolia (the "EPL"), originally enacted in 1995 with certain relevant amendments in 2005, business entities and organizations have the following duties with respect to environmental protection:

- to comply with the EPL and the decisions of the government, local self-governing organizations, local governors and Mongolian state inspectors;
- to comply with environmental standards, limits, legislation and procedures and to supervise their implementation within their organization;
- to keep records on toxic substances, adverse impacts, and waste discharged into the environment; and
- to report on measures taken to reduce or eliminate toxic chemicals, adverse impacts, and waste.

The EPL is enforced at both national and local levels. Both national and local government can require a business entity to desist from and to eliminate the effects of certain actions. The Government of Mongolia has the power to require a business entity to limit or refrain itself from using, importing or exporting natural resources for certain period of time, and in accordance with the recommendation of the local governor and the Ministry of Environment, to prohibit citizens, business entities and organizations from conducting production or other activities which would have an adverse effect on human health or environment, regardless of the form of ownership.

Mongolian state inspectors are provided with a range of powers pursuant to the EPL, including the supervision and implementation of environmental legislation, obtaining information and data required for supervision of such legislation from the relevant individuals, business entities, or organizations, and requiring individuals, business entities, and organizations to eliminate adverse environmental impact and to suspend their activities for certain period of time in the event of an adverse environmental impact in breach of the EPL, accepted standards, and permissible levels.

Local government is also responsible for administering the implementation of the EPL and supervising the activities of business entities within their jurisdiction. Local government also has the power to take measures to eliminate any breach of the EPL by business entities and, if necessary, to require the suspension of activities of business entities which have an adverse environmental impact.

The 2006 Minerals Law provides three chapters of guidance relating to further environmental protection obligations imposed on mineral license holders. Under the 2006 Minerals Law, mineral rights are divided into exploration and mining rights, each with separate licensing and attendant environmental protection requirements.

In addition to those duties imposed on them by the EPL, mining license holders are required to prepare an initial environmental impact assessment analysis before the mine comes into production. A mining license holder must also annually develop and implement an environmental protection plan (including reclamation measures) in cooperation with the Ministry of the Environment, which should take into account the results of the environmental impact assessment. A license holder is also required to record all instances of adverse environmental impact resulting from its mining activities and prepare and send an annual report to the Ministry of Environment. In order to ensure compliance with environmental protection obligations. A license holder must deposit 50% of its environmental protection budget for a given year in a bank account established by the Ministry of the Environment. This amount is refundable at the end of each year if the license holder have complied with its obligations under the environmental protection plan. The 2006 Minerals Law further provides that, in the event a license holder fails to fully implement any of the measures outlined in the environmental protection plan, the relevant authority shall use the deposited fund as part of the environmental protection budget to implement those measures and the license holder shall provide any additional fund required.

The 2006 Minerals Law also provides for the following administrative sanctions that may be levied against license holders found in violation of environmental protection obligations:

- MNT500,000 1,000,000 fine for failure to comply with legitimate requirements imposed by an authorized Mongolian state inspector regarding the elimination of deficiencies discovered in the course of an inspection;
- in the event a license holder continues to be in violation of the EPL or the 2006 Minerals Law, the exploration and mining activities of the license holder shall be suspended for up to two months, and if the deficiencies are not eliminated within this period, the relevant minerals license may be revoked; and
- if a mining license holder causes serious damage to the environment, fauna, or human health by failing to implement safety rules or a technological regime while using toxic substances for its operations, its license shall be revoked and no license shall be issued to such holder for 20 years.

On July 16, 2009, Parliament enacted Mining Prohibition in Specified Areas Law, which prohibits minerals exploration and mining in the following described areas:

- headwaters of rivers and lakes:
- forest areas as defined in the Forest Law of Mongolia; and
- land areas adjacent to rivers and lakes as defined in the Water Law of Mongolia.

New exploration licenses and mining licenses overlapping the defined prohibited areas will not be granted and previously granted licenses that overlap the defined prohibited areas will be terminated. It is not clear whether such termination will only apply to the overlapping areas. Government Resolution No. 299, dated November 17, 2010, provides that affected license holders will be compensated for the termination of previously granted licenses. We do not expect the implementation of this law to affect the operations at our UHG and BN mines. Government Resolution No. 174, dated June 8, 2011, has determined a portion of the boundaries of certain areas containing gold deposits where exploration and mining operations are prohibited according to the Mining Prohibition in Specified Areas Law. On October 20, 2011, the Supreme Court of Mongolia ruled that the Government must take action to enforce the Mining Prohibition in Specified Areas Law.

The Law on Special Permit for Business Activities (the "Licensing Law") was adopted on February 1, 2001. The Licensing Law provides for governing relations regarding granting, suspending and revoking special permits for certain business activities that may have impact on the public interest, human health, environment and national safety or that may require certain conditions and qualification. However Article 2.3 of the Licensing Law states that licenses to be granted under the Laws on Land, on Subsoil, on Specially protected territories and natural plants, on Games and Hunting, on Flora and Forest, on Water, on Endangered Species, Trading with the Species or with Items Originating from Them, on Minerals, on Nuclear Energy and on Modified Live Organisms shall be governed by those laws.

According to Article 6.1 of the Licensing Law, the licenses usually are granted not less than three years unless otherwise stated by the Law and the licenses are extendable for the same terms as the initial term. According to the Article 6.3 of the Law unless otherwise stated by Law and conditions specified in the Article 13.1 of the Law are not discovered the term of the license shall be extended within 3 working days upon application of the license holder. Article 7 of the Licensing Law provides procedures for granting the licenses. According to Article 7.1, licenses are usually granted by the central administrative body unless otherwise specified by Law. Central administrative bodies usually mean ministries. However according to Article 7.3, detailed procedures for governing special licenses shall be regulated under the relevant industry Laws. Article 12 provides procedures for granting license for the first time and unless otherwise specified by Law the licensing authority shall grant the license within 21 working days upon receiving the application. If the application for license is denied, the reasons for denial shall be explained in writing. The license authority also has the power to have a relevant organizations to verify the submitted documents. In case if the term, conditions and requirements of the license are violated then the initially granting authority may suspend the license up to 3 months term based on the expert opinion of the professional inspection authority. Under Article 14 of the Licensing Law, a license may be revoked under the following circumstances:

- 14.1.1 The license holder requests so.
- 14.1.2 The legal entity has been liquidated.
- 14.1.3 It was determined the documents were falsified when applying for the license.

- 14.1.4 The conditions and the requirements of the license were violated repeatedly or seriously violated.
- 14.1.5 The demand to remedy the violations were not remedied during the suspension period of the license.

Article 15 of the Licensing Law lists the type of business activities that require special permits or licenses:

- 15.6.2 Protection of poisonous or dangerous chemical substance other than explosive material.
- 15.6.3 Importing exporting transporting over the border use trading and liquidation of poisonous chemical or dangerous substances.
- 15.6.5 Discharging polluting substances, in which acceptable amount is not determined under the standards.
- 15.6.6 Conducting detailed environmental impact assessment, importing, trading and servicing poisonous chemical or dangerous substance that may negatively impact the environment.
- 15.8.2 Construction of electricity power source or transmission line, production of electricity transmission dispatching coordination distribution, supply and sales of electricity.

  Assembly and maintenance of boilers pressure tanks and park lines.
- 15.10.4 Production of explosive substance and explosive equipment for explosions and conducting explosions.
- 15.10.5 Minerals exploration.
- 15.10.6 Minerals mining.
- 15.10.11 Activities related to oil.
- 15.10.13 Production, wholesale and trade of oil products.
- 15.14.6 Designing construction and facilities, conducting construction activities production of construction material, production assembly and maintenance of lifting equipment and its spare parts.
- 15.15.1 Construction and use of railway base structure.
- 15.15.2 Conducting civil aviation operation.
- 15.15.3 Conducting railway transportation activities.
- 15.15.4 Construction and maintenance of road and road facilities.
- 15.15.11 Production assembly and maintenance of railway base structure and rolling stock.

15.16.1 Using radio wave and setting up communication service network and its use and provision of services.

The Law on Environmental Impact Assessment was adopted on February 22, 1998. The purpose of this law is to govern issues regarding environment protection prevention of ecological imbalance, coordinating use of mineral resource, assessing environmental impact projects and making a decision to whether implement the projects.

The general environmental impact assessment shall be made for projects that include construction of new plants, service, building facility or expansion of existing premises or other projects that would use natural resources. Preliminary impact that the projects would cause to the environment shall be assessed during such assessment. For mineral resources mining projects, the environmental impact assessment shall be obtained before obtaining the use right of land and commence the project. The local environmental monitoring inspector, the citizen's representative's Hural's and the presidiums of aimag, capital city, soum and district shall monitor whether the environmental impact assessment has been conducted for mining projects that are being implemented.

The Ministry of Nature and Environment shall approve the methodological instructions for conducting environmental impact assessment for projects. The impact assessment shall be conducted by an expert within 12 working days and shall include conclusions on following matters (Article 4.5):

- 4.6.1 Whether it's possible to implement the project without conducting detailed environmental impact assessment.
- 4.6.2 Whether it's possible to implement the project with certain conditions and terms.
- 4.6.3 Whether it's necessary to conduct environmental impact assessment.
- 4.6.4 To return projects that do not comply with the Laws and regulations or equipment and technology to be used deter mental to the environment or the project is not included in the general land organization plan.

Once it is considered that a detailed impact assessment is necessary then the legal entity that has this license according to Article 9 of the Law on Environmental Impact Assessment shall conduct the assessment. Article 5 of the Law on Environmental Impact Assessment provides the components of the environmental impact assessment report. Under Article 6.3 of the Law, on Environmental Impact Assessment, any organization that is implementing a project (including mining project) shall deposit not less that 50% of the funds to be used a given year for environmental rehabilitation activities. Once a detailed environmental impact assessment report is complete the report shall be submitted to the authority that has conducted the general impact assessment and an expert of the authority shall review the assessment within 18 working days. The central administrative authority in charge of environmental matters shall resolve whether to allow the project implementation based on the expert opinion of the environmental impact assessment and also the comments of the citizen's of a place where the project is to be implemented.

The Railway Transportation Law was adopted on June 5, 2007 and its purpose is to define the principles of the railway transportation operation and ensure safety of the railway traffic. According to Article 4 of the Railway Transportation Law, it shall govern all types of railway transportation operation irrespective of the type and form of ownership.

Article 5 lists the principles that shall apply to the railway transportation operation which are:

- 5.1.1 There should be unified coordination of a schedule
- 5.1.2 There should be permanent monitoring
- 5.1.3 Access quality and safety of the services should be ensured
- 5.1.4 The operation shall be uninterruptible
- 5.1.5 Market competition condition shall be created
- 5.1.6 Operations with other transportation industry shall be coordinated

Article 6.2 states that a railway base structure may be created with a condition that the railway is owned by a legal entity of state property or prevailing state property or to be transferred to the ownership of such an entity after a certain period of use and this railway base structure shall have significantly important for the economy and the society of the nation. Alignment of such railway base structure and railway shall be determined by the Government. Article 7.1 states that the railway transportation services, fees and tariffs of the railway entity related to natural monopoly and market dominating works and services shall be set according to this Law and Law on Prohibiting Unfair Competition.

Article 7.2 of the Railway Transportation Law states that international transportation tariff shall be set according to international agreement to which Mongolia is a party. And according to Article 7.3, any changes in tariff shall be published to the general public not less than 10 days before such change become effective.

According to Article 9.1.2 of the Railway Transportation Law, the Government shall grant and revoke the license to build railway base structure whereas the Government's administrative authority in charge of railway transportation matters shall grant extend the term suspend or revoke licenses for use of base structure railway transportation operation and production assembly maintenance of railway base structure and rolling stock (Article 12.4.4).

According to Article 13 of the Railway Transportation Law there shall be a railway transportation monitoring department which shall implement the administrative monitoring of the safety of railway, transportation quality of such services, labor protection and safety.

Under Article 13.5.3 of the Railway Transportation Law, the monitoring department has the power to limit or suspend the use of railway in case of potential conditions for accident and defaults. The department also has the power to propose to relevant authorized body to suspend or revoke the relevant license and certificate (Article 13.5.5). According to Article 15 of the Railway Transportation Law, the railway authority shall approve the package of general procedures.

Article 16 of the Railway Transportation Law describes the types of railway licenses and also provides procedures for issuing such licenses especially under Article 16.4 (verification of an application by the Government administrative body), 16.5 (verification and opinion of the central Government administrative body regarding certain issues), 16.6 (allowing the applicant an opportunity to extend the term of the application review due to need to comply with additional requirements), 16.7 (the Government administrative body making a decision of either granting the license or refusing to grant the license), 16.8 (the Government administrative body (the "RAM") review the application within 14 days and shall submit its opinion to the central Government administrative body (the

"Ministry")), the relevant authority shall review and make a decision on grating the licenses within 21 days (except the railway base structure construction license which requires 45 days) and if necessary may extend the term another 14 days. Article 16.10 stated that the license holder shall apply 21 days before expiry of the license to the authorized body, and that body shall resolve the extension of the license term within 14 days. Any response to granting or refusing to grant a license shall be provided in writing within the timeline provided by this Law (16.11).

Under Parliament Resolution No. 68, dated November 25, 2010, the Government is instructed to take measures, among others, to support economic growth by increasing the capacity of the border ports, railways and auto roads where overwhelming amount of exported and imported raw material and goods are transported.

In addition, under Parliament Resolution No. 15, dated February 10, 2011, the Government is instructed to fund projects such as the construction of railways according to the State Policy on Railway (adopted on June 24, 2010), Sainshand Industrial Complex project (adopted on July 07, 2010) and other projects funded through public and private partnership.

The Law on Water was adopted on April 22, 2004 and its purpose as stated in Article 1 is to govern issues regarding proper use of water and water bed area protection and rehabilitation. Article 19 of the Law on Water provides that water bed area council shall be set up to involve local population in management of the local water in order to protect, restore properly and use the water resources. Article 23 titled 'Water user' states that any citizen, legal entity or organization shall obtain the right to use the water by entering into an agreement and obtaining the permission of the relevant authorities. According to Article 23.2, the agreement to use water shall be entered for a term of 20 years and as long as the user complied with its obligations, the agreement can be extended for another 5 years. Articles 24-28 deal with the requirements for the water user and procedures for entering into water use agreement and granting the permission to use water. Chapter 4 deals with the protection of water resources its quality and rehabilitation of environment. Chapter 5 deals with the requirements to be imposed on water use facilities, such as approval of the design construction and use of the facilities.

Law on Energy was adopted on February 1, 2001. The purpose of it is to govern the issues regarding production, transmission, distribution, dispatching coordination and services using energy reserves and construction of energy infrastructure and use of energy. Chapter 2 deals typically with the Government powers including the State Great Hural, the Cabinet, the Ministries and local governments regarding the policy determination and enforcement of the Law on energy. Chapter 3 deals with the special permits or licenses to be granted under this Law:

- 12.1.1 Production of energy
- 12.1.2 Production of heat
- 12.1.3 Transmission of electricity
- 12.1.4 Transmission of heat
- 12.1.5 Providing dispatching coordination
- 12.1.6 Distribution of electricity
- 12.1.7 Distribution of heat
- 12.1.8 Regulated supply of energy

- 12.1.9 Unregulated supply of energy
- 12.1.10 Importing and exporting electricity
- 12.1.11 Construction of energy related buildings and facilities

Chapter 4 deals with the setting of price and tariff. Chapter 5 deals with the relations between the supplier and consumers and Chapter 6 deals with the monitoring and imposing liabilities under the Law.

The Law on Construction was adopted on February 15, 2008. The purpose of the Law is to govern the issues regarding development of design for buildings and facilities, production of construction material, use of construction works and rendering technical supervision over construction work. Article 3.1.4 (Definitions) states that the "building and facilities" shall mean accommodation, buildings for public and industrial use, facilities for energy communication, roads, bridges, water channel, dams and shields and other engineering networks built by a licensed legal entity based on design and drawing accredited and developed according to construction norms and rules.

Chapter 2 deals with the powers of the Government institutions including the State Great Hural, the Government, the Ministry and local Governments. Chapter 3 provides clauses regarding requirements to be imposed on design, construction material, product and construction agreements for building facilities and accrediting construction design. Chapter 4 provides for rights and obligations of investor, client, contractor, and designer and construction material producer. Chapter 5 provides requirements to be imposed on use of buildings and facilities and also norms and normative documents, registration and information regarding buildings and facilities.

The Law on Protection of Nature and Environment was adopted on March 30, 1995. The purpose of the Law is to govern the issues regarding ensuring the right of a human being to live in healthy and safe environment, to coordinate social and economic development along with the environmental balance, to protect the nature and environment for the interests of the current and future generations, to properly use natural wealth, and restoring the possible natural wealth. Article 7.2 of the Law states that any citizen, legal entity or organization that is willing to use natural wealth for industrial purposes shall have the environmental assessment conducted for its own costs or if such assessment has been already done then shall pay for the related costs. Chapter 3 of the Law deals with the powers with the Government organizations including the State Great Hural, the Government, The Ministry and local Governments. Chapter 4 describes actions for protecting nature and environment, using natural wealth and rehabilitation works.

Chapter 5 deals with the environmental inspection and monitoring including the powers and the obligations of the environmental inspectors. Article 27.1.10 states that the environmental inspector shall have the right to revoke or suspend licenses, permissions and other rights of legal entity and organizations who has caused damages to the nature and environment due to violations of Laws, regulations and the technology. Under Article 27.1.3, the inspector also has the right to suspend operations of citizens, legal entities and organizations who have negatively impacted nature and environment due to violations of the Laws, regulations, standards and acceptable levels. Chapter 6 deals with the obligations of legal entities and organizations with respect to protection of nature and environment and the natural wealth. Chapter 7 deals with the form of the information regarding nature and environment.

Law on Monitoring Explosive Substances and Turnover of Explosion Equipment was adopted on May 6, 2004. The Law deals with the detailed procedure insuring safe operation dealing with explosive substances and explosion equipment. Chapter 3 of the Law deals with the data pool regarding explosive substance and explosion equipment. Chapter 4 deals with the supervision of the substances and equipment.

The Law on Poisonous Chemicals and Dangerous Substances was adopted on May 25, 2006. This Law has the same importance as the Law on Explosive substances and Explosion Equipment.

The Law on Arbitration was adopted May 9, 2003. Article 3 (Scope of the Law) states that the decisions of foreign arbitration shall be acceptable in Mongolia and enforcement actions shall be regulated according to the New York Convention of 1958 on acceptance and enforcement of decision of the foreign arbitration and Chapter 8 of the Law (Article 3.2).

On October 6, 2011, the Law of Drivers Insurance was approved and became effective on January 1, 2011 and provides that liability insurance for drivers and owners of vehicles is mandatory.

## Mongolian Law Relating to Concessions

The Mongolian Parliament defined 'State Policy on Public and Private Partnership' in 2009 by Resolution No.64, where it specifically considered legal framework for a concession. In accordance with that policy the Concessions Law was adopted by the Parliament in January 28, 2010, which came into effect since March 1, 2010. Based upon on the 2010 Concessions Law, the Government approved list of concessions in July 21, 2010, by the Resolution No.198, which remains valid and up to date.

In accordance with the 2010 Concessions Law, a concession means a special right to transfer possession and operations of state-owned property, for the creation and improvement of state and locally owned property, for the purpose of rendering basic social and infrastructure services to the public, based on an agreement, according to conditions and regulations specified in the Concessions Law.

Unlike other countries which limit concessions only to foreign investors, the 2010 Concessions Law defines a concessionaire as a Mongolian or foreign legal entity or their consortium that has obtained a concession according to the procedures set forth in the Concessions Law.

The purpose of the Concessions Law is to regulate issues regarding the organization of tenders for granting to investors the rights of possession, operation, creation, and renovation of state and local own properties under concession agreements, conclusion, modification, and termination of concession agreements and settlement of disputes. The 2010 Concessions Law not only does not limit concessions to either foreign investors or domestic entities, but also does not provide preferential treatment for domestic entities or afford special treatment to bidders that undertake to use national goods or employ local labor.

A concession agreement is a written agreement that implements a concession between the authorized entity and a concessionaire. The agreement specifies the scope of works and services to be performed by a concessionaire, the rights and duties of the parties, fees, charges and tariffs for concessionaire's services, terms and conditions for the transfer of a controlling package of shares of the concessionaire, financing issues, duties of the governmental authority to issue necessary permits, approval and licenses in connection with the concession, compensation and indemnification issues, reimbursement of additional costs incurred by the concessionaire, substitution of the concessionaire, terms and conditions relating to the transfer of concession items and other issues the parties deem it necessary to include in the concession agreement. The term of the concession agreement is agreed between the parties.

The 2010 Concessions Law specifies seven types of concessions:

- "Build-Operate-Transfer" the concessionaire must build the concession object by using its own or raised funds, commission it, and operate it within the period specified in the agreement and transfer it, after the completion of the agreement period, to the state or local ownership in compliance with conditions stated in the agreement.
- "Build-Transfer" the concessionaire shall build the concession object by using its own or raised funds, commission it and transfer it to state or local ownership, in accordance with the conditions stated in the agreement.
- "Build-Own-Operate" the concessionaire must build the concession object by using its own or raised funds, commission it, own and operate in compliance with conditions and obligations stated in the agreement.
- "Build-Own-Operate-Transfer" the concessionaire shall build the concession object by using its own or raised funds, commission it, operate and own it within the period specified in the agreement and transfer it after the completion of the agreement period to the state or local ownership, in compliance with conditions stated in the agreement.
- "Build-Lease-Transfer" the concessionaire shall build the concession object by using its own or raised funds, commission it, give it to the possession of the authorized entity under a financial lease as specified in the agreement and transfer it to state or local ownership once the lease duration is complete.
- "Design-Build-Finance-Operate" the concessionaire shall design and build the concession object by using its own or raised funds; operate it within the period specified in the agreement and transfer it after the completion of the period to state and/or local ownership in accordance with the conditions stipulated in the agreement.
- "Renovate-Operate-Transfer" the concessionaire shall renovate the concession object by using its own or raised funds, operate it within the period specified in the agreement and transfer it together with the renovation to state or local ownership in accordance with the conditions stipulated in the agreement.

The objects eligible for concessions are not explicitly referred to in this law. The 2010 Concessions Law states that the government or the local parliament shall create a list of objects offered for transfer as concessions and the list of objects for a concession will be publicly announced. This announcement contains the title and description of the concession object, concession type, work, and services to be rendered, and specify whether financial assistance from budget funds shall be provided and guaranteed and whether a tender is to be organized as specified in the law or an agreement will be concluded directly.

Concessions may be publicly tendered or in specific cases can be contracted directly with a concessioner. If the concession right were to be granted through a tender, the authorized entity would advertise for tenders through national daily newspapers and other means of media, and proposals need to be submitted within two months of the announcement. Apart from meeting general requirements for tender submission, selection and evaluation of proposals will be based on the participant's financial capacity, existence of an experienced and professional working team with technical and technological capacity, satisfaction of conditions necessary to obtain the special permits in accordance with the law on special permit for business entities, and other criteria deemed necessary by the authorized entity. If tendering conflicts with national security or rights relating to intellectual property necessary for

implementing the concession are in the ownership of the one or more entities with a common interest, or no proposal received in response to a tender invitation, or no qualifying proposals were received and it was deemed that there is little probability of proposals being received within the required period in case of a re-invitation, or the concession item has been transferred to other entities as part of the rights of the concession financier, then a concession right could be granted by concluding a direct agreement.

The 2010 Concessions Law also requires that the government shall publicly announce its decision on granting a concession. A concession agreement is required to be issued in written form and the term shall be mutually agreed by the parties, considering the specifics of the industry, period of implementing the investment plan, amount of investment, its recuperation time, profits and the period of the concession item usage.

In regards to the ownership rights related to a concession object, profits earned during the possession and operation of the concession, belong to the concessionaire. However, the tangible property and intellectual values created during the use of the concession shall remain state and local property. Besides this the concessionaire's may not pledge concessions objects as collateral for financing and prohibited to transfer its controlling shares to others, unless the concession agreement stipulates otherwise.

The state may provide financial support to the concessionaire either by providing tax credit or exemption according to relevant laws, issuing a loan guarantee, providing a certain part of concession financing, insurance coverage, issuing a guarantee for the minimum amount of the concessionaire's profit according to the concession agreement or providing compensation where this law and the concession agreement specify, etc. The amount, terms and conditions and requirements for state support will be specified by the concession agreement.

The state or local government may agree to reimburse the difference if actual costs exceed the service payment and tariff rates for works and services under the concession agreement. Taking into consideration the nature of the specific sector and the concession item, the reimbursement may be granted to the concessionaire until such time when the concessionaire can operate profitably.

Dispute settlement between the parties of a concession agreement may be resolved by the way of mutual reconciliation. The Concessions Law implies that international arbitration is possible for parties to a concession agreement. Only, disputes caused between the concessionaire and customer is subject to the legally defined procedures via courts, in Mongolia.

#### List of Other Applicable Mongolian Laws

Law on Auto Road was adopted on January 2, 1998.

The Law on Auto Transportation was adopted on June 4, 1999.

The Law on Civil Aviation was adopted on January 21, 1999.

The Law on using Air Space for Aviation was adopted on May 30, 2003.

#### Mongolian Laws and Regulations Relating to Labor, Health and Safety

The Mongolian Labor Law (1999) ("Labor Law") and the Labor Safety and Sanitary Law (2008) ("Labor Safety Law") contain provisions of general application in relation to labor, health and safety.

Labor legislation in Mongolia includes the Law on Setting up Minimum Labor Wage (2010) according to which the Government (Cabinet) and National Trilateral Committee of Labor and Social Consensus shall set the minimum labor wage, and the minimum labor wage in April 2011 was MNT140,400.

The Labor Law provides general provisions and detailed provisions regarding collective bargaining and contract, detailed clauses regarding independent contract and provisions regarding the grounds for terminating employment agreement, provisions governing wage and allocation of wages including the overtime, holiday and afterhours wages or day-off time, provisions regarding the labor condition, safety and health standards, the labor of women, juveniles, disabled and senior citizen's and foreign citizens in Mongolian entities. The Labor Law also deals with the collective and individual dispute resolution.

An employer is responsible for maintaining a safe working environment that meets applicable safety and sanitation requirements. Furthermore, if the nature of an employee's work so requires, the employer must provide special work garments and arrange for such employees to receive regular, preventative health examinations related to their work. Mining companies must create a special department, or appoint an officer, dedicated to overseeing matters of safety and sanitation. The Ministry of Social Welfare and Labor is responsible for adopting regulations governing labor safety and sanitation.

The Labor Law and the Labor Safety Law provide that in the event of an industrial accident the employer, at its own expense, must immediately transport injured employees to a hospital and take steps to eliminate any causes of harm created by the accident. Employers are obligated to investigate and report all industrial accidents. Regardless of whether an employee was covered by insurance for injuries sustained during an industrial accident, the employer must reimburse the employee in an amount determined as a percentage of the average salary of the employee. If the employee died as a result of the accident, the employer must reimburse the employee's family in an amount equal to not less than the deceased employee's average compensation for 36 months. Reimbursement under these provisions of the Labor Law and Labor Safety Law do not affect the employee's entitlement to pensions or other benefits under social insurance or other laws.

If a company's activities are proven to have an adverse impact on the health and safety of its employees, the State Professional Inspection Agency of Mongolia or other authorized official may take steps to force the company to remedy the breaches. If the company fails to remedy such breaches, it may be ordered to wholly or partially suspend business activities until the labor safety and sanitation requirements are satisfied. Additionally, failing to comply with labor safety and sanitation regulations, causing or concealing an industrial accident, or failing to pay requisite compensation for an industrial accident, may result in the imposition of administrative fines. In extreme cases, criminal sanctions may be imposed for violating the applicable Labor Law provisions.

The 2006 Minerals Law provides that local administrative and self-governing bodies are responsible for monitoring compliance with respect to health and safety regulations for workers and local residents. A mining license holder must carry out activities that ensure (i) safety for the citizens of the relevant soum or district and (ii) labor safety and proper sanitary conditions for its employees. The license holder must also submit an annual report on safety to the State Professional Inspection Agency and the MRAM.

If a license holder is found to have continually violated mining operation safety regulations, its license(s) may be suspended by a State inspector for up to two months, and if the deficiencies are not eliminated within this period, the license(s) may be revoked. If a mining license holder causes serious damage to human health through failure to implement safety rules and appropriate technical standards while using toxic chemicals and substances, its license may be revoked and no new license issued for a period of up to twenty years. Criminal sanctions may also be imposed for violating the health and safety provisions of the 2006 Minerals Law, in extreme cases.

Under the Subsoil Law of Mongolia (1988), a special mining rescue unit has been established by the Government of Mongolia, and mine operators are required to pay fees to support and maintain the services of this unit. Also under this law, the Ministry of Environment and Tourism of Mongolia and the MMRE are responsible for ensuring compliance with applicable safety rules and standards while conducting subsoil-related activities. If a mine operator is not in compliance with these safety rules and standards, it may be ordered to suspend its activities.

The Mongolian Fire Safety Law (1999) requires companies to observe fire prevention and extinguishing regulations, norms and standards and to train employees in fire fighting skills.

Specific provisions of the regulations implemented by the Ministry of Social Welfare and Labor pursuant to the Labor Law, newly amended and supplemented by the Labor Safety Law, effective from June 16, 2008, as the same may amended and supplemented from time to time, govern:

- the air quality structure and permitted levels of poisonous gas in the atmosphere;
- fire prevention measures; permitted levels of dust in the atmosphere;
- provision of amenity rooms for mine operating personnel, medical and first-aid care, and a clean water supply;
- establishment of ancillary facilities for the health and welfare of mine operating personnel;
   and
- compliance with radiation safety norms and permitted levels of radioactive exposure.

Mine operators, as well as all employees working at a mine site, are responsible for complying with these regulations. A breach of the regulations, regardless of whether or not it results in an industrial accident, may result in disciplinary, administrative or criminal liability depending on the severity of the breach.

Law on Sending Work Force Abroad and Accepting Work Force and Specialists From Abroad was adopted on April 12, 2001. As the Article 1 states the purpose of the Law is to govern the issues regarding sending Mongolian citizens abroad and accepting foreign citizens to Mongolia for the purposes of employment and for protecting their right and interests.

Chapter 2 and especially Article 7 deals with the general conditions of a contract under which the work force and specialists are received in Mongolia and according to Article 9, business entity, organization or individual citizens shall pay a fee equal to two times of the minimum monthly wage for employing a foreign citizen in Mongolia and that fee is per month per each foreign citizen. Article 9.3 of the Law states that if a mining license holder employs foreign citizens in numbers more than stated in Article 43.1 of the 2006 Minerals Law than the fees stated in Article 43.2 of the Law shall be paid each month. (Article 43.1 of the 2006 Minerals Law states that the license holder is obliged to employ the citizens of Mongolia and up to 10 percent of the employees may be foreign citizens.

Article 43.2 provides that if the number of foreign citizens employed exceeds the percentage set forth in Article 43.1 the license holder shall pay 10 times the minimum monthly salary for each foreign citizen every month.)

Government Resolution No. 376, dated December 28, 2011 sets the percentage of foreign labor force and personnel allowed in mining and other companies. The percentage depends on the company's main operational direction, equity fund and number of total employees. For a company whose operation is exploration and mining of raw petroleum and natural gas and whose total equity fund is up to 50 million togrog, the percentage of foreign labor force and personnel may be up to 60%, if the total number of employee is from 51 to 100, the percentage may be up to 70%, if the total number of employee is more than 100, the percentage may be up to 75%. For a company whose equity fund is more than 51 million togrog, the percentage of foreign labor force and personnel may be up to 75% regardless of the total number of employees. For other mining and exploration companies, the percentage of foreign labor force and personnel may be up to 25% regardless of the company's equity fund and total number of employee.

### Mongolian Laws Relating to Coal Export Requirements

A Mongolian mining company holding a valid mining license that extracts and processes coal has the right to export and sell the coal on the international market. There is no additional export license required. There are, however, certain requirements that must be complied with and procedures that must be followed in order to lawfully export coal.

First, a coal mining company must pay the appropriate royalty (addressed in more detail above) and obtain a document evidencing such payment from the relevant tax office. The royalty rate is based on the sales value, which in turn is dependent on a deemed sales price. In order to provide a uniform standard in this regard, the Ministry of Finance and the MMRE have issued a joint order to the effect that the prices to be used in calculating the royalty are those published in China Coal Weekly, a publication that is widely accepted as a definitive source of reliable information concerning the coal market in China. Coal is not subject to Mongolian export tax.

Second, the coal producer/exporter must obtain a certificate of origin from the Mongolian Chamber of Commerce and Industry in respect of each shipment of coal. This certificate of origin certifies that the source of the coal is from within Mongolia.

Finally, the producer/exporter must obtain a certificate from the Mongolian National Centre of Standardization and Measurement certifying that the coal to be shipped is properly classified. A representative from the Centre examines each shipment of coal and attests that it corresponds to a specified class of coal, for example thermal coal or coking coal.

In order to complete the coal export process, the coal producer/exporter must present the three aforementioned documents, along with the following additional documents, to the customs authority at the border crossing:

- a copy of the producer's mining license (to establish that the coal has been extracted and processed by a duly authorized Mongolian entity);
- a copy of the coal sales contract;
- a copy of the shipping contract; and
- other standard commercial shipping documentation.

#### Mongolian Laws Relating to Borrowing and Lending Activities

The Civil Code of Mongolia allows citizens, legal bodies and organizations to borrow money or other property in two ways: from other citizens, legal bodies or organizations or from banks or financial institutions. Article 281.1 of the Civil Code regulates the regular loan relationship between legal bodies while Article 451.1 of Civil Code regulates loan relation between legal bodies and banks or financial institutions. There is no restriction in the laws and legislation of Mongolia on borrowing from any individual, who might be considered connected persons of the borrower, but special decision making requirements defined by the 2011 Company Law pertains to contracts that involves conflict of interest.

### Mongolian Laws and Regulations Relating to Land Tenure

#### Land Tenure

Land tenure in Mongolia is divided into: (i) ownership rights; (ii) possession rights; and (iii) use rights. Only Mongolian citizens can own land. Mongolian citizens, organizations and legal entities that are not deemed to be a business entity with foreign investment ("BEFI") are entitled to possess land, which entitles them to pledge their interest and to transfer or lease it, all subject to approval by relevant authorities. BEFIs may only acquire use rights over land, which may not be transferred, pledged or leased.

Land possession and land use rights are evidenced by certificates issued by the local government authority in the city, aimag (province) or soum (district) in which the relevant property is located. Such certificates are issued in conjunction with a document that provides for the term of the land possession or land use rights and the requirements for maintaining such rights in good standing, most notably the payment of recurring fees to the local government (together a "Land Use or Possession Certificate").

To engage in mining activities the license holder, if it is a BEFI, must acquire land use rights to the relevant land area. Under the Land Law of Mongolia enacted on June 7, 2002, and effective from January 1, 2003, as the same may be amended and supplemented from time to time (the "Land Law"), land use rights can be granted for a period of up to sixty (60) years, although in practice Land Use Certificates are typically issued for shorter terms. The Land Law provides that renewals may be made once or more than once, but that the maximum term of any renewal may not exceed a period of forty (40) years. The Foreign Investment Law of Mongolia enacted on May 10, 1993, effective from July 1, 1993, and amended May 29, 2008, as the same may be amended and supplemented from time to time ("Mongolia's Foreign Investment Law") further provides, in respect of BEFIs, that such renewals may not be made more than once.

Land Use or Possession Certificates are issued for a specific number of years and for a specific purpose stated in the relevant land use or possession agreement, and are usually renewable if the holder has complied with relevant requirements. Land possession and land use rights are subject to revocation by the issuing authority if the holder fails to comply with i) applicable provisions of the Land Law, ii) the terms of the relevant Land Use or Possession Certificate (most notably failure to make timely payment of recurring land use fees), or iii) applicable environmental protection obligations.

A mining license holder must enter into either a land possession or land use or possession agreement with relevant land owners, possessors, or the governing authorities of soums and districts and obtain the Land Use or Possession Certificate.

An exploration license is also not a real property interest and does not convey either land possession or land use rights to the holder. But it is not clear whether an exploration license holder must obtain a Land Use or Possession Certificate before conducting minerals exploration activities. The 2006 Minerals Law does not specifically provide that such holders must obtain such Land Use or Possession Certificates. All minerals in the ground are owned by the Government of Mongolia on behalf of the people of Mongolia. The holder of a mining licenses is entitled to extract and sell the minerals located within the land area covered by the license, and is eligible to hold them for up to a maximum of 70 years so long as it complies with all applicable legal requirements. We may sell minerals extracted from the relevant license area, subject to the payment of applicable royalties and income taxes. The mining license will be issued at first for 30 years and is extendable two times for 20 years each.

Government Resolution No. 302, dated September 30, 2009, states that the term of land use for a foreign investment enterprise holding a mining license relating to a Mineral Deposit of Strategic Importance shall be 30 years, extendable one time for 20 years.

## Land Use for Special Needs

The Land Law provides that land can be taken for special needs by the relevant local government body for the purpose of turning the land into: (i) specially protected areas; (ii) lands allocated for ensuring national defense and security; (iii) land granted to foreign diplomatic and consular offices and representative offices of international organizations; (iv) sites reserved for conducting scientific and technological tests and experiments; (v) permanent environment and weather prediction and observation sites; (vi) pastures and hayfields; (vii) areas designated for oil exploration pursuant to production sharing agreements and (viii) free trade zones. Pursuant to the 2006 Minerals Law, the DGMC may revoke a license on the grounds that the exploration or a mining area has been designated as special needs territory and the license holder has been fully compensated. Mongolia's Foreign Investment Law provides that the property of a foreign investor may be expropriated exclusively for public purposes or interests and only in accordance with due process of law on a nondiscriminatory basis and with payment of full compensation. The 2006 Minerals Law further provides that a government agency which has issued a decision to take the land for special needs shall be obligated to compensate the license holder. If the parties fail to reach agreement, the amount of compensation shall be determined based on an adequate compensation amount determined by an authorized independent body. The 2006 Minerals Law provides that disputes relating to compensation shall be decided by a court.

### Mongolian Laws Relating to Business Entities

On October 6, 2011, the State Great Hural adopted new edition of the Company Law of Mongolia. The Company Law introduces governance requirements for all companies. The Company Law provides general and detailed provisions regarding the legal status of a company and its establishment including, but not limited to, reorganization and liquidation, share capital of a company, dividends and transfer of a company's property, company's management and responsibilities of a company's authorized officials, and the provisions of major transactions or conflict-of-interest transactions.

Pursuant to Article 6.5 of the Company Law, controlled and subsidiary companies shall not be liable for the debts of its parent company and, unless otherwise provided by law and by an agreement, the parent company shall not be liable for debts of its controlled and subsidiary companies.

#### Mongolian Laws Relating to Business Entities with Foreign Investment

Where twenty-five percent (25%) or more of the paid-in-capital of a Mongolian company is contributed from foreign sources, such company is deemed to be a BEFI and the company must

register with the Foreign Investment Agency, a department under the umbrella of the Ministry of Foreign Affairs and Trade, and obtain a document certifying the company's status as a BEFI.

Mongolia's Foreign Investment Law defines the BEFI concept and provides for the duties and powers of the FID. In August 2008, Mongolia's Foreign Investment Law was amended to increase the minimum paid-in capital requirement for BEFIs from the equivalent of US\$10,000 to the equivalent of US\$100,000. In addition, the amendments expand the regulatory authority of the FID, giving it greater bureaucratic discretion in registering and supervising the operations of BEFIs. The FID may now terminate the BEFI status of, or order the cessation of activities by, any BEFI that the FID determines has not met various specified requirements or is deemed by the FID to have violated Mongolian laws.

## Mongolian Laws Relating to Payments for Goods and Services in Local Currency

The Law on Implementing Payments in National Banknotes enacted in 2009 provides that (i) all posted tariffs and contracts between two parties within the territory of Mongolia must be stated in MNT; (ii) all payments made between two parties within the territory of Mongolia must be made in MNT; and (iii) parties within the territory of Mongolia are prohibited from including an adjustment mechanism in the terms of a contract that adjusts the agreed MNT price based on changes in foreign exchange rates. The Law of Mongolia on Implementing Payments in National Banknotes does not prohibit an offshore party and a Mongolian party from transacting in the currency of their choice, nor does the law prohibit a Mongolian party from paying into an offshore account or being paid in an offshore account in foreign currency.

Penalties for non-compliance with the Law of Mongolia on Implementing Payments in National Banknotes include confiscation of the proceeds of an illegal payment by the State, other administrative fines and revocation of a non-complying business's operating license.

### Mongolian Laws Relating to Auditing

According to Article 7.1 of the Law on Auditing (1997), business entities and organizations with assets amounting to or above MNT50,000,000 and, unless otherwise provided by law and international treaties to which Mongolia is a party, foreign invested business entities and organizations shall procure so that their financial reports are confirmed by an auditing organization which is incorporated and registered in Mongolia. In case of a failure to appoint such auditing organization, the maximum penalty imposed will be approximately US\$524.

#### **Sino-Mongolian Bilateral Treaties**

There are several bilateral agreements between Mongolia and China.

Sino-Mongolian Border Railroad Agreement: The agreement has been entered between the Ministry of Infrastructure Development of Mongolia and Ministry of Railroad of China on October 17, 1955 in Ulaanbaatar, Mongolia. The agreement only has a few provisions such as traffic conditions of trains, procedure on arrangement of the cargo and transportation plans, telegraphic and telephone communication between the two parties, the adherence to the time schedule, terms and procedures to use the opposites of the boarder stations, constructions of roads and stations, staying of railroad employees in the other parties territory, procedure for serving trains interchange operations, traffic interruption, maintenance of rolling stock and railway, procedures during accident and breakdown issues regarding passenger transportation cargo transportation, responsibilities of the parties for any damages the transportation of spare parts material communication issues. The agreement also has a number of rules and procedures mainly for coordinating train traffic Zamyn-Uud and Yerlian boarder stations, procedure on maintaining a log book on both sides, procedures on mutual warning on traffic

and other necessary events, and procedures on passing for employees from both sides and their staying on the other territory of the other side. The agreement also has numerous forms for notification and log maintenance.

The Agreement between the Governments of China and Mongolia for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income was signed on July 29, 1991 and came into force on January 1, 1993.

The Agreement on Friendly Relations and Cooperation between Mongolia and China was signed on April 29, 1994 and ratified by the State Great Hural on July 4, 1994.

The Intergovernmental Agreement between Mongolian Government and the Government of China on Protection and Use of Border Area Water which was signed on April 29, 1994 was ratified by the State Great Hural on January 3, 1995.

On June 9, 2006, the State Great Hural ratified Intergovernmental Agreement signed between the Government of Mongolia and the Government of China on November 28, 2005 titled 'General Loan Agreement' regarding usage of export soft loan for the amount of US\$300 million.

The Intergovernmental Agreement between the Governments of China and Mongolia on Auto Transportation was signed on June 16, 2011 and approved by the Government on August 24, 2011.

## **Mongolian Air Pollution Laws**

On June 24, 2010, the State Great Hural adopted the Air Pollution Fee Law, which imposes fees on entities that pollute, including persons engaged in raw coal mining, producers and importers of organic absorbent, users of auto vehicles and self-moving equipment, holders of licenses to use significant and stationary sources of air pollution and citizens, business entities and organizations using sources of air pollution.

The fee for extracting raw coal is between MNT1 to 2 per kilogram of coal and for producing and importing organic absorbent between MNT10 to 30 per kilogram of organic absorbent. The fee for emission of carbon dioxide by auto vehicles and self-moving equipment that emit more than 120 grams of carbon dioxide per kilometer per year is between MNT1,800 and 9,500 per year per vehicle/equipment, based on the amount of emissions. The fee for waste of significant and stationary sources of air pollution is between MNT1 to 10 per kilogram of waste. Exemptions from fees exist where raw coal is highly processed and new fuel is produced that meets standard requirements. Business entities and organizations extracting raw coal for ensuring national security and protecting public interest and producing power may be exempt from the fee subject to regulations adopted by the Government.

Based upon the range of MNT1 to 2 defined by the 2010 Air Pollution Fee Law, the Government of Mongolia published Resolution Number 273 on October 20, 2010 and specifically defined the air pollution fee for the coal mining industry to be MNT1 for every kilogram of raw coal mined.

#### Certain Mongolian Tax Laws

This section does not purport to be a comprehensive description of the Mongolian tax system.

Mongolian tax law sets forth a general structure of taxation but in many circumstances fails to provide clear or detailed guidance as to how the general provisions contained in the law are to be applied to specific transactions. This lack of detailed guidance may lead to inconsistent implementation of the law by the tax authorities.

The basic Mongolian tax law is the General Law on Taxation which provides the overall structure of the tax regime and the general rights and obligations of taxpayers and the taxation authorities. This law has been substantially amended, effective as of July 1, 2008. Specific laws, such as the Economic Entity Income Tax Law, the Personal Income Tax Law and the Value-Added Tax Law, address specific areas of the tax law. These three tax laws were substantially amended, effective as of January 1, 2007. Notwithstanding such amendment, these laws remain rudimentary.

A summary of the principal tax legislation that may affect the operations of the Company and its subsidiaries in Mongolia is as follows:

- The general income tax rate applicable to business entities with Mongolian source income is 10% on the first MNT3 billion of taxable income and 25% on amounts in excess thereof. These rates are applicable to operating and certain other types of income (e.g., capital gains on the sale of shares and equipment). Other types of income (e.g., capital gains on the sale of real property, interest, royalty and dividend income) are subject to other, varying rates of income tax.
- Taxable operating income of a Mongolian business entity is determined by taking into
  account operating income received less permitted deductions. Mongolian tax law does not
  always permit all items of expense incurred in the furtherance of the business purpose of
  the enterprise (as such concept would be understood in more developed jurisdictions) to be
  fully deducted when determining taxable operating income.
- Effective from January 1, 2010, the Business Entity Income Tax Law has been amended to allow for operating losses accumulated by mining companies as well as companies that are operating in the infrastructure sector to be carried forward and deducted from taxable income for a period of four to eight years following the year in which the loss was incurred, the determination of the carry-forward period applicable to any particular mining company to be determined by the Resolution No. 287 of the Government of Mongolia (2009) after taking into consideration the investment made by such company in its mining operations. In the case of mining companies, the loss carry-forward deduction can be applied to 100% of the taxable income calculated in the relevant tax year.
- In the absence of a tax treaty, (i) dividend income received from a business entity that is registered and operates in Mongolia; (ii) loan interest from a guarantee, royalty income and interest from finance lease; (iii) rental income from tangible and intangible asset lease; and (iv) income resulting from goods sold and services provided within Mongolia, received by a non-resident legal entity from a Mongolian source are subject to Mongolian income tax rate of 20%. The Mongolian legal entity making such payments is obligated to withhold the Mongolian income tax from such payments. Mongolia has entered into double tax treaties with a number of countries. Such treaties may provide for lower rates of taxation in certain circumstances. To date, Mongolia has signed double taxation treaties with 35 countries, out of which 30 treaties are in force or ratified.
- VAT at a rate of 10% is payable in respect of all goods sold, work performed and services provided within Mongolia. VAT is also payable in respect of goods imported into Mongolia and in respect of certain service fee payments made by Mongolian taxpayers to non-resident service providers. If a legal entity is registered as a value-added taxpayer, it can obtain credits for such tax paid to its suppliers of goods and services and can use such credits to offset value-added, or other, taxes owed in Mongolia. However, the Law on VAT provides certain conditions which may limit the ability of a legal entity to register as a value-added taxpayer. On July 21, 2009, the Parliament has passed the Amendment pursuant

to which only exported "finished mineral products" become subject to zero rate VAT. Before the Amendment, there was no distinction between finished and unprocessed mineral products; and all mineral products that were exported were subject to zero rate VAT regardless of their level of processing. As such, an exporter/producer of mineral products could have had the VAT refunded at 10% rate on the purchases of services and goods paid for its operation to produce exported minerals. However, after the enactment of the Amendment on July 21, 2009 as mentioned previously, only so-called finished mineral products are subject to zero rate VAT, and sales of other minerals are exempted from the payment of VAT under newly introduced Article 13.1.16 of Law on VAT. This means that an exporter or producer of mineral products, other than "finished mineral products" for export, are not entitled to have the VAT paid on the purchases of goods and services used for its mining operation refunded. As a result, operating costs of an exporter or producer of mineral ore or unprocessed mineral will increase. The Amendment did not define what constituted exported "finished mineral products". Instead, it provides that the Government (the Cabinet) shall adopt a regulation on list and category of the finished mineral products. As such, until the Government adopted its regulation on the list of finished mineral products and provided guidance on the implementation of the Amendment, it was unclear whether the Amendment is currently enforceable. The Amendment was passed on July 21, 2009 was silent on its effective date. According to Article 26.3 of the Constitution of Mongolia and Article 43.2 of the Law on State Great Hural (Parliament) of Mongolia, if a law in question does not provide specific date of its entry into force, the law will enter into force ten days after its official publication thereof on a Government gazette called "The Government News" ("Turiin Medeelel"). As the Amendment was published on August 6. 2009, the Law should be in effect commencing on 16 August, 2009. However, the Government has issued on 10 November, 2010 its Resolution No. 286 on the List of Final Mining Products, which includes Coal washed and processed (code 2701.19.00), Briquette and compressed coal generated from the coal and similar solid fuel (code 2701.20.00), Coal coke and semi-coke (code 2704.00.10), and Lignite coke and semi-coke (code 2704.00.20). Finished products that are exported are, however, subject to a zero rate of VAT and VAT paid to produce such products may be claimed back.

- Equipment and other goods imported into Mongolia are also subject to an import duty, generally at the rate of 5%. An additional excise tax is payable on the importation of petroleum products and some motor vehicles. It should be noted that value-added tax is also imposed on them.
- Mongolian employers are required to withhold income tax and social insurance fees owed by their employees from salaries payable to such employees, and to make an additional employer payment to the Mongolian social insurance fund. The relevant laws have been substantially revised, and effective from May 8, 2008 these rules apply to Mongolian and non-Mongolian employees. These rules also apply to independent contractors. Payments to the social insurance fund are to be made in respect of all salary, bonus and benefit payments (e.g., housing and transportation allowances) received by the individual. Employees must pay 10% of such total compensation package (to be withheld by the employer), but such percentage will be applied to a maximum compensation amount which is adjusted annually but which is currently set at MNT1,404,000 per month (i.e., income in excess of this amount is not subject to the 10% assessment). The employer must pay an additional 11-13% (13% in respect of employees engaged in dangerous occupations, such as mining) and such percentage is applied to all compensation paid to the employee with no maximum amount limitation.

• The Company and the Company's Mongolian subsidiaries will be obligated to make other regular payments which do not fall under the above-noted tax laws of Mongolia. For example, fees will be payable in respect of foreign citizens employed in Mongolia, for the use of water, for lease payments in respect of land surface rights, for environmental bonding obligations (addressed in more detail above), for annual mineral license fees and other license renewal fees, for mineral royalties, air pollution fee and for annual vehicle taxes, and fees for usage of auto road.

#### **DIRECTORS AND MANAGEMENT**

### General

The Board consists of eleven Directors, comprising two executive Directors, six non-executive Directors and three independent non-executive Directors.

The principal functions and duties conferred on our Board include:

- convening Shareholders' general meetings and reporting our Board's work at Shareholders' general meetings;
- implementing the resolutions passed by our Shareholders in general meetings;
- deciding our business plans and investment plans;
- preparing our annual financial budgets and final reports;
- formulating the proposals for profit distributions, recovery of losses and for the increase or reduction of our authorized share capital; and
- exercising other powers, functions and duties conferred by our Shareholders in general meetings.

The following table provides information about our Directors and other senior managers of our Company.

Name	Age	Position
<b>Board of Directors</b>		
Odjargal Jambaljamts	46	Executive Director and Chairman of the Board
Battsengel Gotov	39	Executive Director and Chief Executive Officer
Oyungerel Janchiv	57	Non-executive Director
Philip Hubert ter Woort	50	Non-executive Director
Batsaikhan Purev	45	Non-executive Director
Enkh-Amgalan Luvsantseren	42	Non-executive Director
Gantumur Lingov	41	Non-executive Director
Enkhtuvshin Gombo	40	Non-executive Director
Ochirbat Punsalmaa	70	Independent non-executive Director
Unenbat Jigjid	49	Independent non-executive Director
Chan Tze Ching, Ignatius	55	Independent non-executive Director
Senior Management		
Enkhzaya Nyamdorj	37	Vice President and Chief Financial Officer
Ulemj Baskhuu	33	Vice President and Chief Investment Officer
Enkhtuvshin Dashtseren	36	Vice President and Chief Marketing Officer
Oyunbat Lkhagvatsend	35	Vice President and Chief Logistics Officer
Uurtsaikh Dorjgotov	47	Vice President and Chief Legal Counsel
Davaakhuu Chultem	39	Vice President, Operations and Project Management
Ariunaa Baldandorj	46	Vice President, Corporate Communications and Public
		Relations
Andrew Little	59	Executive General Manager, Technical Services
Gary Ballantine	43	Executive General Manager, Exploration and Geology
Bayarbayasgalan Dorjderem	38	General Manager, Mining
Baigalmaa Shurka	49	Executive General Manager, UHG Site
Batbold Khorloo	46	Executive General Manager, BN Site

#### **Executive Directors**

Odjargal Jambaljamts is an executive Director and Chairman of the Board of the Company. Mr. Jambaljamts was appointed as an executive Director of the Company in May 2010. Mr. Jambaljamts is also the Chairman of the Nomination Committee and member of the Remuneration Committee. He ceased to be Chairman of the Remuneration Committee in January 2012. From 1993 to the present, Mr. Jambaljamts has been the Chairman of MCS Holding, the controlling shareholder of the Company. From 1989 to 1991, Mr. Jambaljamts was an automation engineer at the Energy Authority of Ulaanbaatar, Mongolia. From 1992 to 1993, he was an economist at the Hydropower LLC for the Project of Egiin River. Mr. Jambaljamts was awarded a bachelor's degree in cybernetics of electrical system by the Kiev Polytechnic Institute, Ukraine, and holds his master's degree in business administration from the Maastricht School of Management, Ulaanbaatar, Mongolia.

Battsengel Gotov is an executive Director and Chief Executive Officer of the Company. Dr. Gotov was appointed as an executive Director of the Company in May 2010. Dr. Gotov joined the Group in June 2008 as the Chief Executive Officer of ER LLC. Since 2004, Dr. Gotov has served at various managerial positions in the MCS Group. From 1996 to 2000, Dr. Gotov was an assistant professor at Comenius University in Bratislava. He moved to the University of Cologne, Germany in September 2000 as a research fellow sponsored by the Alexander von Humboldt Foundation. He stayed at the University of Cologne, Germany from September 2000 until October 2003 as a postdoctoral fellow. Dr. Gotov is a board member of the Mongolian National Mining Association, the Mineral Industry Safety Association and the South Gobi Business Council. Dr. Gotov was awarded a master's degree in science and a PhD in organic chemistry by the Comenius University, Slovakia.

#### **Non-executive Directors**

Oyungerel Janchiv is a non-executive Director of the Company. She was appointed as a non-executive Director of the Company in September 2010. She is a representative of Petrovis Resources Inc., a substantial shareholder of the Company. Between 1979 and 1982, Dr. Janchiv served as a petroleum economist at the Oil Supply Management Authority. From 1988-1990, she served as a chief economist at the Oil Supply Management Authority. From 1990 to 1996, she was the general director of the board of directors of the Neft Import Concern and was responsible for managing the importation and distribution of petroleum products. Since 1996, Dr. Janchiv has been the Chairperson and general director of Petrovis LLC, the largest petroleum import and distribution company in Mongolia. Dr. Janchiv is also a non-executive director of Petro Matad Limited, a subsidiary of Petrovis LLC, engaged in oil exploration and listed on the London Stock Exchange. She was appointed as the non-executive chairperson of Petro Matad Limited in 2012. Dr. Janchiv was awarded a diploma of engineer-economist for the petroleum and gas industry and a PhD by the Gubkin State University of Oil and Gas in Moscow, Russian Federation.

Philip Hubert ter Woort is a non-executive Director of the Company. He was appointed as a non-executive Director of the Company in September 2010. Mr. ter Woort was appointed as a member of the Corporate Governance Committee in January 2012. He is a representative of the EBRD. Between 1990 and 1997, Mr. ter Woort worked in ING Bank N.V. and he held various positions within the ING Group (and its predecessors). From 1997 to 1998, Mr. ter Woort worked for Cargill Financial Services in Geneva, Switzerland as a senior structured financier. In 1998, Mr. ter Woort joined ABN AMRO Bank in Moscow as vice president in corporate banking. From 2000 to 2001, he served as branch manager of ABN AMRO Bank St. Petersburg Branch responsible for managing ABN AMRO Bank Russia's commercial banking activities in the northwestern part of Russia. From 2001-2005, Mr. ter Woort served as chairman of supervisory board of directors of Rabo Invest OOO, Moscow, a soft commodity financier in Russia and a wholly owned subsidiary of Rabobank the Netherlands. From 2005 to 2009, Mr. ter Woort was active as a private residential property investor during which period

he built and managed a residential property investment portfolio in a number of countries. In 2009, Mr. ter Woort was appointed as the Head of EBRD Mongolia Resident Office. Mr. ter Woort was awarded a master's degree in economics by the University of Amsterdam, the Netherlands.

Batsaikhan Purev is a non-executive Director of the Company. He was appointed as a non-executive Director of the Company in September 2010. He is a representative of Shunkhlai Mining, a shareholder of the Company. He is a founder of Shunkhlai LLC, one of the first private companies in Mongolia and one of Mongolia's largest petroleum companies. He has been the general director of Shunkhlai LLC and Shunkhlai Group LLC, and an Executive Director of Shunkhlai Mining LLC since 1993. Mr. Purev was appointed as the Chairman and President of Shunkhlai Group LLC in January 2012. He is a Chairman of APU, a company listed on the Mongolian Stock Exchange. Mr. Purev was awarded a bachelor's degree in mechanical engineering by the Mongolian Technical University, Mongolia.

Enkh-Amgalan Luvsantseren is a non-executive Director of the Company. He was appointed as a non-executive Director of the Company in September 2010. He is a representative of MCS Holding LLC, the controlling shareholder of the Company. Mr. Luvsantseren joined the MCS Group in 1997. During his career in the MCS Group, he held various executive positions, including deputy director of MCS Holding and managing director of MCS Electronics. Mr. Luvsantseren has been the vice president of the MCS Group since 2002. He is a chairman of Coal Road LLC, Unitel LLC and MCS Electronics. Mr. Luvsantseren was awarded a diploma in journalism by Saint-Petersburg State University, Russia, and a master's degree in business administration by Handong Global University, South Korea.

Gantumur Lingov is a non-executive Director of the Company. He was appointed as a non-executive Director of the Company in September 2010. He is a representative of MCS Holding LLC, the controlling shareholder of the Company. Mr. Lingov taught at the Computer Science & Management School of Mongolian Technical University from 1993 to 1997. From February to August 1997, Mr. Lingov was the project coordinator of the UNESCO/DANIDA Project. Mr. Lingov worked at Procter & Gamble from 1999 to 2005, and was appointed distributor operations manager for the whole Central Asia and Caucasus region in April 2004. Since 2006, Mr. Lingov has been the vice president for human resources of the MCS Group. Mr. Lingov was awarded a diploma as engineer-economist for the fuel and energy industry by the Moscow State Academy of management, Russia, and a master's degree in business administration (international business) by the Maastricht School of Management, the Netherlands.

Enkhtuvshin Gombo is a non-executive Director of the Company. She was appointed as a non-executive Director of the Company in September 2010. Ms. Gombo is also a member of the Audit Committee. She is a representative of MCS Holding, the controlling shareholder of the Company. Ms. Gombo is currently the vice president responsible for finance and investment of MCS Holding. Ms. Gombo joined the MCS Group in 2003 as a financial analyst of MCS Holding and became the head of the planning unit of the finance department in 2006. Ms. Gombo was appointed as a director of MCS Group's finance department in 2008. Ms. Gombo was awarded a bachelor's degree in banking and finance from the Economic College of Mongolia, a master's degree in business administration from the University of Birmingham, UK, and a master's degree in finance from the University of Colorado, United States.

# **Independent Non-Executive Directors**

*Ochirbat Punsalmaa* is an independent non-executive Director of the Company. Mr. Punsalmaa was appointed as an independent non-executive Director of the Company in September 2010. Mr. Punsalmaa is a member of the Audit Committee, and the Nomination Committee. He was appointed as

the Chairman of the Remuneration Committee in January 2012. During 1972 to 1990, Mr. Punsalmaa held various positions with the Government of Mongolia, including as a deputy minister of the Ministry of Power Energy and Mining, minister of the Ministry of Fuel and Power Energy, chairman of the State Committee of External Economic Relations and Cooperation and minister of the Ministry of External Economic Relation. Mr. Punsalmaa was the President of Mongolia between 1990 and 1997. Since 1997, he has been the chairman of the board of Ochirbat Foundation. He was awarded a PhD in technical sciences from the Moscow Mining Institute, Russia, and honorary doctorate degree from Dankook University, South Korea, Mongolian Technical University, Mongolia and Saint Petersburg Mining Institute, Russia. He became an Academician of Mongolian Academy of Science in July 2011. Mr. Punsalmaa was credited as a Barrister Emeritus by the School of Law, Texas Wesleyan University, United States.

Unenbat Jigjid is an independent non-executive Director of the Company. Mr. Jigjid was appointed as an independent non-executive Director of the Company in September 2010. Mr. Jigjid is a member of the Audit Committee, Nomination Committee and Remuneration Committee. He ceased to be the Chairman of the Audit Committee and was appointed as the Chairman of the Corporate Governance Committee in January 2012. From 1990 to 2000, Mr. Jigjid held various positions in the Bank of Mongolia, including as an economist, senior economist, director of the monetary policy department and governor. During 2000 and 2006, Mr. Jigjid was the executive director of the Mongolian Bankers Association. Since 2009, Mr. Jigjid has been an executive director of the Corporate Governance Development Center in Mongolia. He is also a member of the supervisory board of the Bank of Mongolia and the board of Micro Finance Development Fund. From October 2010, Mr. Jigjid serves as a director of Golomt Bank and Resources Investment Capital. He was appointed as the board member of Open Society Forum in Mongolia in March 2011. Mr. Jigjid was awarded a master's degree in economics by the Moscow Institute of Economics and Statistics, Russia, and a master's degree in international affairs by Columbia University, United States.

Chan Tze Ching, Ignatius is an independent non-executive Director of the Company. Mr. Chan was appointed as an independent non-executive Director of the Company in September 2010. Mr. Chan was appointed as the Chairman of the Audit Committee and member of the Corporate Governance Committee in January 2012. From 1980 to 2007, Mr. Chan held various positions with Citigroup, including management associate, country treasurer and head of sales and trading, head of corporate banking business for Hong Kong, country officer for Taiwan, chief operating officer for Greater China, country officer for Hong Kong and head of corporate and investment banking business for Greater China. In 2008, he was the deputy chief executive of the Bank of China (Hong Kong) Limited. Mr. Chan was appointed as a senior advisor of The Bank of East Asia in March 2009 and of CVC Capital Partners Limited in November 2010. He was appointed as an honorary advisory vice president of The Hong Kong Institute of Bankers in February 2011. Mr. Chan is a member of the Disciplinary Appeals Committee of the Hong Kong Securities Clearing Company Limited and independent non-executive director of the Hong Kong Exchanges and Clearing Limited, the shares of which are listed on the Hong Kong Stock Exchange. He was appointed as non-executive director of Rizal Commercial Banking Corporation, the shares of which are listed on the Philippines Stock Exchange, in November 2011. Mr. Chan was awarded bachelor's and master's degrees in business administration by the University of Hawaii, United States, and is a Certified Public Accountant with the American Institute of Certified Public Accountants.

#### **Senior Management**

*Enkhzaya Nyamdorj* is the Vice President and Chief Financial Officer of the Company. Ms. Nyamdorj joined the Company as a Deputy Chief Financial Officer on August 1, 2011. She was appointed as the Chief Financial Officer in November 2011. Prior to joining the Company, Ms. Nyamdorj was a senior manager at Ernst & Young LLP's Chicago office, where she had been working

since 2000. With over 10 years of experience in public accounting, finance and business development, she has a strong background working with companies in diverse industries and various sizes including newly formed companies, publicly listed companies and corporations within the Fortune 500. Ms. Nyamdorj is a Certified Public Accountant in the United States and a member of the California Society of Certified Public Accountants. Ms. Nyamdorj was awarded a bachelor's degree in Business Administration, Economics and Marketing by the National University of Mongolia, Mongolia in 1997 and a master's degree in Business Administration in International Business and Finance by the Schiller International University, United States.

*Ulemj Baskhuu* is the Vice President and Chief Investment Officer of the Company. Ms. Baskhuu was appointed as vice president responsible for investment of Energy Resources Rail LLC in December 2008. Ms. Baskhuu has worked for major banks and held various senior positions such as director of financial institutions at the Trade and Development Bank of Mongolia and head of investment banking at Khan Bank. Ms. Baskhuu was awarded a bachelor's degree in business administration from the Mercer University, United States.

Enkhtuvshin Dashtseren is the Vice President and Chief Marketing Officer of the Company. Mr. Dashtseren has held various positions including chief financial officer and vice president for the Corporate Strategy of MCS Holding since he joined the MCS Group in 1997. He joined ER LLC in 2008 as the vice president and chief marketing officer and has played a key role in obtaining and maintaining the current customer base of the Company. Mr. Dashtseren was awarded a bachelor's degree in finance and management from the National University of Mongolia, Mongolia.

Oyunbat Lkhagvatsend is the Vice President and Chief Logistics Officer of the Company. In February 2011, Mr. Lkhagvatsend was appointed as the Chief Executive Officer of Energy Resources Rail LLC, Transgobi LLC, Tavan Tolgoi Airport LLC, Energy Resources Road LLC and Gobi Road LLC. Mr. Lkhagvatsend has 11 years of experience in the business sector of Mongolia, holding senior positions in various businesses in the country. From 2003 to 2005, Mr. Lkhagvatsend was the chief executive officer of Newcom Group and was responsible for strategy planning and business development. From May 2005 to December 2006, he was the president and chief executive officer of Eznis Airways and was in charge of strategy planning, project management and other corporate affairs. He joined the Group in 2008 as the chief executive officer of Energy Resources Rail LLC and was responsible for overall business strategy and planning. Mr. Lkhagvatsend was awarded a bachelor's degree in law from the National University of Mongolia, Mongolia. He also underwent executive trainings held by the Michigan Business School, United States, in 2004.

*Uurtsaikh Dorjgotov* is the Vice President and Chief Legal Counsel of the Company. Ms. Dorjgotov joined the Group in December 2009. Prior to joining the Company, Ms. Dorjgotov was the director of the legal and administration department and chief legal counsel of MCS Holding LLC. She also worked for 6 years on the USAID-funded Mongolia Privatisation Program of Barents Group of Bearing Point, Inc. as in-house lawyer and for 10 years at the Prosecutor General Office of Mongolia as a supervising prosecutor. Ms. Dorjgotov was awarded a master's degree (LL.M.) from the University of Waikato, New Zealand, and also a diploma of lawyer from the University of Irkutsk, Russia.

Davaakhuu Chultem is the Vice President responsible for operations and project management of the Company. In February 2011, Mr. Chultem was appointed as the Chief Executive Officer of Energy Resources Mining LLC, Enrestechnology LLC and United Power LLC. From September 1998 to February 2010, Mr. Chultem held various engineering and managerial positions with MCS International LLC, including Deputy Director of MCS International LLC, prior to joining ER LLC in April 2010. He has over 14 years of experience in the project implementation of heating systems and power plants, and has been involved in various national level energy sector projects. Mr. Chultem was

awarded a bachelor's degree in power engineering from the Mongolian Technical University, Mongolia and a master's degree in business administration from the La Trobe University, Australia.

Ariunaa Baldandorj is the Vice President responsible for corporate communications and public relations of the Company. She started her professional career as a journalist in the Mongolian press agency Montsame, and worked as a consultant in various projects of the Asian Development Bank. In 2002, she joined the MCS Group as head of the marketing department and was responsible for the establishment and development of the marketing functions of the MCS Group. Ms. Baldandorj has over 21 years of experience in marketing, public relations and related fields, and joined the Group in April 2010. Ms. Baldandorj was awarded a bachelor's degree in economics from the Moscow Economics University, Russia, and a master's degree in international business and marketing from the University of Waikato, New Zealand.

Andrew Little is the Executive General Manager responsible for technical services of the Company. Mr. Little has been a member of the Australian Institute of Mining and Metallurgy for 22 years and is also a member of the Australian Coal Preparation Society. Mr. Little has over 35 year experience in the mining industry, including 8 years in the Australian coal mining industry with Utah Development Company at Peak Downs coking coal mine and Capricorn Coal Management at German Creek coking coal mine. He has also held operational and technical positions with Hedges Gold Mine (Alcoa), Alcoa Alumina and Minproc Engineers. From 1997 to 2007 Mr. Little was technical director responsible for mining and metals with JPMorgan. Mr. Little joined the Group in April 2008 as technical director with primary responsibility for the technical development of the UHG coal project. Mr. Little was awarded a diploma of mining engineering by RMIT University, Melbourne, Australia, and a graduate diploma in business (management studies) from Edith Cowan University, Australia.

Gary Ballantine is the Executive General Manager responsible for exploration and geology of the Company. Mr. Ballantine has over 22 years of experience in mining and geology, and has held various positions in Australian mining companies, such as Micromine Pty Limited and BHP Billiton. Mr. Ballantine was appointed as Executive General Manager responsible for exploration and geology of the Company in July 2010 and has been advising on upcoming resource reviews and approval of borehole data for JORC compliance as well as for the designing, budgeting and supervising of our 5 year exploration program and the setting up of the geology department of the Company. Mr. Ballantine was awarded a bachelor's degree in geology by the University College of Southern Queensland, Australia, and a postgraduate diploma in geology from James Cook University, Australia. Mr. Ballantine has been a member of the Australian Institute of Mining and Metallurgy since 1987.

Bayarbayasgalan Dorjderem is the General Manager responsible for mining of the Company. Mr. Dorjderem has 16 years of extensive experience in the mining industry, having started his professional career at the Baganuur coal mine, which once was the largest open cut coal mine operating in Mongolia. From 1995 to 2009, Mr. Dorjderem has held various positions at Baganuur Joint Stock Company, including as a mine surveyor and a mine chief surveyor. Mr. Dorjderem joined ER LLC in January 2009 as a chief surveyor and was later promoted to general manager responsible for mining. Mr. Dorjderem was awarded a bachelor's degree in mine surveying from the Mongolian Technical University, Mongolia.

Baigalmaa Shurka is the Executive General Manager of our UHG site. Ms. Shurka joined ER LLC in 2008 as the Head of the HSE & Infrastructure Division and was responsible for projects design development and implementation. Ms. Shurka was promoted to deputy director responsible for corporate sustainable development in 2010. Prior to joining ER LLC, Ms. Shurka was a senior engineer at IMMI LLC from 2005 to 2008. Ms. Shurka was awarded a diploma in an environmental engineering by Irkutsk Polytechnic Institute. Russia, in 1986. She holds a masters degree in public administration from the National University of Mongolia, Mongolia, and a master's degree in civil engineering from School of Mines & Technology, Rapid City, South Dakota, United States.

Batbold Khorloo is the Executive General Manager of our BN mine. Mr. Khorloo joined MCS Group in 2001 as the Head of the hydropower department of MCS International LLC. Mr. Khorloo has extensive experience in mining project operations and management. He held positions as the deputy director responsible for Ukhaa Khudag branch operation and as the executive director of Energy Resources Mining LLC and Tavan Tolgoi Airport LLC. Mr. Batbold was awarded a bachelor's degree in science from Moscow Civil Engineering University, Russian Federation and a master's degree in business administration from the Institute of Business Administration, Mongolia.

### **Company Secretary**

NG Sin Yee was appointed as Secretary of our Company in July 2010. Ms. Ng is the senior manager of the corporate services department of Tricor Services Limited. She is an associate of the Hong Kong Institute of Chartered Secretaries and the Institute of Chartered Secretaries and Administrators in the UK. Before joining the Tricor Group, Ms. Ng has worked in the Company Secretarial Department of Secretaries Limited, a professional service company wholly owned by Deloitte Touche Tohmatsu. Ms. Ng has more than 26 years of experience in company secretarial field and has been providing corporate services to both multi-national companies and listed companies in Hong Kong.

#### **Board Practices**

In the absence of extraordinary events, it is the practice of the Board to meet at least four times a year. At such meeting, our Directors conduct, among other things, an operational review of our business.

#### **Board Committees**

#### Audit Committee

The Board has established an Audit Committee, which operates under a charter approved by the Board. It is the Board's responsibility to ensure that an effective internal control framework exists within the Company. This includes internal controls to deal with both the effectiveness and efficiency of significant business processes, safeguarding of assets, maintenance of proper accounting records, and reliability of financial information as well as non-financial considerations such as benchmarking of operational key performance indicators. The Board has delegated the responsibility for the initial establishment and maintenance of a framework of internal controls and ethical standards for our management to the Audit Committee.

Our Audit Committee currently comprises one non-executive Director, Ms. Enkhtuvshin Gombo, and three independent non-executive Directors, namely Mr. Unenbat Jigjid, Mr. Ochirbat Punsalmaa and Mr. Chan Tze Ching, Ignatius. Mr. Chan Tze Ching, Ignatius is the Chairman of our Audit Committee.

#### Nomination Committee

The Nomination Committee of the Board is responsible for making recommendations to the Board regarding candidates to fill vacancies on the Board.

Our Nomination Committee, currently comprises one executive Director, Mr. Odjargal Jambaljamts, and two independent non-executive Directors, namely, Mr. Unenbat Jigjid and Mr. Ochirbat Punsalmaa. Mr. Odjargal Jambaljamts is the Chairman of our Nomination Committee.

#### Remuneration Committee

The Remuneration Committee of the Board is responsible for determining and reviewing compensation arrangements for our Directors, the chief executive officer and the senior management. The Remuneration Committee assesses the appropriateness of the nature and amount of emoluments of such officers on a periodic basis by reference to relevant employment market conditions with the overall objective of ensuring maximum shareholder benefit from the retention of a high quality board and executive team. To assist in achieving these objectives, the Remuneration Committee considers the nature and amount of executive Directors' and senior executives' emoluments with reference to our Company's financial and operational performance. All senior executives have the opportunity to qualify for participation in the Share Option Scheme, which currently provides incentives where specified criteria are met.

Our Remuneration Committee currently comprises one executive Director, Mr. Odjargal Jambaljamts, and two independent non-executive Directors, namely, Mr. Unenbat Jigjid and Mr. Ochirbat Punsalmaa. Mr. Ochirbat Punsalmaa is the Chairman of our Remuneration Committee.

# Corporate Governance Committee

The Corporate Governance Committee of the Board is responsible for reviewing and reporting to the Board on matters of corporate governance, including developing and reviewing the Company's policies and practices on corporate governance and making recommendations to the Board and to review and monitor training and continuous professional development of the directors and senior management of the Company and making recommendations on methods to improve directors' knowledge of the Company's business and governance policies and their responsibilities.

Our Corporate Governance Committee currently comprises one non-executive Director, Mr.Philip Hubert ter Woort, and two independent non-executive Directors, namely, Mr. Unenbat Jigjid and Mr. Chan Tze Ching, Ignatius. Mr. Unenbat Jigjid is the Chairman of our Corporate Governance Committee.

# PRINCIPAL SHAREHOLDERS

As at December 31, 2011, so far as known to any Director or chief executive of the Company, shareholders (other than a Director or chief executive of the Company) who had an interest or short position in the shares or underlying shares of the Company as recorded in the register required to be kept pursuant to section 336 of the SFO were as follows:

Name of substantial shareholder	Capacity/Nature of interest	Number of Shares	Approximate percentage of shareholdings in our Company
MCS Mining Group Limited	Beneficial owner	1,609,962,692 (L)	43.45%
(Notes 1 and 3)	Beneficial 6 wher	534,439,609 (S)	14.42%
MCS Group Limited	Interest of controlled	1,609,962,692 (L)	43.45%
(Notes 1 and 3)		534,439,609 (S)	14.42%
MCS Holding LLC	Interest of controlled	1,609,962,692 (L)	43.45%
(Notes 1 and 3)		534,439,609 (S)	14.42%
Mr. Odjargal Jambaljamts	Interest of controlled	1,609,962,692 (L)	43.45%
(Notes 1 and 3)		534,439,609 (S)	14.42%
Ms. Batmunkh Dashdeleg	Interest of spouse	1,609,962,692 (L)	43.45%
(Notes 1 and 3)	interest of species	534,439,609 (S)	14.42%
Mr. Od Jambaljamts	Interest of controlled	1,609,962,692 (L)	43.45%
(Notes 1 and 3)		534,439,609 (S)	14.42%
Ms. Munkhsuren Surenkhuu	Interest of spouse	1,609,962,692 (L)	43.45%
(Notes 1 and 3)	interest of species	534,439,609 (S)	14.42%
Petrovis Resources Inc.	Beneficial owner	423,000,000 (L)	11.42%
(Note 2)		.20,000,000 (2)	111.12/9
Petrovis LLC (Note 2)	Interest of controlled corporation	423,000,000 (L)	11.42%
Mongol Contract LLC (Note 2).	Interest of controlled corporation	423,000,000 (L)	11.42%
Dr. Oyungerel Janchiv	Interest of controlled corporation	423,000,000 (L)	11.42%
Mr. Batbold Batochir (Note 2) .		423,000,000 (L)	11.42%
Mr. Davaanyam Choindon (Note 2)	Interest of controlled corporation	423,000,000 (L)	11.42%
Ms. Shagdardulam Sambalkhundev (Note 2)	Interest of spouse	423,000,000 (L)	11.42%
Ms. Tuya Danzandarjaa (Note 2)	Interest of controlled corporation	423,000,000 (L)	11.42%
Kerry Mining (UHG) Limited (Note 4)	Registered owner	300,000,000 (L)	8.10%
Kerry Mining (Mongolia)	Interest of controlled	300,000,000 (L)	9.74%
Limited (Note 4)	corporation	60,714,285 (L)	
` ,	1	(Note 5)	
Fexos Limited (Note 4)	Interest of controlled	300,014,640 (L)	9.74%
•	corporations	60,714,285 (L)	
	•	(Note 5)	
Kerry Holdings Limited	Interest of controlled	300,014,640 (L)	9.74%
(Note 4)	corporations	60,714,285 (L)	
	_	(Note 5)	
Kerry Group Limited	Interest of controlled	349,093,642 (L)	11.06%
(Note 4)	corporation	(Notes 5 and 6)	
		60,714,285 (L) (Note 5)	

<sup>(</sup>L) – Long position (S) – Short position

Notes:

- (1) The entire issued share capital of MCS Mining Group Limited is wholly owned by MCS Group Limited which in turn is a direct wholly-owned subsidiary of MCS Holding LLC. MCS Holding LLC is owned as to approximately 49.84% by Mr. Odjargal Jambaljamts and 28.69% by Mr. Od Jambaljamts. Mr. Odjargal Jambaljamts is also director of MCS Holding LLC. Ms. Batmunkh Dashdeleg is the spouse of Mr. Odjargal Jambaljamts. Ms. Munkhsuren Surenkhuu is the spouse of Mr. Od Jambaljamts.
- (2) The entire issued share capital of Petrovis Resources Inc. is owned by Petrovis LLC which is owned as to approximately 33.4% by Dr. Oyungerel Janchiv, 33.3% by Mr. Davaanyam Choindon and 33.3% by Mongol Contract LLC (which is wholly owned by Ms. Tuya Danzandarjaa). Dr. Oyungerel Janchiv is the chairperson of Petrovis LLC. Mr. Batbold Batochir is the spouse of Dr. Oyungerel Janchiv. Ms. Shagdardulam Sambalkhundev is the spouse of Mr. Davaanyam Choindon.
- (3) On June 9, 2011, MCS Mining Group Limited, the controlling shareholder of the Company, entered into a new charge over the shares with Standard Bank Plc (the "New Share Charge") in respect of 336,650,250 shares (the "SB Charged Shares", whereby MCS Mining Group Limited granted security over the SB Charged Shares in favor of Standard Bank Plc. As a result of the decrease in the price of the shares, MCS Mining Group Limited further charged 87,418,330 shares and 75,857,848 shares in favor of Standard Bank Plc on October 27, 2011 and December 16, 2011, respectively, pursuant to the terms of the New Share Charge. On November 18, 2011, MCS Mining Group Limited entered into a share charge over the shares with International Finance Corporation ("IFC") in respect of 36,679,681 shares (the "IFC Charged Shares"), whereby MCS Mining Group Limited granted security over the IFC Charged Shares in favor of IFC. On December 28, 2011, MCS Mining Group Limited transferred 19,706,308 shares to IFC following the exercise by IFC of its right to convert a loan extended by IFC into shares.
- (4) Kerry Mining (UHG) Limited ("KMUHG") is a direct wholly-owned subsidiary of Kerry Mining (Mongolia) Limited ("KMM") which is owned as to approximately 49.38% by Fexos Limited ("Fexos"). Fexos is a direct wholly-owned subsidiary of Kerry Holdings Limited ("KHL") which in turn is a direct wholly-owned subsidiary of Kerry Group Limited ("KGL"). The shares of the Company in which KMUHG are shown to be interested are also included in the shares of the Company in which KMM, Fexos, KHL and KGL are shown to be interested.
- (5) Each of KMM, Fexos, KHL and KGL was deemed interested in 60,714,285 underlying shares held by KMM. Such underlying shares represent the number of shares of the Company that may be issued upon exercise of the conversion rights attaching to the convertible bonds issued by the Company to KMM's subsidiary. Please refer to the announcement of the Company dated June 1, 2011 for further details.
- (6) Out of KGL's corporate interest in 349,093,642 shares of the Company, 300,014,640 shares of the Company were held through companies in which KGL, through KHL, controls more than one-third of the voting power (other than those wholly-owned subsidiaries as aforementioned).

#### RELATED PARTY TRANSACTIONS

We and our subsidiaries engage in a broad range of related party transactions with our subsidiaries and affiliates, some of which are material to our operations. The following is a summary of material transactions we have engaged in with our direct and indirect shareholders, affiliates of our shareholders and other related parties, including those in which we or our management have a significant equity interest. We believe each of these arrangements as described below have been entered into based on agreements on arm's length terms or on terms that we believe have been at least as favorable to us as similar transactions with non-related parties. For a further discussion of related party transactions, see Note 31 to our financial statements as of and for the years ended December 31, 2009, 2010, and 2011 included elsewhere in this offering memorandum.

## **Ancillary Services**

As of December 31, 2009, 2010 and 2011, we recorded ancillary services payments to Uniservice Solution and MCS Holding and its affiliates, of US\$5.3 million, US\$25.2 million and US\$30.3 million, respectively. Ancillary services represent expenditures for support services such as consultancy, cleaning and canteen expense paid to Uniservice Solution and MCS Holding and its affiliates.

#### **Purchases of Goods**

As of December 31, 2009, 2010 and 2011, we recorded purchases of goods from MCS Property and MCS Holding and its affiliates, of US\$0.8 million, US\$0.4 million and US\$0.1 million, respectively. Purchases of goods represented concrete purchased from MCS Property and MCS Holding and its affiliates.

# Leases of Property, Plant and Equipment

As of December 31, 2009, 2010 and 2011, we recorded payments pursuant to leases of property, plant and equipment to MCS Electronics and MCS Holding and its affiliates, of US\$1.4 million, US\$1.2 million and US\$0.9 million, respectively. Leases of property, plant and equipment represented rental paid or payable in respect of properties and office equipment leased from MCS Electronics and MCS Holding and its affiliates.

# **Purchases of Equipment and Construction Work**

As of December 31, 2009, 2010 and 2011, we recorded purchases of equipment and construction work payments to MCS Electronics, Anun and MCS Holding and its affiliates, of US\$11.7 million, US\$42.4 million and US\$24.5 million, respectively. Purchases of equipment and construction work represented expenditure relating to equipment and construction service provided by MCS Electronics, Anun and MCS Holding and its affiliates.

#### Sales of Property, Plant and Equipment

As of December 31, 2009, 2010 and 2011, we recorded sale of property, plant and equipment to Uniservice Solution of nil, nil and US\$2.4 million, respectively.

# Finance Leases of Equipment

As of December 31, 2009, 2010 and 2011, we recorded expenditures relating to the lease of equipment from MCS Electronics through finance lease of nil, nil and US\$0.3 million, respectively. The rental charges are based on comparable or prevailing market rates.

# Loan to MCS Holding and MCS Electronics

We granted a US\$2.3 million loan to MCS Holding and MCS Electronics in the year ended December 31, 2009, which was subsequently repaid in full in the year ended December 31, 2010.

# Interest income for a loan to MCS Holding

As of December 31, 2009, 2010 and 2011, we recorded interest income from MCS Holding of US\$73,000, US\$42,000 and nil, respectively. The interest incomes relate from a loan granted by us to MCS Holding, under which the applicable interest rate was 2% per month.

# Interest expenses for loans from MCS Holding

As of December 31, 2009, 2010 and 2011, we paid interest expenses to MCS Holding of US\$158,000, nil and nil, respectively. The interest expense relates to a loan from MCS Holding, under which the applicable interest rate ranged from 18% to 24% per annum.

### DESCRIPTION OF OTHER MATERIAL INDEBTEDNESS

### US\$180 Million EBRD, FMO and DEG Loan Agreements

ER LLC has entered into an aggregate of US\$180 million loan facility agreements with (i) EBRD dated May 12, 2010, amended and restated on August 11, 2010 and further amended on October 8, 2010, (ii) FMO dated August 11, 2010 and further amended on October 13, 2010, and (iii) DEG dated August 11, 2010 and further amended on October 13, 2010, and each of them further amended on March 5, 2012 (collectively, the "EBRD, FMO and DEG Loan Agreements"), the proceeds of which were applied to the development of our CHPP. As of December 31, 2011, interest was payable semi-annually at the rate of six-month LIBOR plus a margin of 4.75%-6.85% per annum. Pursuant to the March 5, 2012 amendments to the EBRD, FMO and DEG Loan Agreements, interest is now payable semi-annually at the rate of six-month LIBOR plus a margin of 3.25%-3.75% per annum. US\$120 million principal amount of the loans are repayable in 11 semi-annual installments ending on May 15, 2016 and US\$60 million principal amount of the loans are repayable in two equal installments on May 15, 2015 and May 15, 2016. As of December 31, 2011, the outstanding principal amount was US\$169.1 million.

The EBRD, FMO and DEG Loan Agreements are secured by a comprehensive security package including fiducial security over accounts of our subsidiaries, our construction agreement with Sedgman for our CHPP, our coal mining agreement with Leighton, our offtake agreements, our CHPP, our water supply infrastructure assets and our 3x6 MW power plant. ER LLC is obligated to ensure that its debt service coverage ratio is not less than 1.50 to 1, its leverage ratio is less than 3.00 to 1, its current ratio is not less than 1.10 to 1 and total liabilities to tangible net worth ratio is less than 2.00 to 1. In the year ended December 31, 2011, ER LLC was violation of the debt service coverage ratio, the current ratio and the total liabilities to tangible net worth ratio. EBRD, FMO and DEG each waived these breaches to the EBRD, FMO and DEG Loan Agreements for such period.

Subject to certain exceptions, none of ER LLC nor its subsidiaries may (i) pay any dividends at any time when a default has occurred and is continuing, (ii) spend more than US\$30 million per year on any capital expenditures other than the coal handling and preparation plant and its related infrastructure, (iii) incur or permit to be outstanding any financial indebtedness if the Borrower is in breach of any financial ratio specified above, (iv) be the creditor in respect of any financial indebtedness or guarantee any obligation of another person, (v) create or allow to exist any security interest over its assets, (vi) enter into any derivative transaction, except in the ordinary course of business with an aggregate open position not exceeding US\$10 million, (vii) dispose of all or a substantial part of its assets or (viii) open or maintain any bank account. The EBRD, FMO and DEG Loan Agreements contain customary events of default.

### **Existing Standard Bank Facilities Agreement**

We entered into an aggregate of US\$400 million loan facility agreement with Standard Bank dated June 24, 2011 (the "Existing Standard Bank Facilities Agreement"), the proceeds of which were used to acquire our BN mine and for our general working capital and capital expenditure requirements. Interest is payable quarterly at the rate of six-month LIBOR plus a margin of 3.25% per annum. The loan matures on March 23, 2012. Energy Resources Corporation LLC has guaranteed our obligations under the loan. We and ER LLC granted a security interest in favor of Standard Bank over certain accounts to secure the facilities. As of December 31, 2011, the outstanding principal amount was US\$298.8 million.

The Existing Standard Bank Facilities Agreement contains customary covenants including, without limitation, on incurrence of financial indebtedness, acquisitions, disposals and capital expenditures and customary events of default.

We plan to repay the outstanding principal amount due under the Existing Standard Bank Facilities Agreement with cash and a portion of the amount we plan to draw down under the New Standard Bank Facilities Agreement.

# **New Standard Bank Facilities Agreement**

We have entered into a term loan facilities agreement with Standard Bank on March 8, 2012, pursuant to which Standard Bank and potentially a syndicate of lenders have agreed to make available to us term loan facilities of up to US\$300 million (the "New Standard Bank Facilities Agreement"). The facilities under the New Standard Bank Facilities Agreement will be split into two tranches of US\$250 million and US\$50 million (increasable to up to US\$100 million if up to US\$50 million is undrawn in the first tranche). The latter tranche will be made available to us when the relevant lenders have confirmed their commitments. On March 14, 2012, we drew down US\$50 million under the facilities for our cash needs. We plan to draw down US\$150 million on March 23, 2012 to repay a portion of the outstanding amount under the Existing Standard Bank Facilities Agreement. On or before March 29, 2012, we will provide notice to Standard Bank to reduce the size of the New Standard Bank Facilities Agreement to US\$200.0 million.

Interest is payable quarterly at the rate of the applicable LIBOR plus a margin of 5.25% per annum. The facilities will mature three years after the first draw down date and are repayable in installments on a quarterly basis, commencing on the last business day of December 2012. Each of the Subsidiary Guarantors has guaranteed our obligations under the New Standard Bank Facilities Agreement. In addition, ER LLC and we will grant a security interest in favor of Standard Bank over certain accounts, coal collateral and our rights under certain of our coal sales contracts to secure the facilities. Substantially simultaneously with the issuance of the Notes contemplated hereunder, the Collateral will be charged to secure both our obligations under the Notes and the facilities, on a pari passu basis. Standard Bank, the Subsidiary Guarantors, the trustee of the Notes, the Shared Security Agent and we will enter into an intercreditor agreement regulating the creditors' rights with respect to the Collateral and the guarantees provided by the Subsidiary Guarantors with respect to the Notes and our obligations under the facilities. See "Description of the Notes – Security – Intercreditor Agreement."

The New Standard Bank Facilities Agreement contains customary covenants including without limitation on incurrence of financial indebtedness, acquisitions, disposals and capital expenditure and customary events of default. In addition, we will need to comply with certain financial covenants, including maximum leverage ratio, minimum interest coverage ratio, security coverage ratio and minimum consolidated tangible net worth.

## **QGX** Convertible Bonds

The US\$85 million 2.0% QGX Convertible Bonds due December 2012 were issued by us on June 1, 2011 to and QGX Holdings Ltd. We issued the QGX Convertible Bonds as part of our consideration for the acquisition of our BN mine. The QGX Convertible Bonds will mature on December 1, 2012. The maturity date is extendable to March 1, 2013 subject to a reserve adjustment. The QGX Convertible Bonds are convertible into our shares at the bondholder's option in the four days prior to the maturity date at a conversion rate of HK\$10.92 per share. If our consolidated leverage ratio exceeds 5.5 to 1, the interest rate of the Convertible Bonds will increase to 4.0% per annum.

# Khan Bank Loan Agreement

ER LLC has entered into a US\$13 million loan agreement with Khan Bank LLC ("Khan Bank") dated December 26, 2011 (the "Khan Bank Loan Agreement"). Interest is payable monthly at the rate of 11% per annum. The loan matures on December 30, 2012. Transgobi LLC has granted a security interest in favor of certain our motor vehicles to secure the loan. As of December 31, 2011, the outstanding principal amount was US\$13.0 million.

#### DESCRIPTION OF THE NOTES

For purposes of this "Description of the Notes," the term "Company" refers only to Mongolian Mining Corporation, a company incorporated with limited liability under the laws of the Cayman Islands, and any successor obligor on the Notes, and not to any of its Subsidiaries. Each Subsidiary of the Company which guarantees the Notes is referred to as a "Subsidiary Guarantor," and each such guarantee is referred to as a "Subsidiary Guarantee."

The Notes are to be issued under an indenture (the "Indenture"), to be dated as of the Original Issue Date, among the Company, the initial Subsidiary Guarantors, as guarantors, and Deutsche Bank Trust Company Americas, as trustee (the "Trustee").

The following is a summary of certain provisions of the Indenture, the Notes, the Subsidiary Guarantees, the Security Documents and the Intercreditor Agreement. This summary does not purport to be complete and is qualified in its entirety by reference to all of the provisions of the Indenture, the Notes, the Subsidiary Guarantees, the Security Documents and the Intercreditor Agreement. It does not restate those agreements in their entirety. Whenever particular sections or defined terms of the Indenture not otherwise defined herein are referred to, such sections or defined terms are incorporated herein by reference. Copies of the Indenture will be available on or after the Original Issue Date during normal office hours at the corporate trust office of the Trustee at Deutsche Bank Trust Company Americas, Trust & Agency Services, 60 Wall Street, MS NYC60-2710, New York, New York 10005.

# **Brief Description of the Notes**

The Notes are:

- general obligations of the Company;
- effectively subordinated to secured obligations of the Company (other than to the extent of the Collateral securing the Notes), to the extent of the value of the assets serving as security therefor;
- senior in right of payment to any existing and future obligations of the Company expressly subordinated in right of payment to the Notes;
- at least *pari passu* in right of payment with all other unsecured, unsubordinated Indebtedness of the Company (subject to any priority rights of such unsubordinated Indebtedness pursuant to applicable law);
- guaranteed by the Subsidiary Guarantors on a senior basis, subject to the limitations described below under the caption "- The Subsidiary Guarantees" and in "Risk Factors Risks Relating to the Subsidiary Guarantees and the Collateral"; and
- effectively subordinated to all existing and future obligations of the Non-Guarantor Restricted Subsidiaries (defined below).

In addition, on the Original Issue Date, subject to the limitations described in "Risk Factors – Risks Relating to the Subsidiary Guarantees and the Collateral," the Notes will be secured by a pledge of the Collateral as described below under the caption "– Security" and will:

• be entitled to a first priority Lien on the Collateral (subject to any Permitted Liens and the Intercreditor Agreement) and shared on a *pari passu* basis among the holders of the Notes,

- the lenders of the New Standard Bank Facilities Agreement and any other creditors with respect to Permitted Pari Passu Secured Indebtedness incurred by the Company; and
- rank effectively senior in right of payment to unsecured obligations of the Company with respect to the value of the Collateral pledged by the Company securing the Notes (subject to any priority rights of such unsecured obligations pursuant to applicable law).

The Notes will mature on March 29, 2017, unless earlier redeemed or repurchased by the Company pursuant to the terms thereof and the Indenture.

The Indenture allows additional Notes to be issued from time to time (the "Additional Notes"), subject to certain limitations described under "– Further Issues." Unless the context requires otherwise, references to the "Notes" for all purposes of the Indenture and this "Description of the Notes" include any Additional Notes that are actually issued. The Notes will bear interest at 8.875% per annum from the Original Issue Date or from the most recent interest payment date to which interest has been paid or duly provided for, payable semi-annually in arrears on March 29 and September 29 of each year (each an "Interest Payment Date"), commencing September 29, 2012.

Interest on the Notes will be paid to Holders of record at the close of business on March 14 and September 14 immediately preceding an Interest Payment Date (each, a "Record Date"), notwithstanding any transfer, exchange or cancellation thereof after a Record Date and prior to the immediately following Interest Payment Date. In any case in which the date of the payment of principal of or premium (if any) or interest on the Notes (including any payment to be made on any date fixed for redemption or purchase of any Note) is not a Business Day in the relevant place of payment, then payment of principal or premium (if any) or interest need not be made in such place on such date but may be made on the next succeeding Business Day in such place. Any payment made on such Business Day shall have the same force and effect as if made on the date on which such payment is due, and no interest on the Notes shall accrue for the period after such date. Interest on the Notes will be calculated on the basis of a 360 day year comprised of twelve 30-day months.

The Notes will be issued only in fully registered form, without coupons, in denominations of US\$200,000 and integral multiples of US\$1,000 in excess thereof. No service charge will be made for any registration of transfer or exchange of Notes, but the Company may require payment of a sum sufficient to cover any transfer tax or other similar governmental charge payable in connection therewith.

All payments on the Notes will be made in U.S. dollars by the Company at the office or agency of the Company maintained for that purpose in the Borough of Manhattan, The City of New York (which initially will be the corporate trust administration office of the Trustee, currently located at Deutsche Bank Trust Company Americas, Trust & Agency Services, 60 Wall Street, MS NYC60-2710, New York, New York 10005, Attn: Corporates Team Deal Manager – Mongolian Mining Corporation, with a copy to: Deutsche Bank Trust Company Americas, c/o Deutsche Bank National Trust Company, Trust & Agency Services, 100 Plaza One, Mailstop JCY03-0699, Jersey City, New Jersey 07311, Attn: Corporates Team Deal Manager – Mongolian Mining Corporation), and the Notes may be presented for registration of transfer or exchange at such office or agency; provided that, at the option of the Company, payment of interest may be made by check mailed to the address of the Holders as such address appears in the Note register maintained by the Registrar or by wire transfer. Interest payable on the Notes held through DTC will be available to DTC participants (as defined herein) on the Business Day following payment thereof.

### The Subsidiary Guarantees

On the Original Issue Date, all of the Company's Subsidiaries will be Restricted Subsidiaries, and the initial Subsidiary Guarantors will consist of Mongolian Coal Corporation Limited, Mongolian Coal Corporation S.à.r.l., Energy Resources Corporation LLC, Energy Resources LLC, Energy Resources Mining LLC and Transgobi LLC. All of the Restricted Subsidiaries that are not Subsidiary Guarantors are collectively referred to herein as the "Non-Guarantor Restricted Subsidiaries."

The Company may at its option at any time cause any Restricted Subsidiary to become a Subsidiary Guarantor by causing such Restricted Subsidiary to execute and deliver to the Trustee a supplemental indenture to the Indenture pursuant to which such Restricted Subsidiary will guarantee the payment of the Notes.

Although the Indenture contains limitations on the amount of additional Indebtedness that the Non-Guarantor Restricted Subsidiaries may incur, the amount of such additional Indebtedness could be substantial. In the event of a bankruptcy, liquidation or reorganization of any Non-Guarantor Restricted Subsidiary, the Non-Guarantor Restricted Subsidiary will pay the holders of its debt and its trade creditors before it will be able to distribute any of its assets to the Company. See "Risk Factors – Risks Relating to the Notes – We are a holding company and payments with respect to the Notes are structurally subordinated to liabilities, contingent liabilities and obligations of our subsidiaries that do not guarantee the Notes."

As of December 31, 2011,

- the Company and its consolidated subsidiaries had approximately US\$561.7 million of consolidated indebtedness outstanding, of which approximately US\$478.2 million was secured;
- the Company and the Subsidiary Guarantors had approximately US\$478.2 million of secured indebtedness outstanding; and
- the Non-Guarantor Restricted Subsidiaries had approximately nil of consolidated indebtedness outstanding.

In addition, as of December 31, 2011, the Company and its consolidated subsidiaries had US\$94.9 million of capital commitments and contingent liabilities, including US\$54.2 million at the Non-Guarantor Restricted Subsidiaries.

The Subsidiary Guarantee of each Subsidiary Guarantor:

- is a general obligation of such Subsidiary Guarantor;
- is effectively subordinated to secured obligations of such Subsidiary Guarantor (if any, other than to the extent of the Collateral securing the Notes), to the extent of the value of the assets serving as security therefor;
- is senior in right of payment to all future obligations of such Subsidiary Guarantor expressly subordinated in right of payment to such Subsidiary Guarantee;
- ranks at least *pari passu* with all other unsecured, unsubordinated Indebtedness of such Subsidiary Guarantor (subject to any priority rights of such unsecured, unsubordinated Indebtedness pursuant to applicable law); and

• is effectively subordinated to all existing and future obligations of the Non-Guarantor Restricted Subsidiaries.

In addition, subject to the limitations described in "Risk Factors – Risks Relating to the Subsidiary Guarantees and the Collateral," the Subsidiary Guarantee of each Subsidiary Guaranter Pledgor (defined below) will:

- be entitled to a first-ranking security interest in the Collateral (subject to any Permitted Liens and the Intercreditor Agreement) pledged by such Subsidiary Guarantor Pledgor, as described below under "- Security" and shared on a pari passu basis by holders of the Notes, the lenders of the New Standard Bank Facilities Agreement and any other creditors with respect to Permitted Pari Passu Secured Indebtedness incurred by such Subsidiary Guarantor Pledgor; and
- rank effectively senior in right of payment to the unsecured obligations of such Subsidiary
  Guarantor Pledgor with respect to the value of the Collateral securing such Subsidiary
  Guarantee (subject to any priority rights of such unsecured obligations pursuant to
  applicable law).

The Company will cause each of its future Wholly Owned Restricted Subsidiaries which, directly or indirectly, own any mining deposits or reserves or any mining license (other than with respect to the Baruun Naran mine), as soon as practicable but in any event within five days after becoming a Restricted Subsidiary, to execute and deliver to the Trustee a supplemental indenture to the Indenture pursuant to which such Restricted Subsidiary will guarantee the payment of the Notes.

Notwithstanding the foregoing, the Company will not be obligated to cause any Restricted Subsidiary to guarantee the Notes to the extent such guarantee could reasonably be expected to give rise to or result in any conflict with or violation of applicable law (or risk of personal or criminal liability for the officers, directors, managers or shareholders of such Restricted Subsidiary). Each Subsidiary of the Company that guarantees the Notes after the Original Issue Date is referred to as a "Future Subsidiary Guarantor" and, upon execution of the applicable supplemental indenture to the Indenture, will be a "Subsidiary Guarantor."

Under the Indenture, and any supplemental indenture to the Indenture, as applicable, each of the Subsidiary Guarantors will jointly and severally guarantee the due and punctual payment of the principal of, premium, if any, and interest on, and all other amounts payable under, the Notes and the Indenture, subject to the limitations set forth herein. The Subsidiary Guarantors will (1) agree that their obligations under the Subsidiary Guarantees will be enforceable irrespective of any invalidity, irregularity or unenforceability of the Notes or the Indenture and (2) waive their right to require the Trustee to pursue or exhaust its legal or equitable remedies against the Company prior to exercising its rights under the Subsidiary Guarantees. Moreover, if at any time any amount paid under a Note or the Indenture is rescinded or must otherwise be restored, the rights of the Holders under the Subsidiary Guarantees will be reinstated with respect to such payments as though such payments had not been made. All payments under the Subsidiary Guarantees are required to be made in U.S. dollars.

Under the Indenture and any supplemental indenture to the Indenture, as applicable, each Subsidiary Guarantee will be limited to an amount not to exceed the maximum amount that can be guaranteed by the applicable Subsidiary Guarantor without rendering the Subsidiary Guarantee, as it relates to such Subsidiary Guarantor, voidable under applicable law relating to fraudulent conveyance, fraudulent transfer, financial assistance, corporate benefit, capital maintenance or similar laws affecting the rights of creditors generally. In respect of any Subsidiary Guarantor incorporated under the laws of Luxembourg (each, a "Luxembourg Subsidiary Guarantor"), the maximum liability of such Luxembourg Subsidiary Guarantor will be limited so that the maximum amount payable by it under

the Notes or the Indenture, shall at no time exceed the Maximum Amount notwithstanding any provision of the Notes or the Indenture. Any Subsidiary Guarantee of any Subsidiary Guarantor may include specific provisions limiting such guarantee to the extent such guarantee could reasonably be expected to give rise to or result in any conflict with or violation of applicable law (for risk of personal or criminal liability for the officers, directors, managers or shareholders of such Restricted Subsidiary). By virtue of these limitations, a Subsidiary Guarantor's obligations under its Subsidiary Guarantee could be significantly less than amounts payable with respect to the Notes, or a Subsidiary Guarantor may effectively have no obligation under its Subsidiary Guarantee. If a Subsidiary Guarantee were to be rendered voidable, it could be subordinated by a court to all other indebtedness (including guarantees and other contingent liabilities) of the applicable Subsidiary Guarantor and, depending on the amount of such indebtedness, a Subsidiary Guarantor's liability on its Subsidiary Guarantee could be reduced to zero.

The obligations of each Subsidiary Guarantor under its respective Subsidiary Guarantee may be limited, or possibly invalid, under applicable laws. See "Risk Factors – Risks Relating to the Subsidiary Guarantees and the Collateral – The Subsidiary Guarantees may be challenged under applicable bankruptcy, fraudulent transfer, insolvency or similar laws which could impair the enforceability of the Subsidiary Guarantees."

# Release of the Subsidiary Guarantees

A Subsidiary Guarantee given by a Subsidiary Guarantor may be released in certain circumstances, including:

- upon repayment in full of the Notes;
- upon a defeasance or satisfaction and discharge as described under "- Defeasance Defeasance and Discharge"; or "- Satisfaction and Discharge";
- upon the designation by the Company of a Subsidiary Guarantor as an Unrestricted Subsidiary in compliance with the terms of the Indenture;
- upon the sale of Capital Stock of a Subsidiary Guarantor (other than Energy Resources LLC) in compliance with the terms of the Indenture (including the covenants described under the captions "- Certain Covenants - Limitation on Sales and Issuances of Capital Stock in Restricted Subsidiaries," "- Certain Covenants - Limitation on Asset Sales," and "- Consolidation, Mergers and Sale of Assets") resulting in such Subsidiary Guarantor no longer being a Wholly Owned Restricted Subsidiary, so long as (1) the proceeds from such sale are used for the purposes permitted or required by the Indenture; (2) if such Subsidiary Guarantor is no longer a Restricted Subsidiary upon such sale, such Subsidiary Guarantor is simultaneously released from its obligations in respect of any of the Company's other Indebtedness or any Indebtedness of any other Restricted Subsidiary and neither the Company or any Restricted Subsidiary guarantees or provides credit support for any Indebtedness of such Subsidiary Guarantor upon such sale, unless the Company or such Restricted Subsidiary could have incurred the Indebtedness represented by such guarantee or credit support under the Indenture on the date of such release after giving pro forma effect to such sale and release and (3) if such Subsidiary Guarantor remains a Restricted Subsidiary upon such sale, any outstanding Indebtedness of such Subsidiary Guarantor for money borrowed which is owed to any Person other than the Company or any Restricted Subsidiary is repaid in full prior to the release of the Subsidiary Guarantee of such Subsidiary Guarantor, unless such Subsidiary Guarantor could have incurred such Indebtedness under the Indenture as a Restricted Subsidiary that is not a Subsidiary Guarantor on the date of such release after giving pro forma effect to such sale and release;

- upon the merger or consolidation of any Subsidiary Guarantor with and into the Company or a Wholly Owned Subsidiary Guarantor (or a Wholly Owned Restricted Subsidiary that becomes a Subsidiary Guarantor concurrently with the transaction) that is the surviving Person in such merger or consolidation, or upon the liquidation of such Subsidiary Guarantor following the transfer of all or substantially all of its assets to the Company or a Wholly Owned Subsidiary Guarantor (or a Wholly Owned Restricted Subsidiary that becomes a Subsidiary Guarantor concurrently with the transaction); or
- as described under "- Amendments and Waivers."

No release of a Subsidiary Guarantor from its Subsidiary Guarantee shall be effective against the Trustee or the Holders until the Company has delivered to the Trustee an Officers' Certificate stating that all requirements relating to such release have been complied with and that such release is not prohibited by the terms of the Indenture.

Under the circumstances described below under the caption "- Certain Covenants - Designation of Restricted and Unrestricted Subsidiaries," the Company will be permitted to designate certain of its Subsidiaries as "Unrestricted Subsidiaries." The Company's Unrestricted Subsidiaries will generally not be subject to the restrictive covenants in the Indenture and will not guarantee the Notes.

## **Security**

The Company has agreed, for the benefit of the Holders, to pledge all of the Capital Stock of Mongolian Coal Corporation Limited owned by the Company and to cause the initial Subsidiary Guarantor Pledgor to pledge all of the Capital Stock of Mongolian Coal Corporation S.à.r.l. owned by the initial Subsidiary Guarantor, in each case on a first-priority basis (subject to Permitted Liens and the Intercreditor Agreement) on the Original Issue Date pursuant to share mortgages or share charges on the applicable Capital Stock of such Restricted Subsidiaries (the "Share Charges") in order to secure the obligations of the Company under the Notes and the Indenture and of such initial Subsidiary Guarantor Pledgor under its Subsidiary Guarantee.

The initial Subsidiary Guarantor Pledgor is Mongolian Coal Corporation Limited.

The Collateral will secure on a pari passu basis (i) the obligations of the Company under the Notes and the Indenture and of the Subsidiary Guarantor Pledgors under the Subsidiary Guarantees; (ii) the obligations of the Company under the New Standard Bank Facilities Agreement and (iii) any Permitted Pari Passu Indebtedness. See "– Intercreditor Agreement."

The Company has also agreed, for the benefit of the Holders, to pledge, or cause each Subsidiary Guarantor to pledge, the Capital Stock owned directly by the Company or such Subsidiary Guarantor of any Person that is a Restricted Subsidiary and that directly or indirectly holds the mining license in relation to the Ukhaa Khudag mine (other than Persons organized under the laws of Mongolia) (each such Person, an "Ukhaa Khudag Restricted Subsidiary") after the Original Issue Date, promptly upon such Person becoming an Ukhaa Khudag Restricted Subsidiary, to secure the obligations of the Company under the Notes and the Indenture, and of such Subsidiary Guarantor under its Subsidiary Guarantee, in the manner described above.

Each Subsidiary Guarantor that pledges Capital Stock of a Restricted Subsidiary after the Original Issue Date is referred to as a "Future Subsidiary Guarantor Pledgor" and, upon giving such pledge, will be a "Subsidiary Guarantor Pledgor."

The value of the Collateral securing the Notes, the Subsidiary Guarantee of the Subsidiary Guarantor Pledgor and any other Indebtedness secured by the Collateral under the Intercreditor

Agreement will likely not be sufficient to satisfy the Company's and the Subsidiary Guarantor Pledgor's obligations under the Notes and the Subsidiary Guarantee of the Subsidiary Guarantor Pledgor, and the Collateral securing the Notes and such Subsidiary Guarantee may be reduced or diluted under certain circumstances, including the issuance of Additional Notes and the incurrence of other Permitted Pari Passu Secured Indebtedness and the disposition of assets comprising the Collateral, subject to the terms of the Indenture and the Intercreditor Agreement. See "– Release of Security" and "Risk Factors – Risks Relating to the Subsidiary Guarantees and the Collateral – The value of the Collateral will likely not be sufficient to satisfy our obligations under the Notes, the New Standard Bank Facilities Agreement and other Permitted Pari Passu Secured Indebtedness."

No appraisals of the Collateral have been prepared in connection with this offering of the Notes. There can be no assurance that the proceeds of any sale of the Collateral, in whole or in part, pursuant to the Indenture, the Intercreditor Agreement and the Security Documents or the Intercreditor Agreement following an Event of Default, would be sufficient to satisfy amounts due under the Notes, the Subsidiary Guarantees of the Subsidiary Guarantor Pledgors or other Indebtedness secured by the Collateral. Some or all of the Collateral will be illiquid and may have no readily ascertainable market value. Accordingly, there can be no assurance that the Collateral would be sold in a timely manner or at all.

So long as no Payment Default has occurred and is continuing, and subject to the terms of the Security Documents and the Indenture, the Company and any Subsidiary Guarantor Pledgor, as the case may be, will be entitled to exercise any and all voting rights and to receive, retain and use any and all cash dividends, stock dividends, liquidating dividends, non-cash dividends, shares or stock resulting from stock splits or reclassifications, rights issues, warrants, options and other distributions (whether similar or dissimilar to the foregoing) in respect of Capital Stock constituting Collateral.

#### Permitted Pari Passu Secured Indebtedness

On or after the Original Issue Date, the Company and any Subsidiary Guarantor Pledgor may create Liens on the Collateral pari passu with the Lien for the benefit of the Holders and the lenders under the New Standard Bank Facilities Agreement to secure Indebtedness of the Company (including Additional Notes) or any Subsidiary Guarantor Pledgor and any Pari Passu Subsidiary Guarantee of a Subsidiary Guarantor Pledgor or guarantee of the Company with respect to such Indebtedness of such Subsidiary Guarantor Pledgor (such Indebtedness of the Company, any Subsidiary Guarantor Pledgor and any such Pari Passu Subsidiary Guarantee or guarantee of the Company with respect to such Indebtedness of such Subsidiary Guarantor Pledgor, "Permitted Pari Passu Secured Indebtedness"); provided that (1) the Company or such Subsidiary Guarantor Pledgor was permitted to Incur and secure such Indebtedness under the Indenture and the New Standard Bank Facilities Agreement; (2) the holders of such Indebtedness (other than Additional Notes) or their representative or agent, become party to the Intercreditor Agreement; and (3) the Company and such Subsidiary Guarantor Pledgor deliver to the Trustee and the Shared Security Agent (as defined below) an Opinion of Counsel and Officers' Certificate with respect to compliance with the conditions stated in (1) and (2) above. The Trustee and/or the Shared Security Agent, as the case may be, will be permitted and authorized, without the consent of any Holder, to enter into any amendments to the Security Documents, the Intercreditor Agreement or the Indenture and take any other action necessary to permit the creation and registration of Liens on the Collateral to secure Permitted Pari Passu Secured Indebtedness in accordance with this paragraph and the terms of the Indenture (including, without limitation, the appointment of any collateral or security agent under the Intercreditor Agreement referred to below to hold the Collateral on behalf of the Holders, the lenders under the New Standard Bank Facilities Agreement and the holders of Permitted Pari Passu Secured Indebtedness (the "Shared Security Agent")).

Except for certain Permitted Liens and Permitted Pari Passu Secured Indebtedness, the Company and its Restricted Subsidiaries will not be permitted to Incur any other Indebtedness secured by all or

any portion of the Collateral without the consent of each Holder of the Notes then outstanding and the lenders under the New Standard Bank Facilities Agreement.

### Intercreditor Agreement

To regulate the application of proceeds of enforcement of the Collateral and the application of proceeds of enforcement of the guarantees provided by the Subsidiary Guarantors with respect to the Notes and the Company's and the Subsidiary Guarantors' obligations under the New Standard Bank Facilities Agreement (together the "Shared Guarantees"), the Company, the Subsidiary Guarantors, Standard Bank, the trustee of the Notes and the Shared Security Agent (among others) will enter into on or prior to the Original Issue Date an intercreditor agreement (as amended, waived, restated, replaced and/or supplemented from time to time, the "Intercreditor Agreement"). Neither the Trustee nor the Shared Security Agent shall have any liability to any Holder for so entering into the Intercreditor Agreement. The Intercreditor Agreement is governed by English law and sets out, among other things, the application of proceeds of enforcement of the Collateral and the Shared Guarantees and customary intercreditor provisions governing similar debt instruments. By accepting a Note, Holders shall be deemed to have agreed to, and accepted the terms and conditions of, the Intercreditor Agreement.

## Ranking and priority

The Intercreditor Agreement will provide that that the obligations of the Company and the Subsidiary Guarantors to the agent, lenders, arranger and security trustee in each case under the New Standard Bank Facilities Agreement (together the "Senior Finance Parties"), the Holders and the Trustee (together the "Notes Parties") and certain other creditors in relation to any Permitted Pari Passu Secured Indebtedness that have acceded to the Intercreditor Agreement (the "Pari Passu Finance Parties" and together with the Senior Finance Parties and the Notes Parties, the "Secured Parties"), shall rank *pari passu* in right of payment and without any preference between them save to the extent that such liabilities are secured by security other than the Collateral.

The Intercreditor Agreement will provide that the Collateral shall rank and secure the indebtedness under the New Standard Bank Facilities Agreement indebtedness, the Notes and any Permitted Pari Passu Secured Indebtedness (collectively, the "Secured Obligations") *pari passu* and without any preference between them.

# **Payments**

The Company and the Subsidiary Guarantors are entitled to make payments under the Notes, the New Standard Bank Facilities Agreement and any Permitted Pari Passu Secured Indebtedness at any time in accordance with the terms of the relevant documents entered into in relation to the Secured Obligations (the "Secured Party Documents") until the occurrence of an acceleration event under the Intercreditor Agreement (an "Acceleration Event"). After the occurrence of an Acceleration Event, repayments or prepayments of any obligations under the Secured Party Documents are to be made to the Shared Security Agent for application in accordance with the terms of the Intercreditor Agreement.

#### **Turnover**

Subject to certain limited exceptions in the Intercreditor Agreement, if at any time prior to the date on which all obligations under the Secured Party Documents are fully paid and discharged, any Secured Party receives or recovers the proceeds of, *inter alia*, any enforcement of any Collateral or the Shared Guarantees except in accordance with the provisions described below under "– Application of Proceeds," that Secured Party will:

- in relation to receipts and recoveries not received or recovered by way of set-off:
  - hold an amount of that receipt or recovery equal to the amount owed to such Secured
    Party (or if less, the amount received or recovered) on trust for the Shared Security
    Agent and promptly pay that amount to the Shared Security Agent for application in
    accordance with the terms of the Intercreditor Agreement; and
  - promptly pay an amount equal to the amount (if any) by which the receipt or recovery exceeds the amount owed to such Secured Party to the Shared Security Agent for application in accordance with the terms of the Intercreditor Agreement; and
- in relation to receipts and recoveries received or recovered by way of set-off, promptly pay an amount equal to that receipt or recovery to the Shared Security Agent for application in accordance with the terms of the Intercreditor Agreement.

## Enforcement

The first priority Liens and security interests (subject to any Permitted Liens and the Intercreditor Agreement) in the Collateral will be granted to the Shared Security Agent. The Shared Security Agent will hold such Liens and security interests in the Collateral granted pursuant to the Security Documents with sole authority as directed by the Secured Parties in accordance with the Intercreditor Agreement. The Shared Security Agent has agreed to act as security agent on behalf of the Secured Parties under the applicable Security Documents, to follow the instructions provided to it under the Intercreditor Agreement and to carry out certain other duties.

The Shared Security Agent shall refrain from enforcing the Collateral unless it receives enforcement instructions from either the Trustee, the agent of the Senior Finance Parties or the representative of holders of any Permitted Pari Passu Secured Indebtedness (each an "Agent"). An enforcement action is an instruction from an Agent to the Shared Security Agent to enforce the Collateral and is not to be construed to include any instruction from an Agent not to enforce the Collateral.

If there are conflicting enforcement instructions from any Agent in respect of the enforcement of the Collateral, the Shared Security Agent shall act in accordance with the first enforcement instruction it receives. Pursuant to the Intercreditor Agreement, the Trustee, the facility agent under the New Standard Bank Facilities Agreement and the representative of any Permitted Pari Passu Secured Indebtedness will be entitled to give instructions to the Shared Security Agent to foreclose the Collateral, upon the occurrence of a continuing event of default under the applicable finance document. In the event of any conflict between any enforcement instructions, the Shared Security Agent shall act in accordance with the first enforcement instruction it receives. If the preference of the holders of the Notes at such time is not to foreclose the Collateral, or if foreclosure may not at such time be in the best interest of the holders, the holders will not be able to instruct the Shared Security Agent to refrain from acting. In addition, other than with respect to enforcement instructions and other circumstances as described under the Intercreditor Agreement, creditors representing 50% or more of the indebtedness subject to the Intercreditor Agreement shall be entitled to give any instruction (other than enforcement instruction) which will override any conflicting instruction given by any other party.

If the indebtedness of the Notes at such time constitutes less than 50% of the indebtedness subject to the Intercreditor Agreement, the holders of the Notes will not be able to override any prevailing instruction, and such prevailing instruction may not be in the best interest of the holders of the Notes.

# Application of Proceeds

In general, all amounts from time to time received or recovered by the Shared Security Agent in connection with the realization or enforcement of all or any Collateral or otherwise paid to the Shared Security Agent for application pursuant to the provision under this "– Application of Proceeds" (the "Recoveries") shall be held by the Shared Security Agent on trust to apply them at any time as the Shared Security Agent (in its discretion) sees fit, to the extent permitted by applicable law, in the following order of priority:

first, in discharging any sums owing to the Shared Security Agent, or any receiver or delegate;

second, pari passu and pro rata in or towards payment of all costs and expenses incurred by the Secured Parties in connection with any realization or enforcement of the Collateral;

third, in payment to:

- (i) the agent on behalf of the Senior Finance Parties on its own behalf and on behalf of the Senior Finance Parties;
- (ii) the Trustee on its own behalf and on behalf of the Notes Parties; and
- (iii) in respect of any Permitted Pari Passu Secured Indebtedness, the relevant representative for holders of such Permitted Pari Passu Secured Indebtedness Agent on its own behalf and on behalf of the relevant Permitted Pari Passu Secured Finance Parties,

for application towards the discharge of the (a) indebtedness under the New Standard Bank Facilities Agreement, (b) the Notes and (c) any Permitted Pari Passu Secured Indebtedness, on a *pro rata* basis between paragraphs (a), (b) and (c) above;

fourth, if none of the Company or the Subsidiary Guarantors is under any further actual or contingent liability under any Secured Party Document, in payment to any person to whom the Shared Security Agent is obliged to pay in priority to any of the Company or the Subsidiary Guarantors; and

fifth, the balance, if any, in payment to the Company or the relevant Subsidiary Guarantor.

The Trustee and the Shared Security Agent may decline to foreclose on the Collateral or exercise remedies available if it does not receive indemnification and/or security to its satisfaction. In addition, the Trustee's ability to foreclose on the Collateral may be subject to lack of perfection, the consent of third parties, prior Liens and practical problems associated with the realization of the Trustee's Liens on the Collateral. Neither the Trustee nor any of its officers, directors, employees, attorneys or agents will be responsible or liable for the existence, genuineness, value or protection of any Collateral securing the Notes, for the legality, enforceability, effectiveness or sufficiency of the Security Documents or Intercreditor Agreement, for the creation, perfection, priority, sufficiency or protection of any of the Liens, or for any defect or deficiency as to any such matters, or for any failure to demand, collect, foreclose or realize upon or otherwise enforce any of the Liens or Security Documents or any delay in doing so.

The Security Documents provide that the Company and the Subsidiary Guarantor Pledgors will indemnify the Trustee, the Shared Security Agent or any of their respective officers, directors, employees, attorneys or agents for all liabilities, obligations, losses, damages, penalties, actions,

judgments, suits, costs, claims, expenses or disbursements of any kind imposed against the Trustee or the Shared Security Agent arising out of the Security Documents except to the extent that any of the foregoing are finally judicially determined to have resulted from the gross negligence or willful misconduct of the Trustee or the Shared Security Agent.

This section, "- Enforcement," shall be subject to any amendments to the Security Documents or the Indenture to permit the creation of Liens on the Collateral to secure Permitted Pari Passu Secured Indebtedness in accordance with "- Permitted Pari Passu Secured Indebtedness" above.

# Release of Security

The security created in respect of the Collateral granted under the Security Documents may be released in certain circumstances, including:

- upon repayment in full of the Notes;
- upon defeasance and discharge of the Notes as provided below under the caption "Defeasance Defeasance and Discharge";
- upon certain dispositions of the Collateral in compliance with the covenants described under "- Certain Covenants - Limitation on Sales and Issuances of Capital Stock in Restricted Subsidiaries" or "- Certain Covenants - Limitation on Asset Sales" or in accordance with the provision described under "- Certain Covenants - Consolidation, Merger and Sale of Assets";
- with respect to security granted by a Subsidiary Guarantor Pledgor, upon the release of the Subsidiary Guarantee of such Subsidiary Guarantor Pledgor in accordance with the terms of the Indenture;
- with respect to Capital Stock of a Subsidiary Guarantor constituting Collateral, upon the transfer of all such Capital Stock to the Company or Wholly Owned Subsidiary Guarantor (or a Wholly Owned Restricted Subsidiary that becomes a Subsidiary Guarantor concurrently with the transaction), *provided* that concurrently or immediately subsequent to such transfer, the transferee creates a first priority Lien on such Capital Stock (subject to Permitted Liens and the Intercreditor Agreement) for the benefit of the Holders;
- with respect to Capital Stock of a Ukhaa Khudag Restricted Subsidiary constituting Collateral, if such Collateral no longer constitutes Capital Stock of a Ukhaa Khudag Restricted Subsidiary; or
- in whole or in part, with the requisite consent of the Holders in accordance with the provisions described under "- Amendments and Waivers."

## **Further Issues**

Subject to the covenants described below, the Company may, from time to time, without notice to or the consent of the Holders, create and issue Additional Notes having the same terms and conditions as the Notes (including the benefit of the Subsidiary Guarantees and the Collateral) in all respects (or in all respects except for the issue date, issue price and the date and/or amount of the first payment of interest on them and, to the extent necessary, certain temporary securities law transfer restrictions) (a "Further Issue") so that such Additional Notes may be consolidated and form a single class with the previously outstanding Notes and vote together as one class on all matters with respect to the Notes; *provided* that the issuance of any such Additional Notes shall then be permitted under the "– Certain Covenants – Limitation on Indebtedness" covenant described below and the other provisions of the Indenture; and *provided further* that Additional Notes will not be issued under the same CUSIP, ISIN or Common Code as the Notes unless such Additional Notes are fungible with the Notes for United States federal income tax purposes.

In addition, the issuance of any Additional Notes by the Company will be subject to the following conditions:

- (1) the Additional Notes shall be secured and guaranteed under the Indenture and the Subsidiary Guarantees and any other Security Documents to the same extent and on the same basis as the Notes outstanding on the date the Additional Notes are issued; and
- (2) the Company shall have delivered to the Trustee an Officers' Certificate, in form and substance satisfactory to the Trustee, confirming that the issuance of the Additional Notes complies with the Indenture and is permitted by the Indenture.

## **Optional Redemption**

At any time and from time to time on or after March 29, 2015, the Company may at its option redeem the Notes, in whole or in part, at a redemption price equal to the percentage of principal amount set forth below, plus accrued and unpaid interest, if any, on the Notes redeemed, to (but not including) the applicable redemption date, if redeemed during the 12-month period commencing on March 29 of any year set forth below:

Period	Redemption Price
2015	104.4375%
2016	102.2188%

At any time and from time to time prior to March 29, 2015, the Company may at its option redeem the Notes, in whole or in part, at a redemption price equal to 100% of the principal amount of the Notes plus the Applicable Premium as of, and accrued and unpaid interest on the Notes redeemed, if any, to (but not including), the redemption date.

In addition, at any time and from time to time prior to March 29, 2015, the Company may at its option redeem up to 35% of the aggregate principal amount of the Notes with the Net Cash Proceeds of one or more sales of Common Stock of the Company in an Equity Offering at a redemption price of 108.875% of the principal amount of the Notes, plus accrued and unpaid interest on the Notes redeemed, if any, to (but not including) the redemption date; *provided* that at least 65% of the aggregate principal amount of the Notes issued on the Original Issue Date remains outstanding after each such redemption and any such redemption takes place within 60 days after the closing of the related Equity Offering.

The Company will give not less than 30 days' nor more than 60 days' notice of any redemption. If fewer than all of the Notes are to be redeemed, the Trustee or the Registrar will select Notes for redemption as follows:

- if the Notes are listed on any securities exchange, in compliance with the requirements of the principal securities exchange on which the Notes are then listed; or
- if the Notes are not listed on any securities exchange, on a pro rata basis, by lot or by such other method as the Trustee or the Registrar deems fair and appropriate, and in accordance with the procedures of DTC.

However, no Note of US\$200,000 in principal amount or less shall be redeemed in part. If any Note is to be redeemed in part only, the notice of redemption relating to such Note will state the portion of the principal amount to be redeemed. In the case of Certificated Notes, a new Note in

principal amount equal to the unredeemed portion will be issued upon cancellation of the original Note. On and after the redemption date, interest will cease to accrue on Notes or portions of them called for redemption.

## Repurchase of Notes upon a Change of Control

Not later than 30 days following a Change of Control , the Company will make an Offer to Purchase all outstanding Notes (a "Change of Control Offer") at a purchase price equal to 101% of the principal amount thereof plus accrued and unpaid interest, if any, to (but not including) the Offer to Purchase Payment Date.

The Company has agreed in the Indenture that it will timely repay all Indebtedness or obtain consents as necessary under, or terminate, agreements or instruments that would otherwise prohibit a Change of Control Offer required to be made pursuant to the Indenture. Notwithstanding this agreement of the Company, it is important to note that if the Company is unable to repay (or cause to be repaid) all of the Indebtedness, if any, that would prohibit repurchase of the Notes or is unable to obtain the requisite consents of the holders of such Indebtedness, or terminate any agreements or instruments that would otherwise prohibit a Change of Control Offer, it would continue to be prohibited from purchasing the Notes. In that case, the failure by the Company to purchase tendered Notes would constitute an Event of Default under the Indenture.

Certain of the events constituting a Change of Control under the Notes will also constitute an event of default under certain other debt instruments of the Company or its Subsidiaries. Future debt of the Company may also (i) prohibit the Company from purchasing Notes in the event of a Change of Control, (ii) provide that a Change of Control is a default or (iii) require repurchase of such debt upon a Change of Control. Moreover, the exercise by the Holders of their right to require the Company to purchase the Notes could cause a default under other Indebtedness, even if the Change of Control itself does not, due to the financial effect of the purchase on the Company. The ability of the Company to pay cash to the Holders following the occurrence of a Change of Control may be limited by the Company's then existing financial resources. There can be no assurance that sufficient funds will be available when necessary to make the required purchase of the Notes. See "Risk Factors – Risks Relating to the Notes – We may not be able to repurchase the Notes upon a Change of Control."

The definition of Change of Control includes a phrase "all or substantially all" as used with respect to the assets of the Company. No precise definition of the phrase has been established under applicable law, and the phrase will likely be interpreted under applicable law of the relevant jurisdictions based on particular facts and circumstances. Accordingly, there may be a degree of uncertainty as to the ability of a Holder to require the Company to repurchase such Holder's Notes as a result of a sale of less than all the assets of the Company to another person or group.

Notwithstanding the above, the Company will not be required to make a Change of Control Offer following a Change of Control if a third party makes the Change of Control Offer in the same manner, at the same times and otherwise in compliance with the requirements set forth in the Indenture applicable to a Change of Control Offer made by the Company and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer.

Except as described above with respect to a Change of Control, the Indenture does not contain provisions that permit the Holders to require that the Company purchase or redeem the Notes in the event of a takeover, recapitalization or similar transaction.

## No Mandatory Redemption or Sinking Fund

There will be no mandatory redemption or sinking fund payments for the Notes.

#### **Additional Amounts**

All payments of principal of, and premium (if any) and interest on, the Notes or under the Subsidiary Guarantees will be made without withholding or deduction for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed or levied by or within any jurisdiction in which the Company, a Surviving Person (as defined under the caption "– Consolidation, Merger and Sale of Assets") or an applicable Subsidiary Guarantor is organized or resident for tax purposes or any jurisdiction from or through which payment is made (or any political subdivision or taxing authority thereof or therein) (each, as applicable, a "Relevant Jurisdiction"), unless such withholding or deduction is required by law or by regulation or governmental policy having the force of law. In the event that any such withholding or deduction is so required, the Company, a Surviving Person or the applicable Subsidiary Guarantor, as the case may be, will pay such additional amounts ("Additional Amounts") as will result in receipt by the Holder of each Note of such amounts payable under the Notes or the Subsidiary Guarantees as would have been received by such Holder had no such withholding or deduction been required, except that no Additional Amounts shall be payable:

## (a) for or on account of:

- (i) any tax, duty, assessment or other governmental charge that would not have been imposed but for:
  - (A) the existence of any present or former connection between the Holder or beneficial owner of such Note and the Relevant Jurisdiction other than merely holding such Note or the receipt of payments thereunder or under a Subsidiary Guarantee, as the case may be, including, without limitation, such Holder or beneficial owner being or having been a national, domiciliary or resident of such Relevant Jurisdiction or treated as a resident thereof or being or having been physically present or engaged in a trade or business therein or having or having had a permanent establishment therein;
  - (B) the presentation of such Note (in cases in which presentation is required) more than 30 days after the later of the date on which the payment of the principal of, premium, if any, and interest on, such Note became due and payable pursuant to the terms thereof or was made or duly provided for, except to the extent that the Holder thereof would have been entitled to such Additional Amounts if it had presented such Note for payment on any date within such 30 day period;
  - (C) the failure of the Holder or beneficial owner to comply with a timely request of the Company, a Surviving Person or any Subsidiary Guarantor addressed to the Holder to provide information concerning such Holder's or beneficial owner's nationality, residence, identity or connection with any Relevant Jurisdiction, if and to the extent that due and timely compliance with such request would have reduced or eliminated any withholding or deduction as to which Additional Amounts would have otherwise been payable to the Holder; or
  - (D) the presentation of such Note (in cases in which presentation is required) for payment in the Relevant Jurisdiction, unless such Note could not have been presented for payment elsewhere;
- (ii) any estate, inheritance, gift, sale, transfer, personal property or similar tax, assessment or other governmental charge;

- (iii) any withholding or deduction that is imposed or levied on a payment to an individual and is required to be made pursuant to European Council Directive 2003/48/EC or any other Directive implementing the conclusions of the ECOFIN Council meeting of November 26-27, 2000 on the taxation of savings income or any law implementing or complying with, or introduced in order to conform to, such Directive;
- (iv) any tax, duty, assessment or other governmental charge which is payable other than by deduction or withholding from payments of principal of or interest or any premium on the Notes or payments under the Subsidiary Guarantees; or
- (v) any combination of taxes, duties, assessments or other governmental charges referred to in the preceding clauses (i), (ii), (iii) or (iv); or
- (b) to a Holder that is a fiduciary, partnership or person other than the sole beneficial owner of any payment, to the extent that such payment would be required to be included for tax purposes in the income under the laws of a Relevant Jurisdiction of a beneficiary or settlor with respect to the fiduciary, or a member of that partnership or a beneficial owner who would not have been entitled to such Additional Amounts had that beneficiary, settlor, member or beneficial owner been the Holder thereof.

As a result of these provisions, there are circumstances in which taxes could be withheld or deducted but Additional Amounts would not be payable to some or all Holders of Notes.

Whenever there is mentioned in any context the payment of principal, premium or interest in respect of any Note or any Subsidiary Guarantee, such mention shall be deemed to include payment of Additional Amounts provided for in the Indenture to the extent that, in such context, Additional Amounts are, were or would be payable in respect thereof.

# **Redemption for Tax Reasons**

The Notes may be redeemed, at the option of the Company or a Surviving Person (as defined under the caption "– Consolidation, Merger and Sale of Assets"), as a whole but not in part, upon giving not less than 30 days' nor more than 60 days' notice to the Holders (which notice shall be irrevocable), at a redemption price equal to 100% of the principal amount thereof, together with accrued and unpaid interest (including any Additional Amounts), if any, to the date fixed by the Company or the Surviving Person, as the case may be, for redemption (the "Tax Redemption Date") if, as a result of:

- (1) any change in, or amendment to, the laws (or any regulations or rulings promulgated thereunder) of the jurisdiction in which the Company or a Surviving Person is organized or resident for tax purposes (or any political subdivision or taxing authority thereof or therein) (a "Relevant Taxing Jurisdiction") affecting taxation; or
- (2) any change in the existing official position, or the stating of an official position, regarding the application or interpretation of such laws, regulations or rulings (including a holding, judgment or order by a court of competent jurisdiction),

which change or amendment becomes effective on or after (i) with respect to the Company, the Original Issue Date or (ii) with respect to a Surviving Person organized or resident for tax purposes in a jurisdiction that was not a Relevant Taxing Jurisdiction prior to the date on which the Surviving Person becomes a Surviving Person, the date such Surviving Person becomes a Surviving Person with respect to any payment due or to become due under the Notes or the Indenture, the Company or such

Surviving Person is, or on the next Interest Payment Date would be, required to pay Additional Amounts, and such requirement cannot be avoided by the taking of reasonable measures by the Company or such Surviving Person; *provided* that no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Company or such Surviving Person would be obligated to pay such Additional Amounts if a payment in respect of the Notes were then due.

Prior to the mailing of any notice of redemption of the Notes pursuant to the foregoing, the Company or a Surviving Person, as the case may be, will deliver to the Trustee at least 30 days but not more than 60 days before the Tax Redemption Date:

- (1) an Officers' Certificate stating that such change or amendment referred to in the prior paragraph has occurred, describing the facts related thereto and stating that such requirement cannot be avoided by the Company or such Surviving Person, as the case may be, by taking reasonable measures available to it; and
- (2) an Opinion of Counsel or an opinion of a tax consultant, in either case, of recognized standing with respect to tax matters of the Relevant Taxing Jurisdiction, stating that the requirement to pay such Additional Amounts results from such change or amendment referred to in the prior paragraph.

The Trustee shall accept such certificate and opinion as sufficient evidence of the satisfaction of the conditions precedent described above, in which event it shall be conclusive and binding on the Holders.

Any Notes that are redeemed will be cancelled.

## **Open Market Purchases and Cancellation of Notes**

The Company may purchase Notes in the open market or by tender or by any other means at any price, so long as such acquisition does not otherwise violate the terms of the Indenture, the Security Documents or the Intercreditor Agreement, if any; *provided* that all Notes redeemed or repurchased by the Company or any of its affiliates may not be reissued or resold.

#### **Certain Covenants**

Set forth below are summaries of certain covenants contained in the Indenture.

# Limitation on Indebtedness

- (a) The Company will not, and will not permit any Restricted Subsidiary to, Incur any Indebtedness (including Acquired Indebtedness); provided that the Company and any Subsidiary Guarantor or any Finance Subsidiary may Incur Indebtedness (including Acquired Indebtedness) and any Non-Guarantor Restricted Subsidiary may Incur Permitted Subsidiary Indebtedness (including Acquired Indebtedness) if, after giving effect to the Incurrence of such Indebtedness or Permitted Subsidiary Indebtedness, as applicable, and the receipt and application of the proceeds therefrom, the Leverage Ratio would be positive but less than 3.5 to 1.0 until December 31, 2014 and 3.0 to 1.0 thereafter. Notwithstanding the foregoing, the Company will not permit any Restricted Subsidiary to Incur any Disqualified Stock (other than Disqualified Stock held by the Company or a Subsidiary Guarantor, so long as it is so held).
- (b) Notwithstanding the foregoing, the Company and, to the extent provided below, any Restricted Subsidiary, may Incur each and all of the following ("Permitted Indebtedness"):

- (1) Indebtedness under the Notes (excluding any Additional Notes and any Permitted Pari Passu Secured Indebtedness of the Company) and each Subsidiary Guarantee;
- (2) any Pari Passu Subsidiary Guarantee by any Subsidiary Guarantor or any guarantee by the Company of any Permitted Pari Passu Secured Indebtedness;
- (3) Indebtedness of the Company or any Restricted Subsidiary outstanding on the Original Issue Date excluding Indebtedness permitted under clause (b)(4) of this covenant;
- (4) Indebtedness of the Company or any Restricted Subsidiary owed to the Company or any Restricted Subsidiary; *provided* that (x) any event which results in any such Restricted Subsidiary ceasing to be a Restricted Subsidiary or any subsequent transfer of such Indebtedness (other than to the Company or any Restricted Subsidiary) shall be deemed, in each case, to constitute an Incurrence of such Indebtedness not permitted by this clause (b)(4), and (y) if the Company or any Subsidiary Guarantor is the obligor on such Indebtedness (and such Indebtedness is not owed to the Company, a Subsidiary Guarantor or a Finance Subsidiary), such Indebtedness must be unsecured and expressly be subordinated in right of payment to the Notes, in the case of the Company, or the Subsidiary Guarantee of such Subsidiary Guarantor, in the case of a Subsidiary Guarantor;
- (5) Indebtedness ("Permitted Refinancing Indebtedness") issued in exchange for, or the net proceeds of which are used, to refinance, refund, replace, exchange, renew, repay, defease, discharge or extend (collectively, "refinance" and "refinances" and "refinanced" shall have a correlative meaning), then outstanding Indebtedness (or Indebtedness repaid substantially concurrently with but in any case before the Incurrence of such Permitted Refinancing Indebtedness) Incurred under clause (a) or clause (b)(1), (b)(2), (b)(3), (b)(7), (b)(14) or (b)(15)(i) of this covenant and any refinancings thereof in an amount not to exceed the amount so refinanced (plus premiums, accrued interest, fees and expenses); provided that (A) Indebtedness the proceeds of which are used to refinance the Notes or Indebtedness that is pari passu with, or subordinated in right of payment to, the Notes or a Subsidiary Guarantee shall only be permitted under this clause (b)(5) if (x) in case the Notes are refinanced in part or the Indebtedness to be refinanced is pari passu with the Notes or a Subsidiary Guarantee, such new Indebtedness, by its terms or by the terms of any agreement or instrument pursuant to which such new Indebtedness is issued or remains outstanding, is expressly made pari passu with, or subordinate in right of payment to, the remaining Notes or such Subsidiary Guarantee or (y) in case the Indebtedness to be refinanced is subordinated in right of payment to the Notes or a Subsidiary Guarantee, such new Indebtedness, by its terms or by the terms of any agreement or instrument pursuant to which such new Indebtedness is issued or remains outstanding, is expressly made subordinate in right of payment to the Notes or such Subsidiary Guarantee at least to the extent that the Indebtedness to be refinanced is subordinated to the Notes or such Subsidiary Guarantee, (B) such new Indebtedness, determined as of the date of Incurrence of such new Indebtedness, does not mature prior to the earlier of the final maturity date of the Notes and the Stated Maturity of the Indebtedness to be refinanced, and the Average Life of such new Indebtedness is at least equal to the remaining Average Life of the Indebtedness to be refinanced or more than 180 days after the final maturity date of the Notes and (C) in no event may Indebtedness of the Company or any Subsidiary Guarantor be refinanced pursuant to this clause (b)(5) by means of any Indebtedness of any Restricted Subsidiary that is not a Subsidiary Guarantor;

- (6) Indebtedness Incurred by the Company or any Restricted Subsidiary pursuant to Hedging Obligations designed solely to protect the Company or any Restricted Subsidiary from fluctuations in interest rates, currencies or the price of commodities and not for speculation;
- Indebtedness Incurred by the Company or any Restricted Subsidiary (A) representing Capitalized Lease Obligations or (B) for the purpose of financing (i) all or any part of the purchase price of real or personal property, assets or equipment to be used in the ordinary course of business by the Company or a Restricted Subsidiary in the Permitted Business, including any such purchase through the acquisition of Capital Stock of any Person that owns such real or personal property, assets or equipment which will, upon such acquisition, become a Restricted Subsidiary or (ii) all or any part of the purchase price or the cost of development, construction or improvement of real or personal property, assets or equipment to be used in the ordinary course of business by the Company or a Restricted Subsidiary in the Permitted Business; provided, however, that in each case (A) the aggregate principal amount of such Indebtedness shall not exceed such purchase price or cost, (B) such Indebtedness shall be Incurred no later than 180 days after the acquisition of such property, asset or equipment or completion of such development, construction or improvement, and (C) on the date of the Incurrence of such Indebtedness and after giving effect thereto, the aggregate principal amount outstanding of all such Indebtedness (including Capitalized Lease Obligations) permitted by this clause (b)(7) (together with refinancings thereof) does not exceed an amount equal to the greater of (x) US\$100 million (or the Dollar Equivalent thereof) and (y) 5% of Total Assets;
- (8) Indebtedness Incurred by the Company or any Restricted Subsidiary with respect to workers' compensation claims or claims arising under similar legislation, or in connection with self-insurance obligations or similar requirements, or bid, performance or surety bonds (in each case other than for an obligation for borrowed money);
- (9) Indebtedness Incurred by the Company or any Restricted Subsidiary constituting reimbursement obligations with respect to letters of credit or trade guarantees, performance and surety bonds and similar instruments issued in the ordinary course of business to the extent that such letters of credit or trade guarantees, performance and surety bonds and similar instruments are not drawn upon or, if drawn upon, to the extent such drawing is reimbursed no later than the 30 days following receipt by the Company or such Restricted Subsidiary, as applicable, of a demand for reimbursement;
- (10) Indebtedness of the Company or any Restricted Subsidiary arising from agreements providing for indemnification, adjustment of purchase price, earn-out or other similar obligations, or from guarantees or letters of credit, surety bonds or performance bonds securing any obligation of the Company or any Restricted Subsidiary pursuant to such agreements, in any case, Incurred in connection with the disposition of any business, assets or Restricted Subsidiary (other than guarantees of Indebtedness Incurred by any Person acquiring all or any portion of such business, assets or Restricted Subsidiary for the purpose of financing such acquisition); provided that the maximum aggregate liability in respect of all such Indebtedness shall at no time exceed the gross proceeds actually received by the Company or any Restricted Subsidiary from the disposition of such business, assets or Restricted Subsidiary;
- (11) Indebtedness of the Company or any Restricted Subsidiary arising from the honoring by a bank or other financial institution of a check, draft or similar instrument drawn

- against insufficient funds in the ordinary course of business; *provided*, *however*, that such Indebtedness is extinguished within five Business Days of Incurrence;
- (12) guarantees by the Company or any Restricted Subsidiary of Indebtedness of the Company or any Restricted Subsidiary that was permitted to be Incurred by another provision of this covenant;
- (13) Indebtedness Incurred by the Company and any Restricted Subsidiary under the Credit Facilities (including amounts under the New Standard Bank Facilities Agreement) in an aggregate principal amount at any one time outstanding not to exceed the greater of (x) US\$420.0 million (or Dollar Equivalent thereof) and (y) 15% of Total Assets, in either case, less the aggregate amount of all Net Proceeds of Asset Sales applied by the Company or any Restricted Subsidiary to permanently repay any such Indebtedness pursuant to the covenant described under the caption "– Limitation on Asset Sales":
- (14) Indebtedness of the Company or any Restricted Subsidiary in an aggregate principal amount outstanding at any time (together with refinancings thereof) not to exceed US\$20.0 million (or the Dollar Equivalent thereof);
- (15) (i) so long as the Railway Entities are Restricted Subsidiaries, Railway Project Indebtedness in an aggregate principal amount at any one time outstanding (together with refinancings thereof) not to exceed US\$500 million (or the Dollar Equivalent thereof) (and any Railway Completion Guarantee in respect of such Railway Project Indebtedness) and (ii) if at any time any Railway Entity that owns, directly or indirectly, the railway tracks of the Railway Project does not constitute a Restricted Subsidiary as a result of the sale, transfer or other disposition of the majority of the equity interests in such Railway Entity to the Government of Mongolia or Persons controlled by the Government of Mongolia in compliance with clause (k) of the definition of "Asset Sale," any Railway Completion Guarantee in respect of Railway Project Indebtedness in an aggregate principal amount at any time outstanding not to exceed an amount equal to (A) US\$500 million (or the Dollar Equivalent thereof) multiplied by (B) the percentage of the direct equity interest in such Railway Entity owned by the Company or the relevant Restricted Subsidiary (it being understood that any outstanding Railway Completion Guarantee in excess of such amount shall be reduced to be in compliance with this clause (15)(ii)); and
- (16) (i) Indebtedness of a Finance Subsidiary that is guaranteed by the Company to the extent the Company is permitted to Incur such Indebtedness under this covenant and (ii) any guarantee by a Subsidiary Guarantor of any Indebtedness of a Finance Subsidiary so guaranteed by the Company.
- (c) For purposes of determining compliance with this "Limitation on Indebtedness" covenant, in the event that an item of Indebtedness meets the criteria of more than one of the types of Indebtedness described above, including under the proviso in the first sentence of clause (a) of this covenant, the Company, in its sole discretion, shall classify (and divide) and, other than with respect to Indebtedness Incurred under clause (b)(13) of this covenant, from time to time may reclassify (and divide), such item of Indebtedness.
- (d) For the avoidance of doubt, Indebtedness under the Existing Credit Facilities and the New Standard Bank Facilities Agreement (i) will be deemed to have been incurred on the Original Issue Date as "Credit Facilities" under clause (b)(13) of this covenant, (ii) will not

be deemed Indebtedness outstanding on the Original Issue Date for purposes of clauses (b)(3) and (b)(5) of this covenant (but may be refinanced as "Credit Facilities" in accordance with clause (b)(13) thereof) and (iii) may not be otherwise reclassified for purposes of determining compliance with the covenant described under the caption "Limitation on Incurrence of Indebtedness."

(e) For purposes of determining compliance with any U.S. dollar denominated restriction on the Incurrence of Indebtedness under this "Limitation on Indebtedness" covenant, the Dollar Equivalent principal amount of Indebtedness denominated in a foreign currency shall be calculated based on the relevant currency exchange rate in effect on the date such Indebtedness was Incurred, in the case of term Indebtedness, or first committed, in the case of revolving credit Indebtedness; provided that if such Indebtedness is Incurred to refinance other Indebtedness denominated in a foreign currency, and such refinancing would cause the applicable U.S. dollar-denominated restriction to be exceeded if calculated at the relevant currency exchange rate in effect on the date of such refinancing, such U.S. dollardenominated restriction shall be deemed not to have been exceeded so long as the principal amount of such refinancing Indebtedness does not exceed the principal amount of such Indebtedness being refinanced. Notwithstanding any other provision of this covenant, the maximum amount of Indebtedness that may be Incurred pursuant to this covenant shall not be deemed to be exceeded solely as a result of fluctuations in the exchange rates of currencies. The principal amount of any Indebtedness Incurred to refinance other Indebtedness, if Incurred in a different currency from the Indebtedness being refinanced, shall be calculated based on the currency exchange rate applicable to the currencies in which such refinancing Indebtedness is denominated that is in effect on the date of such refinancing.

#### Limitation on Restricted Payments

The Company will not, and will not permit any Restricted Subsidiary to, directly or indirectly (the payments or any other actions described in clauses (a) through (d) below being collectively referred to as "Restricted Payments"):

- (a) declare or pay any dividend or make any distribution on or with respect to the Company's or any Restricted Subsidiary's Capital Stock (other than dividends or distributions payable solely in shares of the Company's or any Restricted Subsidiary's Capital Stock (other than Disqualified Stock or Preferred Stock) or in options, warrants or other rights to acquire shares of such Capital Stock) held by Persons other than the Company or any Restricted Subsidiary;
- (b) purchase, call for redemption or redeem, retire or otherwise acquire for value any shares of Capital Stock (including options, warrants or other rights to acquire such shares of Capital Stock) of the Company, any Restricted Subsidiary or any direct or indirect parent of the Company held by any Persons other than the Company or any Restricted Subsidiary;
- (c) make any voluntary or optional principal payment, or voluntary or optional redemption, repurchase, defeasance, or other acquisition or retirement for value, of Subordinated Indebtedness (excluding any intercompany Indebtedness between or among the Company and any Restricted Subsidiary); or
- (d) make any Investment, other than a Permitted Investment;

if, at the time of, and after giving effect to, the proposed Restricted Payment:

- (A) a Default has occurred and is continuing or would occur as a result of such Restricted Payment;
- (B) the Company could not Incur at least US\$1.00 of Indebtedness under the proviso in the first sentence of clause (a) of the covenant described under the caption "- Limitation on Indebtedness"; or
- (C) such Restricted Payment, together with the aggregate amount of all Restricted Payments made by the Company and its Restricted Subsidiaries after the Original Issue Date, shall exceed the sum (without duplication) of:
  - (i) 50% of the aggregate amount of the Consolidated Net Income of the Company (or, if the Consolidated Net Income is a loss, minus 100% of the amount of such loss) accrued on a cumulative basis during the period (taken as one accounting period) beginning on the first day of the semi-annual fiscal period during which the Notes are first issued and ending on the last day of the Company's most recently ended semi-annual fiscal period for which consolidated financial statements of the Company (which the Company shall use its reasonable best efforts to compile in a timely manner) are available (which may include internal consolidated financial statements); plus
  - (ii) 100% of the aggregate Net Cash Proceeds received by the Company after the Original Issue Date as a capital contribution to its common equity or from the issuance and sale of its Capital Stock (other than Disqualified Stock) to a Person who is not a Subsidiary of the Company, including any such Net Cash Proceeds received upon (x) the conversion of any Indebtedness (other than Subordinated Indebtedness) of the Company into Capital Stock (other than Disqualified Stock) of the Company, or (y) the exercise by a Person who is not a Subsidiary of the Company of any options, warrants or other rights to acquire Capital Stock of the Company (other than Disqualified Stock), in each case after deducting the amount of any such Net Cash Proceeds used to redeem, repurchase, defease or otherwise acquire or retire for value any Subordinated Indebtedness or Capital Stock of the Company; plus
  - (iii) an amount equal to the net reduction in Investments (other than reductions in Permitted Investments) that were made after the Original Issue Date in any Person resulting from (w) payments of interest on Indebtedness, dividends or repayments of loans or advances by such Person, in each case, to the Company or any Restricted Subsidiary (except, in each case, to the extent any such payment or proceeds are included in the calculation of Consolidated Net Income), (x) the unconditional release of a guarantee provided by the Company or any Restricted Subsidiary after the Original Issue Date of an obligation of another Person, (y) the net cash proceeds from the sale of any such Investment (except to the extent such proceeds are included in the calculation of Consolidated Net Income) or (z) from redesignations of Unrestricted Subsidiaries as Restricted Subsidiaries, not to exceed, in each case, the amount of Investments made by the Company or a Restricted Subsidiary after the Original Issue Date in any such Person; plus
  - (iv) the amount by which Indebtedness of the Company or any Restricted Subsidiary is reduced on the Company's consolidated balance sheet upon the conversion or exchange (other than by a Subsidiary of the Company) subsequent to the Original Issue Date of any Indebtedness of the Company or any Restricted Subsidiary convertible or exchangeable into Capital Stock (other than Disqualified Stock) of the

Company (less the amount of any cash, or the Fair Market Value of any other property, distributed by the Company or any Restricted Subsidiary upon such conversion or exchange).

The foregoing provision shall not be violated by reason of:

- (1) the payment of any dividend or redemption of any Capital Stock within 60 days after the related date of declaration or call for redemption if, at said date of declaration or call for redemption, such payment or redemption would comply with the preceding paragraph;
- (2) the redemption, repurchase, defeasance or other acquisition or retirement for value of Subordinated Indebtedness of the Company or any Subsidiary Guarantor with the Net Cash Proceeds of, or in exchange for, a substantially concurrent Incurrence of Permitted Refinancing Indebtedness;
- (3) the redemption, repurchase or other acquisition of Capital Stock of the Company or any Subsidiary Guarantor (or options, warrants or other rights to acquire such Capital Stock) in exchange for, or out of the Net Cash Proceeds of a substantially concurrent capital contribution or sale (other than to a Subsidiary of the Company) of, shares of Capital Stock (other than Disqualified Stock) of the Company (or options, warrants or other rights to acquire such Capital Stock); *provided* that the amount of any such Net Cash Proceeds that are utilized for any such Restricted Payment will be excluded from clause (C)(ii) of the preceding paragraph;
- (4) the redemption, repurchase, defeasance or other acquisition or retirement for value of Subordinated Indebtedness of the Company or any Subsidiary Guarantor in exchange for, or out of the Net Cash Proceeds of, a substantially concurrent capital contribution or sale (other than to a Subsidiary of the Company) of, shares of Capital Stock (other than Disqualified Stock) of the Company (or options, warrants or other rights to acquire such Capital Stock); *provided* that the amount of any such Net Cash Proceeds that are utilized for any such Restricted Payment will be excluded from clause (C)(ii) of the preceding paragraph;
- (5) (x) the payment of any dividends or distributions declared, paid or made by a Restricted Subsidiary payable or (y) the redemption, repurchase, defeasance or other acquisition by a Restricted Subsidiary of any shares of its Capital Stock (including options, warrants or other rights to acquire such shares of Capital Stock), in each case on a pro rata basis or on a basis more favorable to the Company, to (or by) all holders of any class of Capital Stock of such Restricted Subsidiary, a majority of which is held, directly or indirectly through Restricted Subsidiaries, by the Company;
- (6) a Permitted Investment under clause (1) of the definition thereof in the Capital Stock of a Restricted Subsidiary held by a minority shareholder which Investment increases the proportion of the Capital Stock of such Restricted Subsidiary held, directly or indirectly, by the Company;
- (7) the repurchase, redemption or other acquisition or retirement for value of any Capital Stock (including options, warrants or other rights to acquire such shares of Capital Stock) of the Company or any Restricted Subsidiary held by an employee benefit plan of the Company or any Restricted Subsidiary, any current or former officer, director, consultant, or employee of the Company or any Restricted Subsidiary (or permitted transferees, authorized representatives, estates or heirs of any of the foregoing), provided that the aggregate price

paid for all such repurchased, redeemed, acquired or retired Capital Stock may not exceed US\$1.0 million (or the Dollar Equivalent using the Original Issue Date as the date of determination) in any twelve-month period;

- (8) any purchase, repurchase, redemption, defeasance or other acquisition or retirement for value of Disqualified Stock of the Company or Preferred Stock of a Restricted Subsidiary made by exchange for or out of the Net Cash Proceeds of the substantially concurrent sale of Disqualified Stock of the Company or Preferred Stock of a Restricted Subsidiary, as the case may be, that, in each case, is permitted to be incurred pursuant to the covenant described under "– Limitation on Indebtedness" and that in each case constitutes Permitted Refinancing Indebtedness; *provided* that the amount of any such Net Cash Proceeds that are utilized for any such Restricted Payment will be excluded from clause (C) of the preceding paragraph;
- (9) repurchases of Capital Stock deemed to occur upon the exercise of stock options if such Capital Stock represents a portion of the exercise price thereof;
- (10) cash payments in lieu of the issuance of fractional shares in connection with the exercise of warrants, options or other securities convertible into or exchangeable for Capital Stock of the Company; provided that the amount of payments made pursuant to this clause does not exceed US\$2.0 million (or the Dollar Equivalent thereof) in any calendar year; or
- (11) any Restricted Payment in an aggregate amount, taken together with all other Restricted Payments made in reliance on this clause (11), not to exceed US\$10.0 million (or the Dollar Equivalent thereof);

provided that, in the case of clause (2), (3), (4) or (8) above, no Default shall have occurred and be continuing or would occur as a consequence of the actions or payments set forth therein.

Each Restricted Payment permitted pursuant to clause (1) (but only to the extent that dividends are paid to Persons other than the Company or a Wholly Owned Restricted Subsidiary) of the preceding paragraph shall be included in calculating whether the conditions of clause (C) of the first paragraph of this "– Limitation on Restricted Payments" covenant have been met with respect to any subsequent Restricted Payments.

The amount of any Restricted Payments (other than cash) will be the Fair Market Value on the date of the Restricted Payment of the asset(s) or securities proposed to be transferred or issued by the Company or the Restricted Subsidiary, as the case may be, pursuant to the Restricted Payment. The value of any assets or securities that are required to be valued by this covenant will be the Fair Market Value. The Board of Directors' determination of the Fair Market Value of a Restricted Payment or any such assets or securities must be based upon an opinion or appraisal issued by an accounting, appraisal or investment banking firm of recognized international standing if the Fair Market Value exceeds US\$10.0 million (or the Dollar Equivalent thereof).

Not later than the date of making any Restricted Payment in excess of US\$10.0 million (or the Dollar Equivalent thereof), the Company will deliver to the Trustee an Officers' Certificate stating that such Restricted Payment is permitted and setting forth the basis upon which the calculations required by this "— Limitation on Restricted Payments" covenant were computed, together with a copy of any fairness opinion or appraisal required by the Indenture.

### Limitation on Dividend and Other Payment Restrictions Affecting Restricted Subsidiaries

- (a) Except as provided below, the Company will not, and will not permit any Restricted Subsidiary to, create or otherwise cause or permit to exist or become effective any encumbrance or restriction on the ability of any Restricted Subsidiary to:
  - (1) pay dividends or make any other distributions on any Capital Stock of such Restricted Subsidiary owned by the Company or any other Restricted Subsidiary;
  - (2) pay any Indebtedness or other obligation owed to the Company or any other Restricted Subsidiary;
  - (3) make loans or advances to the Company or any other Restricted Subsidiary; or
  - (4) sell, lease or transfer any of its property or assets to the Company or any other Restricted Subsidiary.
- (b) The provisions of paragraph (a) do not apply to any encumbrances or restrictions:
  - (1) existing in agreements as in effect on the Original Issue Date, or in the Notes, the Subsidiary Guarantees, the Indenture, the Security Documents, or under any Permitted Pari Passu Secured Indebtedness of the Company or any Subsidiary Guarantor Pledgor or Pari Passu Guarantee of any Subsidiary Guarantor, and any extensions, refinancings, renewals or replacements of any of the foregoing agreements; *provided* that the encumbrances and restrictions in any such extension, refinancing, renewal or replacement, taken as a whole, are no more restrictive in any material respect than those encumbrances or restrictions that are then in effect and that are being extended, refinanced, renewed or replaced;
  - (2) encumbrances or restrictions imposed by Indebtedness permitted to be Incurred under Credit Facilities or any guarantee thereof in accordance with the "- Limitation on Indebtedness" covenant; provided that in the case of any such encumbrances or restrictions imposed under any Credit Facilities, such encumbrances or restrictions are no more restrictive in any material respect taken as a whole than those imposed under any Existing Credit Facility and the New Standard Bank Facilities Agreement as of the Original Issue Date;
  - (3) existing under or by reason of applicable law, rule, regulation, license, concession, approval, decree or order issued by any government or any agency thereof;
  - (4) with respect to any Person or the property or assets of such Person acquired by the Company or any Restricted Subsidiary, existing at the time of such acquisition and not incurred in contemplation thereof, which encumbrances or restrictions are not applicable to any Person or the property or assets of any Person other than such Person or the property or assets of such Person so acquired, and any extensions, refinancings, renewals or replacements thereof; *provided* that the encumbrances and restrictions in any such extension, refinancing, renewal or replacement, taken as a whole, are no more restrictive in any material respect than those encumbrances or restrictions that are then in effect and that are being extended, refinanced, renewed or replaced;

- (5) that otherwise would be prohibited by the provision described in clause (a)(4) of this covenant if they arise, or are agreed to in the ordinary course of business, and that (x) restrict in a customary manner the subletting, assignment or transfer of any property or asset that is subject to a lease or license, (y) exist by virtue of any Lien on, or agreement to transfer, option or similar right with respect to any property or assets of the Company or any Restricted Subsidiary not otherwise prohibited by the Indenture or (z) do not relate to any Indebtedness, and that do not, individually or in the aggregate, detract from the value of property or assets of the Company or any Restricted Subsidiary in any manner material to the Company or any Restricted Subsidiary;
- (6) with respect to a Restricted Subsidiary and imposed pursuant to an agreement that has been entered into for the sale or disposition of all or substantially all of the Capital Stock of, or property and assets of, such Restricted Subsidiary that is permitted by the "- Limitation on Sales and Issuances of Capital Stock in Restricted Subsidiaries," "- Limitation on Indebtedness" and "- Limitation on Asset Sales" covenants;
- (7) with respect to any Restricted Subsidiary and imposed pursuant to an agreement that has been entered into for the Incurrence of Indebtedness permitted under clause (a) in respect of Permitted Subsidiary Indebtedness or clause (b)(7), (b)(14) or (b)(15) of the "- Limitation on Indebtedness" covenant if, as determined by the Board of Directors, such encumbrances or restrictions (x) are customary for such types of agreements and (y) would not, at the time agreed to, be expected to materially and adversely affect the ability of the Company to make required payments on the Notes and any extensions, refinancings, renewals or replacements of any of the foregoing agreements; provided that the encumbrances and restrictions in any such extension, refinancing, renewal or replacement, taken as a whole, are no more restrictive in any material respect than those encumbrances or restrictions that are then in effect and that are being extended, refinanced, renewed or replaced;
- (8) restrictions on cash or other deposits or net worth imposed by customers under contracts entered into in the ordinary course of business;
- (9) existing in customary provisions in joint venture agreements and other similar agreements permitted under the Indenture, to the extent such encumbrance or restriction relates to the activities or assets of a party to such joint venture and if, as determined by the Board of Directors, (A) the encumbrances or restrictions are customary for a joint venture or similar agreement of that type and (B) the encumbrances or restrictions would not, at the time agreed to, be expected to materially and adversely affect the ability of the Company to make the required payments on the Notes; or
- (10) customary provisions contained in agreements evidencing Liens incurred in accordance with the "Limitation on Liens" covenant.

# Limitation on Sales and Issuances of Capital Stock in Restricted Subsidiaries

The Company will not sell, and will not permit any Restricted Subsidiary, directly or indirectly, to issue or sell, any shares of Capital Stock of a Restricted Subsidiary (including options, warrants or other rights to purchase shares of such Capital Stock) except:

- (1) to the Company or a Restricted Subsidiary;
- (2) to the extent such Capital Stock represents director's qualifying shares or is required by applicable law to be held by a Person other than the Company or a Restricted Subsidiary;
- (3) the sale of all of the shares of Capital Stock of a Restricted Subsidiary if permitted under, and made in accordance with, the "- Limitation on Asset Sales" covenant;
- (4) the issuance or sale of Capital Stock of a Restricted Subsidiary (which remains a Restricted Subsidiary after any such issuance or sale); *provided* that the Company or such Restricted Subsidiary applies the Net Cash Proceeds of such issuance or sale, to the extent required, in accordance with the "– Limitation on Asset Sales" covenant; and
- (5) the issuance or sale of Capital Stock of a Restricted Subsidiary that does not remain a Restricted Subsidiary after such issuance or sale; *provided* that (a) the transaction complies with the "- Limitation on Restricted Payments" covenant and (b) the Company applies the Net Cash Proceeds of such issuance or sale, to the extent required, in accordance with the "- Limitation on Asset Sales" covenant.

Notwithstanding the foregoing, a Restricted Subsidiary may issue Common Stock to its shareholders on a pro rata basis or on a basis more favorable to the Company and its Restricted Subsidiaries.

#### Limitation on Issuances of Guarantees by Restricted Subsidiaries

The Company will not permit any Restricted Subsidiary which is not a Subsidiary Guarantor, directly or indirectly, to guarantee any Indebtedness ("Guaranteed Indebtedness") of the Company or any other Subsidiary Guarantor, unless (1) such Restricted Subsidiary, as soon as practicable but in any event within five days thereafter, executes and delivers a supplemental indenture to the Indenture providing for an unsubordinated Subsidiary Guarantee of payment of the Notes by such Restricted Subsidiary, whereupon it shall become a "Subsidiary Guarantor" and (2) such Restricted Subsidiary waives and will not in any manner whatsoever claim, or take the benefit or advantage of, any rights of reimbursement, indemnity or subrogation or any other rights against the Company or any other Restricted Subsidiary as a result of any payment by such Restricted Subsidiary under its Subsidiary Guarantee until the Notes have been paid in full.

If the Guaranteed Indebtedness (A) ranks *pari passu* in right of payment with the Notes or any Subsidiary Guarantee, then the guarantee of such Guaranteed Indebtedness shall rank *pari passu* in right of payment with, or subordinated to, the Subsidiary Guarantee or (B) is subordinated in right of payment to the Notes or any Subsidiary Guarantee, then the guarantee of such Guaranteed Indebtedness shall be subordinated in right of payment to the Subsidiary Guarantee at least to the extent that the Guaranteed Indebtedness is subordinated to the Notes or the Subsidiary Guarantee.

### Limitation on Transactions with Shareholders and Affiliates

The Company will not, and will not permit any Restricted Subsidiary to, directly or indirectly, enter into, renew or extend any transaction or arrangement (including, without limitation, the purchase, sale, lease or exchange of property or assets, or the rendering of any service) with (a) any holder (or any Affiliate of such holder) of 10% or more of any class of Capital Stock of the Company or (b) with any Affiliate of the Company (each an "Affiliate Transaction"), unless:

- (1) the Affiliate Transaction is on terms that are no less favorable to the Company or the relevant Restricted Subsidiary than those that would have been obtained in a comparable arm's-length transaction by the Company or the relevant Restricted Subsidiary with a Person that is not such a holder or an Affiliate of the Company; and
- (2) the Company delivers to the Trustee:
  - (A) with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration in excess of US\$5.0 million (or the Dollar Equivalent thereof), a Board Resolution set forth in an Officers' Certificate certifying that such Affiliate Transaction complies with this covenant and such Affiliate Transaction has been approved by a majority of the disinterested members of the Board of Directors; and
  - (B) with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration in excess of US\$15.0 million (or the Dollar Equivalent thereof), in addition to the Board Resolution required in clause (2)(A) above, an opinion issued by an accounting, appraisal or investment banking firm of recognized international standing as to the fairness to the Company or such Restricted Subsidiary of such Affiliate Transaction from a financial point of view.

The foregoing limitation does not limit, and shall not apply to:

- (1) any employment or compensation agreement (whether based in cash or securities), officer or director indemnification agreement, severance or termination agreement or any similar arrangement entered into by the Company or any Restricted Subsidiary with their respective officers, directors or employees and payments pursuant thereto, including the payment of reasonable fees and reimbursement of expenses, in each case in the ordinary course of business;
- (2) transactions between or among the Company and any Wholly Owned Restricted Subsidiary or between or among Wholly Owned Restricted Subsidiaries;
- (3) any Restricted Payment (other than a Permitted Investment) not prohibited by the "-Limitation on Restricted Payments" covenant;
- (4) any sale of Capital Stock (other than Disqualified Stock) of the Company;
- (5) the payment of compensation to officers and directors of the Company or any Restricted Subsidiary pursuant to an employee stock or share option scheme, so long as such scheme is in compliance with the listing rules of The Stock Exchange of Hong Kong Limited;

- (6) transactions with a Person (other than an Unrestricted Subsidiary of the Company) that is an Affiliate of the Company solely because the Company, directly or indirectly, owns Capital Stock in, or controls, such Person or solely because the Company or one of its Subsidiaries has the right to designate one or more members of the Board of Directors or similar governing body of such Person;
- (7) loans or advances to officers, directors or employees in the ordinary course of business not to exceed US\$5.0 million (or the Dollar Equivalent thereof) at any one time outstanding; and
- (8) any agreement between any Person and an Affiliate of such Person existing at the time such Person is acquired by or merged into the Company or any of its Restricted Subsidiaries; provided that such agreement was not entered into in contemplation of such acquisition or merger.

In addition, the requirements of clause (2) of the first paragraph of this covenant shall not apply to (i) Investments (other than Permitted Investments) not prohibited by the "– Limitation on Restricted Payments" covenant, (ii) transactions pursuant to agreements in effect on the Original Issue Date and described in this offering memorandum, or any amendment or modification or replacement thereof, so long as such amendment, modification or replacement is not materially more disadvantageous to the Company and its Restricted Subsidiaries than the original agreement in effect on the Original Issue Date, (iii) transactions with customers, clients, suppliers, contractors, other service providers or purchasers and sellers of goods and services or lessors or lessees and (iv) any transaction between or among the Company and any Restricted Subsidiary that is not a Wholly Owned Restricted Subsidiary; provided that (a) in the case of clause (iii), such transaction is entered into in the ordinary course of business and (b) in the case of clause (iv) none of the minority shareholders or minority partners of or in such Restricted Subsidiary is a Person described in clauses (a) or (b) of the first paragraph of this covenant (other than by reason of such minority shareholder or minority partner being an officer or director of such Restricted Subsidiary).

#### Limitation on Liens

The Company will not, and will not permit any Restricted Subsidiary to, directly or indirectly, incur, assume or permit to exist any Lien on the Collateral (other than Permitted Liens).

The Company will not, and will not permit any Restricted Subsidiary to, directly or indirectly, incur, assume or permit to exist any Lien of any nature whatsoever on any of its assets or properties of any kind, whether owned at the Original Issue Date or thereafter acquired, except Permitted Liens, unless the Notes are secured equally and ratably with (or, if the obligation or liability to be secured by such Lien is subordinated in right of payment to the Notes, prior to) the obligation or liability secured by such Lien, for so long as such obligation or liability is secured by such Lien.

#### Limitation on Sale and Leaseback Transactions

The Company will not, and will not permit any Restricted Subsidiary to, enter into any Sale and Leaseback Transaction; *provided* that the Company or any Restricted Subsidiary may enter into a Sale and Leaseback Transaction if:

- (a) the Company or any Restricted Subsidiary could have (1) Incurred Indebtedness in an amount equal to the Attributable Indebtedness relating to such Sale and Leaseback Transaction under the covenant described under the caption "- Limitation on Indebtedness" and (2) incurred a Lien to secure such Indebtedness pursuant to the covenant described under the caption "- Limitation on Liens," in which case, the corresponding Indebtedness and Lien will be deemed incurred pursuant to those provisions;
- (b) the gross cash proceeds of that Sale and Leaseback Transaction are at least equal to the Fair Market Value of the property that is the subject of such Sale and Leaseback Transaction; and
- (c) the transfer of assets in that Sale and Leaseback Transaction is permitted by, and the Company applies to the extent required the proceeds of such transaction in compliance with, the covenant described under the caption "- Limitation on Asset Sales."

#### Limitation on Asset Sales

The Company will not, and will not permit any Restricted Subsidiary to, consummate any Asset Sale, unless:

- (a) no Default shall have occurred and be continuing or would occur as a result of such Asset Sale;
- (b) the consideration received by the Company or such Restricted Subsidiary, as the case may be, is at least equal to the Fair Market Value of the assets sold or disposed of (determined on the date of the contractual agreement for the Asset Sale);
- (c) except in the case of a Permitted Railway Asset Swap, at least 75% of the consideration received consists of cash, Temporary Cash Investments or Replacement Assets; provided that in the case of an Asset Sale in which the Company or such Restricted Subsidiary receives Replacement Assets involving aggregate consideration in excess of US\$15.0 million (or the Dollar Equivalent thereof), the Company shall deliver to the Trustee an opinion as to the fairness to the Company or such Restricted Subsidiary of such Asset Sale from a financial point of view issued by an accounting, appraisal or investment banking firm of recognized international standing. For purposes of this provision, each of the following will be deemed to be cash:
  - (A) any liabilities, as shown on the Company's most recent consolidated balance sheet, of the Company or any Restricted Subsidiary (other than contingent liabilities and liabilities that are by their terms subordinated to the Notes or any Subsidiary Guarantee) that are assumed by the transferee of any such assets pursuant to a customary assumption, assignment, novation or similar agreement that releases the Company or such Restricted Subsidiary from further liability; and

(B) any securities, notes or other obligations received by the Company or any Restricted Subsidiary from such transferee that are promptly, but in any event within 60 days of closing, converted by the Company or such Restricted Subsidiary into cash, to the extent of the cash received in that conversion.

Within 360 days after the receipt of any Net Cash Proceeds from an Asset Sale, the Company or any Restricted Subsidiary may apply such Net Cash Proceeds to:

- (1) permanently repay Senior Indebtedness of the Company or any Restricted Subsidiary or any Indebtedness of a Restricted Subsidiary that was secured by the assets that were the subject of such Asset Sale (and, if such Senior Indebtedness repaid is revolving credit Indebtedness, to correspondingly reduce commitments with respect thereto) in each case owing to a Person other than the Company or a Restricted Subsidiary; or
- (2) develop or acquire Replacement Assets; *provided* that this clause (2) shall be satisfied if the Company or Restricted Subsidiary (i) enters into a definitive agreement committing to invest the relevant amount in Replacement Assets within 360 days of the receipt of such Net Cash Proceeds and (ii) actually invests such amount in Replacement Assets within 180 days after the 360 day period.

Any Net Cash Proceeds from Asset Sales that are not applied or invested as provided in clauses (1) and (2) in the immediately preceding paragraph will constitute "Excess Proceeds." Pending the final application of any such Net Cash Proceeds, the Company may temporarily reduce revolving credit borrowings or otherwise invest such Net Cash Proceeds in any manner that is not prohibited by the terms of the Indenture.

Excess proceeds of less than US\$15.0 million (or the Dollar Equivalent thereof) will be carried forward and accumulated. When accumulated Excess Proceeds equals to or exceeds US\$15.0 million (or the Dollar Equivalent thereof), within 10 days thereof, the Company shall make an Offer to Purchase Notes having a principal amount equal to:

- (i) accumulated Excess Proceeds, multiplied by
- (ii) a fraction (x) the numerator of which is equal to the outstanding principal amount of the Notes and (y) the denominator of which is equal to the outstanding principal amount of the Notes and all pari passu Indebtedness similarly required to be repaid, redeemed or tendered for in connection with the Asset Sale, rounded down to the nearest US\$1,000. The offer price in any Offer to Purchase will be equal to 100% of the principal amount plus accrued and unpaid interest to the date of purchase, and will be payable in cash.

If any Excess Proceeds remain after the consummation of an Offer to Purchase, the Company or any Restricted Subsidiary may use such Excess Proceeds for any purpose not otherwise prohibited by the Indenture. If the aggregate principal amount of Notes and any other *pari passu* Indebtedness tendered into (or required to be prepaid or redeemed in connection with) such Offer to Purchase exceeds the amount of Excess Proceeds, the Notes and such other *pari passu* Indebtedness will be purchased on a pro rata basis based on the principal amount of Notes and such *pari passu* Indebtedness tendered (or required to be prepaid or redeemed) (with such adjustments as may be deemed appropriate by the Company so that only Notes in denominations of \$200,000, or an integral multiple of \$1,000 in excess thereof, will be purchased). Upon completion of any each Offer to Purchase, the amount of Excess Proceeds will be reset at zero.

# Limitation on the Company's Business Activities

The Company will not, and will not permit any Restricted Subsidiary to, directly or indirectly, engage in any business other than a Permitted Business; *provided*, *however*, that the Company or any Restricted Subsidiary may own Capital Stock of an Unrestricted Subsidiary or joint venture or other entity that is engaged in a business other than a Permitted Business as long as any Investment therein was not prohibited when made by the covenant under the caption "– Limitation on Restricted Payments."

# Maintenance of Insurance

The Company will, and will cause each Restricted Subsidiary, to maintain insurance with reputable and financially sound carriers against such risks and in such amounts as is customarily carried by similar companies engaged in similar business to the Permitted Business in the jurisdictions in which the Company or such Restricted Subsidiary conducts its businesses, including, without limitation, property and casualty insurance.

# Use of Proceeds

The Company will not, and will not permit any Restricted Subsidiary to, use the net proceeds from the sale of the Notes, in any amount, for any purpose other than (a) in the approximate amounts and for the purposes specified under the caption "Use of Proceeds" in this offering memorandum (it being understood that the use of proceeds may be reallocated as specified in "Use of Proceeds") and (b) pending the application of all of such net proceeds in such manner, to invest the portion of such net proceeds not yet so applied in cash or Temporary Cash Investments.

# Designation of Restricted and Unrestricted Subsidiaries

The Board of Directors may designate any Restricted Subsidiary to be an Unrestricted Subsidiary; provided that (a) no Default shall have occurred and be continuing at the time of or after giving effect to such designation; (b) neither the Company nor any Restricted Subsidiary guarantees or provides credit support for the Indebtedness of such Restricted Subsidiary; (c) such Restricted Subsidiary has no outstanding Indebtedness that could trigger a cross-default to the Indebtedness of the Company or any other Restricted Subsidiary; (d) such Restricted Subsidiary does not own any Disqualified Stock of the Company or Disqualified or Preferred Stock of another Restricted Subsidiary or hold any Indebtedness, or any Lien on any property, of the Company or any Restricted Subsidiary, if such Disqualified or Preferred Stock or Indebtedness could not be Incurred under the covenant described under the caption "- Limitation on Indebtedness" or such Lien would violate the covenant described under the caption "- Limitation on Liens"; (e) such Restricted Subsidiary does not own any Voting Stock of another Restricted Subsidiary, and all of its Subsidiaries are Unrestricted Subsidiaries or are being concurrently designated as Unrestricted Subsidiaries in accordance with this paragraph; and (f) the Investment deemed to have been made thereby in such newly designated Unrestricted Subsidiary and each other newly designated Unrestricted Subsidiary being concurrently redesignated would be permitted to be made by the covenant described under the caption "Limitation on Restricted Payments.

The Board of Directors may designate any Unrestricted Subsidiary to be a Restricted Subsidiary; provided that (a) no Default shall have occurred and be continuing at the time of or after giving effect to such designation; (b) any Indebtedness of such Unrestricted Subsidiary outstanding at the time of such designation which will be deemed to have been Incurred by such newly designated Restricted Subsidiary as a result of such designation would be permitted to be Incurred by the covenant described under the caption "- Limitation on Indebtedness"; (c) any Lien on the property of such Unrestricted Subsidiary at the time of such designation which will be deemed to have been Incurred by such newly designated Restricted Subsidiary as a result of such designation would be permitted to be Incurred by the covenant described under the caption "- Limitation on Liens"; (d) such Unrestricted Subsidiary is not a Subsidiary of another Unrestricted Subsidiary (that is not concurrently being designated as a Restricted Subsidiary); and (e) if such Restricted Subsidiary is a Wholly Owned Subsidiary which, directly or indirectly, own any mining deposits or reserves or any mining license (other than with respect to the Baruun Naran mine), such Restricted Subsidiary shall upon such designation execute and deliver to the Trustee a supplemental indenture to the Indenture by which such Restricted Subsidiary shall become a Subsidiary Guarantor. Notwithstanding the foregoing, the Company will not be obligated to cause any Restricted Subsidiary to guarantee the Notes to the extent such guarantee could reasonably be expected to give rise to or result in any conflict with or violation of applicable law (or risk of personal or criminal liability for the officers, directors, managers or shareholders of such Restricted Subsidiary).

Notwithstanding the provisions of this covenant "Designation of Restricted and Unrestricted Subsidiaries," in no event shall Energy Resources LLC be designated as an Unrestricted Subsidiary so long as the Notes are outstanding.

# Government Approvals and Licenses; Compliance with Law

The Company will, and will cause each Restricted Subsidiary to, (a) obtain and maintain in full force and effect all governmental approvals, authorizations, consents, permits, concessions and licenses as are necessary to engage in the Permitted Business, (b) preserve and maintain good and valid title to its properties and assets (including mining and land-use rights) free and clear of any Liens other than Permitted Liens and (c) comply with all laws, regulations, orders, judgments and decrees of any governmental body, except to the extent that failure so to obtain, maintain, preserve and comply would not reasonably be expected to have a material adverse effect on (1) the business, results of operations or prospects of the Company and its Restricted Subsidiaries, taken as a whole, or (2) the ability of the Company or any Subsidiary Guarantor to perform its obligations under the Notes, the relevant Subsidiary Guarantee or the Indenture.

# Anti-Layering

The Company will not, and will not permit any Subsidiary Guarantor to, Incur any Indebtedness if such Indebtedness is contractually subordinated in right of payment to any other Indebtedness of the Company or such Subsidiary Guarantor, as the case may be, unless such Indebtedness is also contractually subordinated in right of payment to the Notes or the applicable Subsidiary Guarantee, on substantially identical terms. This does not apply to distinctions between categories of Indebtedness that exist by reason of any Liens or guarantees securing or in favor of some but not all of such Indebtedness.

# Suspension of Certain Covenants

If, on any date following the date of the Indenture, the Notes have an Investment Grade Rating from both of the Rating Agencies and no Default or Event of Default has occurred and is continuing (a "Suspension Event"), then, beginning on that day and continuing until such time, if any, at which the Notes cease to have an Investment Grade Rating from either of the Rating Agencies, the provisions of the Indenture summarized under the following captions will be suspended:

- (1) "- Certain Covenants Limitation on Indebtedness";
- (2) "- Certain Covenants Limitation on Restricted Payments";
- (3) "- Certain Covenants Limitation on Dividend and Other Payment Restrictions Affecting Restricted Subsidiaries";
- (4) "- Certain Covenants Limitation on Sales and Issuances of Capital Stock in Restricted Subsidiaries":
- (5) "- Certain Covenants Limitation on Issuances of Guarantees by Restricted Subsidiaries";
- (6) "- Certain Covenants Limitation on Sale and Leaseback Transactions";
- (7) "- Certain Covenants Limitation on Asset Sales"; and
- (8) "- Certain Covenants Limitation on the Company's Business Activities."

During any period that the foregoing covenants have been suspended, the Board of Directors may not designate any Restricted Subsidiary as an Unrestricted Subsidiary pursuant to the covenant described under the caption "– Certain Covenants – Designation of Restricted and Unrestricted Subsidiaries" or the definition of "Unrestricted Subsidiary."

Such covenants will be reinstituted and apply according to their terms as of and from the first day on which a Suspension Event ceases to be in effect. Such covenants will not, however, be of any effect with regard to actions of the Company or any Restricted Subsidiary properly taken in compliance with the provisions of the Indenture during the continuance of the Suspension Event and, following reinstatement, (1) the calculations under the covenant described under the caption "– Certain Covenants – Limitation on Restricted Payments" will be made as if such covenant had been in effect since the date of the Indenture except that no Default will be deemed to have occurred solely by reason of a Restricted Payment made while that covenant was suspended and (2) all Indebtedness incurred during the Suspension Period will be classified to have been incurred or issued pursuant to clause (b)(3) of the covenant described under the caption "– Certain Covenants – Limitation on Indebtedness." Upon the occurrence of a Suspension Period, the amount of Excess Proceeds shall be reset at zero. There can be no assurance that the Notes will ever achieve an Investment Grade Rating or that, if achieved, any such rating will be maintained.

# Provision of Financial Statements and Reports

- (a) So long as any of the Notes remain outstanding, the Company will furnish to the Trustee and furnish to the Holders upon request, as soon as they are available but in any event not more than 10 calendar days after they are filed with The Stock Exchange of Hong Kong Limited or any other securities exchange on which the Company's ordinary shares are at any time listed for trading, true and correct copies of any financial or other report in the English language filed with such exchange; *provided* that, if at any time the ordinary shares of the Company cease to be listed for trading on a recognized securities exchange, the Company will file with the Trustee and furnish to the Holders:
  - (1) as soon as they are available, but in any event within 90 calendar days after the end of each fiscal year of the Company, annual reports containing, and in a level of detail that is comparable in all material respects to that included in this offering memorandum, the following information: (i) audited consolidated balance sheets of the Company of the end of the two most recent fiscal years and audited consolidated income statements and statements of cash flow of the Company for the two most recent fiscal years, including complete footnotes to such financial statements and the audit report of a member firm of an internationally recognized firm of independent accountants on the financial statements; (ii) an operating and financial review of the audited financial statements, including a discussion of the results of operations, financial condition, Consolidated Adjusted EBITDA (as presented in this offering memorandum) and liquidity and capital resources of the Company, and a discussion of material recent developments and material commitments and contingencies and critical accounting policies; and (iii) description of the business, management and shareholders of the Company (on a consolidated basis);
  - (2) as soon as they are available, but in any event within 60 calendar days after the end of the first semi-annual fiscal period of the Company, semi-annual reports of the Company containing the following information: (i) an unaudited condensed consolidated balance sheet as of the end of such semi-annual period and unaudited condensed consolidated statements of income and statements of cash flow of the Company for the most recent semi-annual fiscal period ending on the unaudited condensed consolidated balance sheet date, and the comparable prior year period, together with condensed footnote disclosure, reviewed by a member firm of an internationally recognized firm of independent accountants together with the review report thereon; and (ii) an operating and financial review of the unaudited financial statements, including a discussion of the results of operations, financial condition, Consolidated Adjusted EBITDA (as presented in this offering memorandum) and liquidity and capital resources of the Company, and a discussion of material recent developments and material changes in commitments and contingencies and critical accounting policies since the most recent annual report; and
  - (3) promptly after the occurrence of (i) any Material Acquisition or Disposition or restructuring, (ii) any senior executive officer changes at the Company or change in auditors of the Company or (iii) any other material event not in the ordinary course of business, solely with respect to this sub-clause (iii), that the Company announces publicly, a report containing a description of such event.

- (b) In addition, so long as any of the Notes remain outstanding, the Company will provide to the Trustee (1) within 120 days after the close of each fiscal year, an Officers' Certificate stating the Leverage Ratio with respect to the two most recent semi-annual fiscal periods and showing in reasonable detail the calculation of the Leverage Ratio, including the arithmetic computations of each component of the Leverage Ratio, together with a certificate from the Company's external auditors verifying the accuracy and arithmetic computation; and (2) as soon as possible and in any event within 10 days after the Company becomes aware or should reasonably become aware of the occurrence of a Default, an Officers' Certificate setting forth the details of such Default or default, and the action which the Company proposes to take with respect thereto.
- (c) Further, the Company and each Subsidiary Guarantor have agreed that, for as long as any Notes are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act, during any period in which the Company or such Subsidiary Guarantor is neither subject to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), nor exempt from reporting pursuant to Rule 12g3-2(b) thereunder, the Company or such Subsidiary Guarantor, as the case may be, will supply to (i) any Holder or beneficial owner of a Note or (ii) a prospective purchaser of a Note or a beneficial interest therein designated by such Holder or beneficial owner, the information specified in, and meeting the requirements of Rule 144A(d)(4) under the Securities Act upon the request of any Holder or beneficial owner of a Note.

#### **Events of Default**

The following events will be defined as "Events of Default" in the Indenture:

- (a) default in the payment of principal of (or premium, if any, on) the Notes when the same becomes due and payable at maturity, upon acceleration, redemption or otherwise;
- (b) default in the payment of interest on any Note when the same becomes due and payable, and such default continues for a period of 30 consecutive days;
- (c) default in the performance or breach of the provisions of the covenants described under the caption "- Consolidation, Merger and Sale of Assets," or the failure by the Company to make or consummate an Offer to Purchase in the manner described under the captions "- Repurchase of Notes upon a Change of Control" or "- Certain Covenants Limitation on Asset Sales" or the failure by the Company to create, or cause its Restricted Subsidiaries to create, a first priority Lien on the Collateral (subject to any Permitted Liens and the Intercreditor Agreement) in accordance with the covenant described under the caption "- Security";
- (d) the Company or any Restricted Subsidiary defaults in the performance of or breaches any other covenant or agreement in the Indenture or under the Notes (other than a default specified in clause (a), (b) or (c) above) and such default or breach continues for a period of 30 consecutive days after written notice of such default or breach to the Company by the Trustee or the Holders of 25% or more in aggregate principal amount of the Notes;
- (e) there occurs with respect to any Indebtedness of the Company or any Restricted Subsidiary having an outstanding principal amount of US\$15.0 million (or the Dollar Equivalent thereof) or more in the aggregate for all such Indebtedness of all such Persons, whether such Indebtedness now exists or shall hereafter be created, (1) an event of default that has caused the holder thereof to declare such Indebtedness to be due and payable prior to its

Stated Maturity and/or (2) a failure to pay principal of, or interest or premium on, such Indebtedness when the same becomes due (subject to the applicable grace period in the relevant documents);

- (f) one or more final judgments or orders for the payment of money are rendered against the Company or any Restricted Subsidiary and are not paid or discharged, and there is a period of 60 consecutive days following entry of the final judgment or order that causes the aggregate amount for all such final judgments or orders outstanding and not paid or discharged against all such Persons to exceed US\$15.0 million (or the Dollar Equivalent thereof) (in excess of amounts which the Company's insurance carriers have agreed to pay under applicable policies) during which a stay of enforcement, by reason of a pending appeal or otherwise, is not in effect;
- (g) an involuntary case or other proceeding is commenced against the Company or any Significant Subsidiary (or any group of Restricted Subsidiaries that together would constitute a Significant Subsidiary) with respect to it or its debts under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect seeking the appointment of a receiver, liquidator, assignee, custodian, trustee, sequestrator or similar official of the Company or any Significant Subsidiary (or any group of Restricted Subsidiaries that together would constitute a Significant Subsidiary (or any group of Restricted Subsidiaries that together would constitute a Significant Subsidiary) and such involuntary case or other proceeding remains undismissed and unstayed for a period of 60 consecutive days; or an order for relief is entered against the Company or any Significant Subsidiary (or any group of Restricted Subsidiaries that together would constitute a Significant Subsidiary) under any applicable bankruptcy, insolvency or other similar law as now or hereafter in effect;
- (h) the Company or any Significant Subsidiary (or any group of Restricted Subsidiaries that together would constitute a Significant Subsidiary) (1) commences a voluntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, or consents to the entry of an order for relief in an involuntary case under any such law, (2) consents to the appointment of or taking possession by a receiver, liquidator, assignee, custodian, trustee, sequestrator or similar official of the Company or any Significant Subsidiary (or any group of Restricted Subsidiaries that together would constitute a Significant Subsidiary), or for all or substantially all of the property and assets of the Company or any Subsidiary (or any group of Restricted Subsidiaries that together would constitute a Significant Subsidiary), or (3) effects any general assignment for the benefit of creditors;
- (i) (a) the entity holding the mining license in relation to the Ukhaa Khudag mine ceases to be, directly or indirectly a Wholly Owned Restricted Subsidiary or a Subsidiary Guarantor or (b) the mining license for the Ukhaa Khudag mine ceases to be valid and effective or wholly owned by the Company or a Subsidiary Guarantor;
- (j) any Subsidiary Guarantor denies or disaffirms its obligations under its Subsidiary Guarantee or, except as permitted by the Indenture, any Subsidiary Guarantee is determined to be unenforceable or invalid or shall for any reason cease to be in full force and effect;
- (k) any default by the Company in the performance of any of its obligations under the Security Documents or the Indenture, which adversely affects the enforceability, validity, perfection or priority of the applicable Lien on the Collateral or which adversely affects the condition or value of the Collateral, taken as a whole, in any material respect; or

(1) the Company denies or disaffirms its obligations under any Security Document or, other than in accordance with the Indenture and the Security Documents, any Security Document ceases to be or is not in full force and effect or the Trustee ceases to have a first priority security interest in the Collateral (subject to any Permitted Liens and the Intercreditor Agreement).

If an Event of Default (other than an Event of Default specified in clause (g) or (h) above) occurs and is continuing under the Indenture, the Trustee or the Holders of at least 25% in aggregate principal amount of the Notes, then outstanding, by written notice to the Company (and to the Trustee if such notice is given by the Holders), may, and the Trustee at the request of such Holders shall, declare the principal of, premium, if any, and accrued and unpaid interest on the Notes to be immediately due and payable. Upon a declaration of acceleration, such principal of, premium, if any, and accrued and unpaid interest shall be immediately due and payable. If an Event of Default specified in clause (g) or (h) above occurs with respect to the Company or any Significant Subsidiary (or any group of Restricted Subsidiaries that together would constitute a Significant Subsidiary), the principal of, premium, if any, and accrued and unpaid interest on the Notes then outstanding shall automatically become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holder.

The Holders of at least a majority in principal amount of the outstanding Notes by written notice to the Company and to the Trustee may on behalf of all Holders waive all past defaults and rescind and annul a declaration of acceleration and its consequences if:

- (x) all existing Events of Default, other than the non-payment of the principal of, premium, if any, and interest on the Notes that have become due solely by such declaration of acceleration, have been cured or waived; and
- (y) the rescission would not conflict with any judgment or decree of a court of competent jurisdiction.

Upon such waiver, the Default will cease to exist, and any Event of Default arising therefrom will be deemed to have been cured, but no such waiver will extend to any subsequent or other Default or impair any right consequent thereon.

If an Event of Default occurs and is continuing, the Trustee may (but shall not be obligated to) pursue, in its own name or as trustee of an express trust, any available remedy by proceeding at law or in equity to collect the payment of principal of and interest on the Notes or to enforce the performance of any provision of the Notes or the Indenture. The Trustee may maintain a proceeding, subject to the Intercreditor Agreement, even if it does not possess any of the Notes or does not produce any of them in the proceeding. In addition, if an Event of Default occurs and is continuing, the Shared Security Agent may, and shall upon request of Holders of at least 25% in aggregate principal amount of outstanding Notes, subject to the Intercreditor Agreement, foreclose on the Collateral in accordance with the terms of the Security Documents and take such further action on behalf of the Holders with respect to the Collateral as the Shared Security Agent deems appropriate or is directed by the Holders of at least 25% in aggregate principal amount of outstanding Notes. See "– Security."

The Holders of at least a majority in aggregate principal amount of the outstanding Notes may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee. However, the Trustee may refuse to follow any direction that conflicts, or the Indenture or the Security Documents with law or the Indenture that may involve the Trustee in personal liability, or that the Trustee determines in good faith may be unduly prejudicial to the rights of Holders not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from Holders. A Holder may not institute any proceeding, judicial or otherwise, with respect to the Indenture or the Notes, or for the appointment of a receiver or trustee, or for any other remedy under the Indenture or the Notes unless:

- (1) the Holder has previously given the Trustee written notice of a continuing Event of Default;
- (2) the Holders of at least 25% in aggregate principal amount of outstanding Notes make a written request to the Trustee to pursue the remedy;
- (3) such Holder or Holders provide the Trustee indemnity and/or security satisfactory to the Trustee against any costs, liability or expense to be incurred in compliance with such request;
- (4) the Trustee does not comply with the request within 60 days after receipt of the request and the indemnity and/or security; and
- (5) during such 60-day period, the Holders of a majority in aggregate principal amount of the outstanding Notes do not give the Trustee a direction that is inconsistent with the request.

However, such limitations do not apply to the right of any Holder to receive payment of the principal of, premium, if any, or interest, and any Additional Amounts, if any, on, such Note or to bring suit for the enforcement of any such payment, on or after the due date expressed in the Notes, which right shall not be impaired or affected without the consent of the Holder.

Two Officers of the Company must certify to the Trustee in writing, on or before a date not more than 120 days after the end of each fiscal year, that a review has been conducted of the activities of the Company and its Restricted Subsidiaries and the Company's and its Restricted Subsidiaries' performance under the Indenture and the Security Documents and that the Company and its Restricted Subsidiaries have fulfilled all obligations thereunder, or, if there has been a default in the fulfillment of any such obligation, specifying each such default and the nature and status thereof. The Company will also be obligated to notify the Trustee in writing of any default or defaults in the performance of any covenants or agreements under the Indenture and the Security Documents. See "—Provision of Financial Statements and Reports."

# Consolidation, Merger and Sale of Assets

The Company will not consolidate with, merge with or into another Person, permit any Person to merge with or into it, or sell, convey, transfer, lease or otherwise dispose of all or substantially all of its and its Restricted Subsidiaries' properties and assets (computed on a consolidated basis) (as an entirety or substantially an entirety in one transaction or a series of related transactions), unless:

- (a) the Company shall be the continuing Person, or the Person (if other than it) formed by such consolidation or merger, or with or into which the Company consolidated or merged, or that acquired or leased such property and assets (the "Surviving Person") shall be (x) a corporation organized and validly existing under the laws of the Cayman Islands, the British Virgin Islands, Luxembourg, Mongolia or Hong Kong or any jurisdiction thereof and (y) shall expressly assume, by a supplemental indenture to the Indenture, executed and delivered to the Trustee, all the obligations of the Company under the Indenture and the Notes and the Security Documents, as the case may be, including the obligation to pay Additional Amounts with respect to any jurisdiction in which it is organized or resident for tax purposes, or from or through which payment is made, and the Indenture and the Notes and the Security Documents, as the case may be, shall remain in full force and effect;
- (b) immediately after giving effect to such transaction, no Default shall have occurred and be continuing;
- (c) immediately after giving effect to such transaction on a pro forma basis, the Company or the Surviving Person, as the case may be, could Incur at least US\$1.00 of Indebtedness under the proviso in the first sentence of clause (a) of the covenant described under the caption "— Certain Covenants Limitation on Indebtedness";
- (d) the Company delivers to the Trustee (1) an Officers' Certificate (attaching the arithmetic computations to demonstrate compliance with clause (c)) and (2) an Opinion of Counsel, in each case stating that such consolidation, merger or transfer and such supplemental indenture complies with this provision and that all conditions precedent provided for in the Indenture relating to such transaction have been complied with;
- (e) each Subsidiary Guarantor, unless such Subsidiary Guarantor is the Person with which the Company has entered into a transaction described under this covenant, shall execute and deliver a supplemental indenture to the Indenture confirming that its Subsidiary Guarantee shall apply to the obligations of the Company or the Surviving Person in accordance with the Notes and the Indenture; and
- (f) no Rating Decline shall have occurred.

No Subsidiary Guarantor will consolidate with or merge with or into another Person, permit any Person to merge with or into it, or sell, convey, transfer, lease or otherwise dispose of all or substantially all of its and its Restricted Subsidiaries' properties and assets (computed on a consolidated basis) (as an entirety or substantially an entirety in one transaction or a series of related transactions) to another Person (other than the Company or another Subsidiary Guarantor), unless:

(A) such Subsidiary Guarantor shall be the continuing Person, or the Person (if other than it) formed by such consolidation or merger or that acquired or leased such property and assets shall be the Company, another Subsidiary Guarantor or shall become a Subsidiary Guarantor concurrently with the transaction;

- (B) immediately after giving effect to such transaction, no Default shall have occurred and be continuing;
- (C) immediately after giving effect to such transaction on a pro forma basis, the Company could Incur at least US\$1.00 of Indebtedness under the proviso in the first sentence of clause (a) of the covenant described under the caption "– Certain Covenants Limitation on Indebtedness":
- (D) the Company delivers to the Trustee (1) an Officers' Certificate (attaching the arithmetic computations to demonstrate compliance with clause (C)) and (2) an Opinion of Counsel, in each case stating that such consolidation, merger or transfer and the relevant supplemental indenture complies with this provision and that all conditions precedent provided for in the Indenture relating to such transaction have been complied with; and
- (E) no Rating Decline shall have occurred;

provided that this paragraph shall not apply to (1) any sale or other disposition that complies with the "Limitation on Asset Sales" covenant or any Subsidiary Guarantor whose Subsidiary Guarantee is unconditionally released in accordance with the provisions described under "The Subsidiary Guarantees – Release of Subsidiary Guarantees" and (2) a consolidation or merger of any Subsidiary Guarantor with and into the Company or any other Subsidiary Guarantor, so long as the Company or such Subsidiary Guarantor survives such consolidation or merger.

Nothing in the Indenture will prevent any Restricted Subsidiary that is not a Subsidiary Guarantor from consolidating with, merging into or transferring all or substantially all of its properties and assets to the Company, a Subsidiary Guarantor or any other Restricted Subsidiary. The Company may consolidate or otherwise combine with or merge into an Affiliate incorporated or organized for the purpose of changing the legal domicile of the Company, reincorporating the Company in another jurisdiction in compliance with clause (a)(x) of the first paragraph under this "– Consolidation, Merger and Sale of Assets" covenant or changing the legal form of the Company.

Although there is a limited body of case law interpreting the phrase "substantially all," there is no precise established definition of the phrase under applicable law. Accordingly, in certain circumstances there may be a degree of uncertainty as to whether a particular transaction would involve "all or substantially all" of the property or assets of a Person.

The foregoing provisions would not necessarily afford Holders protection in the event of highly leveraged or other transactions involving the Company or the Subsidiary Guarantors that may adversely affect Holders.

# No Payments for Consents

The Company will not, and shall not permit any of its Subsidiaries to, directly or indirectly, pay or cause to be paid any consideration, whether by way of interest, fee or otherwise, to any Holder for or as an inducement to any consent, waiver or amendment of any of the terms or provisions of the Indenture or the Notes unless such consideration is offered to be paid and is paid to all Holders that consent, waive or agree to amend such term or provision within the time period set forth in the solicitation documents relating to such consent, waiver or amendment. Notwithstanding the foregoing, in any offer or payment of consideration for, or as an inducement to, any consent, waiver or amendment of any of the terms or provisions of the Indenture or the Notes in connection with an exchange offer, the Company and any Restricted Subsidiary may exclude (i) Holders or beneficial owners of the Notes that are not institutional "accredited investors" as defined in subparagraphs (a)(1), (2), (3) or (7) of Rule 501 under the Securities Act, and (ii) Holders or beneficial owners of the Notes in any jurisdiction where the inclusion of such Holders or beneficial owners would require the Company or any Restricted Subsidiary to comply with the registration requirements or other similar requirements under any securities laws of such jurisdiction, or the solicitation of such consent, waiver or amendment from, or the granting of such consent or waiver, or the approval of such amendment by, Holders or beneficial owners in such jurisdiction would be unlawful, in each case as determined by the Company in its sole discretion.

#### **Defeasance**

# Defeasance and Discharge

The Indenture will provide that the Company will be deemed to have paid and will be discharged from any and all obligations in respect of the Notes on the 183rd day after the deposit referred to below, and the provisions of the Indenture, the Security Documents and the Intercreditor Agreement will no longer be in effect with respect to the Notes (except for, among other matters, certain obligations to register the transfer or exchange of the Notes, to replace stolen, lost or mutilated Notes, to maintain paying agencies and to hold monies for payment in trust) if, among other things:

(a) the Company has (1) deposited with the Trustee (or its agent), in trust, money and/or U.S. Government Obligations or any combination thereof that through the payment of interest and principal in respect thereof in accordance with their terms will provide money in an amount sufficient to pay the principal of, premium, if any, and accrued interest on the Notes on the Stated Maturity of such payments in accordance with the terms of the Indenture and the Notes and (2) delivered to the Trustee an Opinion of Counsel or a certificate of an internationally recognized firm of independent auditors to the effect that the amount deposited by the Company is sufficient to provide payment for the principal of, premium, if any, and accrued interest on, the Notes on the Stated Maturity of such payment in accordance with the terms of the Indenture;

- (b) the Company has delivered to the Trustee (1) either (x) an Opinion of Counsel of recognized standing with respect to U.S. federal income tax laws which is based on a change in applicable U.S. federal income tax law occurring after the Original Issue Date to the effect that beneficial owners will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the Company's exercise of its option under this "Defeasance and Discharge" provision and will be subject to U.S. federal income tax on the same amounts and in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred or (y) a ruling directed to the Company or the Trustee received from the U.S. Internal Revenue Service to the same effect as the aforementioned Opinion of Counsel, and (2) an Opinion of Counsel of recognized international standing to the effect that the creation of the defeasance trust does not violate the U.S. Investment Company Act of 1940, as amended, and after the passage of 123 days following the deposit, the trust fund will not be subject to the effect of Section 547 of the United States Bankruptcy Code or Section 15 of the New York Debtor and Creditor Law; and
- (c) immediately after giving effect to such deposit on a pro forma basis, no Event of Default, or event that after the giving of notice or lapse of time or both would become an Event of Default, shall have occurred and be continuing on the date of such deposit or during the period ending on the 183rd day after the date of such deposit, and such defeasance shall not result in a breach or violation of or constitute a default under, any other agreement or instrument to which the Company or any Restricted Subsidiary is a party or by which the Company or any Restricted Subsidiary is bound.

In the case of either discharge or defeasance, each of the Subsidiary Guarantees will terminate.

# Defeasance of Certain Covenants

The Indenture further will provide that the provisions of the Indenture will no longer be in effect with respect to clauses (c), (d)(1) and (f) under the first paragraph and clauses (C), (D)(1) and (E) under the second paragraph under "Consolidation, Merger and Sale of Assets" and all the covenants described herein under "- Certain Covenants," other than as described under "- Certain Covenants -Government Approvals and Licenses; Compliance with Law" and "- Certain Covenants -Anti-Layering," clause (c) under "Events of Default" with respect to such clauses (c), (d)(1) and (f) under the first paragraph and clauses (C), (D)(1) and (E) under the second paragraph under "Consolidation, Merger and Sale of Assets" and with respect to the other events set forth in such clause, clause (d) under "Events of Default" with respect to such other covenants and clauses (e) and (f) under "Events of Default" shall be deemed not to be Events of Default upon, among other things, the deposit with the Trustee (or its agent), in trust, of money, U.S. Government Obligations or a combination thereof that through the payment of interest and principal in respect thereof in accordance with their terms will provide money in an amount sufficient to pay the principal of, premium, if any, and accrued interest on the Notes on the Stated Maturity of such payments in accordance with the terms of the Indenture and the Notes, the satisfaction of the provisions described in clause (b)(2) of the preceding paragraph and the delivery by the Company to the Trustee of an Opinion of Counsel of recognized standing with respect to U.S. federal income tax matters to the effect that beneficial owners will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit and defeasance of certain covenants and Events of Default and will be subject to U.S. federal income tax on the same amounts and in the same manner and at the same times as would have been the case if such deposit and defeasance had not occurred.

# Defeasance and Certain Other Events of Default

In the event the Company exercises its option to omit compliance with certain covenants and provisions of the Indenture as described in the immediately preceding paragraph and the Notes are declared due and payable because of the occurrence of an Event of Default that remains applicable, the amount of money and/or U.S. Government Obligations on deposit with the Trustee will be sufficient to pay amounts due on the Notes at the time of their Stated Maturity but may not be sufficient to pay amounts due on the Notes at the time of the acceleration resulting from such Event of Default. However, the Company and the Subsidiary Guarantors will remain liable for such payments.

# **Amendments and Waiver**

### Amendments Without Consent of Holders

The Indenture, the Intercreditor Agreement, or any Security Document may be amended, without the consent of any Holder, to:

- (a) cure any ambiguity, defect, omission or inconsistency in the Indenture or the Notes, the Intercreditor Agreement, or any Security Document;
- (b) comply with the provisions described under "Consolidation, Merger and Sale of Assets";
- (c) evidence and provide for the acceptance of appointment by a successor Trustee or Shared Security Agent;
- (d) add any Subsidiary Guarantor or any Subsidiary Guarantee or release any Subsidiary Guarantor from any Subsidiary Guarantee as provided or permitted by the terms of the Indenture:
- (e) add any Subsidiary Guarantor Pledgor or release any Subsidiary Guarantor Pledger as provided or permitted by the terms of the Indenture;
- (f) provide for the issuance of Additional Notes in accordance with the limitations set forth in the Indenture;
- (g) add additional Collateral to secure the Notes or any Subsidiary Guarantee and create or register Liens on such additional Collateral;
- (h) in any other case where a supplemental indenture to the Indenture is required or permitted to be entered into pursuant to the provisions of the Indenture without the consent of any Holder;
- (i) effect any changes to the Indenture in a manner necessary to comply with the procedures of DTC or any other applicable securities depositary or clearing system;
- (j) permit Permitted Pari Passu Secured Indebtedness (including, without limitation, permitting the Trustee and the Shared Security Agent to enter into any amendments to the Security Documents, the Intercreditor Agreement or the Indenture and take any other action necessary to permit the creation and registration of Liens on the Collateral to secure Permitted Pari Passu Secured Indebtedness, in accordance with the Indenture);
- (k) make any other change that, in the good faith opinion of the Board of Directors, does not materially and adversely affect the rights of any Holder;

- (1) conform the text of the Indenture, the Notes or the Subsidiary Guarantees, the Security Documents or the Intercreditor Agreement to any provision of this "Description of the Notes" to the extent that such provision in this "Description of the Notes" was intended to be a verbatim recitation of a provision in the Indenture, the Notes or the Subsidiary Guarantees, the Security Documents or the Intercreditor Agreement; or
- (m) to make any other change that would provide any additional rights or benefits to the Holders.

# Amendments With Consent of Holders

Amendments of the Indenture, the Intercreditor Agreement, or any Security Document may be made by the Company, the Subsidiary Guarantors and the Trustee with the consent of the Holders of not less than a majority in aggregate principal amount of the outstanding Notes, and the holders of a majority in principal amount of the outstanding Notes may waive future compliance by the Company with any provision of the Indenture or the Notes, the Intercreditor Agreement, or any Security Document; *provided*, *however*, that no such modification, amendment or waiver may, without the consent of each Holder affected thereby:

- (a) change the Stated Maturity of the principal of, or any installment of interest on, any Note;
- (b) reduce the principal amount of, or premium, if any, or interest on, any Note;
- (c) change the currency, time or place of payment of principal of, or premium, if any, or interest on, any Note;
- (d) impair the right to institute suit for the enforcement of any payment on or after the Stated Maturity (or, in the case of a redemption, on or after the redemption date) of any Note or any Subsidiary Guarantee;
- (e) reduce the above stated percentage of outstanding Notes the consent of whose Holders is necessary to modify or amend the Indenture;
- (f) waive a default in the payment of principal of, premium, if any, or interest on the Notes;
- (g) release any Subsidiary Guarantor from its Subsidiary Guarantee, except as provided in the Indenture;
- (h) release any Collateral, except as provided in the Indenture, the Intercreditor Agreement and the Security Documents;
- (i) reduce the percentage or aggregate principal amount of outstanding Notes the consent of whose Holders is necessary for waiver of compliance with certain provisions of the Indenture or for waiver of certain defaults:
- (j) amend, change or modify any Subsidiary Guarantee in a manner that adversely affects the Holders, except as permitted by the Indenture;
- (k) amend, change or modify any provision of any Security Document, the Intercreditor Agreement or any provision of the Indenture relating to the Collateral, in a manner that adversely affects the Holders, except in accordance with the other provisions of the Indenture, such Security Document or such Intercreditor Agreement;

- (1) reduce the amount payable upon a Change of Control Offer or an Offer to Purchase with the Excess Proceeds from any Asset Sale or change the time or manner by which a Change of Control Offer or an Offer to Purchase with the Excess Proceeds from any Asset Sale may be made or by which the Notes must be repurchased pursuant to a Change of Control Offer or an Offer to Purchase with the Excess Proceeds from any Asset Sale;
- (m) change the redemption date or the redemption price of the Notes from that stated under "- Optional Redemption" or "- Redemption for Tax Reasons";
- (n) amend, change or modify the obligation of the Company or any Subsidiary Guarantor to pay Additional Amounts; or
- (o) amend, change or modify any provision of the Indenture or the related definition affecting the ranking of the Notes or any Subsidiary Guarantee in a manner which adversely affects the Holders.

# Satisfaction and Discharge

The Indenture will be discharged and will cease to be of further effect as to the Notes issued thereunder, when either:

- (a) all Notes theretofore authenticated and delivered, except lost, stolen or destroyed Notes which have been replaced or paid and Notes for whose payment money has theretofore been deposited in trust, have been delivered to the Trustee for cancellation; or
- (b) (1) all Notes not theretofore delivered to such Trustee for cancellation have become due and payable by reason of the making of a notice of redemption or otherwise, will become due and payable within one year or are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Company and the Company or any Subsidiary Guarantor has irrevocably deposited or caused to be deposited with such Trustee as trust funds in trust solely for the benefit of the Holders, cash in U.S. dollars, U.S. Government Obligations, or a combination thereof, in such amounts as will be sufficient without consideration of any reinvestment of interest to pay and discharge the entire indebtedness on Notes not theretofore delivered to the Trustee for cancellation for principal, premium, if any, and accrued interest to the date of maturity or redemption;
  - (2) no Default or Event of Default (other than that resulting from borrowing funds to be applied to make such deposit and any similar and simultaneous deposit relating to other Indebtedness and, in each case, the granting of Liens in connection therewith) with respect to the Indenture or the Notes issued thereunder shall have occurred and be continuing on the date of such deposit or shall occur as a result of such deposit and such deposit will not result in a breach or violation of, or constitute a default under the Credit Facilities or any other material agreement or instrument (other than the Indenture) to which the Company or any Subsidiary Guarantor is a party or by which the Company or any Subsidiary Guarantor is bound (other than that resulting from borrowing funds to be applied to make such deposit and any similar and simultaneous deposit relating to other Indebtedness and, in each case, the granting of Liens in connection therewith);
  - (3) the Company has paid or caused to be paid all sums payable by it under the Indenture; and

(4) the Company has delivered irrevocable instructions to the Trustee under the Indenture to apply the deposited money toward the payment of the Notes at maturity or the redemption date, as the case may be.

In addition, the Company must deliver an Officers' Certificate and an Opinion of Counsel to the Trustee stating that all conditions precedent to satisfaction and discharge have been satisfied.

# **Unclaimed Money**

Claims against the Company for the payment of principal of, premium, if any, or interest, on the Notes will become void unless presentation for payment is made as required in the Indenture within a period of six years.

# No Personal Liability of Incorporators, Stockholders, Members, Officers, Directors or Employees

No recourse for the payment of the principal of, premium, if any, or interest on any of the Notes or for any claim based thereon or otherwise in respect thereof, and no recourse under or upon any obligation, covenant or agreement of the Company or any of the Subsidiary Guarantors in the Indenture, or in any of the Notes or the Subsidiary Guarantees or because of the creation of any Indebtedness represented thereby, shall be had against any incorporator, stockholder, member, officer, director, employee or controlling person of the Company or any of the Subsidiary Guarantors or of any successor Person thereof. Each Holder, by accepting the Notes, waives and releases all such liability. The waiver and release are part of the consideration for the issuance of the Notes and the Subsidiary Guarantees. Such waiver may not be effective to waive liabilities under any applicable law.

# Concerning the Trustee and the Paying Agent

Deutsche Bank Trust Company Americas is to be appointed as Trustee under the Indenture and as registrar ("Registrar") and paying and transfer agent (the "Paying Agent") with regard to the Notes. Except during the continuance of a Default, the Trustee will not be liable, except for the performance of such duties as are specifically set forth in the Indenture. If an Event of Default has occurred and is continuing, the Trustee will use the same degree of care and skill in its exercise of the rights and powers vested in it under the Indenture as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The Indenture contains limitations on the rights of the Trustee, should it become a creditor of the Company or any of the Subsidiary Guarantors, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claims, as security or otherwise. The Trustee is permitted to engage in other transactions with the Company and its Affiliates; *provided*, *however*, that if the Trustee acquires any conflicting interest, it must eliminate such conflict or resign.

If the Company maintains a paying agent with respect to the Notes in a member state of the European Union, such paying agent will be located in a member state of the European Union that is not obligated to withhold or deduct tax pursuant to European Council Directive 2003/48/EC or any other directive implementing the conclusions of ECOFIN Council meeting of November 26-27, 2000 on the taxation of savings income, or any law implementing or complying with, or introduced in order to conform to, such Directive or such other directive.

Subject to the Intercreditor Agreement, DB Trustees (Hong Kong) Limited will initially act as shared security agent (the "Shared Security Agent") under the Security Documents in respect of the Security over the Collateral. The Shared Security Agent, acting in its capacity as such, shall have such duties with respect to the Collateral pledged, assigned or granted pursuant to the Intercreditor Agreement and the Security Documents as are set forth in the Intercreditor Agreement and the Security Documents. Under certain circumstances, the Shared Security Agent may have obligations under the Security Documents that are in conflict with the interests of the Holders. Neither the Shared Security Agent or the Trustee will be obligated to exercise any rights or powers conferred under the Intercreditor Agreement or any of the Security Documents for the benefit of the Holders, unless such Holders have offered to the Shared Security Agent/Trustee indemnity and/or security satisfactory to the Shared Security Agent/Trustee against any loss, liability or expense. Furthermore, each Holder, by accepting the Notes will agree, for the benefit of the Trustee and the Shared Security Agent that it is solely responsible for its own independent appraisal of and investigation into all risks arising under or in connection with the Security Documents and has not relied on and will not at any time rely on the Trustee or the Shared Security Agent in respect of such risks.

# **Book-Entry**; Delivery and Form

The certificates representing the Notes will be issued in fully registered form without interest coupons, Notes sold in offshore transactions in reliance on Regulation S under the Securities Act will initially be represented by one or more permanent global notes in definitive, fully registered form without interest coupons (each a "Regulation S Global Note") and will be deposited with Deutsche Bank Trust Company Americas as custodian for, and registered in the name of a nominee of, DTC for the accounts of Euroclear and Clearstream.

Notes sold in reliance on Rule 144A will be represented by one or more permanent global notes in definitive, fully registered form without interest coupons (each a "Restricted Global Note"; and together with the Regulation S Global Notes, the "Global Notes") and will be deposited with Deutsche Bank Trust Company Americas as custodian for, and registered in the name of a nominee of, DTC.

Each Global Note (and any Notes issued for exchange therefor) will be subject to certain restrictions on transfer set forth therein as described under "Transfer Restrictions."

Ownership of beneficial interests in a Global Note will be limited to persons who have accounts with DTC ("participants") or persons who hold interests through participants. Ownership of beneficial interests in a Global Note will be shown on, and the transfer of that ownership will be effected only through, records maintained by DTC or its nominee (with respect to interests of participants) and the records of participants (with respect to interests of persons other than participants). Beneficial owners may hold their interests in a Global Note directly through DTC if they are participants in such system, or indirectly through organizations which are participants in such system.

Euroclear and Clearstream will hold interests in the Global Notes on behalf of their participants through DTC.

So long as DTC, or its nominee, is the registered owner or holder of a Global Note, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by such Global Note for all purposes under the Indenture and the Notes. No beneficial owner of an interest in a Global Note will be able to transfer that interest except in accordance with DTC's applicable procedures, in addition to those provided for under the Indenture and, if applicable, those of Euroclear and Clearstream.

Payments of the principal of, and interest on, a Global Note will be made to DTC or its nominee, as the case may be, as the registered owner thereof. Neither the Company nor any of the Subsidiary Guarantors, the Trustee nor the Paying Agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in a Global Note or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The Company expects that DTC or its nominee, upon receipt of any payment of principal or interest in respect of a Global Note, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of such Global Note as shown on the records of DTC or its nominee.

The Company also expects that payments by participants to owners of beneficial interests in such Global Note held through such participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers registered in the names of nominees for such customers. Such payments will be the responsibility of such participants.

The Company expects that DTC will take any action permitted to be taken by a holder of Notes (including the presentation of Notes for exchange as described below) only at the direction of one or more participants to whose account the DTC interests in a Global Note is credited and only in respect of such portion of the aggregate principal amount of Notes as to which such participant or participants has or have given such direction. However, if there is an Event of Default under the Notes, DTC will exchange the applicable Global Note for Notes in certificated form ("Certificated Notes"), which it will distribute to its participants and which may be legended as set forth under the heading "Transfer Restrictions."

Although DTC, Euroclear and Clearstream are expected to follow the foregoing procedures in order to facilitate transfers of interests in a Global Note among participants of DTC, Euroclear and Clearstream, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. None of the Company, any of the Subsidiary Guarantors, the Trustee or the Paying Agent will have any responsibility for the performance by DTC, Euroclear or Clearstream or their respective participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

If DTC is at any time unwilling or unable to continue as a depositary for the Global Notes and a successor depositary is not appointed by the Company within 90 days, the Company will issue Certificated Notes in registered form, which may bear the legend referred to under "Transfer Restrictions," in exchange for the Global Notes. Holders of an interest in a Global Note may receive Certificated Notes, which may bear the legend referred to under "Transfer Restrictions," in accordance with the DTC's rules and procedures in addition to those provided for under the Indenture.

# The Clearing Systems

#### General

DTC, Euroclear and Clearstream have advised the Company as follows:

DTC. DTC is a limited-purpose trust company organized under the laws of the State of New York, a "banking organization" within the meaning of New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC was created to hold securities of its participants and to facilitate the clearance and settlement of securities transactions among its participants in such securities through electronic bookentry changes in accounts of its participants, thereby eliminating the need for physical movement of securities certificates. DTC's participants include securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations, some of whom own DTC, and may include the initial purchaser. Indirect access to the DTC system is also available to others that clear through or maintain a custodial relationship with a DTC participant, either directly or indirectly ("indirect participants"). Transfers of ownership or other interests in Notes in DTC may be made only through DTC participants. In addition, beneficial owners of Notes in DTC will receive all distributions of principal of and interest on the Notes from the Trustee through such DTC participant.

Euroclear and Clearstream. Euroclear and Clearstream hold securities for participating organizations and facilitate the clearance and settlement of securities transactions between their respective participants through electronic book-entry changes in accounts of such participants. Euroclear and Clearstream provide to their participants, among other things, services for safekeeping, administration, clearance and settlement of internationally-traded securities and securities lending and borrowing. Euroclear and Clearstream interface with domestic securities markets. Euroclear and Clearstream participants are financial institutions such as underwriters, securities brokers and dealers, banks, trust companies and certain other organizations. Indirect access to Euroclear or Clearstream is also available to others such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Euroclear or Clearstream participant, either directly or indirectly.

# Initial Settlement

Investors' interests in Notes held in book-entry form by DTC will be represented through financial institutions acting on their behalf as direct and indirect participants in DTC. As a result, Euroclear and Clearstream will hold positions on behalf of their participants through DTC.

Investors electing to hold their Notes through DTC (other than through accounts at Euroclear or Clearstream) must follow the settlement practices applicable to United States corporate debt obligations. The securities custody accounts of investors will be credited with their holdings against payment in same day funds on the settlement date.

Investors electing to hold their Notes through Euroclear or Clearstream accounts will follow the settlement procedures applicable to conventional Eurobonds in registered form. Notes will be credited to the securities custody accounts of Euroclear Holders and of Clearstream Holders on the Business Day following the settlement date against payment for value on the settlement date.

# Secondary Market Trading

Secondary market trading between DTC participants will occur in the ordinary way in accordance with DTC rules. Secondary market trading between Clearstream participants and/or Euroclear participants will occur in the ordinary way in accordance with the applicable rules and operating procedures of Clearstream and Euroclear and will be settled using the procedures applicable to conventional eurobonds.

Cross-market transfers between persons holding directly or indirectly through DTC, on the one hand, and directly or indirectly through Clearstream participants or Euroclear participants, on the other, will be effected in DTC in accordance with DTC rules on behalf of the relevant European international clearing system by its U.S. depositary; however, such cross-market transactions will require delivery of instructions to the relevant European international clearing system by the counterparty in such system in accordance with its rules and procedures and within its established deadlines (European time). The relevant European international clearing system will, if a transaction meets its settlement requirements, deliver instructions to its U.S. depositary to take action to effect final settlement on its behalf by delivering or receiving Notes in DTC, and making or receiving payment in accordance with normal procedures for same-day funds settlement applicable to DTC. Clearstream participants and Euroclear participants may not deliver instructions directly to the U.S. depositaries.

Because of time zone differences, credits of Notes received in Clearstream or Euroclear as a result of a transaction with a DTC participant will be made during subsequent securities settlement processing and dated the Business Day following the DTC settlement date. Such credits or any transactions in such Notes settled during such processing will be reported to the relevant Clearstream participants or Euroclear participants on such Business Day. Cash received in Clearstream or Euroclear as a result of sales of Notes by or through a Clearstream participant or a Euroclear participant to a DTC participant will be received with value on the DTC settlement date but will be available in the relevant Clearstream or Euroclear cash account only as of the Business Day following settlement in DTC.

# **Notices**

All notices or demands required or permitted by the terms of the Notes or the Indenture to be given to or by the Holders are required to be in writing and may be given or served by being sent by prepaid courier or by being deposited, first-class postage prepaid, in the United States mails (if intended for the Company or any Subsidiary Guarantor or the Trustee) addressed to the Company, such Subsidiary Guarantor or the Trustee, as the case may be, at the corporate trust office of the Trustee; and (if intended for any Holder) addressed to such Holder at such Holder's last address as it appears in the Note register.

Any such notice or demand will be deemed to have been sufficiently given or served when so sent or deposited and, if to the Holders, when delivered in accordance with the applicable rules and procedures of DTC. Any such notice shall be deemed to have been delivered on the day such notice is delivered to DTC or if by mail, when so sent or deposited.

#### Consent to Jurisdiction; Service of Process

The Company and each of the Subsidiary Guarantors will irrevocably (i) submit to the non-exclusive jurisdiction of any U.S. federal or New York state court located in the Borough of Manhattan, The City of New York in connection with any suit, action or proceeding arising out of, or relating to, the Notes, any Subsidiary Guarantee, the Indenture or any transaction contemplated

thereby and (ii) designate and appoint Law Debenture Corporate Services Inc., currently at 400 Madison Avenue, 4th Floor, New York, New York 10017, for receipt of service of process in any such suit, action or proceeding.

# Governing Law

Each of the Notes, the Subsidiary Guarantees and the Indenture provides that such instrument will be governed by, and construed in accordance with, the laws of the State of New York. The Intercreditor Agreement will be governed by, and construed in accordance with, the laws of England. The pledge of the Capital Stock of Mongolian Coal Corporation Limited will be governed by, and construed in accordance with, the laws of Hong Kong. The pledge of the Capital Stock of Mongolian Coal Corporation S.à.r.l. will be governed by, and construed in accordance with, the laws of Luxembourg.

# **Definitions**

Set forth below are defined terms used in the covenants and other provisions of the Indenture. Reference is made to the Indenture for other capitalized terms used in this "Description of the Notes" for which no definition is provided.

"Acquired Indebtedness" means Indebtedness of a Person existing at the time such Person becomes a Restricted Subsidiary or Indebtedness of a Restricted Subsidiary assumed in connection with an Asset Acquisition by such Restricted Subsidiary, whether or not Incurred in connection with, or in contemplation of, the Person merging with or into or becoming a Restricted Subsidiary.

"Adjusted Treasury Rate" means, with respect to any redemption date, the rate per annum equal to the semi-annual equivalent yield in maturity of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date.

"Affiliate" means, with respect to any Person, any other Person (i) directly or indirectly controlling, controlled by, or under direct or indirect common control with, such Person, (ii) who is a director or officer of such Person or any Subsidiary of such Person or of any Person referred to in clause (i) of this definition or (iii) who is a spouse or any person cohabiting as a spouse, child or step-child, parent or step-parent, brother, sister, step-brother or step-sister, parent-in-law, grandchild, grandparent, uncle, aunt, nephew and niece of a Person described in clause (i) or (ii). For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as applied to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise.

"Applicable Premium" means with respect to a Note at any redemption date, the greater of (i) 1.00% of the principal amount of such Note and (ii) the excess of (A) the present value at such redemption date of the redemption price of such Note on March 29, 2015 (such redemption price being described in the first paragraph in the "- Optional Redemption" section exclusive of any accrued interest), plus all required remaining scheduled interest payments due on such Note through March 29, 2015 (but excluding accrued and unpaid interest to the redemption date), computed using a discount rate equal to the Adjusted Treasury Rate plus 50 basis points, over (B) the principal amount of such Note on such redemption date.

"Asset Acquisition" means (1) an Investment by the Company or any Restricted Subsidiary in any other Person pursuant to which such Person shall become a Restricted Subsidiary or shall be merged

into or consolidated with the Company or any Restricted Subsidiary or (2) an acquisition by the Company or any Restricted Subsidiary of the property and assets of any Person other than the Company or any Restricted Subsidiary that constitute substantially all of a division or line of business of such Person.

"Asset Disposition" means the sale or other disposition by the Company or any Restricted Subsidiary (other than to the Company or another Restricted Subsidiary) of (1) all or substantially all of the Capital Stock of any Restricted Subsidiary or (2) all or substantially all of the assets that constitute a division or line of business of the Company or any Restricted Subsidiary.

"Asset Sale" means any sale, transfer or other disposition of any assets (including by way of merger, consolidation or Sale and Leaseback Transaction and including any sale or issuance of Capital Stock by a Restricted Subsidiary) in one transaction or a series of related transactions by the Company or any Restricted Subsidiary to any Person; provided that "Asset Sale" shall not include:

- (a) sales, transfers or other dispositions of inventory, receivables and other current assets in the ordinary course of business;
- (b) sales, transfers or other dispositions of assets constituting a Permitted Investment or Restricted Payment permitted to be made under the covenant described under the caption "-Certain Covenants - Limitation on Restricted Payments";
- (c) sales, transfers or other dispositions of assets with a Fair Market Value not in excess of US\$5.0 million (or the Dollar Equivalent thereof) in any transaction or series of related transactions;
- (d) any sale, transfer, assignment or other disposition of any property or equipment that has become damaged, worn out, obsolete or otherwise unsuitable for use in connection with the business of the Company or its Restricted Subsidiaries;
- (e) any transfer, assignment or other disposition deemed to occur in connection with creating or granting any Permitted Lien;
- (f) sales or other dispositions of cash or Temporary Cash Investments;
- (g) any transfer, termination, unwinding or other disposition of Hedging Obligations;
- (h) a transaction covered by the covenant under the caption "- Consolidation, Merger and Sale of Assets";
- (i) any sale, transfer or other disposition of any assets by the Company or any Restricted Subsidiary, including the sale or issuance by the Company or any Restricted Subsidiary of any Capital Stock of any Restricted Subsidiary, to the Company or any other Restricted Subsidiary;
- (j) transfers resulting from any casualty or condemnation of property;
- (k) any sale, transfer or other disposition of any Capital Stock or other asset (other than the mining license for the Ukhaa Khudag mine or any direct or indirect equity interest in Energy Resources LLC or any other Person that holds the license for the Ukhaa Khudag mine) subject to any license or agreement that provides for Build-Operate-Transfer (the "BOT Agreement") to the Government of Mongolia and any entity controlled by the

Government of Mongolia, prior to or upon expiration of the BOT Agreement; *provided* that any cash or Temporary Cash Investment must be applied in compliance with the covenant described under the caption "– Limitation on Asset Sales";

- (1) disposition of Investment in joint ventures to the extent required by or made pursuant to buy/sell arrangements between the joint venture parties; provided that any cash, Temporary Cash Investment or other consideration received must be applied in compliance with the covenant described under the caption "- Limitation on Asset Sales";
- (m) any surrender or waiver of contract rights or settlement, release, recovery on or surrender of contract, tort or other claims in the ordinary course of business; and
- (n) any Permitted Railway Asset Swap.

"Attributable Indebtedness" means, in respect of a Sale and Leaseback Transaction, at the time of determination, the present value, discounted at the interest rate implicit in such Sale and Leaseback Transaction, of the total obligations of the lessee for rental payments during the remaining term of the lease in such Sale and Leaseback Transaction, including any period for which such lease has been extended or may, at the option of the lessor, be extended; provided, however, that if such Sale and Leaseback Transaction results in Capitalized Lease Obligations, the amount of Indebtedness represented thereby will be determined in accordance with the definition of "Capitalized Lease Obligations."

"Average Life" means, at any date of determination with respect to any Indebtedness, the quotient obtained by dividing (1) the sum of the products of (a) the number of years from such date of determination to the dates of each successive scheduled principal payment of such Indebtedness and (b) the amount of such principal payment by (2) the sum of all such principal payments.

"Board of Directors" means the board of directors elected or appointed by the stockholders of the Company to manage the business of the Company or any committee of such board duly authorized to take the action purported to be taken by such committee.

"Board Resolution" means any resolution of the Board of Directors taking an action which it is authorized to take and adopted at a meeting duly called and held at which a quorum of disinterested members (if so required) was present and acting throughout or adopted by written resolution executed by the requisite members of the Board of Directors.

"Business Day" means any day which is not a Saturday, Sunday, legal holiday or other day on which banking institutions in The City of New York, London or Hong Kong (or in any other place in which payments on the Notes are to be made) are authorized by law or governmental regulation to close.

"Capital Stock" means, with respect to any Person, any and all shares, interests, participations or other equivalents (however designated, whether voting or non-voting) in equity of such Person, whether outstanding on the Original Issue Date or issued thereafter, including, without limitation, all Common Stock and Preferred Stock, but excluding debt securities convertible into such equity.

"Capitalized Lease" means, with respect to any Person, any finance lease of any property (whether real, personal or mixed) which, in conformity with IFRS, is required to be capitalized on the balance sheet of such Person.

"Capitalized Lease Obligations" means the present value of minimum lease payments under a Capitalized Lease measured in conformity with IFRS.

"Change of Control" means the occurrence of one or more of the following events:

- (1) the direct or indirect sale, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or a series of related transactions, of all or substantially all of the properties or assets of the Company and its Restricted Subsidiaries, taken as a whole, to any "person" (within the meaning of Section 13(d) of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act")), other than one or more Permitted Holders;
- the Company consolidates with, or merges with or into, any Person (other than one or more Permitted Holders), or any Person consolidates with, or merges with or into, the Company, in any such event pursuant to a transaction in which any of the outstanding Voting Stock of the Company or such other Person is converted into or exchanged for cash, securities or other property, other than any such transaction where the Voting Stock of the Company outstanding immediately prior to such transaction is converted into or exchanged for (or continues as) Voting Stock (other than Disqualified Stock) of the surviving or transferee Person constituting a majority of the outstanding shares of Voting Stock of such surviving or transferee Person (immediately after giving effect to such issuance);
- (3) the Permitted Holders are the beneficial owners of less than 30% of the total voting power of the Voting Stock of the Company;
- (4) any "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act) is or becomes the "beneficial owner" (as such term is used in Rule 13d-3 of the Exchange Act), directly or indirectly, of the total voting power of the Voting Stock of the Company greater than such total voting power held beneficially by the Permitted Holders:
- (5) individuals who on the Original Issue Date constituted the Board of Directors (together with any new directors whose nomination or election was approved by a vote of at least a majority of the members of the Board of Directors then in office who were members of the Board of Directors on the Original Issue Date or whose nomination or election was previously so approved) cease for any reason to constitute a majority of the members of the Board of Directors then in office; or
- (6) the adoption of a plan relating to the liquidation or dissolution of the Company.

"Clearstream" means Clearstream Banking, société anonyme, Luxembourg.

"Collateral" means all collateral securing, or purported to be securing, directly or indirectly, the Notes or any Subsidiary Guarantee pursuant to the Security Documents, and shall initially consist of the Capital Stock of Mongolia Coal Corporation Limited and Mongolian Coal Corporation S.à.r.l., owned by the Company and the initial Subsidiary Guarantor Pledgor, respectively.

"Commodity Agreement" means any spot, forward contract, commodity swap agreement, commodity option agreement, commodity price protection or other similar agreement or arrangement designed to protect against fluctuations in commodity prices.

"Common Stock" means, with respect to any Person, any and all shares, interests or other participations in, and other equivalents (however designated and whether voting or non-voting) of such Person's common stock or ordinary shares, whether or not outstanding on the Original Issue Date, and include, without limitation, all series and classes of such common stock or ordinary shares.

"Comparable Treasury Issue" means the U.S. Treasury security having a maturity comparable to March 29, 2015 that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to March 29, 2015.

"Comparable Treasury Price" means, with respect to any redemption date:

- (1) the average of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) on the third Business Day preceding such redemption date, as set forth in the daily statistical release (or any successor release) published by the Federal Reserve Bank of New York and designated "Composite 3:30 p.m. Quotations for U.S. Government Securities"; or
- (2) if such release (or any successor release) is not published or does not contain such prices on such Business Day, (a) the average of the Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and lowest of such Reference Treasury Dealer Quotations or (b) if fewer than three such Reference Treasury Dealer Quotations are available, the average of all such quotations.

"Consolidated EBITDA" means, for any period, Consolidated Net Income for such period plus, to the extent such amount was deducted in calculating such Consolidated Net Income:

- (1) Consolidated Interest Expense;
- (2) income taxes (other than income taxes attributable to extraordinary and non-recurring gains or losses or sales of assets); and
- (3) depreciation expense, amortization expense and all other non-cash items reducing Consolidated Net Income (other than non-cash items in a period which reflect cash expenses paid or to be paid in another period), less all non-cash items increasing Consolidated Net Income (other than accrual of revenues in the ordinary course of business),

all as determined on a consolidated basis for the Company and its Restricted Subsidiaries in conformity with IFRS; *provided* that if any Restricted Subsidiary is not a Wholly Owned Restricted Subsidiary, Consolidated EBITDA shall be reduced (to the extent not otherwise reduced in accordance with IFRS) by an amount equal to (A) the amount of the Consolidated Net Income attributable to such Restricted Subsidiary multiplied by (B) the percentage ownership interest in the income of such Restricted Subsidiary not owned on the last day of such period by the Company or any Restricted Subsidiary.

"Consolidated Interest Expense" means, for any period, the amount that would be included in gross finance costs/interest expense on a consolidated statement of comprehensive income prepared in accordance with IFRS for such period of the Company and its Restricted Subsidiaries, plus, to the extent not included in such gross interest expense, and to the extent incurred, accrued or payable during such period by the Company and its Restricted Subsidiaries, without duplication, (i) interest expense attributable to Capitalized Lease Obligations and imputed interest with respect to Attributable Indebtedness, (ii) amortization of debt issuance costs and original issue discount expense and non-cash interest payments in respect of any Indebtedness, (iii) the interest portion of any deferred payment obligation, (iv) all commissions, discounts and other fees and charges with respect to letters of credit or similar instruments issued for financing purposes or in respect of any Indebtedness, (v) the net costs associated with Hedging Obligations (including the amortization of fees), (vi) interest accruing on Indebtedness of any other Person that is guaranteed by the Company or any Restricted Subsidiary proportionate to the extent that such Indebtedness is guaranteed or secured by a Lien on assets of the Company or any Restricted Subsidiary; (vii) any capitalized interest and (viii) all other non-cash interest expense; provided that interest expense attributable to interest on any Indebtedness bearing a floating interest rate will be computed on a pro forma basis as if the rate in effect on the date of determination had been the applicable rate for the entire relevant period.

"Consolidated Net Income" means, with respect to any specified Person for any period, the aggregate of the consolidated profit attributable to the equity shareholders of such Person for such period, on a consolidated basis, determined in conformity with IFRS; provided that the following items shall be excluded in computing Consolidated Net Income (without duplication):

- (1) the net income (or loss) of any Person that is not a Restricted Subsidiary or that is accounted for by the equity method of accounting, except to the extent of the amount of net income actually paid in cash to, or the amount of loss actually funded in cash by, the specified Person or a Restricted Subsidiary of the Person during such period;
- (2) the net income (or loss) of any Person accrued prior to the date it becomes a Restricted Subsidiary or is merged into or consolidated with the Company or any Restricted Subsidiary or all or substantially all of the property and assets of such Person are acquired by the Company or any Restricted Subsidiary;
- (3) the net income (but not loss) of any Restricted Subsidiary (other than a Subsidiary Guarantor) to the extent that the declaration or payment of dividends or similar distributions by such Restricted Subsidiary of such net income is not at the time permitted by the operation of the terms of its charter, articles of association or other similar constitutive documents, or any agreement, instrument, judgment, decree, order, statute, rule or governmental regulation applicable to such Restricted Subsidiary;
- (4) the cumulative effect of a change in accounting principles;
- (5) any net after-tax gains realized on the sale or other disposition of (A) any property or assets of the Company or any Restricted Subsidiary which is not sold in the ordinary course of business or (B) any Capital Stock of any Person (including any gains by the Company realized on sales of Capital Stock of the Company or any Restricted Subsidiary);
- (6) any non-cash expense, loss, income or gain relating to any change in fair value of convertible securities issued by the Company;
- (7) any non-cash expense, loss, income or gain relating to any change in fair value of share options and other equity based compensation;
- (8) any translation gains or losses due solely to fluctuations in currency values and related tax effects; and
- (9) any net after-tax extraordinary or non-recurring gains or (solely for the purposes of calculating Consolidated EBITDA) losses.

"Credit Facilities" means one or more debt facilities (including, without limitation, debt facilities made available under, or in accordance with, the New Standard Bank Facilities Agreement) or commercial paper facilities or indentures or trust deeds or note purchase agreements or Capitalized Lease Obligations, in each case, with banks or other institutional lenders or investors providing for revolving credit loans, term loans, receivables financing (including through the sale of receivables to such lenders or to other entities formed to borrow from such lenders against such receivables), letters of credit, bonds, notes, debentures or other corporate debt instruments or other financing, in each case, as amended, extended, restated, modified, supplemented, renewed, refunded, replaced or refinanced (whether upon or after termination or otherwise) (including by means of sales of debt securities to institutional investors) in whole or in part from time to time by one or more credit agreements, debt facilities or other agreement (and whether or not with the parties to the New Standard Bank Facilities

Agreement) without limitation as to the identity of the lenders or investors, or the maturity, terms, conditions, covenants or other provisions thereof.

"Currency Agreement" means any foreign exchange forward contract, currency swap agreement, currency hedge agreement, currency option agreement or other similar agreement or arrangement designed to protect against fluctuations in foreign exchange rates.

"Deemed Railway Entity Investment" means, on the date of any sale, transfer or other disposition of an equity interest in any Railway Entity in compliance with clause (k) of the definition of "Asset Sale," which results in such Railway Entity no longer constituting a Subsidiary of the Company, the Fair Market Value of the Company's remaining Investment in such Railway Entity after such sale, transfer or disposition; provided that the lesser of (x) such Fair Market Value of the Company's remaining Investment and (y) the aggregate value of all Investments in such Railroad Entity by the Company or any Restricted Subsidiary prior to such sale, transfer or other disposition, valued at the time each such Investment was made shall not exceed an amount equal to US\$200 million (or the Dollar Equivalent thereof).

"Deemed Road Investment" means, on the date of any sale, transfer or other disposition of an equity interest in any Person that owns the toll road between the Company's Ukhaa Khudag mine and Gashuun Sukhait in compliance with clause (k) of the definition of "Asset Sale," which results in such entity no longer constituting a Subsidiary of the Company, the Fair Market Value of the Company's remaining Investment in such entity after such sale, transfer or disposition.

"Default" means any event that is, or after notice or passage of time or both would be, an Event of Default.

"Disqualified Stock" means any class or series of Capital Stock of any Person that by its terms or otherwise is (1) required to be redeemed prior to the Stated Maturity of the Notes, (2) redeemable at the option of the holder of such class or series of Capital Stock at any time prior to the Stated Maturity of the Notes or (3) convertible into or exchangeable for Capital Stock referred to in clause (1) or (2) above or Indebtedness having a scheduled maturity prior to the Stated Maturity of the Notes; provided that any Capital Stock that would not constitute Disqualified Stock but for provisions thereof giving holders thereof the right to require such Person to repurchase or redeem such Capital Stock upon the occurrence of an "asset sale" or "change of control" occurring prior to the Stated Maturity of the Notes shall not constitute Disqualified Stock if (a) the "asset sale" or "change of control" provisions applicable to such Capital Stock are no more favorable to the holders of such Capital Stock than the provisions contained in "- Certain Covenants - Limitation on Asset Sales" and "Repurchase of Notes upon a Change of Control" covenants and such Capital Stock specifically provides that such Person will not repurchase or redeem any such stock pursuant to such provision prior to the Company's repurchase of the Notes as are required to be repurchased pursuant to the "-Certain Covenants - Limitation on Asset Sales" and "Repurchase of Notes upon a Change of Control" covenants or (b) if the terms of such Capital Stock provide that such Person may not repurchase or redeem such Capital Stock pursuant to such provision unless such repurchase or redemption complies with the covenant described under "- Certain Covenants - Limitation on Restricted Payments."

"Dollar Equivalent" means, with respect to any monetary amount in a currency other than U.S. dollars, at any time for the determination thereof, the amount of U.S. dollars obtained by converting such foreign currency involved in such computation into U.S. dollars at the base rate for the purchase of U.S. dollars with the applicable foreign currency as quoted by the Federal Reserve Bank of New York on the date of determination.

"DTC" means The Depository Trust Company and its successors.

"Equity Offering" means (i) any underwritten primary public offering or private placement of Common Stock of the Company after the Original Issue Date to any Person other than a Wholly Owned Restricted Subsidiary or any Permitted Holder or (ii) any secondary public offering or secondary private placement of Common Stock of the Company beneficially owned by a Permitted Holder after the Original Issue Date, the net proceeds therefrom are contributed to the common equity capital of the Company; provided that the aggregate gross cash proceeds received by the Company from such transaction shall be no less than US\$20.0 million (or the Dollar Equivalent thereof).

"Euroclear" means Euroclear Bank S.A./N.V., as operator of the Euroclear System.

"Existing Credit Facilities" means (i) the US\$120 million loan pursuant to the loan agreement dated May 12, 2010, as amended and restated, between Energy Resources LLC and European Bank for Reconstruction and Development; (ii) the US\$36 million loan pursuant to the loan agreement dated August 11, 2010, as amended, between Energy Resources LLC and Nederlandse Financierings-Maatschappij Voor Ontwikkelingslanden N.V.; (iii) the US\$24 million loan pursuant to the loan agreement dated August 11, 2010, as amended, between Energy Resources LLC and Deutsche Investitions-und Entwicklungsegesellschaft mbH; and (iv) the US\$13 million loan pursuant to the loan agreement dated December 26, 2011, as amended, between Energy Resources LLC and Khaan Bank.

"Fair Market Value" means the price that would be paid in an arm's-length transaction between an informed and willing seller under no compulsion to sell and an informed and willing buyer under no compulsion to buy, as determined in good faith by the Board of Directors, whose determination shall be conclusive if evidenced by a Board Resolution.

"Finance Subsidiary" means any Person who is Wholly Owned by the Company and who does not engage in any business activity except (1) the Incurrence of Indebtedness to Persons other than the Company or any Restricted Subsidiary from time to time to finance the operations of the Company and/or any Restricted Subsidiary, (2) the ownership of shares of another Finance Subsidiary, (3) activity related to the establishment or maintenance of that Person's corporate existence, and (4) any other activity in connection with or incidental to activities referred to in clauses (1), (2) or (3).

"guarantee" means any obligation, contingent or otherwise, of any Person directly or indirectly guaranteeing any Indebtedness or other obligation of any other Person and, without limiting the generality of the foregoing, any obligation, direct or indirect, contingent or otherwise, of such Person (1) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation of such other Person (whether arising by virtue of partnership arrangements, or by agreements to keep-well, to purchase assets, goods, securities or services, to take-or-pay, or to maintain financial statement conditions or otherwise) or (2) entered into for purposes of assuring in any other manner the obligee of such Indebtedness or other obligation of the payment thereof or to protect such obligee against loss in respect thereof (in whole or in part); provided that the term "guarantee" shall not include endorsements for collection or deposit in the ordinary course of business. The term "guarantee" used as a verb has a corresponding meaning.

"Hedging Obligation" of any Person means the obligations of such Person pursuant to any Commodity Agreement, Currency Agreement or Interest Rate Agreement.

"Holder" means the Person in whose name a Note is registered in the Note register.

"IFRS" means International Financial Reporting Standards as in effect from time to time. All computations contained or referred to in the Indenture, to the extent applicable, shall be computed in conformity with IFRS applied on a consistent basis.

"Incur" means, with respect to any Indebtedness or Capital Stock, to incur, create, issue, assume, guarantee or otherwise become liable for or with respect to, or become responsible for, the payment of, contingently or otherwise, such Indebtedness or Capital Stock; provided that (1) any Indebtedness and Capital Stock of a Person existing at the time such Person becomes a Restricted Subsidiary (or fails to meet the qualifications necessary to remain an Unrestricted Subsidiary) will be deemed to be Incurred by such Restricted Subsidiary at the time it becomes a Restricted Subsidiary and (2) the accretion of original issue discount, the accrual of interest, the accrual of dividends, the payment of interest in the form of additional Indebtedness and the payment of dividends on Preferred Stock in the form of additional shares of Preferred Stock (to the extent provided for when the Indebtedness or Preferred Stock on which such interest or dividend is paid was originally issued) shall not be considered an Incurrence of Indebtedness. The terms "Incurrence," "Incurred" and "Incurring" have meanings correlative with the foregoing.

"Indebtedness" means, with respect to any Person at any date of determination (without duplication):

- (1) all indebtedness of such Person for borrowed money;
- (2) all obligations of such Person evidenced by bonds, debentures, notes or other similar instruments;
- (3) all obligations of such Person in respect of letters of credit, bankers' acceptances or other similar instruments;
- (4) all obligations of such Person to pay the deferred and unpaid purchase price of property or services, except Trade Payables;
- (5) all Capitalized Lease Obligations and Attributable Indebtedness;
- (6) all Indebtedness of other Persons secured by a Lien on any asset of such Person, whether or not such Indebtedness is assumed by such Person; *provided* that the amount of such Indebtedness shall be the lesser of (A) the Fair Market Value of such asset at such date of determination and (B) the amount of such Indebtedness;
- (7) all Indebtedness of other Persons guaranteed by such Person to the extent such Indebtedness is guaranteed by such Person;
- (8) to the extent not otherwise included in this definition, Hedging Obligations;
- (9) all Disqualified Stock issued by such Person valued at the greater of its voluntary or involuntary liquidation preference and its maximum fixed repurchase price plus accrued dividends (to the extent not included therein); and
- (10) any Preferred Stock issued by (i) such Person, if such Person is a Restricted Subsidiary or (ii) any Restricted Subsidiary of such Person, valued at the greater of its voluntary or involuntary liquidation preference and its maximum fixed repurchase price plus (to the extent not included therein) accrued dividends.

Notwithstanding the foregoing, "Indebtedness" will not include (i) any capital commitments, presale receipts, deposits or advances from customers or any contingent obligations to refund payments (including deposits) to customers (or any guarantee thereof) in connection with mandatory obligations under or pending completion of a customer contract, (ii) obligations of the Company or a Restricted Subsidiary to pay the deferred and unpaid purchase price of property or services due to suppliers of equipment or other assets (including parts thereof) not more than one year after such property is acquired or such services are completed and the amount of unpaid purchase price retained by the Company or any Restricted Subsidiary in the ordinary course of business in connection with an acquisition of equipment or other assets (including parts thereof) pending full operation or contingent on certain conditions during a warranty period of such equipment or assets in accordance with the terms of the acquisition or (iii) obligations of the Company or any Restricted Subsidiary to pay for transportation in respect of its coal on the railway contemplated by the Railway Project pursuant to an off-take or similar agreement; provided that, in each case, such Indebtedness is not reflected as borrowings on the consolidated balance sheet of the Company (contingent obligations and commitments referred to in a footnote to financial statements and not otherwise reflected as borrowings on the balance sheet will not be deemed to be reflected on such balance sheet).

Notwithstanding the foregoing, in connection with the purchase by the Company or any Restricted Subsidiary of any asset or property to be used in the ordinary course of business by the Company or any Restricted Subsidiary in the Permitted Business (including any such purchase through the acquisition of Capital Stock of any Person that owns such asset or property, which will, upon such acquisition, become a Restricted Subsidiary), the term "Indebtedness" will not include post-closing payment obligations of the Company or such Restricted Subsidiary to which the seller may become entitled to the extent the amount of such payment is determined by a final closing balance sheet, final reserve assessment or a similar report or document or such payment depends on the performance of such asset or property after the closing; *provided*, *however*, that, at the time of closing, the amount of any such payment obligation is not determinable and, to the extent such payment thereafter becomes fixed and determined, the amount is paid within 360 days thereafter.

The amount of Indebtedness of any Person at any time shall be the outstanding balance at such time of all unconditional obligations as described above and, with respect to contingent obligations, the maximum liability upon the occurrence of the contingency giving rise to the obligation; *provided* that:

- (A) the amount outstanding at any time of any Indebtedness issued with original issue discount is the face amount of such Indebtedness less the remaining unamortized portion of the original issue discount of such Indebtedness at such time as determined in conformity with IFRS:
- (B) money borrowed and set aside at the time of the Incurrence of any Indebtedness in order to prefund the payment of the interest on such Indebtedness shall not be deemed to be "Indebtedness" so long as such money is held to secure the payment of such interest; and
- (C) that the amount of or the principal amount of Indebtedness with respect to any Hedging Obligation shall be equal to the net amount payable if such Hedging Obligation terminated at or prior to that time due to a default by such Person.

"Intercreditor Agreement" has the meaning set forth under "- Security."

"Interest Rate Agreement" means any interest rate protection agreement, interest rate future agreement, interest rate option agreement, interest rate swap agreement, interest rate cap agreement, interest rate collar agreement, interest rate hedge agreement, option or future contract or other similar agreement or arrangement designed to protect against fluctuations in interest rates.

#### "Investment" means:

- (i) any direct or indirect advance, loan or other extension of credit to another Person,
- (ii) any capital contribution to another Person (by means of any transfer of cash or other property to others or any payment for property or services for the account or use of others),
- (iii) any purchase or acquisition of Capital Stock, Indebtedness, bonds, notes, debentures or other similar instruments or securities issued by another Person, or
- (iv) any guarantee of any obligation of another Person to the extent such obligation is outstanding and to the extent guaranteed by such Person.

For the purposes of the provisions of the "- Certain Covenants - Designation of Restricted and Unrestricted Subsidiaries" and "- Certain Covenants - Limitation on Restricted Payments" covenants: (i) the Company will be deemed to have made an Investment in an Unrestricted Subsidiary in an amount equal to the Company's proportional interest in the Fair Market Value of the assets (net of liabilities owed to any Person other than the Company or a Restricted Subsidiary and that are not guaranteed by the Company or a Restricted Subsidiary) of a Restricted Subsidiary that is designated an Unrestricted Subsidiary at the time of such designation representing the percentage ownership of such Unrestricted Subsidiary at such time and (ii) any property transferred to or from any Person shall be valued at its Fair Market Value at the time of such transfer, as determined in good faith by the Board of Directors.

"Investment Grade" means a rating of "AAA," "AA," "A" or "BBB," as modified by a "+" or "-" indication, or an equivalent rating representing one of the four highest Rating Categories, by S&P or any of its successors or assigns or a rating of "Aaa," or "Aa," "A" or "Baa," as modified by a "1," "2" or "3" indication, or an equivalent rating representing one of the four highest Rating Categories, by Moody's or any of its successors or assigns or the equivalent ratings of any internationally recognized rating agency or agencies, as the case may be, which shall have been designated by the Company as having been substituted for S&P or Moody's or both, as the case may be.

"Leverage Ratio" means, as of any Transaction Date, the ratio of (i) the aggregate amount of Indebtedness of the Company and its Restricted Subsidiaries on a consolidated basis outstanding on such Transaction Date to (ii) the aggregate amount of Consolidated EBITDA for the then most recent two semi-annual fiscal periods prior to such Transaction Date for which consolidated financial statements of the Company (which the Company will use its reasonable best efforts to compile in a timely manner) are available (which may include internal consolidated financial statements) (the "Two Semi-annual Period"). In making the foregoing calculation:

(A) pro forma effect will be given to any Indebtedness Incurred or repaid during the period (the "Reference Period") commencing on and including the first day of the Two Semi-annual Period and ending on and including the Transaction Date (other than Indebtedness Incurred or repaid under a revolving credit or similar arrangement (or under any predecessor revolving credit or similar arrangement) in effect on the last day of such Two Semi-annual Period), in each case as if such Indebtedness had been Incurred or repaid on the first day of such Reference Period; provided that, in the event of any such repayment, Consolidated EBITDA for such Two Semi-annual Period will not include any interest income actually earned by the Company or such Restricted Subsidiary during such Two Semi-annual Period in respect of the funds used to repay such Indebtedness;

- (B) *pro forma* effect will be given to Asset Dispositions and Asset Acquisitions (including giving *pro forma* effect to the application of proceeds of any Asset Disposition) that occur during such Reference Period as if they had occurred and such proceeds had been applied on the first day of such Reference Period;
- (C) pro forma effect will be given to asset dispositions and asset acquisitions (including giving pro forma effect to the application of proceeds of any asset disposition) that have been made by any Person that has become a Restricted Subsidiary or has been merged with or into the Company or any Restricted Subsidiary during such Reference Period and that would have constituted Asset Dispositions or Asset Acquisitions had such transactions occurred when such Person was a Restricted Subsidiary as if such asset dispositions or asset acquisitions were Asset Dispositions or Asset Acquisitions that occurred on the first day of such Reference Period; and
- (D) pro forma effect will be given to the creation, designation or re-designation of Restricted Subsidiaries and Unrestricted Subsidiaries as if such creation, designation or re-designation had occurred on the first day of such Reference Period;

provided that to the extent that clause (B) or (C) of this paragraph requires that pro forma effect be given to an Asset Acquisition or Asset Disposition (or asset acquisition or asset disposition), such pro forma calculation will be based upon the two full semi-annual fiscal periods immediately preceding the Transaction Date of the Person, or division or line of business of the Person, that is acquired or disposed for which financial information is available.

"Liabilities" means, with respect to a Luxembourg Subsidiary Guarantor, all existing liabilities (other than any liabilities owed to the direct or indirect shareholders of such Luxembourg Subsidiary Guarantor) incurred by such Luxembourg Subsidiary Guarantor and as reflected in the books of such Luxembourg Subsidiary Guarantor.

"Lien" means any mortgage, pledge, security interest, encumbrance, lien or charge of any kind (including, without limitation, any conditional sale or other title retention agreement or lease in the nature thereof or any agreement to create any mortgage, pledge, security interest, lien, charge, easement or encumbrance of any kind).

"Material Acquisitions or Dispositions" means any transaction that would require the preparation of pro forma financial information pursuant to Rule 11-01(a) or (b) of Regulation S-X promulgated under the Securities Act, assuming that such Rule is applicable to the Company.

"Maximum Amount" means, with respect to a Luxembourg Subsidiary Guarantor, an amount equal to 90% of the fair value of the assets of such Luxembourg Subsidiary Guarantor less the Liabilities at the time the guarantee or the indemnity is called.

"Moody's" means Moody's Investors Service, Inc. and its affiliates.

# "Net Cash Proceeds" means:

- (a) with respect to any Asset Sale (other than the issuance or sale of Capital Stock), the proceeds of such Asset Sale in the form of cash or Temporary Cash Investments, including payments in respect of deferred payment obligations (to the extent corresponding to the principal, but not interest, component thereof) when received in the form of cash or Temporary Cash Investments and proceeds from the conversion of other property received when converted to cash or Temporary Cash Investments, net of
  - (1) brokerage commissions and other fees and expenses (including fees and expenses of counsel and investment banks) related to such Asset Sale;
  - (2) provisions for all taxes (whether or not such taxes will actually be paid or are payable) as a result of such Asset Sale without regard to the consolidated results of operations of the Company and its Restricted Subsidiaries, taken as a whole;
  - (3) payments made to repay Indebtedness or any other obligation outstanding at the time of such Asset Sale that either (x) is secured by a Lien on the property or assets sold or (y) is required to be paid as a result of such sale;
  - (4) appropriate amounts to be provided by the Company or any Restricted Subsidiary as a reserve against any liabilities associated with such Asset Sale, including, without limitation, pension and other post-employment benefit liabilities, liabilities related to environmental matters and liabilities under any indemnification obligations associated with such Asset Sale, all as determined in conformity with IFRS; and
  - (5) all distributions and other payments required to be made to minority interest holders in Subsidiaries or joint ventures as a result of such Asset Sale or the distribution of proceeds from such Asset Sale; and
- (b) with respect to any Asset Sale consisting of the issuance or sale of Capital Stock, the proceeds of such issuance or sale in the form of cash or Temporary Cash Investments, including payments in respect of deferred payment obligations (to the extent corresponding to the principal, but not interest, component thereof) when received in the form of cash or Temporary Cash Investments and proceeds from the conversion of other property received when converted to cash or Temporary Cash Investments, net of attorneys' fees, accountants' fees, underwriters' or placement agents' fees, discounts or commissions and brokerage, consultant and other fees incurred in connection with such issuance or sale and net of taxes paid or payable as a result thereof.

"New Standard Bank Facilities Agreement" means the debt facility with respect to borrowings by the Company set forth in that certain agreement dated March 8, 2012 and as amended and/or restated from time to time, among the Company and Standard Bank and such other banks and lenders as shall be or become parties thereto, including any related notes, bonds, debentures, guarantees, collateral documents, instruments, indenture, trust deed and agreements executed in connection therewith and, in each case, as amended, restated, modified, renewed, refunded, replaced or refinanced (whether upon or after termination or otherwise) in whole or in part from time to time in accordance with the provisions of clause (b)(13) of the covenant described under the caption "– Limitation on Indebtedness."

"Offer to Purchase" means an offer to purchase the Notes by the Company from the Holders commenced by the Company mailing a notice by first class mail, postage prepaid, to the Trustee and each Holder at its last address appearing in the Note register stating:

- (1) the provision of the Indenture pursuant to which the offer is being made and that all Notes validly tendered will be accepted for payment on a pro rata basis;
- (2) the purchase price and the date of purchase (which shall be a Business Day no earlier than 30 days nor later than 60 days from the date such notice is mailed) (the "Offer to Purchase Payment Date");
- (3) that any Note not tendered will continue to accrue interest pursuant to its terms;
- (4) that, unless the Company defaults in the payment of the purchase price, any Note accepted for payment pursuant to the Offer to Purchase shall cease to accrue interest on and after the Offer to Purchase Payment Date;
- (5) that Holders electing to have a Note purchased pursuant to the Offer to Purchase will be required to surrender the Note, together with the form entitled "Option of the Holder to Elect Purchase" on the reverse side of the Note completed, to the Paying Agent at the address specified in the notice prior to the close of business on the Business Day immediately preceding the Offer to Purchase Payment Date;
- (6) that Holders will be entitled to withdraw their election if the Paying Agent receives, not later than the close of business on the third Business Day immediately preceding the Offer to Purchase Payment Date, a facsimile transmission or letter setting forth the name of such Holder, the principal amount of Notes delivered for purchase and a statement that such Holder is withdrawing his election to have such Notes purchased; and
- (7) that Holders whose Notes are being purchased only in part will be issued new Notes equal in principal amount to the unpurchased portion of the Notes surrendered; *provided* that each Note purchased and each new Note issued shall be in a principal amount of US\$200,000 or integral multiples of US\$1,000 in excess thereof.

One Business Day prior to the Offer to Purchase Payment Date, the Company will deposit with the Paying Agent money sufficient to pay the purchase price of all Notes or portions thereof to be accepted by the Company for payment on the Offer to Purchase Payment Date. On the Offer to Purchase Payment Date, the Company shall (a) accept for payment on a pro rata basis Notes or portions thereof tendered pursuant to an Offer to Purchase; and (b) deliver, or cause to be delivered, to the Trustee all Notes or portions thereof so accepted together with an Officers' Certificate specifying the Notes or portions thereof accepted for payment by the Company. In the case of Certificated Notes, the Paying Agent shall promptly mail to the Holders of Notes so accepted payment in an amount equal to the purchase price, and the Trustee shall promptly authenticate and mail to such Holders a new Note equal in principal amount to any unpurchased portion of the Note surrendered; provided that each Note purchased and each new Note issued shall be in a principal amount of US\$200,000 or integral multiples of US\$1,000 in excess thereof. The Company will publicly announce the results of an Offer to Purchase as soon as practicable after the Offer to Purchase Payment Date. The Company will comply with Rule 14e-1 under the Exchange Act and any other securities laws and regulations to the extent such laws and regulations are applicable, in the event that the Company is required to repurchase Notes pursuant to an Offer to Purchase.

To the extent that the provisions of any securities laws or regulations of any jurisdiction conflict with the provisions of the Indenture governing any Offer to Purchase, the Company will comply with the applicable securities laws and regulations and will not be deemed to have breached its obligations under the Indenture by virtue of such compliance.

The materials used in connection with an Offer to Purchase are required to contain or incorporate by reference information concerning the business of the Company and its Subsidiaries which the Company in good faith believes will assist such Holders to make an informed decision with respect to the Offer to Purchase, including a brief description of the events requiring the Company to make the Offer to Purchase, and any other information required by applicable law to be included therein. The offer is required to contain all instructions and materials necessary to enable such Holders to tender Notes pursuant to the Offer to Purchase.

"Officer" means one of the executive officers of the Company or, in the case of a Subsidiary Guarantor, one of the directors or executive officers of such Subsidiary Guarantor.

"Officers' Certificate" means a certificate signed by two Officers; provided that, with respect to any Subsidiary Guarantor having only one Officer, an "Officers" Certificate means a certificate signed by such Officer.

"Opinion of Counsel" means a written opinion from legal counsel which is acceptable to the Trustee that meets the requirements of the Indenture; provided that legal counsel shall be entitled to rely on certificates of the Company and any Subsidiary of the Company as to matters of fact.

"Original Issue Date" means the date on which the Notes are originally issued under the Indenture.

"Pari Passu Subsidiary Guarantee" means a guarantee by any Subsidiary Guarantor of Indebtedness of the Company (including Additional Notes), a Subsidiary Guarantor or Finance Subsidiary; provided that (i) the Company, such Subsidiary Guarantor or such Finance Subsidiary was permitted to Incur the Indebtedness to be guaranteed under the covenant described under the caption "- Certain Covenants – Limitation on Indebtedness" and (ii) such guarantee ranks pari passu with the Subsidiary Guarantee of such Subsidiary Guarantor.

"Payment Default" means (i) any default in the payment of interest on any Note when the same becomes due and payable, (ii) any default in the payment of principal of (or premium, if any, on) the Notes when the same becomes due and payable at maturity, upon acceleration, redemption or otherwise, (iii) the failure by the Company to make or consummate a Change of Control Offer in the manner described under the caption "– Repurchase of Notes upon a Change of Control," or an Offer to Purchase in the manner described under the caption "– Certain Covenants – Limitation on Asset Sales" or (iv) any Event of Default specified in clause (e) of the definition of Events of Default.

"Permitted Business" means any business conducted by the Company and its Restricted Subsidiaries on the Original Issue Date as described in this offering memorandum, any other mineral resources extraction, processing, transportation or marketing business and other businesses reasonably related or ancillary thereto.

"Permitted Holders" means any or all of the following:

- (1) Mr. Odjargal Jambaljamts and Mr. Od Jambaljamts;
- (2) the estate, trust and spouse or any immediate family member of the Person specified in clause (1) or the legal representative of any of the foregoing;

- (3) any Affiliate (other than an Affiliate as defined in clause (ii) or (iii) of the definition of "Affiliate") of either of the Persons specified in clause (1) of this definition; and
- (4) any Person both the Capital Stock and the Voting Stock of which (or in the case of a trust, the beneficial interests in which) are more than 80% owned by Persons specified in clauses (1) and (2) of this definition.

#### "Permitted Investment" means:

- (1) any Investment in the Company or a Restricted Subsidiary that is, directly or indirectly primarily engaged in a Permitted Business or a Person which will, upon the making of such Investment, become a Restricted Subsidiary that is, directly or indirectly primarily engaged in a Permitted Business or be merged or consolidated with or into or to transfer or convey all or substantially all its assets to the Company or a Restricted Subsidiary that is, directly or indirectly primarily engaged in a Permitted Business;
- (2) cash or Temporary Cash Investments;
- (3) payroll, travel and similar advances to cover matters that are expected at the time of such advances ultimately to be treated as expenses in accordance with IFRS;
- (4) stock, obligations or securities received in satisfaction of judgments;
- (5) an Investment in an Unrestricted Subsidiary consisting solely of an Investment in another Unrestricted Subsidiary;
- (6) any Investment pursuant to a Hedging Obligation designed solely to protect the Company or any Restricted Subsidiary against fluctuations in commodity prices, interest rates or foreign currency exchange rates and not for speculation;
- (7) receivables, trade credits or other current assets owing to the Company or any Restricted Subsidiary, if created or acquired in the ordinary course of business and payable or dischargeable in accordance with customary trade terms, including such concessionary trade terms as the Company or any Restricted Subsidiary considers reasonable under the circumstances;
- (8) any securities or other Investments received as consideration in, or retained in connection with, sales or other dispositions of property or assets, including Asset Dispositions made in compliance with the covenant described under the caption "- Certain Covenants -Limitation on Asset Sales";
- (9) pledges or deposits (x) with respect to leases or utilities provided to third parties in the ordinary course of business or (y) otherwise described in the definition of "Permitted Liens" or made in connection with Liens permitted under the covenant described under the caption "- Certain Covenants - Limitation on Liens";
- (10) Investments in securities or other obligations of trade creditors, trade debtors or customers received in compromise or settlement of debts created in the ordinary course of business, or pursuant to any plan of reorganization or similar arrangement upon the bankruptcy or insolvency of such trade creditor, trade debtor or customer, or as a result of foreclosure of or transfer of title with respect to any secured investment;
- (11) loans or advances to contractors, vendors, suppliers or distributors for the acquisition of assets or consumables or services in the ordinary course of business that are recorded as deposits or prepaid expenses on the Company's consolidated balance sheet;

- (12) loans or advances to employees made in the ordinary course of business in an aggregate principal amount not to exceed \$5 million at any one time outstanding;
- (13) deposits made in order to comply with statutory or regulatory obligations to maintain deposits for workers, compensation claims and other purposes specified by statute or regulation from time to time in the ordinary course of business;
- (14) deposits made in order to secure the performance of the Company or any of its Restricted Subsidiaries and prepayments made in connection with the acquisition of real property or land use rights by the Company or any Restricted Subsidiary, in each case, in the ordinary course of a Permitted Business:
- (15) any guarantee of Indebtedness Incurred in accordance with the covenant "- Limitation on Indebtedness":
- (16) repurchases of the Notes;
- (17) an acquisition of assets, Capital Stock or other securities by the Company or a Subsidiary for consideration to the extent such consideration consists solely of Common Stock of the Company;
- (18) any Railway Completion Guarantee permitted under clause (a) or (b)(15) of the covenant "Limitation on Indebtedness":
- (19) any Permitted Railway Asset Swap;
- (20) any Deemed Railway Entity Investment and any Deemed Road Investment; and
- (21) if any Railway Entity is not a Restricted Subsidiary as a result of the sale, transfer or other disposition of an equity interest in such Railway Entity in compliance with clause (k) of the definition of "Asset Sale", any Investment by the Company or a Restricted Subsidiary in such Railway Entity after such sale, transfer or other disposition; provided that the aggregate amount of all Investments (valued at the time each Investment is made) made under this clause (21) (less the reductions described in the following proviso) shall not exceed an amount equal to (i) (A) US\$120 million (or the Dollar Equivalent thereof) less (B) the aggregate amount of any Deemed Railway Entity Investment with respect to all Railway Entities multiplied by (ii) the percentage of direct equity interest in the Railway Entities owned by the Company or the relevant Restricted Subsidiary; provided further that such aggregate amount of all Investments with respect to any Railway Entity made under this clause (21) shall be calculated after deducting an amount equal to all reductions in such Investments since the date such Railway Entity was not Subsidiary resulting from:
  - (x) repayments of Investments made under this clause (21), in each case to the Company or any Restricted Subsidiary (except, in each case, to the extent any such payment or proceeds are included in the calculation of Consolidated Net Income), or
  - (y) such Investment, in whole or part, being sold or otherwise liquidated or repaid for cash (in which case such reduction will equal the lesser of (a) cash return of capital with respect to such Investment (less the cost of disposition, if any) and (b) the initial amount of such Investment).

#### "Permitted Liens" means:

- (1) Liens for taxes, assessments, governmental charges or claims that are being contested in good faith by appropriate legal or administrative proceedings promptly instituted and diligently conducted and for which a reserve or other appropriate provision, if any, as shall be required in conformity with IFRS shall have been made;
- (2) statutory and common law Liens of landlords and carriers, warehousemen, mechanics, suppliers, repairmen or other similar Liens arising in the ordinary course of business and with respect to amounts not yet delinquent or being contested in good faith by appropriate legal or administrative proceedings promptly instituted and diligently conducted and for which a reserve or other appropriate provision, if any, as shall be required in conformity with IFRS shall have been made:
- (3) Liens incurred or deposits made to secure the performance of tenders, bids, leases, statutory or regulatory obligations, bankers' acceptances, surety and appeal bonds, government contracts, performance and return-of-money bonds and other obligations of a similar nature incurred in the ordinary course of business (exclusive of obligations for the payment of borrowed money);
- (4) leases or subleases granted to others that do not materially interfere with the ordinary course of business of the Company and its Restricted Subsidiaries, taken as a whole;
- (5) Liens encumbering property or assets under construction arising from progress or partial payments by a customer of the Company or its Restricted Subsidiaries relating to such property or assets;
- (6) any interest or title of a lessor in the property subject to any operating lease;
- (7) Liens on property of, or on shares of Capital Stock or Indebtedness of, any Person existing at the time such Person becomes, or becomes a part of, any Restricted Subsidiary; provided that such Liens do not extend to or cover any property or assets of the Company or any Restricted Subsidiary other than the property or assets acquired; provided further that such Liens were not created in contemplation of or in connection with the transactions or series of transactions pursuant to which such Person became a Restricted Subsidiary;
- (8) Liens (other than Liens on the Collateral) in favor of the Company or any Restricted Subsidiary;
- (9) Liens arising from attachment or the rendering of a final judgment or order against the Company or any Restricted Subsidiary that does not give rise to an Event of Default;
- (10) (a) Liens securing reimbursement obligations with respect to letters of credit or trade guarantees, performance and surety bonds and similar instruments that encumber documents and other property relating to such letters of credit or trade guarantees, performance and surety bonds and similar instruments and the products and proceeds thereof, in each case exclusive of obligations for the payment of borrowed money or (b) Liens in favor of any bank having a right of setoff, revocation, refund or chargeback with respect to money or instruments of the Company or any Restricted Subsidiary on deposit with or in the possession of such bank;
- (11) Liens existing on the Original Issue Date;

- (12) Liens securing Indebtedness which is Incurred to refinance secured Indebtedness which is permitted to be Incurred under clause (b)(5) of the covenant described under the caption "– Limitation on Indebtedness"; provided that such Liens do not extend to or cover any property or assets of the Company or any Restricted Subsidiary other than the property or assets securing the Indebtedness being refinanced;
- (13) Liens (including extensions and renewals thereof) upon real or personal property, asset or equipment acquired after the Original Issue Date of the Company or any Restricted Subsidiary; provided that (a) such Lien is created solely for the purpose of securing Indebtedness Incurred under clause (b)(7)(B) of the covenant described under the caption "– Limitation on Indebtedness," (b) such Lien is created prior to, at the time of or within 180 days after the later of the acquisition or the completion of development, construction or improvement of such property, (c) the principal amount of Indebtedness secured by such Lien does not exceed 100% of the cost of such property, development, construction or improvement and (d) such Lien shall not extend to or cover any property or assets other than such item of property and any improvements on such item;
- (14) Liens under the Security Documents, including, without limitation, any Liens on the Collateral securing any Permitted Pari Passu Secured Indebtedness;
- (15) easements, rights-of-way, municipal and zoning ordinances or other restrictions as to the use of properties in favor of governmental agencies or utility companies that do not materially adversely affect the value of such properties or materially impair the use for the purposes of which such properties are held by the Company or any Restricted Subsidiary;
- (16) Liens securing Indebtedness under any Hedging Obligation permitted to be Incurred under clause (b)(6) of the covenant described under the caption "- Certain Covenants Limitation on Indebtedness"; provided that (i) Indebtedness relating to any such Hedging Obligations is, and is permitted under the covenant described under the caption "- Certain Covenants Limitation on Liens" to be, secured by a Lien on the same property securing such Hedging Obligation or (ii) such Lien is encumbering customary initial deposits or margin deposits or are otherwise within the general parameters customary in the industry;
- (17) any interest or title of a lessor under any Capitalized Lease Obligation permitted to be Incurred under the Indenture; *provided*, *however*, that the Liens do not extend to any property or assets which is not leased property subject to such Capitalized Lease Obligation;
- (18) Liens on pledges or deposits under worker's compensation laws, unemployment insurance laws or similar legislation, or good faith deposits in connection with bids, tenders, contracts or leases, or to secure public or statutory obligations, and other purposes specified by statute made in the ordinary course of business and not securing Indebtedness of the Company or any Restricted Subsidiary;
- (19) Liens on deposits made in order to secure the performance of the Company or any of its Restricted Subsidiaries in connection with the acquisition of real property or land use rights by the Company or any of its Restricted Subsidiaries in the ordinary course of business and not securing Indebtedness of the Company or any Restricted Subsidiary;
- (20) Liens to secure Indebtedness under the Credit Facilities Incurred or outstanding pursuant to clause (b)(13) under the caption "Limitation on Indebtedness";
- (21) Liens on assets of a Non-Guarantor Restricted Subsidiary securing any Permitted Subsidiary Indebtedness of such Non-Guarantor Restricted Subsidiary permitted to be Incurred under clause (a) of the covenant "– Limitation on Indebtedness";

- (22) Liens in favor of customs and revenue authorities arising by operation of law to secure payment of customs duties in connection with importation or exportation of goods in the ordinary course of business;
- (23) retention of title reserved by any seller of goods or any Lien imposed, reserved or granted over goods supplied by such seller, in each case in the ordinary course of business;
- (24) Liens on the Capital Stock of Unrestricted Subsidiaries or any Person that is not a Subsidiary of the Company solely to secure Indebtedness of Unrestricted Subsidiaries or such Person, in each case that is non-recourse to the Company or any Restricted Subsidiary, unless the Company or such Restricted Subsidiary could have incurred such Indebtedness under the Indenture on the date of incurrence of such Lien:
- (25) Liens with respect to minor survey exceptions, minor encumbrances, easements or reservations of, or rights of others for, licenses, rights of way, sewers, electric lines, telegraph and telephone lines and other similar purposes, or zoning or other restrictions as to the use of real property, not interfering in any material respect with the conduct of the business of the Company and its Restricted Subsidiaries;
- (26) Liens with respect to licenses or leases or subleases as licensor, lessor or sublessor of any of the Company's or its Restricted Subsidiaries property, including intellectual property, in the ordinary course of business;
- (27) Liens on the Capital Stock of any Finance Subsidiary or any loan extended by a Finance Subsidiary to the Company or any other Restricted Subsidiary; *provided* such Lien is for the benefit of the lenders relating to, or interests in, such Indebtedness Incurred by such Finance Subsidiary in compliance with the covenant "-Limitation on Indebtedness";
- (28) Liens on the assets or Capital Stock of the Railway Entities (excluding assets or Capital Stock of any Restricted Subsidiary that is not a Railway Entity) and Liens on certain other assets relating to and necessary for the Railway Project (including, without limitation, the license to build (as the same may be amended and supplemented from time to time) and land use rights) owned by any Restricted Subsidiary (other than a Railway Entity), in each case securing any Railway Project Indebtedness or Railway Completion Guarantee permitted to be Incurred under the covenant "– Limitation on Indebtedness";
- (29) Liens to secure Indebtedness permitted under clause (b)(14) under the caption "Limitation on Indebtedness"; and
- (30) Liens with respect to obligations of the Company or any Restricted Subsidiary that do not exceed US\$5.0 million (or the Dollar Equivalent thereof using the Original Issue Date as the date of determination) at any one time outstanding;

provided that Permitted Liens shall not include any Liens on the mining license for the Ukhaa Khudag mine or the Capital Stock of the entity holding the mining license for the Ukhaa Khudag mine.

"Permitted Pari Passu Secured Indebtedness" has the meaning set forth under "- Security - Permitted Pari Passu Secured Indebtedness."

"Permitted Railway Asset Swap" means the concurrent purchase and sale or exchange of the Company's equity interest in the Railway Project and the equity interest in the railway project that owns and operates the railroad between Tavan Tolgoi to Sainshand; provided that any cash or Temporary Cash Investment received must be applied in compliance with the covenant described under the caption "– Certain Covenants – Limitation on Asset Sales".

"Permitted Subsidiary Indebtedness" means any Indebtedness of any Non-Guarantor Restricted Subsidiary; provided that, on the date of the Incurrence of such Indebtedness and after giving effect thereto and the application of the proceeds thereof, the aggregate principal amount outstanding of all Indebtedness of all Non-Guarantor Restricted Subsidiaries (but excluding the amount of any Indebtedness of any Non-Guarantor Restricted Subsidiary permitted under clauses (b)(4), (b)(6), (b)(9), (b)(10), (b)(11), (b)(12) and (b)(16) of the covenant described under the caption "- Certain Covenants – Limitation on Indebtedness") does not exceed an amount equal to 15% of Total Assets.

"Person" means any individual, corporation, partnership, limited liability company, joint venture, trust, unincorporated organization or government or any agency or political subdivision thereof.

"Preferred Stock" as applied to the Capital Stock of any Person means Capital Stock of any class or classes that by its term is preferred as to the payment of dividends, or as to the distribution of assets upon any voluntary or involuntary liquidation or dissolution of such Person, over any other class of Capital Stock of such Person.

"Railway Completion Guarantee" means any guarantee, letters of credit, surety bonds or performance bonds or other similar obligations Incurred by the Company or any Restricted Subsidiary in respect of the Railway Project Indebtedness.

"Railway Entities" means any Person or its Subsidiaries established for the purposes of owning, constructing, operating and maintaining the railroad (including, without limitation, railway infrastructure, depot and workshops, rolling stocks and transshipment facilities and other items reasonably related thereto) between the Company's Ukhaa Khudag mine deposit to Gashuun Sukhait.

"Railway Project" means owning, constructing, operating and maintaining of the railroad (including, without limitation, railway infrastructure, depot and workshops, rolling stocks and transshipment facilities and other items reasonably related thereto) between the Company's Ukhaa Khudag mine deposit to Gashuun Sukhait.

"Railway Project Indebtedness" means any Indebtedness of the Railway Entities Incurred to finance all or any part of the cost of the Railway Project (including, without limitation, working capital); provided that such Indebtedness is non-recourse (other than pursuant to a Railway Completion Guarantee or any Permitted Lien securing any Railway Completion Guarantee, or any obligation of the Company or any Restricted Subsidiary to pay for transportation in respect of its coal on the railway contemplated by the Railway Project pursuant to an off-take or similar agreement) to the Company or any Restricted Subsidiary (other than the Railway Entities to the extent such Railway Entities constitute Restricted Subsidiaries).

"Rating Agencies" means (i) S&P, (ii) Moody's and (iii) if S&P or Moody's or both shall not make a rating of the Notes publicly available, one or more "nationally recognized statistical rating organizations," as the case may be, within the meaning of Rule 15c3-I(c)(2)(iv)(F) under the Exchange Act, selected by the Company, which shall be substituted for S&P or Moody's or both, as the case may be.

"Rating Category" means (i) with respect to S&P, any of the following categories: "BB," "B," "CCC," "CC," "C" and "D" (or equivalent successor categories); (ii) with respect to Moody's, any of the following categories: "Ba," "B," "Caa," "Ca," "C" and "D" (or equivalent successor categories); and (iii) the equivalent of any such category of S&P or Moody's used by another Rating Agency. In determining whether the rating of the Notes has decreased by one or more gradations, gradations within Rating Categories ("+" and "-" for S&P; "1," "2" and "3" for Moody's; or the equivalent gradations for another Rating Agency) shall be taken into account (e.g., with respect to S&P, a decline in a rating from "BB+" to "BB," as well as from "BB-" to "B+," will constitute a decrease of one gradation).

"Rating Date" means, in connection with actions contemplated under the caption "— Consolidation, Merger and Sale of Assets," that date which is 90 days prior to the earlier of (x) the occurrence of any such actions as set forth therein and (y) a public notice of the occurrence of any such actions.

"Rating Decline" means, in connection with actions contemplated under the caption "- Consolidation, Merger and Sale of Assets," the notification by any of the Rating Agencies that such proposed actions will result in any of the events listed below:

- (a) in the event the Notes are rated by both Moody's and S&P on the Rating Date as Investment Grade, the rating of the Notes by either Rating Agency shall be below Investment Grade:
- (b) in the event the Notes are rated by either, but not both, of the Rating Agencies on the Rating Date as Investment Grade, the rating of the Notes by such Rating Agency shall be below Investment Grade; or
- (c) in the event the Notes are rated below Investment Grade by both Rating Agencies on the Rating Date, the rating of the Notes by either Rating Agency shall be decreased by one or more gradations (including gradations within Rating Categories as well as between Rating Categories).

"Reference Treasury Dealer" means each of any three investment banks of recognized standing that is a primary U.S. Government securities dealer in The City of New York, selected by the Company in good faith.

"Reference Treasury Dealer Quotations" means, with respect to each Reference Treasury Dealer and any redemption date, the average as determined by an investment banking firm of recognized international standing selected by the Company, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to such investment banking firm by such Reference Treasury Dealer at 5:00 p.m. on the fifth Business Day preceding such redemption date.

"Replacement Assets" means, on any date, property or assets (other than current assets) of a nature or type or that are used in a Permitted Business, including the Capital Stock of any Person holding such property or assets that is, directly or indirectly, primarily engaged in a Permitted Business and is or will become, upon the acquisition by the Company or any of its Restricted Subsidiaries of such Capital Stock, a Restricted Subsidiary.

"Restricted Subsidiary" means any Subsidiary of the Company other than an Unrestricted Subsidiary.

"S&P" means Standard & Poor's Ratings Services and its affiliates.

"Sale and Leaseback Transaction" means any direct or indirect arrangement relating to property (whether real, personal or mixed), now owned or hereafter acquired whereby the Company or any Restricted Subsidiary transfers such property to another Person and the Company or any Restricted Subsidiary leases it from such Person.

"Security Documents" means, collectively, the pledge or charge agreements and any other agreements or instruments that, including the Indenture, may evidence or create any security interest in favor of the Shared Security Agent and/or any holder (or its representative or agent) of any Permitted Pari Passu Secured Indebtedness in any or all of the Collateral.

"Senior Indebtedness" of the Company or any Restricted Subsidiary, as the case may be, means all Indebtedness of the Company or such Restricted Subsidiary, as relevant, whether outstanding on the Original Issue Date or thereafter created, except for Indebtedness which, in the instrument creating or evidencing the same, is expressly stated to be subordinated in right of payment to (a) in respect of the Company, the Notes or (b) in respect of any Restricted Subsidiary that is a Subsidiary Guarantor, its Subsidiary Guarantee; provided that Senior Indebtedness does not include (i) any obligation to the Company or any Restricted Subsidiary, (ii) trade payables or (iii) Indebtedness Incurred in violation of the Indenture.

"Significant Subsidiary" means any Restricted Subsidiary that would constitute a "significant subsidiary" as defined in Article 1, Rule 1-02 of Regulation S-X, promulgated pursuant to the United States Securities Act of 1933, as such Regulation is in effect on the date of the Indenture.

"Stated Maturity" means, (1) with respect to any Indebtedness, the date specified in such debt security as the fixed date on which the final installment of principal of such Indebtedness is due and payable as set forth in the documentation governing such Indebtedness and (2) with respect to any scheduled installment of principal of or interest on any Indebtedness, the date specified as the fixed date on which such installment is due and payable as set forth in the documentation governing such Indebtedness, and shall not include any contingent obligations to repay, redeem or repurchase any such interest or principal prior to the date originally scheduled for the payment thereof.

"Subordinated Indebtedness" means any Indebtedness of the Company or any Subsidiary Guarantor which is contractually subordinated or junior in right of payment to the Notes or any Subsidiary Guarantee, as applicable, pursuant to a written agreement to such effect.

"Subsidiary" means, with respect to any Person, any corporation, association or other business entity (i) of which more than 50% of the voting power of the outstanding Voting Stock is owned, directly or indirectly, by such Person and one or more other Subsidiaries of such Person or (ii) of which 50% of the outstanding Voting Stock is owned, directly or indirectly, by such Person and which is "controlled" and consolidated by such Person in accordance with IFRS; provided, however, that with respect to clause (ii) the occurrence of any event (other than the issuance or sale of Capital Stock) as a result of which such corporation, association or other business entity ceases to be "controlled" by such Person under IFRS and to constitute a Subsidiary of such Person shall be deemed to be a designation of such corporation, association or other business entity as an Unrestricted Subsidiary by such Person and be subject to the requirements under the first paragraph of "— Designation of Restricted and Unrestricted Subsidiaries" covenant.

"Subsidiary Guarantee" means any guarantee of the obligations of the Company under the Indenture and the Notes by any Subsidiary Guarantor, subject to the limitations set forth therein.

"Subsidiary Guarantor" means any initial Subsidiary Guarantor named herein and any other Restricted Subsidiary which guarantees the payment of the Notes pursuant to the Indenture and the Notes; provided that Subsidiary Guarantor will not include any Person whose Subsidiary Guarantee has been released in accordance with the Indenture and the Notes.

"Subsidiary Guarantor Pledgor" means the initial Subsidiary Guarantor Pledgor and any other Subsidiary Guarantor that pledges Collateral to secure the obligations of the Company under the Notes and the Indenture and of such Subsidiary Guarantor under its Subsidiary Guarantee; provided that "Subsidiary Guarantor Pledgor" does not include any person whose pledge under the Security Documents has been released in accordance with the Security Documents, the Indenture and the Notes.

"Temporary Cash Investment" means any of the following:

- (1) direct obligations of the United States of America, any state of the European Economic Area, the United Kingdom, Japan, the People's Republic of China, Singapore and Hong Kong or any agency of the foregoing; *provided* that such country or state is rated "AA" (or such similar equivalent rating) or higher by at least two nationally recognized statistical rating organization (as defined in Rule 436 under the Securities Act) (each such country or state a "Rated Country/State"), or obligations fully and unconditionally guaranteed by any Rated Country/State, in each case maturing within one year;
- (2) demand or time deposit accounts, certificates of deposit and money market deposits maturing within 180 days of the date of acquisition thereof issued by a bank or trust company which is organized under the laws of the United States of America or any state thereof, any state of the European Economic Area that is rated "AA" (or such similar equivalent rating) or higher by at least two nationally recognized statistical rating organization (as defined in Rule 436 under the Securities Act), the United Kingdom, Japan, Singapore or Hong Kong, and which bank or trust company has capital, surplus and undivided profits aggregating in excess of US\$500.0 million (or the Dollar Equivalent thereof) and has outstanding debt which is rated "A" (or such similar equivalent rating) or higher by at least one nationally recognized statistical rating organization (as defined in Rule 436 under the Securities Act) or any money market fund sponsored by a registered broker dealer or mutual fund distributor;
- (3) repurchase obligations with a term of not more than 30 days for underlying securities of the types described in clause (1) above entered into with a bank or trust company meeting the qualifications described in clause (2) above;
- (4) commercial paper, maturing within one year of the date of acquisition thereof, issued by a corporation (other than an Affiliate of the Company) organized and in existence under the laws of the United States of America, any state thereof or any foreign country recognized by the United States of America with a rating at the time as of which any investment therein is made of "P-1" (or higher) according to Moody's or "A-1" (or higher) according to S&P;
- (5) securities, maturing within 180 days of the date of acquisition thereof, issued or fully and unconditionally guaranteed by any state, commonwealth or territory of the United States of America, or by any political subdivision or taxing authority thereof and rated at least "A" by S&P or Moody's;
- (6) any mutual or money market fund that has at least 95% of its assets continuously invested in investments of the types described in clauses (1) through (5) above; and

(7) demand or time deposit accounts, certificates of deposit, overnight or call deposits and money market deposits with (i) Standard Chartered Bank, Citibank, N.A., Hong Kong Branch, The Bank of East Asia Limited, Standard Bank Plc, Trade and Development Bank of Mongolia, Golomt Bank, Khan Bank, Xac Bank, Industrial and Commercial Bank of China, Bank of China, China Construction Bank, ING, HSBC and Deutsche Bank (or, in each case, any successor), (ii) any other bank or trust company organized under the laws of the People's Republic of China, Hong Kong, Mongolia or the United Kingdom, whose long-term debt rating by Moody's or S&P is "A2" or "A" or higher, respectively, or (iii) any other bank organized under the laws of the People's Republic of China, Hong Kong, Mongolia or the United Kingdom, provided that, in the case of clause (iii), such deposits do not exceed US\$10.0 million (or the Dollar Equivalent thereof) with any single bank or US\$30.0 million (or the Dollar Equivalent thereof) in the aggregate on any date of determination.

"Total Assets" means, as of any date, the total consolidated assets of the Company and its Restricted Subsidiaries measured in accordance with IFRS as of the last day of the most recent semi-annual fiscal period for which consolidated financial statements of the Company (which the Company shall use its reasonable best efforts to compile on a timely manner) are available(which may be internal consolidated financial statements); provided that only with respect to clause (b)(7) or (b)(13) of the covenant described under the caption "– Certain Covenants – Limitation on Indebtedness" and the definition of "Permitted Subsidiary Indebtedness," Total Assets shall be calculated after giving pro forma effect to include the cumulative value of all of the real or personal property, asset or equipment the acquisition, development, construction or improvement of which requires or required the Incurrence of Indebtedness and calculation of Total Assets thereunder, as measured by the purchase price or cost therefor or budgeted cost provided in good faith by the Company or any of its Restricted Subsidiaries to the bank or other similar financial institutional lender providing such Indebtedness.

"Trade Payables" means, with respect to any Person, any accounts payable or any other indebtedness or monetary obligation to trade creditors created, assumed or guaranteed by such Person or any of its Subsidiaries arising in the ordinary course of business in connection with the acquisition of goods or services and payable within 180 days.

"Transaction Date" means, with respect to the Incurrence of any Indebtedness, the date such Indebtedness is to be Incurred and, with respect to any Restricted Payment, the date such Restricted Payment is to be made.

"Unrestricted Subsidiary" means (1) any Subsidiary of the Company that at the time of determination shall be designated an Unrestricted Subsidiary by the Board of Directors in the manner provided in the Indenture and (2) any Subsidiary of an Unrestricted Subsidiary.

"U.S. Government Obligations" means securities that are (1) direct obligations of the United States of America for the payment of which its full faith and credit is pledged or (2) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America, which, in either case, are not callable or redeemable at the option of the issuer thereof at any time prior to the Stated Maturity of the Notes, and shall also include a depository receipt issued by a bank or trust company as custodian with respect to any such U.S. Government Obligation or a specific payment of interest on or principal of any such U.S. Government Obligation held by such custodian for the account of the holder of a depository receipt; provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the U.S. Government Obligation or the specific payment of interest on or principal of the U.S. Government Obligation evidenced by such depository receipt.

"Voting Stock" means, with respect to any Person, Capital Stock of any class or kind ordinarily having the power to vote for the election of directors, managers or other voting members of the governing body of such Person.

"Wholly Owned" means, with respect to any Subsidiary of any Person, the ownership of 100% of the outstanding Capital Stock of such Subsidiary (other than any director's qualifying shares or Investments by foreign nationals mandated by applicable law or a minimum number of shares owned by a second shareholder as mandated by applicable law) by such Person or one or more Wholly Owned Subsidiaries of such Person.

#### **TAXATION**

The following summary of certain Cayman Islands, Mongolian and United States federal income tax consequences of the ownership and disposition of the Notes is based upon applicable laws, regulations, rulings and decisions as of the date of this offering circular, all of which are subject to change (possibly with retroactive effect). This discussion does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase, own or dispose of the Notes and does not purport to deal with consequences applicable to all categories of investors, some of which may be subject to special rules. Persons considering the purchase of the Notes should consult their own tax advisors concerning the tax consequences of the purchase, ownership and disposition of the Notes, including such possible consequences under the laws of their country of citizenship, tax residence or domicile.

#### **Cayman Islands Taxation**

The Cayman Islands currently levy no taxes on individuals or corporations based upon profits, income, gains or appreciations and there is no taxation in the nature of inheritance tax or estate duty. The Cayman Islands are not party to any double tax treaties.

Pursuant to the Tax Concessions Law (1999 Revision) of the Cayman Islands, the Company has obtained an undertaking from the Governor-in-Council: (a) that no law which is enacted in the Cayman Islands imposing any tax to be levied on profits or income or gains or appreciations shall apply to the Company or its operations; and (b) that the aforesaid tax or any tax in the nature of estate duty or inheritance tax shall not be payable on the shares, debentures or other obligations of the Company. The undertaking is for a period of twenty years from May 25, 2010.

# **Mongolian Taxation**

Holders that are not Mongolian taxpayers will not be subject to any Mongolian tax or withholding tax on payments made by the Company or any non-Mongolian Subsidiary Guarantor on or in respect of the Notes. Any payments made by a Mongolian Subsidiary Guarantor will be subject to 20% withholding tax, subject to the provisions of any applicable income tax treaty.

Holders that are not Mongolian taxpayers will generally not be subject to any Mongolian tax or withholding tax on any capital gains from the sale or disposition of Notes. However, if Notes are sold to a Mongolian purchaser, the Mongolian purchaser will be required to withhold 20% from the sale proceeds.

#### Certain U.S. Federal Income Tax Considerations

This disclosure is limited to the U.S. federal tax issues addressed herein. Additional issues may exist that are not addressed in this disclosure and that could affect the U.S. federal tax treatment of the Notes. This tax disclosure was written in connection with the marketing of the Notes by the Company, and it cannot be used by any holder or beneficial owner for the purpose of avoiding penalties that may be asserted against the holder or beneficial owner under the Internal Revenue Code of 1986, as amended (the "Code"). Holders and beneficial owners should seek their own advice based on their particular circumstances from independent tax advisers.

The following is a description of certain U.S. federal income tax consequences to the U.S. Holders described below of owning and disposing of Notes, but it does not purport to be a comprehensive description of all tax considerations that may be relevant to a particular person's decision to acquire the Notes. This discussion applies only to initial U.S. Holders that (i) purchase Notes in this offering at the "issue price," which will equal the first price to the public (not including bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers) at which a substantial amount of the Notes is sold for money and (ii) hold the Notes as capital assets for U.S. federal income tax purposes.

This discussion does not describe all of the tax consequences that may be relevant in light of a U.S. Holder's particular circumstances, including alternative minimum tax consequences and tax consequences applicable to U.S. Holders subject to special rules, such as:

- certain financial institutions;
- dealers or traders in securities that use a mark-to-market method of tax accounting;
- persons holding Notes as part of a straddle, wash sale, conversion transaction or integrated transaction;
- persons whose functional currency for U.S. federal income tax purposes is not the U.S. dollar:
- entities classified as partnerships for U.S. federal income tax purposes;
- tax-exempt entities; or
- persons holding Notes in connection with a trade or business conducted outside of the United States.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds Notes, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partnerships holding Notes and partners in such partnerships should consult their tax advisers as to the particular U.S. federal income tax consequences of holding and disposing of the Notes.

This discussion is based on the Code, administrative pronouncements, judicial decisions, and Treasury regulations, all as of the date hereof, any of which is subject to change, possibly with retroactive effect.

As used herein, a "U.S. Holder" is a person that for U.S. federal income tax purposes is a beneficial owner of a Note and is:

- an individual who is a citizen or resident of the United States;
- a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia; or
- an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

#### Payments of Interest

It is expected, and therefore this discussion assumes, that the Notes will be issued without original issue discount for U.S. federal income tax purposes. Interest on the Notes (including foreign taxes, if any, withheld from payments in respect of the Notes) will be taxable to a U.S. Holder as ordinary interest income at the time it accrues or is received, in accordance with the U.S. Holder's method of accounting for U.S. federal income tax purposes. Interest income generally will constitute foreign-source income for foreign tax credit purposes, which may be relevant in calculating the U.S. Holder's foreign tax credit limitation.

Subject to applicable limitations, any foreign income taxes withheld from payments in respect of the Notes would be creditable against a U.S. Holder's U.S. federal income tax liability. The rules governing foreign tax credits are complex, and U.S. Holders should consult their tax advisers regarding the creditability of any foreign income taxes in their particular circumstances. Instead of claiming a credit, a U.S. Holder may elect to deduct such foreign taxes in computing taxable income. An election to deduct foreign taxes instead of claiming foreign tax credits must apply to all foreign taxes paid or accrued in the taxable year.

#### Sale, Retirement or Other Taxable Disposition of the Notes

Upon the sale, retirement or other taxable disposition of a Note, a U.S. Holder will recognize taxable gain or loss in an amount equal to the difference between the amount realized on the sale, retirement or disposition and the U.S. Holder's tax basis in the Note. For these purposes, the amount realized does not include any amount attributable to accrued interest, which will be treated as interest as described under "— Payments of Interest" above. Gain or loss realized on the sale, retirement or other taxable disposition of a Note will be U.S.-source capital gain or loss, and will be long-term capital gain or loss if at the time of the sale, retirement or disposition the U.S. Holder has held the Note for more than one year. Long-term capital gains recognized by non-corporate U.S. Holders are subject to reduced tax rates. The deductibility of capital losses may be subject to limitations.

If a U.S. Holder sells Notes to a Mongolian purchaser, the Mongolian purchaser may withhold 20% from the gross proceeds. See "Mongolian Taxation." U.S. Holders should consult their tax advisers regarding their ability to obtain a refund or foreign tax credit with respect to any Mongolian tax on dispositions in their particular circumstances.

# Information Reporting and Backup Withholding

Payments of interest and proceeds from the sale of a Note that are made within the United States or through one of certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (i) the U.S. Holder is an exempt recipient or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle it to a refund, provided that the required information is timely furnished to the Internal Revenue Service.

#### TRANSFER RESTRICTIONS

Because of the following restrictions, purchasers are advised to consult legal counsel prior to making any offer, sale, resale, pledge or other transfer of the Notes.

Each purchaser of the Notes and Subsidiary Guarantees, by accepting the delivery of this offering memorandum, will be deemed to have represented and agreed as follows (terms used in this paragraph that are defined in Rule 144A or in Regulation S are used herein as defined therein):

- 1. it is purchasing the Notes and Subsidiary Guarantees for its own account or an account with respect to which it exercises sole investment discretion, and it and any such account (A)(i) is a "qualified institutional buyer" as defined in Rule 144A and (ii) is aware that the sale of the Notes and the Subsidiary Guarantees to it is being made in reliance on Rule 144A, or (B) is outside the United States and is not a U.S. person (as defined in Regulation S);
- 2. it understands and acknowledges that the Notes and Subsidiary Guarantees are being offered only in a transaction not involving any public offering in the United States, within the meaning of the Securities Act, and the Notes and Subsidiary Guarantees have not been and will not be registered under the Securities Act or with any securities regulatory authority of any jurisdiction and may not be offered or sold within the United States except as set forth below;
- it understands and agrees that if in the future it decides to offer, sell, resell, pledge or otherwise transfer any Notes or any beneficial interests in any Notes other than Notes represented by a Regulation S Global Note, such Notes may be offered, sold, resold, pledged or otherwise transferred only (A) by an initial investor (i) to the Company or any subsidiary thereof, (ii) so long as the Notes are eligible for resale pursuant to Rule 144A, to a person whom the seller reasonably believes is a qualified institutional buyer (as defined in Rule 144A) that purchases for its own account or for the account of a qualified institutional buyer in a transaction meeting the requirements of Rule 144A, (iii) in an offshore transaction in accordance with Rule 903 or 904 of Regulation S under the Securities Act or (iv) pursuant to an exemption from registration under the Securities Act provided by Rule 144 under the Securities Act (if available) (resales described in subclauses (i) through (iv) of this clause (A), "Permitted Resales"), or (B) by a subsequent investor, in a Permitted Resale or pursuant to any other available exemption from the registration requirements under the Securities Act (provided that, as a condition to the registration of transfer of any Notes otherwise than in a Permitted Resale, the Company or the Trustee may require delivery of any documents or other evidence (including but not limited to an opinion of counsel) that it, in its sole discretion, may deem necessary or appropriate to evidence compliance with such exemption), or (C) pursuant to an effective registration statement under the Securities Act, and in each of such cases, in accordance with any applicable securities laws of any state of the United States and any other jurisdiction. It understands that no representation has been made as to the availability of Rule 144A or any other exemption under the Securities Act or any state securities laws for the offer, sale, resale, pledge or transfer of the Notes;
- 4. it agrees to, and each subsequent holder is required to, notify any purchaser of the Notes from it of the resale restrictions referred to in paragraph 3 above, if then applicable;
- 5. it understands and agrees that (A) Notes initially offered in the United States to qualified institutional buyers will be represented by Rule 144A Global Notes and (B) that Notes offered outside the United States in reliance on Regulation S will be represented by Regulation S Global Notes;

6. it understands that the Rule 144A Global Notes will bear a legend to the following effect unless otherwise agreed to by the Company and the holder thereof:

"THIS SECURITY AND THE GUARANTEE RELATED TO THIS SECURITY HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). THE HOLDER HEREOF, BY PURCHASING THIS SECURITY, AGREES FOR THE BENEFIT OF MONGOLIAN MINING CORPORATION (THE "COMPANY") THAT THIS SECURITY MAY BE OFFERED, SOLD, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY (A) BY AN INITIAL INVESTOR (AS DEFINED BELOW) (1) TO THE COMPANY OR ANY SUBSIDIARY THEREOF, (2) SO LONG AS THIS SECURITY IS ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT ("RULE 144A"), TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A) THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR 904 OF REGULATION S UNDER THE SECURITIES ACT OR (4) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE) (RESALES DESCRIBED IN SUBCLAUSES (1) THROUGH (4) OF THIS CLAUSE (A), "PERMITTED RESALES"), OR (B) BY A SUBSEQUENT INVESTOR, IN A PERMITTED RESALE OR PURSUANT TO ANY OTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS UNDER THE SECURITIES ACT (PROVIDED THAT, AS A CONDITION TO THE REGISTRATION OF TRANSFER OF ANY SECURITIES OTHERWISE THAN IN A PERMITTED RESALE, THE COMPANY OR THE TRUSTEE MAY REQUIRE DELIVERY OF ANY DOCUMENTS OR OTHER EVIDENCE (INCLUDING BUT NOT LIMITED TO AN OPINION OF COUNSEL) THAT IT, IN ITS SOLE DISCRETION, MAY DEEM NECESSARY OR APPROPRIATE TO EVIDENCE COMPLIANCE WITH SUCH EXEMPTION), OR (C) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, AND IN EACH OF SUCH CASES, IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND ANY OTHER JURISDICTION. THE HOLDER HEREOF, BY PURCHASING THIS SECURITY, REPRESENTS AND AGREES FOR THE BENEFIT OF THE COMPANY THAT IT WILL NOTIFY ANY PURCHASER OF THIS SECURITY FROM IT OF THE RESALE RESTRICTIONS REFERRED TO ABOVE. NO REPRESENTATION CAN BE MADE AS TO THE AVAILABILITY OF THE EXEMPTION PROVIDED BY RULE 144A UNDER THE SECURITIES ACT FOR RESALES OF THE NOTES.

FOR ALL PURPOSES OF THIS SECURITY, THE TERM "INITIAL INVESTOR" MEANS ANY PERSON WHO, IN CONNECTION WITH THE INITIAL DISTRIBUTION OF THIS SECURITY, ACQUIRES SUCH SECURITY FROM THE COMPANY OR THE INITIAL PURCHASERS (AS SUCH TERM IS DEFINED IN THE INDENTURE) PARTICIPATING IN SUCH DISTRIBUTION OR ANY AFFILIATE OF ANY OF THE FOREGOING."

7. it understands and agrees that if in the future it decides to resell, pledge or otherwise transfer any Notes represented by Regulation S Global Notes or any beneficial interest in any Notes represented by Regulation S Global Notes, such Notes may be resold, pledged or transferred only in accordance with the requirements of the legends set forth in paragraph 8 below;

- 8. it understands that the Notes represented by Regulation S Global Notes will bear a legend to the following effect unless otherwise agreed to by the Company and the holder thereof:
  - "THIS SECURITY AND THE GUARANTEE RELATED TO THIS SECURITY HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY JURISDICTION AND, ACCORDINGLY, MAY NOT BE OFFERED, SOLD, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED OR DELIVERED IN THE UNITED STATES TO OR FOR THE ACCOUNT OR BENEFIT OF ANY U.S. PERSON (AS DEFINED IN REGULATION S), UNLESS SUCH SECURITIES AND GUARANTEES ARE REGISTERED UNDER THE SECURITIES ACT OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS THEREOF IS AVAILABLE. THIS LEGEND SHALL BE REMOVED AFTER THE EXPIRATION OF 40 DAYS FROM THE LATER OF THE COMMENCEMENT OF THE OFFERING OF THE SECURITIES AND GUARANTEES AND THE CLOSING DATE, AS DEFINED IN THE PURCHASE AGREEMENT DATED MARCH 22, 2012."
- 9. it acknowledges that, prior to any proposed transfer of Notes in certificated form or of beneficial interests in Notes represented by a global certificate (in each case other than pursuant to an effective registration statement), the holder of Notes or the holder of beneficial interests in Notes represented by a global certificate, as the case may be, may be required to provide certifications and other documentation relating to the manner of such transfer and submit such certifications and other documentation as provided in the relevant Indenture; and
- 10. it acknowledges that the Company, the Subsidiary Guarantors and the Initial Purchasers and others will rely upon the truth and accuracy of the foregoing acknowledgments, representations and agreements and agrees that, if any of such acknowledgments, representations or warranties deemed to have been made by it by its purchase of Notes are no longer accurate, it shall promptly notify the Company, the Subsidiary Guarantors and the Initial Purchasers, and if it is acquiring any Notes as a fiduciary or agent for one or more accounts, it represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgments, representations and agreements on behalf of each such account.

For further discussion of the requirements (including the presentation of transfer certificates) under the relevant Indenture to effect exchanges of transfer of interests in Notes represented by a global certificate and of Notes in certificated form, see "Description of the Notes – Book-Entry; Delivery and Form".

#### PLAN OF DISTRIBUTION

Subject to the terms and conditions set forth in a purchase agreement among us and ING Bank N.V., Singapore Branch, J.P. Morgan Securities Ltd., Merrill Lynch International, Standard Bank Plc and Standard Chartered Bank, as the Initial Purchasers, we have agreed to sell to the Initial Purchasers, and each of the Initial Purchasers has agreed, severally and not jointly, to purchase from us, the principal amount of the Notes set forth opposite its name below. ING Bank N.V., Singapore Branch will offer the Notes in the United States to qualified institutional buyers in reliance on Rule 144A through its selling agent, ING Financial Markets LLC, a U.S. registered broker-dealer. To the extent that Standard Bank Plc intends to effect any sales of the Notes in the United States, Standard Bank Plc will do so through Standard New York Securities, Inc., its selling agent, or one or more U.S. registered broker-dealers or as otherwise permitted by applicable U.S. law.

Initial purchaser	Principal Amount of Notes
ING Bank N.V., Singapore Branch	US\$184,516,129
J.P. Morgan Securities Ltd	US\$184,516,129
Merrill Lynch International	US\$184,516,129
Standard Bank Plc	US\$26,129,032
Standard Chartered Bank	US\$20,322,581
Total	US\$600,000,000

Subject to the terms and conditions set forth in the purchase agreement, the Initial Purchasers have agreed to purchase all of the Notes sold under the purchase agreement if any of these Notes are purchased. If an Initial Purchaser defaults, the purchase agreement provides that the purchase commitments of the non-defaulting Initial Purchaser may be increased or the purchase agreement may be terminated.

The purchase agreement provides that the obligations of the Initial Purchasers to purchase the Notes are subject to approval of legal matters by counsel and to other conditions.

We have agreed to indemnify the Initial Purchasers against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the Initial Purchasers may be required to make in respect of those liabilities.

The Initial Purchasers or their respective affiliates may purchase the Notes for its or their own account and enter into transactions, including credit derivatives, such as asset swaps, repackaging and credit default swaps relating to Notes and/or other securities of the Company, its subsidiaries or associates at the same time as the offer and sale of Notes or in secondary market transactions. Such transactions would be carried out as bilateral trades with selected counterparties and separately from any existing sale or resale of Notes to which this offering memorandum relates (notwithstanding that such selected counterparties may also be purchasers of Notes). The Initial Purchasers or certain of their affiliates may purchase Notes and be allocated Notes for asset management and/or proprietary purposes but not with a view to distribution.

The Initial Purchasers propose initially to offer the Notes at the offering price set forth on the cover page of this offering memorandum. After the initial offering, the offering price or any other term of the offering may be changed.

#### Notes Are Not Being Registered

The Notes have not been registered under the Securities Act or any state securities laws. The Initial Purchasers propose to offer the Notes for resale in transactions not requiring registration under the Securities Act or applicable state securities laws, including sales pursuant to Rule 144A and Regulation S. The Initial Purchasers will not offer or sell the Notes except to persons they reasonably believe to be qualified institutional buyers or pursuant to offers and sales that occur outside of the United States within the meaning of Regulation S. In addition, until the expiration of 40 days after the commencement of this offering, an offer or sale of the Notes within the United States by a dealer (whether or not participating in this offering) may violate the registration requirements of the Securities Act if such offer is made otherwise than pursuant to Rule 144A or another exemption from registration under the Securities Act. Each purchaser of the Notes will be deemed to have made acknowledgments, representations and agreements as described under "Transfer Restrictions."

#### **New Issue of Notes**

The Notes are a new issue of securities with no established trading market. Approval in-principle has been received for the listing and quotation of the Notes on the Official List of the SGX-ST. We have been advised by the Initial Purchasers that they presently intend to make a market in the Notes after completion of the offering. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice. We cannot assure the liquidity of the trading market for the Notes. If an active trading market for the Notes does not develop, the market price and liquidity of the Notes may be adversely affected. If the Notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, our operating performance and financial condition, general economic conditions and other factors.

# **Settlement**

We expect that delivery of the Notes will be made to investors on or about the closing date specified on the cover page of this offering memorandum, which will be the fifth business day following the date of this offering memorandum (such settlement being referred to as "T+5"). Under Rule 15c6-1 under the Exchange Act, trades in the secondary market are required to settle in three business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the Notes prior to the delivery of the Notes hereunder will be required, by virtue of the fact that the Notes initially settle in T+5, to specify an alternate settlement arrangement at the time of any such trade to prevent a failed settlement. Purchasers of the Notes who wish to trade the Notes prior to their date of delivery hereunder should consult their advisors.

#### No Sales of Similar Securities

We have agreed that we will not, for a period of 180 days after the date of this offering memorandum, without first obtaining the prior written consent of the Joint Bookrunners, directly or indirectly, offer, sell, contract to sell, pledge, otherwise dispose of, or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition of any debt securities or securities exchangeable for or convertible into debt securities, issued or guaranteed by us, except for the Notes sold to the Initial Purchasers pursuant to the purchase agreement, except for (i) debt securities that are non-U.S. dollar denominated and have a term of less than one year, and (ii) transactions relating to our QGX Convertible Bonds. The Joint Bookrunners in their sole discretion may release any of the securities subject to these lock-up agreements at any time without notice.

#### **Short Positions and Stabilizing Transactions**

In connection with the offering, the Initial Purchasers may purchase and sell the Notes in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing purchases. Short sales involve the sale by the Initial Purchasers of a greater principal amount of the Notes than they are required to purchase in the offering. The Initial Purchasers must close out any short position by purchasing the Notes in the open market. A short position is more likely to be created if the Initial Purchasers are concerned that there may be downward pressure on the price of the Notes in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions involve bids to purchase the Notes so long as the stabilizing bids do not exceed a specified maximum.

Similar to other purchase transactions, the Initial Purchasers' purchases to cover the syndicate short sales and stabilizing purchasers may have the effect of raising or maintaining the market price of the Notes or preventing or retarding a decline in the market price of the Notes. As a result, the price of the Notes may be higher than the price that might otherwise exist in the open market.

Neither we nor any of the Initial Purchasers make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the Notes. In addition, neither we nor any of the Initial Purchasers make any representation that the Initial Purchasers will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice. No assurance can be given as to the liquidity of, or the trading market for, the Notes.

# Other Relationships

The Initial Purchasers and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions. See "Description of Other Material Indebtedness".

# Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area that has implemented the Prospectus Directive (each, a "Relevant Member State"), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "relevant implementation date"), an offer of the Notes described in this offering memorandum may not be made to the public in that Relevant Member State prior to the publication of a prospectus in relation to the notes that has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that, with effect from and including the relevant implementation date, an offer of securities may be offered to the public in that Relevant Member State at any time:

- to any legal entity that is authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities; or
- to any legal entity that has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts; or
- in any other circumstances that do not require the publication of a prospectus pursuant to Article 3 of the Prospectus Directive.

Each purchaser of Notes described in this offering memorandum located within a Relevant Member State will be deemed to have represented, acknowledged and agreed that it is a "qualified investor" within the meaning of Article 2(1)(e) of the Prospectus Directive. For purposes of this provision, the expression an "offer to the public" in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, and the expression "Prospectus Directive" means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

In addition, in the United Kingdom, this offering memorandum is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

# Notice to Prospective Investors in Switzerland

This offering memorandum does not constitute an issue prospectus pursuant to Article 652a or Article 1156 of the Swiss Code of Obligations and the Notes will not be listed on the SIX Swiss Exchange. Therefore, this offering memorandum may not comply with the disclosure standards of the listing rules (including any additional listing rules or prospectus schemes) of the SIX Swiss Exchange. Accordingly, the Notes may not be offered to the public in or from Switzerland, but only to a selected and limited circle of investors who do not subscribe to the Notes with a view to distribution. Any such investors will be individually approached by the Initial Purchasers from time to time.

#### Notice to Prospective Investors in the Dubai International Financial Centre

This offering memorandum relates to an exempt offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority. This document is intended for distribution only to persons of a type specified in those rules. It must not be delivered to, or relied on by, any other person. The Dubai Financial Services Authority has no responsibility for reviewing or verifying any documents in connection with exempt offers. The Dubai Financial Services Authority has not approved this document nor taken steps to verify the information set out in it, and has no responsibility for it. The Notes which are the subject of the offering contemplated by this offering memorandum may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the Notes offered should conduct their own due diligence on the Notes. If you do not understand the contents of this document you should consult an authorized financial adviser.

#### Notice to Prospective Investors in China

This offering memorandum does not constitute a public offer of the Notes, whether by sale or by subscription, in China. The Notes will not be offered or sold within China by means of this offering memorandum or any other document.

#### **Notice to Prospective Investors in Hong Kong**

The Notes may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies

Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the Notes may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to the Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

# Notice to Prospective Investors in Japan

The Notes offered in this offering memorandum have not been registered under the Securities and Exchange Law of Japan. The Notes have not been offered or sold and will not be offered or sold, directly or indirectly, in Japan or to or for the account of any resident of Japan, except (i) pursuant to an exemption from the registration requirements of the Securities and Exchange Law and (ii) in compliance with any other applicable requirements of Japanese law.

# Notice to Prospective Investors in Korea

Each Initial Purchaser has represented and agreed that Notes have not been and will not be offered, delivered or sold directly or indirectly in Korea or to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations. Each Initial Purchaser has undertaken to ensure that any securities dealer to which it sells Notes confirms that it is purchasing such Notes as principal and agrees with such Initial Purchaser that it will comply with the restrictions described above.

# Notice to Prospective Investors in Singapore

This offering memorandum has not been and will not be registered as a prospectus with the Monetary Authority of Singapore under the SFA. Accordingly, this offering memorandum or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes may not be circulated or distributed, nor may the Notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor under Section 274 of the SFA; (ii) to a relevant person pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee of which is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of which is an individual who is an accredited investor.

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within 6 months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

- (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA); or (in the case of such corporation) where the transfer arises from an offer referred to in Section 276(3)(i)(B) of the SFA, or (in the case of such trust), where the transfer arises from an offer referred to in Section 276(4)(i)(B) of the SFA;
- (2) where no consideration is or will be given for the transfer;
- (3) where the transfer is by operation of law; or
- (4) pursuant to Section 276(7) of the SFA.

# Notice to Prospective Investors in Taiwan

The offer of Notes has not been and will not be registered with the Financial Supervisory Commission of Taiwan, the Republic of China pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan, the Republic of China through a public offering or in a circumstance which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan, the Republic of China that requires a registration or approval of the Financial Supervisory Commission of Taiwan, the Republic of China. No person or entity in Taiwan, the Republic of China has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the Notes in Taiwan, the Republic of China.

# Notice to Prospective Investors in Cayman Islands

No Notes will be offered or sold to the public in the Cayman Islands.

#### Notice to Prospective Investors in Mongolia

Each Initial Purchaser has represented and agreed that neither it nor any of its affiliates has offered or sold or will offer or sell any of the Notes in the territory of Mongolia.

#### Notice to Prospective Investors in the Russian Federation

Each Initial Purchaser has represented and agreed that it has not offered or sold or otherwise transferred and will not offer or sell or otherwise transfer as part of their initial distribution or at any time thereafter any Notes to or for the benefit of any person (including legal entities) resident, incorporated, established or having their usual residence in the Russian Federation or to any person located within the territory of the Russian Federation, unless and to the extent otherwise permitted under Russian laws or regulations.

Information set forth in this offering memorandum is not an offer, or an invitation to make offers, to sell, exchange or otherwise transfer, the Notes in the Russian Federation or to or for the benefit of any Russian person or entity.

The Notes may not be sold or offered to or for the benefit of any person (including legal entities) that are resident, incorporated, established or having their usual residence in the Russian Federation or to any person located within the territory of the Russian Federation unless and to the extent otherwise permitted under Russian law; it being understood and agreed that the Initial Purchasers may distribute the offering memorandum to qualified investors (as defined under Russian law) in the Russian Federation in a manner that does not constitute an advertisement (as defined in Russian law) of Notes and may sell Notes to Russian qualified investors in a manner that does not constitute "placement" or "public circulation" of the Notes in the Russian Federation (as defined in Russian law).

Since neither the issuance of the Notes nor a Russian securities prospectus in respect of the Notes has been registered, or is intended to be registered, with the Federal Service for Financial Markets of the Russian Federation, the Notes are not eligible for initial offering or public circulation in the Russian Federation.

#### **RATINGS**

The Notes are expected to be rated "B1" by Moody's and "B+" by Standard and Poor's. The ratings reflect the rating agencies' assessment of the likelihood of timely payment of the principal of and the interest on the Notes. The credit ratings accorded the Notes are not a recommendation to purchase, hold or sell the Notes inasmuch as such ratings do not comment as to market price or suitability for a particular investor. There can be no assurance that the ratings will remain in effect for any given period or that the ratings will not be revised by the rating agencies in the future if, in their judgment, circumstances so warrant. Each such rating should be evaluated independently of any other rating on the Notes, on any of our other securities, or on us. See "Risk Factors – Risks related to the Offering and the Notes – The ratings assigned to the Notes may be lowered or withdrawn in the future".

#### LEGAL MATTERS

Certain legal matters will be passed upon for us by Davis Polk & Wardwell as to United States federal and New York law and Hong Kong law. Certain legal matters as to Mongolia law will be passed on for us by Economic & Legal Consultancy LLC. Certain legal matters as to Cayman Islands law will be passed on for us by Conyers Dill & Pearman. Certain legal matters as to Luxembourg law will be passed on for us by Loyens & Loeff.

Certain legal matters will be passed upon for the Initial Purchasers by Shearman & Sterling as to matters of United States federal and New York law and JTs Consulting LLC as to Mongolian law.

#### INDEPENDENT AUDITORS

The consolidated financial statements of Mongolian Mining Corporation and its subsidiaries as of and for the years ended December 31, 2009, 2010 and 2011, included in this offering memorandum, have been audited by KPMG, certified public accountants, Hong Kong, as stated in their report herein.

For the purposes of the offers and sales outside the United States under the Regulation S of the Securities Act in reliance on Regulation S and within the United States to "qualified institutional buyers" in reliance on Rule 144A under the Securities Act, KPMG has acknowledged the issue of this offering memorandum with the inclusion herein of and all references to (i) its name and (ii) its report dated March 6, 2012 on the consolidated financial statements for the three years ended December 31, 2011 in the form and context in which they are respectively included in this offering memorandum.

#### INDEPENDENT MINING AND GEOLOGICAL EXPERT

The Company's reserve and resource figures presented in this offering memorandum are estimates that have been prepared by (i) Norwest Corporation, a provider of consulting services to the energy, mining and natural resources industries, with respect to our UHG deposit (resource and reserve estimates) and (ii) MBGS, a provider of consulting services to the energy, mining and natural resources industries (resource estimate) and (iii) SRK Consulting, a provider of consulting services to the energy, mining and natural resources industries (reserve estimate), with respect to our BN deposit.

Each of Norwest Corporation, MBGS and SRK Consulting has given and has not withdrawn its written consent to the issue of this offering memorandum with inclusion of information from its independent technical review report and the references to its name included herein in the form and context in which it is respectively included.

#### **INDUSTRY EXPERTS**

Shanxi Fenwei has given and not withdrawn their written consent to the issue of this offering memorandum with the inclusion herein of their name and all references thereto and to the inclusion of the "Industry Overview" section and other sections containing their names in the form and context in which they appear in this offering memorandum and to act in such capacity in relation to this offering memorandum.

Wood Mackenzie has given and not withdrawn their written consent to the issue of this offering memorandum with the inclusion herein of their name and all references thereto in the form and context in which they appear in this offering memorandum.

#### LISTING AND GENERAL INFORMATION

#### **Consents**

We have each obtained all necessary consents, approvals and authorizations in the Cayman Islands in connection with the issue and performance of the Notes. The entering into of the Indenture and the issue of the Notes have been authorized by a resolution of the Board dated March 12, 2012.

#### **Documents Available**

For so long as any of the Notes are outstanding, copies of the Indenture may be inspected free of charge during normal business hours on any weekday (except public holidays) at the specified offices of the paying agents. For so long as any of the Notes are outstanding, copies of our audited financial statements for the last two financial years may be obtained during normal business hours on any weekday (except public holidays) at the specified offices of the paying agents.

#### **Clearing System and Settlement**

The Notes have been accepted for clearance through the facilities of DTC and Euroclear and Clearstream as participants in DTC. Certain trading information with respect to the Notes is set forth below:

	CUSIP ISIN		COMMON CODE
Restricted Global Note	60937C AA3	US60937CAA36	076529736
Regulation S Global Note	G6264V AA0	USG6264VAA01	076529779

Only Notes evidenced by either a Restricted Global Note or a Regulation S Global Note have been accepted for clearance through DTC and Euroclear and Clearstream as participants in DTC.

# Listing of the Notes

Approval in-principle has been received from the SGX-ST for the listing and quotation of the Notes on the Official List of the SGX-ST. The SGX-ST assumes no responsibility for the correctness of any of the statements made, or opinions expressed or reports contained in this Offering Memorandum. Admission of the Notes to the Official List of the SGX-ST and quotation of the Notes on the SGX-ST are not to be taken as an indication of the merits of the Company, its respective subsidiaries or associated companies or the Notes.

Subject to the approval of the SGX-ST, the Notes will be traded on the SGX-ST in a minimum board lot size of US\$200,000 for so long as any of the Notes are listed on the SGX-ST and the rules of the SGX-ST so require.

So long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require, we shall appoint and maintain a paying agent in Singapore, where the Notes may be presented or surrendered for payment or redemption, in the event that a Global Note is exchanged for Notes in definitive form. In addition, in the event that a Global Note is exchanged for Notes in definitive form, announcement of such exchange shall be made by us or on our behalf through the SGX-ST and such announcement will include all material information with respect to the delivery of the Notes in definitive form, including details of the paying agent in Singapore, so long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require.

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#### INDEPENDENT AUDITOR'S REPORT

# To the Board of Directors of Mongolian Mining Corporation

(Incorporated in the Cayman Islands with limited liability)

We have audited the consolidated financial statements of Mongolian Mining Corporation (the "Company") and its subsidiaries (together referred to as the "Group") set out on pages F-3 to F-55, which comprise the consolidated balance sheets as at 31 December 2009, 2010 and 2011, and the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement for the years then ended (the "Relevant Period"), and a summary of significant accounting policies and other explanatory information.

#### Directors' responsibility for the consolidated financial statements

The directors of the Company are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards promulgated by the International Accounting Standards Board and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. This report is made solely to you, as a body and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

We conducted our audit in accordance with Hong Kong Standards on Auditing issued by the Hong Kong Institute of Certified Public Accountants. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance as to whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and true and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

# **Opinion**

In our opinion, the consolidated financial statements give a true and fair view of the state of affairs of the Company and of the Group as at 31 December 2009, 2010 and 2011 and of the Group's profit and cash flows for the years then ended and have been prepared in accordance with International Financial Reporting Standards.

#### **KPMG**

Certified Public Accountants 8th Floor, Prince's Building 10 Chater Road Central, Hong Kong

6 March 2012

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME for the years ended 31 December 2009, 2010 and 2011

	Note	2009	2010	2011
		USD'000	USD'000	USD'000
Revenue	4	66,983	277,502	542,568
Cost of revenue	5	(38,682)	(164,368)	(336,368)
Gross profit		28,301	113,134	206,200
Other revenue		70	511	435
Other net expenses		(35)	(187)	76
Administrative expenses		(10,427)	(38,685)	(60,303)
Profit from operations		17,909	74,773	146,408
Finance income	6(a)	342	12,335	22,236
Finance costs	6(a)	(3,860)	(4,214)	(13,785)
Net finance (costs)/income	6(a)	(3,518)	8,121	8,451
Share of (losses)/profits of associates		(10)	2	(119)
Profit before taxation	6	14,381	82,896	154,740
Income tax	7	(4,111)	(22,757)	(35,650)
Profit for the year		10,270	60,139	119,090
Other comprehensive income for the year	9			
Exchange differences on re-translation		31	7,601	(79,153)
Total comprehensive income for the year		10,301	67,740	39,937
Profit attributable to the equity shareholders of				
the Company		10,270	60,139	119,090
Total comprehensive income attributable to				
the equity shareholders of the Company		10,301	67,740	39,937
Basic earnings per share	8	0.34 cents	1.91 cents	3.21 cents
Diluted earnings per share	8	0.34 cents	1.91 cents	3.07 cents

The notes on pages F-7 to F-55 form part of these financial statements. Details of dividends payable to equity shareholders of the Company attributable to the profit for the year are set out in Note 28(a).

# CONSOLIDATED BALANCE SHEET at 31 December 2009, 2010 and 2011

	Note	2009	2010	2011
		USD'000	USD'000	USD'000
Non-current assets				
Property, plant and equipment, net	11	30,358	76,646	347,109
Construction in progress	12	43,985	232,784	183,229
Lease prepayments	13	105	118	105
Intangible assets	14	_	_	681,352
Interest in associate	15	14	19	4,278
Other non-current assets	16	8,372	26,889	7,423
Deferred tax assets	22(b)	328		9,698
Total non-current assets		83,162	338,137	1,233,194
Current assets				
Inventories	17	7,661	7,876	57,734
Trade and other receivables	18	20,036	32,350	109,322
Cash at bank and in hand	19	2,371	674,907	227,765
Total current assets		30,068	715,133	394,821
Current liabilities				
Short-term borrowings and current portion of				
long-term borrowings	20(b)	24,200	85,909	333,568
Trade and other payables	21	17,107	40,315	118,680
Current taxation	22(a)	795	5,455	17,508
Convertible bond	23	_	_	83,508
Obligations under finance leases				247
Total current liabilities		42,102	131,679	553,511
Net current (liabilities)/assets		(12,034)	583,454	(158,690)
The current (natificies)/assets				(130,070)
Total assets less current liabilities		71,128	921,591	1,074,504
Non-current liabilities				
Interest-bearing borrowings, less current portion	20(a)	10,000	165,214	144,661
Long-term payables	25	15,215	16,811	-
Provisions	26	1,705	6,904	11,110
Deferred tax liabilities	22(b)	367	5,381	149,656
Obligations under finance leases				213
Total non-current liabilities		27,287	194,310	305,640
NET ASSETS		43,841	727,281	768,864
CAPITAL AND RESERVES		=====		
Share capital	27	_	37,050	37,050
Reserves	28	43,841	690,231	731,814
TOTAL EQUITY		43,841	727,281	768,864
-				

Approved and authorised for issue by the board of directors on 6 March 2012.

**Odjargal Jambaljamts** *Chairman* 

**Battsengel Gotov** *Chief Executive Officer* 

The notes on pages F-7 to F-55 form part of these financial statements.

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY for the years ended 31 December 2009, 2010 and 2011

	Note	Share capital	Share premium	Other reserve	Exchange reserve	(Accumulated losses)/ retained earnings	Total equity
		USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
		(Note 27(b))	(Note 28(a))	(Note 28(b))	(Note 28(c))		
At 1 January 2009	204)	_	_	25,819	(1,507)	(9,522)	14,790
Increase in other reserve.  Total comprehensive	28(b)	_	_	18,750	21	10.270	18,750
income for the year					31	10,270	10,301
At 31 December 2009				44,569	(1,476)	748	43,841
At 1 January 2010		_	_	44,569	(1,476)	748	43,841
Share issued upon	27(.)						
incorporation Nominal value of share capital of new	27(c)	_	_	_	_	_	_
subsidiaries acquired	27(c)	_	_	(30,000)	_	_	(30,000)
Shares issued pursuant to							
capitalisation issue  Shares issued pursuant to the global offering and upon the exercise of the over-allotment option, net of share	27(c)	30,000	-	-	-	_	30,000
issuing costs	27(c)	7,050	608,650	_	_	_	615,700
Total comprehensive income for the year		_	_	_	7,601	60,139	67,740
At 31 December 2010		37,050	608,650	14,569	6,125	60,887	727,281
At 1 January 2011		37,050	608,650	14,569	6,125	60,887	727,281
Changes in equity for 2011:		37,030	008,030	14,309	0,123	00,887	727,201
Equity-settled share-based	a :						
Transactions	24	_	_	1,646	_	_	1,646
Total comprehensive income for the year		_	_	_	(79,153)	119,090	39,937
At 31 December 2011		37,050	608,650	16,215	(73,028)	179,977	768,864

The notes on pages F-7 to F-55 form part of these financial statements.

# CONSOLIDATED CASH FLOW STATEMENT for the years ended 31 December 2009, 2010 and 2011

	Note	2009	2010	2011
		USD'000	USD'000	USD'000
Cash flows from operating activities				
Profit before taxation		14,381	82,896	154,740
Depreciation and amortisation		1,865	3,204	19,370
Allowance for doubtful debts		_	_	4,145
Share of losses/(profits) of associates		10	(2)	119
Loss on disposal of property, plant and equipment		35	187	438
Net finance costs/(income)		194	(8,280)	(8,451)
Transaction costs in relation to acquisition	32	_	_	4,299
Equity-settled share-based payment expenses		_	_	1,646
Increase in inventories		(7,646)	(215)	(55,879)
Increase in trade and other receivables		(6,997)	(8,092)	(88,441)
(Decrease)/Increase in trade and other payables		(4,561)	15,088	14,997
Cash (used in)/generated from operations		(2,719)	84,786	46,983
Income tax paid		(1,305)	(15,145)	(25,998)
Net cash (used in)/generated from operating activities		(4,024)	69,641	20,985
Investing activities				
Payments for acquisition of property, plant and equipment				
and construction in progress		(58,562)	(220,242)	(292,294)
Proceeds from disposal of property, plant and equipment		460	213	3,069
Payment for acquisition of a subsidiary, net	32	_	_	(103,494)
Payment for acquisition of associates		_	_	(4,820)
Amount due from related party		(2,301)	_	_
Time deposits		(2,000)	(344,645)	159,886
Interest received		342	294	22,236
Net cash used in investing activities		(62,061)	(564,380)	(215,417)
Financing activities				
Proceeds from issue of shares		18,750	617,716	_
Proceeds from borrowings		53,331	232,331	143,864
Payments in advance from customers		14,668	_	_
Repayment of borrowings		(22,131)	(11,531)	(201,713)
Interest paid		(1,935)	(6,822)	(19,634)
Payment of transaction costs on issue of shares		_	(2,016)	_
Other borrowing costs paid		_	(6,183)	(2,388)
Net cash generated from/(used in) financing activities		62,683	823,495	(79,871)
Net (decrease)/increase in cash and cash equivalents		(3,402)	328,756	(274,303)
Cash and cash equivalents at beginning of the year		3,791	371	328,262
Effect of foreign exchange rate changes		(18)	(865)	(12,953)
	10			
Cash and cash equivalents at end of the year	19	<u>371</u>	328,262	41,006

#### **Major non-cash transactions:**

- (a) For the non-cash transactions related to acquisition of subsidiaries, please refer to Note 32.
- (b) According to the relevant tax regulations in Mongolia, the income tax payable can be offset by the value-added tax ("VAT") receivables. During the year ended 31 December 2011, the Group offset the VAT receivables of USD9,470,000 and USD8,381,000 with income tax payable and royalty tax payable, respectively (see Note 22(a)).

The notes on pages F-7 to F-55 form part of these financial statements.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### 1 CORPORATE INFORMATION

Mongolian Mining Corporation ("the Company") was incorporated in the Cayman Islands on 18 May 2010 as an exempted company with limited liability under the Companies Law, Cap 22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands. The Company and its subsidiaries are principally engaged in the mining, transportation and sale of coal.

Pursuant to a group reorganisation completed on 17 September 2010 (the "Reorganisation") to rationalise the group structure for the public listing of the Company's shares on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange"), the Company's shares were listed on the Stock Exchange on 13 October 2010. Details of the Reorganisation are set out in the prospectus of the Company dated 28 September 2010.

Pursuant to a share purchase agreement dated 31 May 2011, the Group acquired the entire issued share capital of Baruun Naran Limited (formerly named as "QGX Coal Limited") ("QGX"). Details of the acquisition are set out in Note 32.

#### 2 SIGNIFICANT ACCOUNTING POLICIES

# (a) Statement of compliance

These financial statements of the Company and of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRSs"), promulgated by the International Accounting Standards Board ("IASB"). IFRSs include all applicable individual International Financial Reporting Standards, International Accounting Standards (IASs) and related interpretations. The financial statements also comply with the disclosure requirements of the Hong Kong Companies Ordinance and the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Stock Exchange. A summary of the significant accounting policies adopted by the Group (as defined below) is set out below.

The IASB has issued certain new and revised IFRSs that are first effective or available for early adoption during the Relevant Period of the Group and the Company.

# (b) Basis of preparation of the financial statements

The consolidated financial statements for the years ended 31 December 2009, 2010 and 2011 comprise the Company and its subsidiaries (together referred to as the "Group") and its interest in associates.

The Group adopts the use of a principle similar to that for a reverse acquisition, rather than following its legal form, in the preparation of its financial statements for the years ended 31 December 2009 and 2010. The directors consider that Energy Resources LLC is the accounting parent during the years ended 31 December 2009 and 2010. Details of the companies comprising the Group are set in Note 34.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the following assets and liabilities are stated at their fair value as explained in the accounting policies set out below:

- Derivative financial instruments (see Note 2(f)); and
- Share-based payments (see Note 2(q)(ii)).

The preparation of financial statements in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of IFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are discussed in Note 3.

#### (c) Changes in accounting policies

The IASB has issued a number of amendments to IFRSs and one new Interpretation that are first effective for the current accounting period of the Group and the Company. Of these, the following developments are relevant to the Group's financial statements:

- IAS 24 (revised 2009), Related party disclosures
- Improvements to IFRSs (2010)

The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

The impacts of these developments are discussed below:

- IAS 24 (revised 2009) revises the definition of a related party. As a result, the Group has re-assessed the identification of related parties and concluded that the revised definition does not have any material impact on the Group's related party disclosures in the current and previous period. IAS 24 (revised 2009) also introduces modified disclosure requirements for government-related entities. This does not impact the Group because the Group is not a government-related entity.
- Improvements to IFRSs (2010) omnibus standard introduces a number of amendments to the disclosure requirements in IFRS 7, Financial instruments: Disclosures. The disclosures about the Group's financial instruments in Note 29 have been conformed to the amended disclosure requirements. These amendments do not have any material impact on the classification, recognition and measurements of the amounts recognised in the financial statements in the current and previous periods.

#### (d) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. Control exists when the Group has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that presently are exercisable are taken into account.

An interest in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances and transactions and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

Non-controlling interests (previously known as "minority interests") represent the equity in a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination, the Group can elect to measure any non-controlling interests either at fair value or at their proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated balance sheet within equity, separately from equity attributable to the equity shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the Company. Loans from holders of non-controlling interests and other contractual obligations towards these holders are presented as financial liabilities in the consolidated balance sheet in accordance with Notes 2(n) or (o) depending on the nature of the liability.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset or, when appropriate, the cost on initial recognition of an interest in an associate (see Note 2(e)).

In the Company's balance sheet, an interest in a subsidiary is stated at cost less impairment losses (see Note 2(j)), unless the investment is classified as held for sale (or included in a disposal group that is classified as held for sale).

#### (e) Associates

An associate is an entity in which the Group has significant influence, but not control, over its management, including participation in the financial and operating policy decisions.

An interest in an associate is accounted for in the consolidated financial statements under the equity method, unless it is classified as held for sale (or included in a disposal group that is classified as held for sale). Under the equity method, the investment is initially recorded at cost and adjusted

thereafter for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see Note 2(j)(i)). The Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in profit or loss whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income are recognised in other comprehensive income in the consolidated statement of comprehensive income.

When the Group's share of losses exceeds its interest in the associate, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the Group's interest is the carrying amount of the investment under the equity method together with the Group's long-term interests that in substance form part of the Group's net interest in the associate.

Unrealised profits and losses resulting from transactions between the Group and its associate are eliminated to the extent of the Group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in profit or loss.

When the Group ceases to have significant influence over an associate, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset or, when appropriate, the cost on initial recognition of an interest in an associate (see Note 2(e)).

# (f) Derivative financial instruments

Derivative financial instruments are recognised initially at fair value. At each balance sheet date the fair value is remeasured. The gain or loss on remeasurement to fair value is recognised immediately in profit or loss.

# (g) Property, plant and equipment

Property, plant and equipment, which consist of buildings, plant and equipment, motor vehicles, office equipment, mining structures and mining rights are initially stated at cost less accumulated depreciation and impairment losses (see Note 2(j)(ii)). The cost of an asset comprises its purchase price, any directly attributable costs of bringing the asset to its present working condition and location for its intended use, the cost of borrowed funds used during the period of construction and, when relevant, the costs of dismantling and removing the items and restoring the site on which they are located, and changes in the measurement of existing liabilities recognised for these costs resulting from changes in the timing or outflow of resources required to settle the obligation or from changes in the discount rate.

The Group recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefits embodied with the item will flow to the Group and the cost of the item can be measured reliably. All other cost is recognised as an expense in profit or loss in the period in which it is incurred.

When proven and probable coal reserves have been determined, stripping costs incurred to develop coal mines are capitalised as part of the cost of the mining structures. Stripping costs incurred during the production phase are variable production costs that are included in the costs of inventory produced during the period that the stripping costs are incurred, unless the stripping activity can be shown to give rise to future benefits from the mineral property, in which case the stripping costs would be capitalised into property, plant and equipment as mining structures. Future benefits arise when stripping activity increases the future output of the mine by providing access to a new ore body.

All other expenditures, including the cost of repairs and maintenance and major overhaul, are expensed as they are incurred.

Construction in progress represents property, plant and equipment under construction and equipment pending installation, and is initially recognised at cost less impairment losses (Note 2(j)(ii)). Cost comprises cost of materials, direct labour and an appropriate proportion of production overheads and borrowing costs (Note 2(w)). Capitalisation of these costs ceases and the construction in progress is transferred to property, plant and equipment when the asset is substantially ready for its intended use. No depreciation is provided in respect of construction in progress until it is completed and substantially ready for its intended use.

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

Depreciation is calculated to write off the cost of items of property, plant and equipment, other than mining structures and mining rights, over their estimated useful lives using the straight-line method, after taking into account the estimated residual values.

The estimated useful lives of property, plant and equipment are as follows:

_	Depreciable ine
- Buildings and plants	10-40 years
- Machinery and equipment	10 years
- Motor vehicles	5-10 years
- Office equipment	3-10 years

Danragiable life

Mining structures and mining rights, except for capitalised stripping costs incurred during the production phase, are depreciated on the units-of-production method utilising only proven and probable coal reserves in the depletion base.

Capitalised stripping costs incurred during the production phase are depleted to the extent that the actual waste to ore ratio is lower than the estimated ratio.

No depreciation is provided in respect of construction in progress until it is substantially completed and ready for its intended use.

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reviewed annually.

#### (h) Intangible assets

Intangible assets (acquired mining rights and operating right related to paved road) acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value as at the date of acquisition. Following the initial recognition, intangible assets are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see Note 2(j)).

Intangible assets (acquired mining right) are depreciated on the units-of-production method utilising only proven and probable coal reserves in the depletion base.

Amortisation of other intangible assets with finite useful lives is recognised in profit or loss on a straight-line basis over the expected useful lives. The operating right related to paved road is amortised over 10 years after the commission of the paved road.

Both the period and method of amortisation are reviewed annually.

#### (i) Leased assets

An arrangement, comprising a transaction or a series of transactions, is or contains a lease if the Group determines that the arrangement conveys a right to use a specific asset or assets for an agreed period of time in return for a payment or a series of payments. Such a determination is made based on an evaluation of the substance of the arrangement and is regardless of whether the arrangement takes the legal form of a lease.

### (i) Classification of assets leased to the Group

Assets that are held by the Group under leases which transfer to the Group substantially all the risks and rewards of ownership are classified as being held under finance leases. Leases which do not transfer substantially all the risks and rewards of ownership to the Group are classified as operating leases.

## (ii) Assets acquired under finance leases

Where the Group acquires the use of assets under finance leases, the amounts representing the fair value of the leased asset, or, if lower, the present value of the minimum lease payments, of such assets are included in property, plant and equipment and the corresponding liabilities, net of finance charges, are recorded as obligations under finance leases. Depreciation is provided at rates which write off the cost or valuation of the assets over the term of the relevant lease or, where it is likely the Group will obtain ownership of the asset, the life of the asset, as set out in note 2(g). Impairment losses are accounted for in accordance with the accounting policy as set out in Note 2(j)(ii). Finance charges implicit in the lease payments are charged to profit or loss over the period of the leases so as to produce an approximately constant periodic rate of charge on the remaining balance of the obligations for each accounting period. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

#### (iii) Operating lease charges

Where the Group has the use of assets held under operating leases, payments made under the leases are charged to profit or loss in equal instalments over the accounting periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the leased asset. Lease incentives received are recognised in profit or loss as an integral

part of the aggregate net lease payments made. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

#### (iv) Lease prepayments

Lease prepayments represent the costs of acquiring the land use rights. Land use rights are carried at cost less accumulated amortisation and impairment losses (see Note 2(j)(ii)). Amortisation is charged to profit or loss on a straight-line basis over the period of the land use rights.

#### (j) Impairment of assets

# (i) Impairment of interests in subsidiaries, interest in associate and trade and other receivables

Interests in subsidiaries, interest in associate and trade and other receivables that are stated at cost or amortised cost are reviewed at each balance sheet date to determine whether there is objective evidence of impairment. Objective evidence of impairment includes observable data that comes to the attention of the Group about one or more of the following loss events:

- significant financial difficulty of the debtor;
- a breach of contract, such as a default or delinquency in interest or principal payments;
- it becoming probable that the debtor will enter bankruptcy or other financial reorganisation;
- significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; and
- a significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.

If any such evidence exists, any impairment loss is determined and recognised as follows:

- For interests in subsidiaries and associate (including those recognised using the equity method) (see Note 2(e)), the impairment loss is measured by comparing the recoverable amount of the investment with its carrying amount in accordance with Note 2(j)(ii). The impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount in accordance with Note 2(j)(ii).
- For trade and other current receivables carried at amortised cost, the impairment loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate (i.e. the effective interest rate computed at initial recognition of these assets), where the effect of discounting is material. This assessment is made collectively where these financial assets share similar risk characteristics, such as similar past due status, and have not been individually assessed as impaired. Future cash flows for financial assets which are assessed for impairment collectively are based on historical loss experience for assets with credit risk characteristics similar to the collective group.

If in a subsequent period the amount of an impairment loss decreases and the decrease can be linked objectively to an event occurring after the impairment loss was recognised, the impairment loss is reversed through profit or loss. A reversal of an impairment loss shall not result in the asset's carrying amount exceeding that which would have been determined had no impairment loss been recognised in prior years.

Impairment losses are written off against the corresponding assets directly, except for impairment losses recognised in respect of trade and other receivables, whose recovery is considered doubtful but not remote. In this case, the impairment losses for doubtful debts are recorded using an allowance account. When the Group is satisfied that recovery is remote, the amount considered irrecoverable is written off against trade and other receivables directly and any amounts held in the allowance account relating to that debt are reversed. Subsequent recoveries of amounts previously charged to the allowance account are reversed against the allowance account. Other changes in the allowance account and subsequent recoveries of amounts previously written off directly are recognised in profit or loss.

# (ii) Impairment of other assets

Internal and external sources of information are reviewed at each balance sheet date to identify indications that the following assets may be impaired or an impairment loss previously recognised no longer exists or may have decreased:

- property, plant and equipment
- construction in progress
- lease prepayments
- intangible assets
- other non-current assets (excluding receivables)

If any such indication exists, the asset's recoverable amount is estimated.

#### Calculation of recoverable amount

The recoverable amount of an asset is the greater of its fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit).

#### Recognition of impairment losses

An impairment loss is recognised in profit or loss whenever the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated to reduce the carrying amount of the assets in the cash-generating unit (or group of units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs to sell, or value in use, if determinable.

# Reversals of impairment losses

An impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount.

A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to profit or loss for the year in which the reversals are recognised.

### (iii) Interim financial reporting and impairment

Under the Rules Governing the Listing of Securities on the Stock Exchange, the Group is required to prepare an interim financial report in compliance with IAS 34, *Interim financial reporting*, in respect of the first six months of the financial year. At the end of the interim period, the Group applies the same impairment testing, recognition, and reversal criteria as it would at the end of the financial year (see Notes 2(j)(i) and (ii)).

#### (k) Inventories

Inventories are carried at the lower of cost and net realisable value.

Cost is calculated using the weighted average cost formula and comprises all costs of purchase, an appropriate portion of fixed and variable overhead costs, including the stripping costs incurred during the production phase, and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

When coal inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

Inventories of ancillary materials, spare parts and small tools used in production are stated at cost less impairment losses for obsolescence.

#### (1) Trade and other receivables

Trade and other receivables are initially recognised at fair value and thereafter stated at amortised cost using the effective interest method, less allowance for impairment of doubtful debts (see Note 2(j)(i)), except where the receivables are interest-free loans made to related parties without any fixed repayment terms or the effect of discounting would be immaterial. In such cases, the receivables are stated at cost less allowance for impairment of doubtful debts.

#### (m) Convertible bond

Convertible bond which does not contain an equity component are accounted for as follows:

At initial recognition the derivative component of the convertible bond is measured at fair value and presented as part of derivative financial instruments (see Note 2(f)). Any excess of proceeds over the amount initially recognised as the derivative component is recognised as the liability component. Transaction costs that relate to the issue of the convertible bond are allocated to the liability and derivative components in proportion to the allocation of proceeds. The portion of the transaction costs relating to the liability component is recognised initially as part of the liability. The portion relating to the derivative component is recognised immediately in profit or loss.

The derivative component is subsequently remeasured in accordance with Note 2(f). The liability component is subsequently carried at amortised cost. The interest expense recognised in profit or loss on the liability component is calculated using the effective interest method.

If the bond is converted, the carrying amounts of the derivative and liability components are transferred to share capital and share premium as consideration for the shares issued. If the bond is redeemed, any difference between the amount paid and the carrying amounts of both components is recognised in profit or loss.

#### (n) Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost with any difference between the amount initially recognised and redemption value being recognised in profit or loss over the period of the borrowings, together with any interest and fees payable, using the effective interest method.

#### (o) Trade and other payables

Trade and other payables are initially recognised at fair value and subsequently stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

#### (p) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and in hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition.

#### (q) Employee benefits

## (i) Short-term employee benefits and contributions to defined contribution retirement plans

Salaries, annual bonuses, paid annual leave, contributions to defined contribution retirement plans and the cost of non-monetary benefits are accrued for the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

#### (ii) Share-based payments

The fair value of share options granted to employees is recognised as an employee cost with a corresponding increase in a capital reserve within equity. The fair value is measured at grant date using Black-Scholes option pricing model, taking into account the terms and conditions upon which the options were granted. Where the employees have to meet vesting conditions before becoming unconditionally entitled to the options, the total estimated fair value of the options is spread over the vesting period, taking into account the probability that the options will vest.

During the vesting period, the number of share options that is expected to vest is reviewed. Any resulting adjustment to the cumulative fair value recognised in prior years is charged/credited to the profit or loss for the year of the review, unless the original employee expenses qualify for recognition as an asset, with a corresponding adjustment to the capital reserve. On vesting date, the amount

recognised as an expense is adjusted to reflect the actual number of options that vest (with a corresponding adjustment to the capital reserve) except where forfeiture is only due to not achieving vesting conditions that relate to the market price of the company's shares. The equity amount is recognised in the capital reserve until either the option is exercised (when it is transferred to the share premium account) or the option expires (when it is released directly to retained profits).

#### (r) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in profit or loss except to the extent that they relate to items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustment to tax payable in respect of previous years.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination), and temporary differences relating to interests in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date. Deferred tax assets and liabilities are not discounted.

The carrying amount of a deferred tax asset is reviewed at each balance sheet date and is reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profit will be available.

Additional income taxes that arise from the distribution of dividends are recognised when the liability to pay the related dividend is recognised.

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities if, the Company or the Group have the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

- in the case of current tax assets and liabilities, the Company or the Group intend either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or
- in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:
  - the same taxable entity; or
  - different taxable entities, which, in each future period in which significant amounts of
    deferred tax liabilities or assets are expected to be settled or recovered, intend to
    realise the current tax assets and settle the current tax liabilities on a net basis or
    realise and settle simultaneously.

# (s) Provisions and contingent liabilities

Provisions are recognised for liabilities of uncertain timing or amount when the Group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

#### (t) Obligations for reclamation

The Group's obligations for reclamation consist of spending estimates at its mines in accordance with the relevant rules and regulations in Mongolia. The Group estimates its liabilities for final reclamation and mine closure based upon detailed calculations of the amount and timing of the future cash spending to perform the required work. Spending estimates are escalated for inflation, then discounted at a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligation. The Group records a corresponding asset associated with the liability for final reclamation and mine closure, which is included in the mining structures. The obligation and corresponding asset are recognised in the period in which the liability is incurred. The asset is depreciated on the units-of-production method over its expected life and the liability is accreted to the projected spending date. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in timing of the performance of reclamation activities), the revisions to the obligation and the corresponding asset are recognised at the appropriate discount rate.

#### (u) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Provided it is probable that the economic benefits will flow to the Group and the revenue and costs, if applicable, can be measured reliably, revenue is recognised in profit or loss as follows:

## (i) Sale of goods

Revenue associated with the sale of coal is recognised when the risks and rewards of ownership of the goods have been passed to the customer. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts and volume rebates.

#### (ii) Interest income

Interest income is recognised as it accrues using the effective interest method.

# (v) Translation of foreign currencies

The presentation currency of the Group is USD. The functional currency of the Company and the investment holding companies is USD and the functional currency of other group entities located in Mongolia is Mongolian Togrog ("MNT"). Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the balance sheet date. Exchange gains and losses are recognised in profit or loss.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates.

The results of operations in Mongolia are translated into USD at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Balance sheet items are translated into USD at the foreign exchange rates ruling at the balance sheet date. The resulting exchange difference is recognised directly in a separate component of equity.

## (w) Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

#### (x) Related parties

- (a) A person, or a close member of that person's family, is related to the Group if that person:
  - (i) has control or joint control over the Group;
  - (ii) has significant influence over the Group; or

- (iii) is a member of the key management personnel of the Group or the Group's parent.
- (b) An entity is related to the Group if any of the following conditions applies:
  - (i) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).
  - (ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
  - (iii) Both entities are joint ventures of the same third party.
  - (iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
  - (v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.
  - (vi) The entity is controlled or jointly controlled by a person identified in (a).
  - (vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

Close family members of an individual are those family members who may be expected to influence, or be influenced by, that individual in their dealings with the entity.

#### (y) Segment reporting

Operating segments, and the amounts of each segment item reported in the financial statements, are identified from the financial information provided regularly to the Group's most senior executive management for the purposes of allocating resources to, and assessing the performance of, the Group's various lines of business and geographical locations.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

#### 3 SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

In determining the carrying amounts of certain assets and liabilities, the Group makes assumptions of the effects of uncertain future events on those assets and liabilities at the balance sheet date. These estimates involve assumptions about such items as risk adjustment to cash flows or discount rates used, future changes in salaries and future changes in prices affecting other costs. The Group's estimates and assumptions are based on the expectations of future events and are reviewed periodically. In addition to assumptions and estimations of future events, judgements are also made during the process of applying the Group's accounting policies. In addition to those disclosed in Note 24 about equity-settled share-based payment transactions and in Note 30 (c) about the environmental contingencies, other significant accounting estimates and judgements were summarised as follows:

#### (a) Reserves

Engineering estimates of the Group's coal reserves are inherently imprecise and represent only approximate amounts because of the subjective judgements involved in developing such information.

Reserve estimates are updated at regular basis and have taken into account recent production and technical information about the relevant coal deposit. In addition, as prices and cost levels change from year to year, the estimate of coal reserves also changes. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in related depreciation and amortisation rates.

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation and amortisation expenses and impairment loss. Depreciation and amortisation rates are determined based on estimated coal reserve quantity (the denominator) and capitalised costs of mining structures and mining rights (the numerator). The capitalised cost of mining structures and mining rights are depreciated and amortised based on the units produced.

#### (b) Useful lives of property, plant and equipment

Management determines the estimated useful lives of and related depreciation charges for its property, plant and equipment. This estimate is based on the actual useful lives of assets of similar nature and functions. It could change significantly as a result of significant technical innovations and competitor actions in response to industry cycles. Management will increase the depreciation charges where useful lives are less than previously estimated lives, or will write-off or write-down technically obsolete or non-strategic assets that have been abandoned or sold.

### (c) Impairment of assets

The Group reviews the carrying amounts of the assets at each balance sheet date to determine whether there is objective evidence of impairment. When indication of impairment is identified, management prepares discounted future cashflow to assess the differences between the carrying amount and value in use and provided for impairment loss. Any change in the assumptions adopted in the cash flow forecasts would increase or decreased in the provision of the impairment loss and affect the Group's net asset value.

In relation to trade and other receivables (including the VAT receivables), a provision for impairment is made and an impairment loss is recognised in profit and loss when there is objective evidence (such as the probability of insolvency or significant financial difficulties of the debtor) that the Group will not be able to collect all of the amounts due under the original terms of the invoice. Management uses judgment in determining the probability of insolvency or significant financial difficulties of the debtor.

An increase or decrease in the above impairment loss would affect the net profit in future years.

# (d) Obligation for reclamation

The estimation of the liabilities for final reclamation and mine closure involves the estimates of the amount and timing for the future cash spending as well as the discount rate used for reflecting current market assessments of the time value of money and the risks specific to the liability. The Group considers the factors including future production volume and development plan, the geological structure of the mining regions and reserve volume to determine the scope, amount and timing of reclamation and mine closure works to be performed. Determination of the effect of these factors involves judgements from the Group and the estimated liabilities may turn out to be different from the actual expenditure to be incurred. The discount rate used by the Group may also be altered to reflect the changes in the market assessments of the time value of money and the risks specific to the liability, such as change of the borrowing rate and inflation rate in the market. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in timing of the performance of reclamation activities), the revisions to the obligation will be recognised at the appropriate discount rate.

#### (e) Recognition of deferred tax assets

Deferred tax assets in respect of unused tax losses and tax credit carried forward and deductible temporary differences are recognised and measured based on the expected manner of realisation or settlement of the carrying amount of the assets, using tax rates enacted or substantively enacted at the balance sheet date. In determining the carrying amounts of deferred assets, expected taxable profits are estimated which involves a number of assumptions relating to the operating environment of the Group and require a significant level of judgement exercised by the directors. Any change in such assumptions and judgement would affect the carrying amounts of deferred tax assets to be recognised and hence the next profit in the future years.

# (f) Derivative financial instruments

In determining the fair value of the derivative financial instruments, considerable judgment is required to interpret market data used in the valuation techniques. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts.

## (g) Exploration and evaluation expenditure

The application of the Group's accounting policy for exploration and evaluation expenditure requires judgement in determining whether it is likely that future economic benefits will flow to the Group. It requires management to make certain estimates and assumptions about future events or circumstances, in particular, whether an economically viable extraction operation can be established. Estimates and assumptions made may change if new information becomes available. If, after expenditure is capitalised, information becomes available suggesting that the recovery of expenditure is unlikely, the amount capitalised is written off in profit or loss in the period when the new information becomes available.

# (h) Capitalised stripping costs

The Group capitalises stripping (waste removal) costs incurred during the production phase to the extent that the actual waste to ore ratio is higher than the estimated ratio. This calculation requires the use of judgements and estimates relating to the expected tonnes of waste to be removed over the life of the mining area and the expected economically recoverable reserves to be extracted as a result. Changes in a mine's life and design will usually result in changes to the average life of mine strip ratio. These changes are accounted for prospectively.

#### 4 REVENUE

The Group is principally engaged in the mining, transportation and sale of coal. Revenue represents the sales value of goods sold to customers exclusive of value added or sales taxes and after deduction of any trade discounts and volume rebates. The amount of each significant category of revenue recognised in revenue during the year is as follows:

	2009	2010	2011
	USD'000	USD'000	USD'000
Raw coking coal	66,981	277,444	306,610
Washed coking coal	_	_	235,220
Others	2	58	738
	66,983	277,502	542,568

During the year ended 31 December 2009, the Group had four customers that individually exceeded 10% of the Group's turnover, being USD26,092,000, USD15,439,000, USD15,242,000 and USD10,209,000, respectively.

During the year ended 31 December 2010, the Group had four customers that individually exceeded 10% of the Group's turnover, being USD105,175,000, USD92,742,000, USD33,488,000 and USD27,335,000, respectively.

During the year ended 31 December 2011, the Group had three customers that individually exceeded 10% of the Group's turnover, being USD184,985,000, USD148,540,000, and USD73,563,000, respectively.

Details of concentrations of credit risk arising from these customers are set out in Note 29(b).

## 5 COST OF REVENUE

	2009	2010	2011
	USD'000	USD'000	USD'000
Mining costs	24,500	78,759	120,326
Processing costs	_	_	21,738
Transportation costs	8,000	60,626	107,928
Others <sup>#</sup>	6,182	24,983	86,376
	38,682	164,368	336,368

<sup>#</sup> Others include USD3,343,000, USD10,116,000 and USD48,232,000 relating to the royalty tax on the coals sold for the years ended 31 December 2009, 2010 and 2011, respectively.

# 6 PROFIT BEFORE TAXATION

Profit before taxation is arrived at after charging/ (crediting):

# (a) Net finance costs/(income):

	2009	2010	2011
	USD'000	USD'000	USD'000
Interest income	(342)	(294)	(22,236)
Foreign exchange gain, net		(12,041)	
Finance income	(342)	(12,335)	(22,236)
Interest on bank and other borrowings	1,934	10,578	18,403
Fair value adjustment on derivative component of convertible bond			
(Note 23)	_	_	(7,863)
Interest on liability component of convertible bond (Note 23)	_	_	3,371
Transaction costs	_	3,655	6,495
Unwinding interest on			
- Other long-term payables	70	159	168
- Accrued reclamation obligations (Note 26)	265	332	567
Less: Interest expense capitalised	(1,751)	(10,510)	(9,229)
Net interest expense	518	4,214	11,912
Foreign exchange loss, net	3,342		1,873
Finance costs	3,860	4,214	13,785
Net finance costs/(income)	3,518	(8,121)	(8,451)

<sup>\*</sup> Borrowing costs have been capitalised at a rate of 4%, 8% and 5% per annum for the years ended 31 December 2009, 2010 and 2011, respectively.

# (b) Staff costs:

	2009	2010	2011
	USD'000	USD'000	USD'000
Salaries, wages, bonuses and benefits	2,849	9,706	17,584
Retirement scheme contributions	192	1,039	2,201
Equity-settled share-based payment expenses (Note 24)	_	_	1,646
	3,041	10,745	21,431

Pursuant to the relevant labor rules and regulations in Mongolia, the Group participates in defined contribution retirement benefit schemes ("the Schemes") organised by the Government of Mongolia whereby the Group is required to make contributions to the Schemes at a rate of 7%-13.5% of the eligible employees' salaries.

The Group has no other material obligation for the payment of pension benefits beyond the annual contributions described above.

# (c) Other items:

	2009	2010	2011
	USD'000	USD'000	USD'000
Depreciation and amortisation	1,865	3,204	19,370
Operating lease charges: minimum lease payments – hire of plant and machinery	1,135 308 1,443	1,525 <u>283</u> 1,808	1,049 1,107 2,156
Net losses on disposal of property, plant and equipment	35	187	438
Auditors' remuneration			
– audit services	90	330	780
- tax services		87	195
	90	417 	975
Listing expenses allocated to profit or loss		5,572	
Cost of inventories <sup>#</sup>	38,682	164,368	336,368

<sup>\*\*</sup> Cost of inventories includes USD3,730,000, USD4,674,000 and USD29,961,000 relating to personnel expenses, depreciation and amortisation and operating lease charges for the years ended 31 December 2009, 2010 and 2011, which are also included in the respective amounts disclosed separately above for each of these types of expenses.

# 7 INCOME TAX

# (a) Income tax in the consolidated statement of comprehensive income represents:

	2009	2010	2011
	USD'000	USD'000	USD'000
Current tax			
Provision for the year			
- Mongolian Enterprise Income Tax (Note 22(a))	2,100	19,371	49,367
Deferred tax			
Origination and reversal of temporary difference (Note 22(b))	2,011	3,386	(13,717)
	4,111	22,757	35,650

#### (b) Reconciliation between tax expense and accounting profit at applicable tax rates:

	2009	2010	2011
	USD'000	USD'000	USD'000
Profit before income tax	14,381	82,896	154,740
Notional tax on profit before taxation	2,990	19,642	35,725
Tax effect of non-deductible items (Note (iii))	1,135	1,258	1,508
Tax effect of non-taxable items (Note (iv))	(83)	(242)	(2,588)
Tax loss not recognised	69	2,099	1,005
Actual tax expenses	4,111	22,757	35,650

Note:

- (i) Pursuant to the income tax rules and regulations of Mongolia, the Group is liable to Mongolian Enterprise Income Tax at a rate of 10% of first MNT 3 billion taxable income and 25% of the remaining taxable income during the Relevant Period.
- (ii) Pursuant to the rules and regulations of the Cayman Islands, the Group is not subject to any income tax in the Cayman Islands. The Group is not subject to Hong Kong and Luxembourg profits tax as it has no assessable income arising in or derived from Hong Kong and Luxembourg during the Relevant Period.
- (iii) Non-deductible items mainly represent the non-deductible expenses and the unrealised exchange losses which are non-deductible pursuant to the income tax rules and regulations of Mongolia during the Relevant Period.
- (iv) Non-taxable items mainly represent the unrealized exchange gains which are non-taxable pursuant to the income tax rules and regulations of Mongolia during the Relevant Period.

#### 8 EARNINGS PER SHARE

#### (a) Basic earnings per share

For the year ended 31 December 2009, the calculation of basic earnings per share is based on the profit attributable to equity shareholders of the Company of USD10,270,000 and 3,000,000,000 ordinary shares, which is the share capital of the Company immediately after the Reorganisation and assumed to be outstanding throughout the year ended 31 December 2009.

For the year ended 31 December 2010, the calculation of basic earnings per share is based on the profit attributable to equity shareholders of the Company of USD60,139,000 and the weighted average of 3,152,163,310 ordinary shares, calculated as follows:

#### Weighted average number of ordinary shares

	2010
Issued ordinary shares at 1 January	_
Issued ordinary shares immediately after the Reorganisation and	
assumed to be outstanding throughout the year	3,000,000,000
Effect of issue of new shares pursuant to the initial public offering and	
upon the exercise of the over-allotment option	152,163,310
Weighted average number of ordinary shares at 31 December	3,152,163,310

For the year ended 31 December 2011, the calculation of basic earnings per share is based on the profit attributable to equity shareholders of the Company of USD119,090,000 and 3,705,036,500 ordinary shares.

#### (b) Diluted earnings per share

There were no dilutive potential ordinary shares during the years ended 31 December 2009 and 2010. The calculation of diluted earnings per share for the year ended 31 December 2011 is based on the profit attributable to the equity shareholders of the Company of USD114,716,000 and the weighted average of 3,740,633,369 ordinary shares in issue during the year, calculated as follows:

## (i) Profit attributable to ordinary equity shareholders of the Company (diluted)

	2011
	USD'000
Profit attributable to the equity shareholders of the Company	119,090
- fair value adjustment on the derivative component of convertible bond	(7,863)
- interest on the liability component of convertible bond	3,371
- attributable transaction costs on the derivative component of convertible bond	118
Profit attributable to the equity shareholders of the Company (diluted)	114,716
(ii) Weighted average number of ordinary shares (diluted)	
	2011
Weighted average number of ordinary shares as at 1 January	3,705,036,500
Effect of conversion of convertible bond	35,596,869

The equity-settled share-based payment transactions (see Note 24) are anti-dilutive and therefore not included in calculating diluted earnings per share for the year ended 31 December 2011.

3,740,633,369

Weighted average number of ordinary shares (diluted) as at 31 December. . . . . . . .

# 9 OTHER COMPREHENSIVE INCOME

The components of other comprehensive income do not have any significant tax effect for the years ended 31 December 2009, 2010 and 2011.

#### 10 SEGMENT REPORTING

The Group has one business segment, the mining, processing, transportation and sale of coal. The majority of its customers are located in China. Based on information reported to the chief operating decision maker for the purpose of resource allocation and performance assessment, the Group's only operating segment is the mining, processing, transportation and sales of coal. Accordingly, no additional business and geographical segment information are presented.

# 11 PROPERTY, PLANT AND EQUIPMENT, NET

	Buildings and plants USD'000	Machinery and equipment	Motor vehicles USD'000	Office equipment USD'000	Mining structures and mining rights USD'000	Total USD'000
Cost:						
At 1 January 2009	318 1,355	44 1,666	7,689 2,703	297 1,246	816 1,041	9,164 8,011
progress (Note 12)	2,215	_	_	_	14,537	16,752
Disposals	(21) (47)	(168) (9)	(247) (940)	(79) (39)	- (138)	(515) (1,173)
At 31 December 2009	3,820	1,533	9,205	1,425	16,256	32,239
At 1 January 2010	3,820	1,533	9,205	1,425	16,256	32,239
Additions	782	997	2,013	1,875	21,740	27,407
progress (Note 12)	14,797	123	_	3	-	14,923
Disposals	(64)	(35)	(133)	(242)	- 4 120	(474)
Exchange adjustments	1,796	313	1,509	340	4,128	8,086
At 31 December 2010	21,131	2,931	12,594	3,401	42,124	82,181
At 1 January 2011 Additions in relation to the	21,131	2,931	12,594	3,401	42,124	82,181
Acquisition (Note 32)	1,521	121	4,498	228	_	6,368
AdditionsTransfer from construction in	3,832	2,499	40,019	3,835	51,741	101,926
progress (Note 12)	104,399	115,206	(1.179)	(1,674)	_	219,605
Disposals	(1,606) (12,265)	(238) (11,311)	(1,178) (5,394)	(1,074) $(567)$	(9,047)	(4,696) (38,584)
At 31 December 2011	117,012	109,208	50,539	5,223	84,818	366,800
Accumulated amortisation and depreciation:						
At 1 January 2009	6	_	30	14	_	50
Charge for the year	109	74	1,467	115	97	1,862
Written back on disposal	(1)	(2)	(13)	(4)	_	(20)
Exchange adjustments	(1)		(7)	(3)		(11)
At 31 December 2009	113	72	1,477	122	97	1,881
At 1 January 2010	113	72	1,477	122	97	1,881
Charge for the year	624	216	1,706	424	232	3,202
Written back on disposal Exchange adjustments	(5) 66	(4) 27	(35) 351	(30) 49	33	(74) 526
At 31 December 2010	798	311	3,499	565	362	5,535
1 January 2011 Additions in relation to the	798	311	3,499	565	362	5,535
Acquisition (Note 32)	22	7	247	35	_	311
Charge for the year	2,618	6,432	6,189	1,227	646	17,112
Written back on disposal Exchange adjustments	(239) (305)	(39) (631)	(591) (900)	(320) (145)	(97)	(1,189) $(2,078)$
At 31 December 2011	2,894	6,080	8,444	1,362	911	19,691
Carrying amount: At 31 December 2011	114,118	103,128	42,095	3,861	83,907	347,109
At 31 December 2010	20,333	2,620	9,095	2,836	41,762	76,646
						=====
At 31 December 2009	3,707	1,461	7,728	1,303	16,159	30,358

- (a) All the Group's property, plant and equipment are located in Mongolia.
- (b) Mining structures and mining rights at 31 December 2009, 2010 and 2011 include deferred stripping costs of USD1,041,000, USD19,909,000, and USD60,437,000, respectively.
- (c) Mining structures and mining rights at 31 December 2009, 2010 and 2011 include application fee for the mining rights costs of USD713,000, USD805,000, and USD707,000, respectively.
- (d) The addition of mining structures and mining rights for the years ended 31 December 2009, 2010 and 2011 include reclamation cost of nil, USD4,251,000 and USD4,834,000, respectively (see Note 26).
- (e) As at 31 December 2009, certain of the Group's short-term interest-bearing borrowings were secured by the Group's motor vehicles and buildings with net book value of USD5,026,000 (see Note 20).
  - As at 31 December 2010, there is no interest-bearing borrowings were secured by the Group's property, plant and equipment.
  - As at 31 December 2011, certain of the Group's short-term interest-bearing borrowings were secured by the Group's motor vehicles with net book value of USD11,541,000 (see Note 20).

As at 31 December 2011, certain of the Group's interest-bearing borrowings were secured by the Group's coal handling and preparation plant – module I and power plant with a net book value of USD99,483,000 and USD54,627,000, respectively (see Note 20).

#### 12 CONSTRUCTION IN PROGRESS

	2009	2010	2011
	USD'000	USD'000	USD'000
At 1 January	15,129	43,985	232,784
Additions in relation to the Acquisition (Note 32)	_	_	18,582
Additions	47,522	183,984	267,520
Transfer to property, plant and equipment (Note 11)	(16,752)	(14,923)	(219,605)
Transfer to intangible asset (Note 14)	_	_	(95,817)
Exchange adjustments	(1,914)	19,738	(20,235)
At 31 December	43,985	232,784	183,229

The construction in progress are mainly related to coal handling and preparation plant, power plant, paved road and mining related machinery and equipment.

As at 31 December 2010, certain of Group's interest-bearing borrowings were secured by the Group's coal handling and preparation plant and power plant with net book value of USD102,153,000 and USD46,402,000, respectively (see Note 20), which were transferred to property, plant and equipment during 2011.

As at 31 December 2009 and 2011, no interest-bearing borrowings were secured by the Group's construction in progress.

## 13 LEASE PREPAYMENTS

	2009	2010	2011
	USD'000	USD'000	USD'000
Cost:			
At 1 January	123	108	124
Exchange adjustments	(15)	_16	(12)
At 31 December	108	124	112
Accumulated amortisation:			
At 1 January	1	3	6
Charge for the year	2	2	2
Exchange adjustments		1	(1)
At 31 December	3	6 	
Net book value:	105	118	105

Lease prepayments comprise interests in leasehold land held for own use under operating leases located in Mongolia, with original lease period from 15 years to 60 years.

# 14 INTANGIBLE ASSETS

# The Group

	Acquired mining right	Operating right paved road	Total
	USD'000	USD'000	USD'000
Cost:			
At 1 January 2010/31 December 2010/1 January 2011	_	_	_
Addition in relation to the Acquisition (Note 32)	596,557	_	596,557
Transfer from construction in progress (Note 12)	_	95,817	95,817
Exchange adjustments		(8,978)	(8,978)
At 31 December 2011	596,557	86,839	683,396
Accumulated amortisation:			
At 1 January 2010/31 December 2010/1 January 2011	_	_	_
Charge for the year	_	2,256	2,256
Exchange adjustments		(212)	(212)
At 31 December 2011	_	2,044	2,044
Carrying amount			
Carrying amount: At 31 December 2009/2010			
At 31 December 2011	596,557	84,795	681,352

Acquired mining right represents the mining right acquired during the acquisition of QGX (see Note 32). As QGX has not commenced the commercial production by 31 December 2011, accordingly there was no amortisation related to the acquired mining right during the year ended 31 December 2011.

According to the Resolution of the Government of Mongolia dated 31 March 2010 and the Built-Operate-Transfer agreement signed between the Government of Mongolia and the Group dated 9 June 2010, the Government of Mongolia granted the Group the land use rights, and to build and operate the paved road running from the mine site to the Mongolia-China border at Gashuun Sukhait. Under the terms of the Agreement, the Group will use its own funds to construct the paved road. In return, it enjoys an unrestricted use right to possess, use, operate the paved road for 10 years period after commission of the road. The Group will use the road primarily for the purpose of transporting coals from its mine site to the Mongolia-China border at Gashuun Sukhait, which is the gate to the designated delivery port of the majority of its customers. In addition, the paved road may be opened to public use subject to certain weight restrictions whereupon the Group may direct users. The Group has completed and commissioned the paved road on 6 October 2011.

#### 15 INTEREST IN ASSOCIATE

	2009	2010	2011
	USD'000	USD'000	USD'000
Share of net assets	14	<u>19</u>	4,278

On 15 July 2008, the Group invested in Coal Road LLC (the "Coal Road") and had 25% interest in Coal Road, an entity incorporated in Mongolia with issued and paid up capital of MNT 209,075,133. The principal activities of Coal Road are the provision of road maintenance service and traffic management.

On 14 January 2011, the Group invested in International Medical Center LLC (the "International Medical Center") and had 25.5% interest in International Medical Center, an entity incorporated in Mongolia with issued and paid up capital of MNT 22,522,500,000. The principal activities of International Medical Center are the provision of health care, diagnostic and treatment services.

On 30 May 2011, the Group invested in International Technical College LLC (the "International Technical College") and had 33.33% interest in International Technical College, an entity incorporated in Mongolia with issued and paid up capital of MNT 913,500,000. The principal activity of International Technical College is technical education for ensuring the long- term availability of skilled technical workforce.

# 16 OTHER NON-CURRENT ASSETS

	2009	2010	2011
	USD'000	USD'000	USD'000
Prepayments in connection with construction work,			
equipment purchases and others	8,263	26,882	7,423
Others	109	7	
	8,372	26,889	7,423

#### 17 INVENTORIES

#### (a) Inventories in the consolidated balance sheet comprise:

	2009	2010	2011
	USD'000	USD'000	USD'000
Coal	6,918	6,607	49,912
Materials and supplies	743	1,269	7,822
	7,661	7,876	57,734

As at 31 December 2009, the Group's long-term interest-bearing borrowings were secured by the total carrying amount of the Group's coal inventory (see Note 20).

As at 31 December 2010, the Group's short-term interest-bearing borrowings were secured by the total carrying amount of the Group's coal inventory. Such short-term interest-bearing borrowings were early repaid in January 2011 (see Note 20).

#### 18 TRADE AND OTHER RECEIVABLES

	2009	2010	2011
	USD'000	USD'000	USD'000
Trade receivables (Note (a))	8,502	288	41,445
Other receivables (Note (c))	11,534	32,062	72,022
	20,036	32,350	113,467
Less: allowance for doubtful debts (Note (b))			(4,145)
	20,036	32,350	109,322

# (a) Ageing analysis

Trade receivables (net of allowance for doubtful debts) are invoiced amounts due from the Group's customers which are due from the date of billing. As at 31 December 2009, 2010 and 2011, all of the trade receivables are aged within one year.

#### (b) Impairment of trade receivables

Impairment losses in respect of trade receivables are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against trade receivables directly (Note 2(j)(i)).

As at 31 December 2011, an allowance for doubtful debts amounting to USD4,145,000 (2009 and 2010: Nil) was made on a collective basis in respect of the Group's trade receivable balances outstanding at the balance sheet date, which have been included in "administrative expenses" in the consolidated income statement.

#### (c) Other receivables

	2009	2010	2011
	USD'000	USD'000	USD'000
Amounts due from related parties (Note (i))	3,038	347	455
Security deposit (Note (ii))	1,000	_	_
Prepayments and deposits (Note (iii))	959	7,014	17,695
VAT receivables (Note (iv))	5,738	23,920	43,697
Payment on behalf of the customers	489	_	_
Others ( <i>Note</i> ( <i>v</i> ))	310	781	10,175
	11,534	32,062	72,022

Note:

- (i) As at 31 December 2009, amounts due from related parties mainly represent loan to MCS Holding LLC amounting to USD 2.3 million, at an interest rate of 2% per month and with repayment period of three months and the remaining balances represent other current accounts with related parties (see Note 31(a)). Other than that, amounts due from related parties are unsecured, interest-free and have no fixed repayment terms.
- (ii) The balance as at 31 December 2009 represented the security deposit paid to the mining contractor.
- (iii) Prepayments and deposits mainly represent the prepayments made to the Group's mining contractor.
- (iv) VAT receivables include amounts that have been accumulated to date in certain subsidiaries and were due from the Government of Mongolia Taxation Authority. Based on current available information the Group anticipates full recoverability of such amounts. Further details are stated in Note 29(b).
- (v) At 31 December 2011, others mainly represent the reimbursement receivables due from Erdenes MGL LLC and Government of Mongolia of USD4.5 million each for the construction costs in relation to the expansion project of the border crossing in Mongolian side at Gashuun Sukhait, which are interest-free.

All other receivables were aged within one year and expected to be recovered or expensed off within one year.

# 19 CASH AT BANK AND IN HAND

	2009	2010	2011
	USD'000	USD'000	USD'000
Cash in hand	39	99	77
Cash at bank	2,332	674,808	227,688
Cash at bank and in hand	2,371	674,907	227,765
Less: time deposits with original maturity over three months	(2,000)	(346,645)	(186,759)
Cash and cash equivalents in the consolidated cash flow statement	<u>371</u>	328,262	41,006

As at 31 December 2009, there were no the Group's borrowings which were secured by the Group's cash at bank (see Note 20).

As at 31 December 2010, certain of the Group's borrowings were secured by the Group's cash at bank of USD199,890,000 (see Note 20).

As at 31 December 2011, certain of the Group's borrowings were secured by the Group's cash at bank of USD213,884,000 (see Note 20).

## 20 BORROWINGS

# (a) The Group's long-term interest-bearing borrowings comprise:

	2009	2010	2011
	USD'000	USD'000	USD'000
Bank loan (secured)	30,000	180,000	169,091
Less: Current portion	(20,000)	(10,909)	(21,818)
Less: Unamortised transaction costs		(3,877)	(2,612)
	10,000	165,214	144,661

At 31 December 2009, the Group's long-term interest-bearing borrowings from Standard Bank was USD30,000,000, bearing an interest of 3 months London Interbank Offered Rate ("LIBOR") + 7%~8% and was secured by the Group's coal inventory (see Note 17).

At 31 December 2010, the Group's long-term interest-bearing borrowings from European Bank for Reconstruction and Development ("EBRD"), Nederlandse Financierings-Maatschappij Voor Ontwikkelingslanden N.V., ("FMO") and Deutsche Investitions-und Entwicklungsgesellschaft mbH ("DEG") were USD120,000,000, USD36,000,000 and USD24,000,000, respectively, bearing interest of 6 months LIBOR + 4.75%~6.85% and were secured by the Group's construction in progress (see Note 12) and cash at bank and in hand (see Note 19).

At 31 December 2011, the Group's long-term interest-bearing borrowings from EBRD, FMO and DEG were USD114,546,000, USD32,727,000 and USD21,818,000, respectively, bearing interest of 6 months LIBOR  $+4.75\%\sim6.85\%$  and were secured by the Group's property, plant and equipment (see Note 11) and cash at bank and in hand (see Note 19).

The Group's long-term borrowings are repayable as follows:

	2009	2010	2011
	USD'000	USD'000	USD'000
Within 1 year or on demand	20,000	10,909	21,818
After 1 year but within 2 years	10,000	21,818	21,818
After 2 years but within 5 years	_	95,455	125,455
After 5 years	_	51,818	_
	30,000	180,000	169,091

# (b) The Group's short-term interest-bearing borrowings comprise:

	2009	2010	2011
	USD'000	USD'000	USD'000
Bank loans			
- Secured	1,200	75,000	311,750
- Unsecured	1,000	_	_
Other borrowings			
- Third parties	2,000	_	_
Current portion of long-term borrowings			
- Bank loan	20,000	10,909	21,818
	24,200	85,909	333,568
	====	====	====

As at 31 December 2009, certain of the Group's short-term interest-bearing borrowings were secured by certain of the Group's property, plant and equipment (see Note 11).

At 31 December 2009, the Group's long-term interest-bearing borrowings from Standard Bank was USD30,000,000. During the year ended 31 December 2010, additional borrowings of USD45,000,000 have been drawn-down. The outstanding loan balances with Standard Bank as at 31 December 2010 was USD75,000,000, bearing an interest of 3 months LIBOR + 7%~8% and was secured by the Group's coal inventory (see Note 17). The Group submitted its early repayment request to Standard Bank in December 2010 to repay USD75,000,000 of its long-term borrowings in early 2011; accordingly, the Group classified the related principal amount from long-term interest-bearing borrowings to short-term interest-bearing borrowings as at 31 December 2010.

As at 31 December 2011, the Group's short-term interest-bearing borrowings from Standard Bank of USD300,000,000 bearing interest of 6 months LIBOR + 3.25%, were secured by the Group's cash at bank and in hand. The attributable transaction cost as at 31 December 2011 amounts to USD1,250,000. The original borrowings from Standard Bank was USD400,000,000, part of which amounted to USD100,000,000 was early repaid in December 2011.

As at 31 December 2011, the Group's short-term interest-bearing borrowings from Khan Bank of USD13,000,000 bearing annual interest of 11%, were secured by the Group's property, plant and equipment (see Note 11).

#### 21 TRADE AND OTHER PAYABLES

	2009	2010	2011
	USD'000	USD'000	USD'000
Trade payables ( <i>Note</i> ( <i>i</i> ))	1,623	4,772	18,523
Receipts in advance (Note (ii))	8,537	18,842	9,160
Amounts due to related parties (Note (iii))	2,052	5,329	9,560
Payables for purchase of equipment	4,163	3,913	36,018
Security deposit on construction work	_	128	9,259
Interest payable	19	3,776	2,544
Other taxes payables	_	326	21,354
Provisions for contingent considerations (Note 26)	_	_	1,500
Others ( <i>Note</i> ( <i>iv</i> ))	713	3,229	10,762
	<u>17,107</u>	40,315	118,680

Note:

All of the other payables and receipts in advance are expected to be settled or recognised in profit or loss within one year or are repayable on demand.

<sup>(</sup>i) All trade payables are due and payable on presentation or within one month.

<sup>(</sup>ii) Receipts in advance represent payments in advance made by third party customers in accordance with the terms set out in respective sales agreements.

<sup>(</sup>iii) Amounts due to related parties represent management service fee payable and payables for equipment and construction work, which are unsecured, interest-free and have no fixed terms of repayments (see Note 31(a)).

<sup>(</sup>iv) Others represent accrued expenses, payables for staff related costs and other deposits.

# 22 INCOME TAX IN THE CONSOLIDATED BALANCE SHEET

# (a) Tax payable in the consolidated balance sheet represents:

	2009	2010	2011
	USD'000	USD'000	USD'000
At 1 January	_	795	5,455
Provision for the year ( <i>Note</i> $7(a)$ )	2,100	19,371	49,367
Offsetting with VAT receivable (Note 29(b))	_	_	(9,470)
Income tax paid	(1,305)	(15,145)	(25,998)
Exchange adjustments		434	(1,846)
At 31 December		5,455	17,508

# (b) Deferred tax assets and liabilities recognised

The components of deferred tax assets/(liabilities) recognised in the consolidated balance sheet and the movements during the Relevant Period are as follows:

	Tax losses USD'000	Unrealised profits on intra-group transactions	Depreciation and amortisation	Unrealised foreign exchange difference on long-term borrowings	Allowance for doubtful debts	Fair value adjustments in relation to the Acquisition USD'000	Total USD'000
Deferred tax arising from:	USD 000	USD'000	USD'000	OSD,000	USD'000	USD'000	USD 000
At 1 January 2009 Credited/(charged) to profit or	2,240	-	-	-	-	-	2,240
loss (Note $7(a)$ )	(1,972)	178	(217)	-	-	-	(2,011)
Exchange adjustments	(268)						(268)
At 31 December 2009		178	(217)				(39)
At 1 January 2010	-	178	(217)	-	-	-	(39)
Credited/(charged) to profit or							
loss (Note $7(a)$ )	751	494	(228)	(4,403)	-	_	(3,386)
Exchange adjustments	60	52	(37)	(350)			(275)
At 31 December 2010	811	724	(482)	(4,753)	-	_	(3,700)
At 1 January 2011	811	724	(482)	(4,753)	-	-	(3,700)
Addition in relation to the Acquisition ( <i>Note 32</i> ) Credit to profit or loss	-	-	-	-	-	(149,105)	(149,105)
(Note $7(a)$ )	1,816	3,593	553	6,719	1,036	_	13,717
Exchange adjustments	(251)	(409)	(54)	(156)	<i>-</i>	-	(870)
At 31 December 2011	2,376	3,908	17	1,810	1,036	<u>(149,105)</u>	(139,958)

	2009	2010	2011
	USD'000	USD'000	USD'000
Net deferred tax assets recognised on the consolidated balance			
sheet	328	1,681	9,698
Net deferred tax liability recognised on the consolidated balance			
sheet	(367)	(5,381)	(149,656)
	(39)	(3,700)	(139,958)

#### (c) Deferred tax assets not recognised

In accordance with the accounting policy set out in Note 2(r), at the years ended 31 December 2009, 2010 and 2011, the Group has not recognised deferred tax assets in respect of cumulative tax losses of USD605,000, USD8,949,000 and USD26,973,000, respectively, as it is not probable that future taxable profits against which the losses can be utilised will be available in the relevant tax jurisdiction and entity. The tax losses generated before 31 December 2009 will expire in two years after the tax losses generated under current tax legislation. According to the new amendment to Mongolian Corporate Income Tax Law which is effective on 1 January 2010, for entities engaged in mining or infrastructure construction, the tax losses generated after 1 January 2010 will expire in four to eight years after the tax losses generated under current tax legislation. Other entities will still apply to the two years policy.

Expiry of unrecognised tax losses of group entities located in Mongolia:

	2009	2010	2011
	USD'000	USD'000	USD'000
Year of expiry			
2011	605	553	_
2012	-	368	358
2013	-	_	9,103
2014		2,759	2,681
	605	3,680	12,142

In relation to group entities located in the jurisdictions other than Mongolia, the tax losses amounting Nil, USD5,269,000 and USD14,831,000 as at 31 December 2009, 2010 and 2011, respectively, do not expire under current tax legislations.

#### 23 CONVERTIBLE BOND

	The Group and the Company			
	Liability component USD'000	Derivative component USD'000	Total USD'000	
At 1 January 2011	_	_	_	
Issuance of convertible bond (Note 32)	80,048	10,292	90,340	
Transaction costs	(915)	_	(915)	
Interest charged during the year (Note $6(a)$ )	3,371	_	3,371	
Interest payable	(1,425)	_	(1,425)	
Fair value adjustment (Note 6(a))		(7,863)	(7,863)	
At 31 December 2011	81,079	2,429	83,508	

On 1 June 2011, the Company issued the USD 85,000,000 aggregate principal amount convertible bond ("convertible bond") to QGX Holdings Ltd. ("Bondholder"), related to the acquisition of QGX (see Note 32).

The convertible bond bears interest at 2.0% per annum. If the Group's consolidated leverage ratio exceeds 5.5:1, the interest rate of the convertible bond shall increase to 4.0% per annum. The initial maturity date of the convertible bond is 1 December 2012 and shall be extended but no later than 21 months from 1 June 2011.

If the total proved and probable reserves (as defined under the Australian Code for Reporting of Mineral Resources and Ore Reserves and to be determined after approximately 18 months to 21 months from the date of the Share Purchase Agreement (see the definition in Note 32)) contained in the Baruun Naran Coking Coal Mine (the "Total Reserves") are less than 150,000,000 tonnes ("Reserves Shortfall"), the principal amount of the convertible bond shall be reduced by an amount equal to US\$3.00 per tonne of such Reserves Shortfall, subject to a cap of US\$85,000,000.

Pursuant to the bond conversion terms, the initial conversion price shall be HK\$10.92 per share and may change, subject to adjustment in certain circumstances and events. The Group can choose to satisfy its obligation to convert the convertible bond through either (i) delivery of shares or (ii) payment of cash.

The convertible bond has been accounted for as a hybrid financial instrument containing both a derivative component and a liability component. The derivative component was initially recognised at its fair value of USD10,292,000 and the attributable transaction cost of USD118,000 were charged to the profit or loss for the year ended 31 December 2011. The liability component was initially recognised at amortised cost of USD79,133,000, after taking into account attributable transaction costs of USD915,000.

Fair value of the derivative component was valued by the directors with the reference to a valuation report issued by an independent business valuer based on the Black-Scholes option pricing model.

## 24 EQUITY-SETTLED SHARE-BASED PAYMENT TRANSACTIONS

The Company has a share option scheme ("Share Option Scheme") which was adopted on 17 September 2010 whereby the board of directors of the Group are authorised, at their discretion, invites eligible participants to receive options to subscribe for shares subject to the terms and conditions stipulated therein as incentives or rewards for their contributions to the Group.

Under the Share Option Scheme, the Company may grant options to employees and directors, suppliers, customers and professional advisers of the Group to subscribe for shares of the Company. The exercise price of the options is determined by the board of directors of the Company at the time of grant, and shall be the highest of the nominal value of the shares, the closing price of the shares at the date of grant and the average closing price of the shares for the five business days immediately preceding the date of grant. The Share Option Scheme remains in force for a period of 10 years commencing on its adoption date and will expire on 16 September 2020.

# (i) The terms and conditions of the grants are as follows:

Grant Date	Number of options	Vesting conditions	Contractual life of options
	'000		
12 October 2011	8,800	12 October 2011 to	12 October 2011 to
		12 October 2012	12 October 2019
12 October 2011	8,800	12 October 2011 to	12 October 2011 to
		12 October 2013	12 October 2019
12 October 2011	8,800	12 October 2011 to	12 October 2011 to
		12 October 2014	12 October 2019
12 October 2011	8,800	12 October 2011 to	12 October 2011 to
		12 October 2015	12 October 2019
Total share options .	<u>35,200</u>		

The number of options granted to directors and employees for the year ended 31 December 2011 are 3,000,000 and 32,200,000, respectively.

#### (ii) The number and exercise price of share options are as follows:

	Exercise price	Number of options
	HKD	'000
Outstanding at 1 January 2011	_	_
Granted during the year	6.66	35,200
Forfeited during the year	6.66	(300)
Outstanding at 31 December 2011	6.66	34,900
Exercisable at 31 December 2011		

The options outstanding at 31 December 2011 had an exercise price of HKD6.66 per share and a weighted average remaining contractual life of 7.8 years.

#### (iii) Fair value of share options and assumptions

The fair value of services received in return for share options granted is measured by reference to the fair value of share options granted. The estimate of the fair value of the share options granted is measured based on the Black-Scholes option pricing model. The variables of the models included expected life of the options, risk-free interest rate, expected volatility and expected dividend of the shares of the Company.

	2011
Fair value at measurement date	HKD3.3793~HKD3.7663
Share price	HKD6.66
Exercise price	HKD6.66
Expected life	4.5-6 years
Risk-free interest rate	0.755%~1.054%
Expected volatility	61.87%~63.43%
Expected dividends	_

The expected volatility is based on the historic volatility of entities in the same industry (calculated based on the weighted average remaining life of the share options), adjusted for any expected changes to future volatility based on publicly available information. Expected dividends are based on management estimate. The risk-free interest rate is based on the yield of Hong Kong Exchange Fund Notes corresponding to the expected life of the options as at the grant date. Changes in the subjective input assumptions could materially affect the fair value estimate.

Share options were granted under a service condition. The condition has not been taken into account in the grant date fair value measurement of the services received. There was no market condition associated with the share option grants.

#### 25 LONG-TERM PAYABLES

	2009	2010	2011
	USD'000	USD'000	USD'000
Receipt in advance from a customer (Note i)	14,658	16,811	_
Payable for mining right (Note ii)	557		_
	15,215	16,811	_
			=

Note:

# 26 PROVISIONS

	2009	2010	2011
	USD'000	USD'000	USD'000
Accrued reclamation obligations	1,705	6,904	11,110
Contingent considerations (Note 32)			1,500
Less: Current portion			1,500
	1,705	6,904	11,110

The accrual for reclamation costs has been determined based on management's best estimates. The estimate of the associated costs may be subject to change in the near term when the reclamation on the land from current mining activities becomes apparent in future periods. At the balance sheet

<sup>(</sup>i) Receipt in advance represented an advance payment made by a third party customer in relation to a long-term sales contract with this customer within a ten-year period starting from 2009. The Group fully settled the receipt in advance by selling the coal in the first half of 2011 according to the mutual agreement with the third party customer.

<sup>(</sup>ii) In September 2008, the Group entered into an agreement with the Government agency of Mongolia to reimburse it in relation to the exploration expenditures incurred by the Government of Mongolia at the Ukhaa Khudag ("UHG") deposit prior to the registration of the UHG mining license. Pursuant to the agreement, the payable for mining right should be settled annually within a five-year period starting from 2009. Nevertheless, the Group made full settlement of the outstanding payable balance in 2010.

date, the Group reassessed the estimated costs and adjusted the accrued reclamation obligations, where necessary. The Group's management believes that the accrued reclamation obligations at 31 December 2009, 2010 and 2011 are adequate and appropriate. The accrual is based on estimates and therefore, the ultimate liability may exceed or be less than such estimates. The movement of the accrued reclamation cost during the Relevant Period is as follows:

	2009	2010	2011
	USD'000	USD'000	USD'000
At 1 January	1,640	1,705	6,904
Adjustment of estimations	_	4,251	4,834
Accretion expense (Note 6(a))	265	332	567
Exchange adjustments	(200)	616	(1,195)
At 31 December	1,705	6,904	11,100

Accrued reclamation costs increased during the Relevant Period as the result of a reduction in the discount rate.

#### 27 CAPITAL AND DIVIDENDS

(a) The board of directors of the Company does not recommend the payment of a final dividend in respect of the years ended 31 December 2009, 2010 and 2011.

#### (b) Share capital

The Company was incorporated on 18 May 2010 with an authorised share capital of USD50,000 comprising 5,000,000 ordinary shares of USD0.01 each. On 18 May 2010, MCS Mining Group Limited acquired its initial share of one share of USD0.01. By an ordinary resolution passed at the annual general meeting held on 23 August 2010, the Company's authorised ordinary share capital was increased to USD60,000,000 by the creation of an additional 5,995,000,000 ordinary shares of USD0.01 each, ranking pari passu with the existing ordinary shares of the Company in all respects.

The aggregate amount of share capital of the companies now comprising the Group, after elimination of interests in subsidiaries, was included in other reserve during the years ended 31 December 2009, 2010 and 2011(Note 28(b)).

#### The Company

	2010		2011	
	No of shares '000	USD'000	No of shares	USD'000
Authorised:				
Ordinary shares	6,000,000	60,000	6,000,000	60,000

	Note 20		10	20	11
		No of shares '000	USD'000	No of shares '000	USD'000
Ordinary shares, issued and fully paid:					
At 1 January					
Shares issued immediately after the					
Reorganisation	(i)	3,000,000	30,000	3,000,000	30,000
Shares issued pursuant to the initial public					
offering and upon the exercise of the over-					
allotment option	(ii)	705,037	7,050	705,037	7,050
At 31 December		3,705,037	37,050	3,705,037	37,050

#### (c) Issue of shares

- (i) Upon the incorporation of the Company, one share was subscribed by the initial subscriber (see Note 27 (b)). On 14 September 2010, MCS Mining LLC, Petrovis LLC, Shunkhlai Mining LLC, EBRD, MCS Holding LLC, Tengeriin Tsag Group LLC, Energy Resources Corporation LLC and the Company entered into a share swap agreement, pursuant to which each of MCS Mining LLC, Petrovis LLC, Shunkhlai Mining LLC, EBRD, MCS Holding LLC and Tengeriin Tsag Group LLC transferred its respective shares in Energy Resources LLC to Energy Resources Corporation LLC, in consideration of which the Company allotted and issued, credited as fully paid, 1,715,999,999, 423,000,000, 183,000,000, 150,000,000, 300,000,000 and 228,000,000 shares to MCS Mining Group Limited, Petrovis Resources Inc., Shunkhlai Mining, EBRD, Kerry Mining (UHG) Limited and Ancora Investments No. 2 Limited, respectively.
- (ii) On 13 October 2010, an aggregate of 597,122,500 ordinary shares of USD0.01 each were issued and offered for subscription at a price of HKD7.02 per share upon the listing of the Company's share on the Stock Exchange. On 21 October 2010, an aggregate of 107,914,000 ordinary shares of USD0.01 each were issued and offered for subscription at a price of HKD7.02 per share upon the exercise of the overallotment option. The Group raised approximately HKD4,778,015,000 in total (equivalent to USD615,700,000), net of the related expenses.

# (d) Capital management

The Group's primary objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders. The Group defines the capital as total shareholders' equity plus loans and borrowings.

The Group actively and regularly reviews and manages its capital structure to maintain a balance between the higher shareholder returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position.

The gearing ratio (calculated as total bank and other borrowings divided by total assets) of the Group as at 31 December 2009, 2010 and 2011 was 30%, 24%, and 35%, respectively.

#### 28 RESERVES

#### (a) Share premium

Under the Companies Law of the Cayman Islands, the share premium account of the Company may be applied for payment of distributions or dividends to shareholders provided that immediately following the date on which the distribution or dividend is proposed to be paid, the Company is able to pay its debts as they fall due in the ordinary courses of business.

#### (b) Other reserve

The other reserve comprises the following:

- the aggregate amount of share capital and other reserves of the companies now comprising the Group after elimination of the investments in subsidiaries; and
- the portion of the grant date fair value of unexercised share options granted to directors and employees of the Company that has been recognised in accordance with the accounting policy adopted for share-based payments in Note 2(q)(ii).

#### (c) Exchange reserve

The exchange reserve comprises all foreign exchange adjustments arising from the translation of the MNT denominated financial statements of the companies now comprising the Group to the Group's presentation currency. The reserve is dealt with in accordance with the accounting policy set out in Note 2(v).

# (d) Distributability of reserves

Pursuant to the Companies Law, Cap.22 (Law 3 of 1961, as consolidated and reserved) of the Cayman Islands, share premium of the Company is distributable to the shareholders. Other than the share premium, there is no other amount available for distribution to equity shareholders of the Company as at 31 December 2010 and 2011.

## 29 FINANCIAL INSTRUMENTS

# (a) Financial risk management objectives and policies

Management has adopted certain policies on financial risk management with the objective of:

- (i) ensuring that appropriate funding strategies are adopted to meet the Group's short-term and long-term funding requirements taking into consideration the cost of funding, gearing levels and cash flow projections of each project and that of the Group; and
- (ii) ensuring that appropriate strategies are also adopted to manage related interest and currency risk funding.

#### (b) Credit risk

The Group's credit risk is primarily attributable to cash at bank, trade and other receivables. Management monitors the exposures to these credit risks on an ongoing basis.

Substantially all of the Group's cash at bank are deposited in the reputable banks which management assessed the credit risk to be insignificant.

Trade receivables are presented net of allowance for doubtful debts. In order to minimise the credit risk, the credit management committee, comprising the senior management team of the Group, has established a policy for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. The credit management committee also evaluates and reviews the credit quality and the recoverable amount of each individual trade debt on an ongoing basis. These evaluations and reviews focus on the customer's past history of making payments when due and current ability to pay, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. The Group establishes an allowance for doubtful debts that represents its estimate of losses in respect of trade receivables. The components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established for groups of similar assets. At the end of the reporting period, the Group believes that adequate allowance for impairment has been made in the consolidated financial statements. In this regard, the directors consider that the Group's credit risk is significantly reduced. The Group does not hold any collateral as security for these receivables. The Group has a certain concentration credit risk as three customers accounted for 75% of the total trade receivables as at 31 December 2011.

The Group closely monitors the amount due from related parties.

VAT receivables include amounts that have been accumulated to date in various subsidiaries. According to the prevailing tax rules and regulations in Mongolia, a tax payer may offset future taxes and royalties payable to the Government against VAT amounts receivable from the Government of Mongolia. In July 2009, the Mongolian Tax Laws were amended to preclude producers and exporters of unfinished mineral products from claiming back VAT and any VAT amounts impacted will be prospective from the effective date of the law on 16 August 2009. On 10 November 2010, the Government defined finished mineral products as products which qualify for claiming back VAT. During the year ended 31 December 2010, the Group offset current income tax owning of USD2,604,000 against its VAT receivable balance and also received a cash refund of USD3,314,000 for the VAT receivable balance. During the year ended 31 December 2011, the Group offset current income tax and royalty tax owing of USD9,470,000 and USD8,381,000, respectively, against its VAT receivable balance. Based on currently available information, the Group anticipates full recoverability of amounts due on account primarily relating to finished mineral products at 31 December 2011. Verification by the Mongolian Government Taxation Authority of the collectability of the funds is conducted on an annual basis and any outstanding VAT receivable amounts at 31 December 2011, will be available to the Group to offset future taxes and royalty tax or will be refunded by the Government of Mongolia Taxation Authority.

Further quantitative disclosures in respect of the Group's exposure to credit risk arising from trade and other receivables are set out in Note 18.

#### (c) Foreign currency exchange risk

The Group is exposed to currency risk primarily through sales, purchases and borrowings which give rise to receivables, payables, borrowings and cash balances that are denominated in a foreign currency, i.e. a currency other than the functional currency of the operations to which the transactions relate. The functional currency of the Group's Mongolian entities is MNT and of the Group's overseas entities is USD. The currencies giving rise to this risk are primarily RMB, USD and HKD.

# (i) Exposure to currency risk

The following table details the Group's exposure at the end of the reporting period to currency risk arising from recognised assets or liabilities denominated in a currency other than the functional

currency of the entity to which they relate. For presentation purpose, the amounts of the exposure are shown in USD, translated using the spot rate at the year end date.

Exposur	e to	o foreig	n curr	encies
(expressed	in	United	States	Dollars)

	2009		
	Renminbi	United States Dollars	Hong Kong Dollars
	USD'000	USD'000	USD'000
Trade and other receivables	7	9,507	_
Cash and cash equivalents	1	2,170	_
Trade and other payables	(4,491)	(4,928)	_
Short-term borrowings and current portion of long-term borrowings.	_	(24,200)	_
Long-term borrowings	_	(10,000)	_
Long-term payable	(14,658)	_	-
Net exposure arising from recognised assets and liabilities	<u>(19,141)</u>	(27,451)	- - =

# Exposure to foreign currencies (expressed in United States Dollars)

	2010		
	Renminbi	United States Dollars	Hong Kong Dollars
	USD'000	USD'000	USD'000
Trade and other receivables	40	293	_
Cash and cash equivalents	3,103	268,285	2,216
Trade and other payables	(9,091)	(16,279)	(14)
Short-term borrowings and current portion of long-term borrowings.	_	(85,909)	_
Long-term borrowings	_	(165,214)	_
Long-term payable	(16,811)		
Net exposure arising from recognised assets and liabilities	<u>(22,759)</u>	1,176	<u>2,202</u>

# Exposure to foreign currencies (expressed in United States Dollars)

	2011		
	Renminbi	United States Dollars	Hong Kong Dollars
	USD'000	USD'000	USD'000
Trade and other receivables	3,771	37,629	_
Cash and cash equivalents	2,418	117,234	235
Trade and other payables	(6)	(18,675)	(82)
Short-term borrowings and current portion of long-term borrowings.	-	(34,818)	_
Long-term borrowings		(144,661)	
Net exposure arising from recognised assets and liabilities	6,183	(43,291)	<u>153</u>

#### (ii) Sensitivity analysis

An 5% strengthening/weakening of other currency against functional currencies defined in Note 2(v) as at the respective balance sheet dates would (decrease)/increase profit after taxation by the amount shown below. This analysis assumes that all other risk variables remained constant.

	2009	2010	2011
	USD'000	USD'000	USD'000
Profit for the year			
5% increase in RMB	(717)	(792)	232
5% decrease in RMB	717	792	(232)
5% increase in USD	(1,030)	44	(979)
5% decrease in USD	1,030	(44)	979
5% increase in HKD	_	109	8
5% decrease in HKD	_	(109)	(8)

### (d) Interest rate risk

The Group's interest rate risk arises primarily from short-term borrowings, long-term borrowings and convertible bond. Borrowings issued at variable rates expose the Group to cash flow interest rate risk and fair value interest rate risk respectively.

The following table details the profile of the Group's net borrowings (interest-bearing financial liabilities less interest-bearing financial assets) at the balance sheet date. The detailed interest rates and maturity information of the Group's borrowings are disclosed in Note 20.

	2009	2010	2011
	USD'000	USD'000	USD'000
Net fixed rate borrowings:			
Borrowings	2,200	_	13,000
Obligations under finance lease	_	_	460
Convertible bond	_	_	83,508
Less: Bank deposits (including pledged deposits)	(2,000)	(346,645)	(186,759)
	200	(346,645)	(89,791)
Net floating rate borrowings:			
Borrowings	32,000	251,123	465,229
Less: Bank deposits (including pledged deposits)	(371)	(328,262)	(41,006)
	31,629	(77,139)	424,223
Total net borrowings:	31,829	(423,784)	334,423

As at 31 December 2009, it is estimated that a general increase/decrease of 100 basis points in interest rates, with all other variables held constant, would have decreased/increased the Groups profit after taxation and retained profits by approximately USD240,000.

As at 31 December 2010, it is estimated that a general increase/decrease of 100 basis points in interest rates, with all other variables held constant, would have increased/decreased the Groups profit after taxation and retained profits by approximately USD1,566,000.

As at 31 December 2011, it is estimated that a general increase/decrease of 100 basis points in interest rates, with all other variables held constant, would have decreased/increased the Groups profit after taxation and retained profits by approximately USD3,900,000.

The sensitivity analysis above indicates the instantaneous change in the Group's profit after tax that would arise assuming that the change in interest rates had occurred at the balance sheet date and had been applied to re-measure those financial instruments held by the Group which expose the Group to fair value interest rate risk at the balance sheet date. In respect of the expose to cash flow interest rate risk arising from floating rate non-derivative instruments held by the Group at the balance sheet date, the impact on the Group's profit after tax and retained profits and other components of consolidated equity is estimated as an annualised impact on interest expense or income of such a change in interest rates.

In respect of the convertible bond, as disclosed in Note 23, it bears interest at 2.0% per annum. If the Group's consolidated leverage ratio exceeds 5.5:1, the interest rate of the convertible bond shall increase to 4.0% per annum.

## (e) Liquidity risk

The Group has to maintain a suitable level of liquidity to finance the daily operation, capital expenditure and repayment of borrowings. The Group's policy is to regularly monitor current and expected liquidity requirements to ensure that it maintains sufficient reserves of cash and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer term.

The following table details the remaining contractual maturities at the balance sheet date of the Group's financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the balance sheet date) and the earliest date the Group can be required to pay:

		Contractua	2009 I undiscounted ca	ash outflow		
	Within 1 year	After 1 year but within 2 years	After 2 years but within 5 years	After 5 years	Total contractual undiscounted cash flow	Balance sheet carrying amount
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Borrowings (Note 20)	26,168	10,309	-	-	36,477	34,200
Trade and other payables (Note 21)	17,071	36	_	-	17,107	17,107
Long-term payables (Note 25)	450	225	225	14,648	15,548	15,215
	43,689	10,570	225	14,648	<u>69,132</u>	<u>66,522</u>
		Contractua	2010 Lundiscounted c	ash outflow		
	Within 1 year	After 1 year but within 2 years	After 2 years but within 5 years	After 5 years	Total contractual undiscounted cash flow	Balance sheet carrying amount
		After 1 year but within	After 2 years but within		contractual undiscounted	sheet carrying
Borrowings (Note 20)	1 year	After 1 year but within 2 years	After 2 years but within 5 years	5 years	contractual undiscounted cash flow	sheet carrying amount
Borrowings (Note 20)	1 year USD'000	After 1 year but within 2 years USD'000	After 2 years but within 5 years USD'000	5 years USD'000	contractual undiscounted cash flow USD'000	sheet carrying amount USD'000
	1 year USD'000 96,835	After 1 year but within 2 years USD'000	After 2 years but within 5 years USD'000	5 years USD'000	contractual undiscounted cash flow USD'000 296,749	sheet carrying amount USD'000 251,123

2011 Contractual undiscounted cash outflow

	Within 1 year	After 1 year but within 2 years	After 2 years but within 5 years	After 5 years	Total contractual undiscounted cash flow	Balance sheet carrying amount
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Borrowings ( <i>Note</i> 20)	348,132	29,997	138,088	-	516,217	478,229
Trade and other Payables (Note 21)	118,680	-	-	-	118,680	118,680
Convertible bond (Note 23)	86,565	-	-	-	86,565	83,508
	553,377	29,997	138,088	- - =	721,462	680,417

#### (f) Fair values

#### (i) Financial instruments carried at fair value

The following table presents the carrying value of financial instruments measured at fair value at the end of the reporting period across the three levels of the fair value hierarchy defined in IFRS 7, Financial Instruments: Disclosures, with the fair value of each financial instrument categorised in its entirety based on the lowest level of input that is significant to that fair value measurement. The levels are defined as follows:

- Level 1 (highest level): fair values measured using quoted prices (unadjusted) in active markets for identical financial instruments
- Level 2: fair values measured using quoted prices in active markets for similar financial instruments, or using valuation techniques in which all significant inputs are directly or indirectly based on observable market data
- Level 3 (lowest level): fair values measured using valuation techniques in which any significant input is not based on observable market data

	Level 3		
	2009	2010 USD'000	2011 USD'000
	USD'000		
Derivative financial instruments:			
- Conversion option embedded in convertible bond	_	_	2,429
1	=	=	

#### (ii) Fair value of financial instruments carried at other than fair value

In respect of cash and cash equivalents, trade and other receivables, and trade and other payables, the carrying amounts approximate fair value due to the relatively short term nature of these financial instruments.

In respect of borrowings and the liability component in respect of the convertible bond, the carrying amounts are not materially different from their fair values as at 31 December 2009, 2010 and 2011. The fair values of borrowings are estimated as the present value of future cash flows, discounted at current market interest rates for similar financial instruments. The fair values of the convertible bond are measured using discounted cash flows method in which all significant inputs are directly or indirectly based on observable market data.

The aggregate carrying values of other financial liabilities carried on the consolidated balance sheet are not materially different from their fair values as at 31 December 2009, 2010 and 2011.

#### 30 COMMITMENTS AND CONTINGENCIES

#### (a) Capital commitments

Capital commitments outstanding at respective balance sheet dates not provided for in the financial statements were as follows:

	2009	2010	2011
	USD'000	USD'000	USD'000
Contracted for	81,097	80,079	14,827
Authorised but not contracted for		102,592	80,075
	81,097	182,671	94,902

#### (b) Operating lease commitments

(i) As at 31 December 2009, 2010 and 2011, the total future minimum lease payments under non-cancellable operating leases are payable as follows:

	2009	2010	2011
	USD'000	USD'000	USD'000
Within 1 year	890	1,340	7,136
After 1 year but within 5 years	1,061	825	2,245
	1,951	2,165	9,381

(ii) The Group leases certain buildings through operating leases. These operating leases do not contain provisions for contingent lease rentals. None of the agreements contain escalation provisions that may require higher future rental payments.

# (c) Environmental contingencies

Historically, the Group has not incurred any significant expenditure for environmental remediation. Further, except for the accrued reclamation obligations as disclosed in Note 26 and amounts incurred pursuant to the environment compliance protection and precautionary measures in Mongolia, the Group has not incurred any other significant expenditure for environmental remediation, is currently not involved in any other environmental remediation, and has not accrued any other amounts for environmental remediation relating to its operations. Under existing legislation, the directors believe that there are no probable liabilities that will have a material adverse effect on the financial position or operating results of the Group. Environmental liabilities are subject to considerable uncertainties which affect the Group's ability to estimate the ultimate cost of remediation efforts. The outcome of environmental liabilities under future environmental legislations cannot be estimated reasonably at present and which could be material.

#### 31 MATERIAL RELATED PARTY TRANSACTIONS

## (a) Transactions with related parties

Related parties refer to enterprises over which the Group is able to exercise significant influence or control during the year. During the Relevant Period, the Group entered into transactions with the following related parties.

Name of party	Relationship
MCS Holding LLC ("MCS")	Shareholder
Uniservice Solution ("Uniservice Solution", formerly named as	Subsidiary of MCS
"Officenet LLC")	
MCS Property LLC ("MCS Property")	Subsidiary of MCS
MCS Electronics LLC ("MCS Electronics")	Subsidiary of MCS
Anun LLC ("Anun")	Subsidiary of MCS
MCS International LLC ("MCS International")	Subsidiary of MCS
Erchim Suljee LLC ("Erchim Suljee")	Subsidiary of MCS

Particulars of significant transactions between the Group and the above related parties during the years ended 31 December 2009, 2010 and 2011 are as follows:

	2009	2010	2011
	USD'000	USD'000	USD'000
Interest income (Note (i))	73	42	_
Interest expenses (Note (ii))	158	_	_
Ancillary services (Note (iii))	5,285	25,152	30,326
Purchase of goods (Note (iv))	830	386	112
Lease of property, plant and equipment (Note (v))	1,446	1,177	897
(Repayment of loans from)/loans provided to related parties			
(Note (vi))	2,306	(2,306)	_
Purchase of equipment and construction work (Note (vii))	11,673	42,409	24,447
Sales of property, plant and equipment (Note (viii)	_	_	2,418
Finance lease of equipment (Note (ix))	_	_	301

<sup>(</sup>i) Interest income represents interest earned from loan to MCS. The applicable interest rate is 2% per month.

<sup>(</sup>ii) Interest expense in 2009 represented interest incurred in respect of borrowings from MCS. The applicable interest rates range from 18% to 24% per annum.

<sup>(</sup>iii) Ancillary services represent expenditures for support services such as consultancy, cleaning and canteen expense paid to Uniservice Solution, MCS and its affiliates. The service charges are based on comparable or prevailing market rates, were applicable.

<sup>(</sup>iv) Purchase of goods represents concrete purchased from MCS Property, MCS and its affiliates. The goods are purchased at comparable or prevailing market prices, were applicable.

<sup>(</sup>v) Lease of property, plant and equipment represents rental paid or payable in respect of properties and office equipment leased from MCS Electronics, MCS and its affiliates. The rental charges are based on comparable or prevailing market rates, where applicable.

<sup>(</sup>vi) The Group provided loans to MCS and MCS Electronics in 2009 and collected back the loans in 2010.

<sup>(</sup>vii) Purchase of equipment and construction work represents expenditure relating to equipment and construction service provided by MCS Electronics, Anun, MCS and its affiliates. The purchases are carried out at comparable or prevailing market rates, where applicable.

<sup>(</sup>viii) Sales of property, plant and equipment represent sale to Uniservice Solution. The sales are carried out at comparable or prevailing market rates, where applicable.

(ix) Finance leases of equipment represent expenditure relating to the lease of equipment from MCS Electronics through finance lease. The rental charges are based on comparable or prevailing market rates, where applicable.

Except for the loans provided to and from the related parties and its corresponding interest income and expenses which were terminated before 31 January 2010, the above related party transactions are recurring after the listing of the Company on the Stock Exchange.

The directors of the Company are of the opinion that the above transactions were conducted in the ordinary course of business, on normal commercial terms and in accordance with the agreements governing such transactions.

# Amounts due from/(to) related parties

	2009	2010	2011
	USD'000	USD'000	USD'000
Other receivables (Note $18(c)(i)$ )	3,038	347	455
Other accruals and payables (Note 21(iii))	(2,052)	(5,329)	(9,560)

# (b) Key management personnel remuneration

Key management personnel are those persons holding positions with authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including the Group's directors.

Remuneration for key management personnel, including amounts paid to the Company's directors, is as follows:

	2009	2010	2011
	USD'000	USD'000	USD'000
Salaries and other emoluments	786	894	1,500
Discretionary bonus	223	1,898	1,001
Retirement scheme contributions	70	201	140
Equity-settled share-based payment expenses			837
	1,079	2,993	3,478

#### 32 ACQUISITION OF SUBSIDIARIES

The Group entered into a share purchase agreement with Quincunx (BVI) Ltd. and its parent, Kerry Mining (Mongolia) Limited (collectively the "Seller") on 31 May 2011 ("Share Purchase Agreement") in relation to the acquisition of the entire issued share capital of Baruun Naran Limited (formerly named as "QGX Coal Limited") ("QGX") (the "Acquisition"). QGX ultimately owns the Baruun Naran Coking Coal Mine ("BN mine"), which is located in southern Mongolia, Umnugobi Aimag (South Gobi province). The Acquisition was completed on 1 June 2011.

The consideration for the Acquisition includes:

- (i) USD100,000,000 immediately paid by the Group to the Seller on 1 June 2011;
- (ii) USD279,465,000 of the cash payable by the Group to the Seller is in the form of a promissory note with a 2-month period;

- (iii) USD85,000,000 by the issue of the convertible bond by the Company to QGX Holdings Ltd, a subsidiary of Kerry Mining (Mongolia) Limited; and
- (iv) USD21,874,000 of intercompany loans transferred to the Group, which were previously owed by QGX to the Seller (the "Intercompany loans").

The above consideration may be adjusted as follows:

- (i) Approximately 18 months to 21 months from the date of the Share Purchase Agreement, an additional payment may be payable to the Seller or a claw back may be payable by the Seller in the amount of USD3.00 per tonne to the extent to which Total Reserves exceeds 150,000,000 tonnes or are less than 150,000,000 tonnes, respectively (the "Reserve Adjustment"). Under the Reserve Adjustment, the maximum amount payable to the Seller will be USD105,000,000 and the maximum amount payable by the Seller will be USD90,000,000; and
- (ii) An additional life of mine payment of USD6 per tonne in the event that the actual amount of coal extracted from the BN mine exceeds a specified semi-annual production target fixed on the date of the determination of Total Reserves in each semi-annual period after 1 June 2011 commencing on 1 January and ending on 30 June and commencing on 1 July and ending on 31 December (the "Royalty Provision").

Taking into account the Reserve Adjustment and the Royalty Provision, the total amount of payment to be received by the Seller for the Acquisition is not to exceed USD950,000,000 over the life of the BN mine.

In connection with the Acquisition, transaction costs of approximately USD 4.3 million were incurred, which have been included in the Group's administrative expenses for the year ended 31 December 2011.

The following summarises the consideration transferred, and the recognised amounts of assets acquired and liabilities assumed at the acquisition date:

Identifiable assets acquired and liabilities assumed as at 1 June 2011:

	Carrying value	Fair value adjustments	Fair value
	USD'000	USD'000	USD'000
Property, plant and equipment	6,206	(149)	6,057
Construction in progress	18,582	_	18,582
Intangible assets	_	596,557	596,557
Other receivables	2,148	_	2,148
Cash and cash equivalents	805	_	805
Intercompany loans	(21,874)	_	(21,874)
Other payables	(3,739)	_	(3,739)
Deferred tax liabilities		(149,105)	(149,105)
Total net identifiable assets	2,128	447,303	449,431

Consideration transferred as at 1 June 2011:

	Fair value
	USD'000
Cash	100,000
Fair value of promissory note	279,465
Fair value of convertible bond (Note 23)	90,340
Fair value of contingent considerations (Note 26)	1,500
Less: Fair value of Intercompany loans	(21,874)
Fair value of total consideration	449,431

The initial fair value/acquisition accounting for QGX was determined provisionally. In accordance with IFRS 3, adjustments to the fair value of the consideration and the assets acquired and liabilities assumed can be made during the 12 months from the date of acquisition.

An analysis of the payment for the acquisition of subsidiaries is as follows:

	1 June 2011
	USD'000
Cash consideration paid	100,000
Add: transaction costs in relation to the Acquisition	4,299
Less: cash and cash equivalents acquired	(805)
Fair value of total consideration	103,494

In June 2011, the Group obtained the short-term interest-bearing borrowings from Standard Bank of USD400,000,000, among which USD279,465,000 was paid by Standard Bank to the Seller directly to early settle the promissory note as mentioned above.

#### 33 ULTIMATE CONTROLLING PARTY

As at 31 December 2011, the directors consider the ultimate controlling party of the Group to be MCS Holding LLC, which was incorporated in Mongolia. This entity does not produce financial statements available for public use.

#### 34 PARTICULARS OF SUBSIDIARIES

As at 31 December 2011, the Company had direct or indirect interests in the following subsidiaries, particulars of which are set out below:

	Place of Issued and fully		Equity attributable to the Company		0		
Name of company	incorporation	paid up capital	Direct	Indirect	Principal activities		
Mongolian Coal Corporation Limited	Hong Kong	HKD1	100%	-	Investment holding		
Mongolian Coal Corporation S.a.r.l.	Luxembourg	USD67,126,690	-	100%	Investment holding		

	Place of	Issued and fully	Equity attributable to the Company		
Name of company	incorporation		Direct	Indirect	Principal activities
Energy Resources Corporation LLC	Mongolia	USD103,800,000	_	100%	Investment holding
Energy Resources LLC	Mongolia	USD100,000,370	_	100%	Mining and trading of coals
Energy Resources Rail LLC	Mongolia	MNT10,700,000,000	-	100%	Railway project management
Energy Resources Mining LLC	Mongolia	USD1,000	-	100%	Mining and technical management
Transgobi LLC	Mongolia	MNT9,122,641,836	-	100%	Coal haulage and logistics management
Tavan Tolgoi Airport LLC	Mongolia	MNT3,475,379,135	-	100%	Airport operation and management
Enrestechnology LLC	Mongolia	MNT3,466,163,445	-	100%	Coal plant management
Ukhaa Khudag Water Supply LLC	Mongolia	MNT3,001,940,000	-	100%	Water exploration and supply management
United Power LLC	Mongolia	MNT3,025,219,206	-	100%	Power supply project management
Gobi Road LLC	Mongolia	MNT1,000,000	_	100%	Construction of road
Energy Resources Road LLC	Mongolia	MNT1,000,000	-	100%	Transportation of coal and construction of road
Public Service LLC	Mongolia	MNT20,000,000	_	100%	Provision of public
Khangad Exploration LLC	Mongolia	MNT42,491,100,000		100%	utility services Exploration and development of coal mine
Baruun Naran Sarl	Luxembour	g EUR24,918,394		100%	Investment holding
Baruun Naran Ltd	Gibraltar	USD1,000		100%	Investment holding

# 35 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 DECEMBER 2011

Up to the date of issue of these financial statements, the IASB has issued a number of amendments and new standards which are not yet effective for the year ended 31 December 2011 and which have not been adopted in these financial statements. These included the following which may be relevant to the Group's operations and financial statements.

	Effective for accounting periods beginning on or after
Amendments to IAS 12, Income taxes - Deferred tax: Recovery of	
underlying assets	1 January 2012
Amendments to IAS 1, Presentation of financial statements	
- Presentation of items of other comprehensive income	1 July 2012
IFRS 10, Consolidated financial statements	1 January 2013
IFRS 11, Joint arrangements	1 January 2013
IFRS 12, Disclosure of interests in other entities	1 January 2013
IFRS 13, Fair value measurement	1 January 2013
IAS 27, Separate financial statements (2011)	1 January 2013
IAS 28, Investments in associates and joint ventures (2011)	1 January 2013
Revised IAS 19, Employee benefits	1 January 2013
IFRIC 20, Stripping costs in the production phase of a surface mine	1 January 2013
Amendments to IFRS 7, Financial instruments: Disclosures – Offsetting	
financial assets and financial liabilities	1 January 2013
Amendments to IAS 32, Financial instruments: Presentation – Offsetting	
financial assets and financial liabilities	1 January 2014
IFRS 9, Financial instruments	1 January 2015
Amendments to IFRS 9, Financial instruments and IFRS 7 Financial	·
instruments:	
Disclosures - Mandatory effective date and transition disclosures	1 January 2015

IFRIC 20 applies to all types of natural resources that are extracted using the surfacing mining activity process. It considers when and how to account separately for the two benefits arising from the stripping activity, which are 1) the usable ore that can be used to produce inventory; and 2) improved access to further quantities of material that will be mined in future periods, as well as how to measure these benefits both initially and subsequently.

The Group is in the process of making an assessment of what the impact of these amendments, new standards and new interpretations is expected to be in the period of initial application. So far it has concluded that, except for IFRIC 20 as mentioned above, the adoption of them is unlikely to have a significant impact on the Group's results of operations and financial position other than additional disclosures may arise.

# **UHG COAL PROJECT**

# SOUTH GOBI, MONGOLIA

# INDEPENDENT TECHNICAL REPORT

# Submitted to:

MONGOLIAN MINING CORPORATION (MMC)

Published Date: September 28, 2010

# **Norwest Corporation**

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Author:

ALISTER D. HORN





September 28, 2010

File No.4755

To: The Directors Mongolian Mining Corporation Central Tower (15<sup>th</sup> Floor) 2 Sukhbaatar Square, SBD-8 Ulaanbaatar 210620a Mongolia

Citigroup Global Markets Asia Limited 50th Floor, Citibank Plaza, 3 Garden Road, Central, Hong Kong

J.P. Morgan Securities (Asia Pacific) Limited 28/F, Chater House 8 Connaught Road Central, Hong Kong

Subject: Cover Letter to UHG Independent Technical Report Stating Resources and Reserves

Dear Sirs:

This report summarizes the Norwest Corporation's (Norwest) findings of an updated feasibility level study to determine coal resources and reserves at the Ukhaa Khudag (UHG) Mine, located within the Tavan Tolgoi coal formation in the South Gobi province of Mongolia. Norwest understands that this report will used as the basis of the efforts of Mongolian Mining Corporation (MMC) to place an Initial Public Offering (IPO) with the Honk Kong Exchange (HKEx).

The Independent Technical Report (ITR) "UHG Coal Project, South Gobi, Mongolia, Independent Technical Report", currently dated September 28, 2010, is a summary of updated feasibility level study performed on the project. In conducting this work, Norwest has relied upon information gathered through various exploration programs, some of which Norwest was directly involved with. Norwest has also relied upon its prior experience and knowledge of the Project through its work with MMC on compiling a bankable-feasibility level study report in 2009. In addition, Norwest has relied, in part, on work performed by other parties contracted to MMC to work on the UHG Project. In addition, Norwest Competent Persons have both made personal, current, inspections of the project site and have gathered relevant data. Finally, MMC has provided data used in the estimate of resources and reserves. Norwest has not been hindered in any way on gathering the data and information required for its satisfactory completion of this ITR.

Resource and reserve estimates included in this ITR were prepared in accordance with standards set forth by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

Yours sincerely,

NORWEST CORPORATION

Alister Horn Project Manager

Enclosures: None

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#### 1. INTRODUCTION AND EXECUTIVE SUMMARY

# 1.1 Summary of UHG Project

At the outset of the Ukhaa Khudag (UHG) project, ER LLC (ER) made a strategic decision to establish a project that would both meet 'world class' technical standards and establish new standards of performance for Mongolian coal mines. Energy Resources is a wholly-owned subsidiary of the Mongolian Mining Corporation (MMC).

The coal mine is currently in operation using the contract mining company, Leighton Asia Ltd (Leighton), which is one of the largest mining contractors in the world and has a reputation for operating 'world class' mines in terms of safety, productivity and other technical parameters. Leighton was awarded a "relationship style" mining contract with the following key provisions:

- Contract termination after four years at ER's discretion
- Contract to re-set with significant capital expenditure from Leighton
- Equipment buyback mechanism.

The conventional truck/shovel mining method based on large capacity proven equipment will be used. State of art mine planning will also be used and the mine will be operated to the appropriate environmental standards of the World Bank and other international institutions.

As with the mine, the coal handling and preparation plant (CHPP) as designed by Sedgman, will meet 'world class' standards and is expected to be the one of the most advanced in Asia as well as one of the largest coking coal processing plants in the world, with the highest process recovery efficiencies in the industry.

Mining of run-of-mine (ROM) coking coal commenced in April 2009 and a total of 1.8 million tonnes (Mt) of coal was mined in 2009. This is equivalent to an annualized mining rate of 2.4Mt. A total of 3.8 million tonnes per annum (Mtpa) of ROM coking coal is scheduled to be mined in 2010.

The planned project capacity ramp-up, shown in Table 1.1, will result in a 15Mtpa ROM coal mining rate by the start of 2013.

Table 1.1 Projected 'Ramp-Up' Schedules

	2010	2011	2012	2013	2014
ROM Coal Production (Mtpa)	3.8	7.0	10.7	14.7	15.2
Washplant Schedule		5Mtpa	Capacity	Rail	Full
		(Jan 1),	(10Mtpa)	Integration	Capacity
		10Mtpa		& 15Mtpa,	(15Mtpa)
		(Sept 1)		(Jan 1)	
Sales Product	Unwashed	Washed	Washed	Washed	Washed
	ROM	Product	Product	Product	Product
	Coking				
Transport	Road	Road	Road	Rail	Rail

Coal is currently transported to the Chinese border by truck on an unpaved road. To enhance efficiency and capacity, a paved road is currently under construction which is expected to be substantially completed by the start of 2011. This paved road will support UHG's product volumes up to the target plateau capacity of 15Mtpa ROM production. Further, ER is planning to begin the construction of a 236 kilometer (km) railway link from UHG to Gashuun Sukhait in 2011, which will be operational by the beginning of 2013. At that point, ER's coal products will be transported via rail to Gashuun Sukhait, then transferred to the Chinese rail network and moved by Chinese locomotives to their ultimate destinations.

To ensure a reliable source of electric power, electric power will be generated via an on-site power plant with capacity of 3x6MW units. Construction is underway, with the third and final coal-fired unit to be completed by mid-2011. Additional power will be from the Mandalgovi – Tavan Tolgoi – Oyu Tolgoi transmission line, construction of which will begin shortly and is scheduled to be completed in May 2012.

Site infrastructure principally consists of a dedicated airstrip and terminal, and mine-site accommodations for project personnel. A permanent mine camp building has been constructed to accommodate mine project personnel. A 'ger' camp originally built to accommodate the mine project personnel now accommodates road transport and other construction personnel.

# 1.2 Summary of Geology, Resources and Reserves

#### 1.2.1 Geologic Setting

The UHG coalfield is one of six separate subfields of the greater Tavan Tolgoi deposit, which include the Tsankhi, UHG, Southwest, Borteeg, Eastern and Bortolgoi coalfields.

Seventeen named coal seams (Seams 0 through 16) have been identified in the Tavan Tolgoi coalfield, of which Seams 0 through 12 have been identified at UHG. These seam groups contain numerous splits, or sub-seams, which amount to 35 distinct and individually modeled coal horizons within the property.

Numerous exploration programs have been conducted, primarily during the 1970's and 1980's by Russian-Mongolian scientific teams and lately by ER. Exploration techniques employed by the early investigations employed core hole drilling and extensive trenching to delineate coal seam crop lines and fault boundaries. Recent investigations conducted by ER have utilized rotary (open hole) and both slim gauge and large diameter core drilling to further delineate and characterize the UHG resource.

The UHG coal seams have been extensively sampled from the slim and large diameter drillhole cores during previous Russian and more recent drilling campaigns. The 124-hole ER program in 2008, conducted by Norwest, provided thorough coal quality analysis of coal cores including five bulk sample sites using large diameter cores (6"/150mm) to gather information for detailed studies of coal washability and metallurgical/thermal properties for detailed wash plant design. ER has also conducted more recent infill in-pit sampling and 50m by 50m drilling within the near-term development area.

A detailed geological model for the license area was prepared by Norwest which forms the basis for current resource estimates. The model has been created using state-of-the-art computer software and modeling techniques to most accurately represent the coal resource at UHG.

#### 1.2.2 Coal Resources

The UHG in-place surface-mineable coal resources as of May 31, 2010, have been estimated according to JORC<sup>1</sup> standards by Norwest as indicated in Table 1.2. It is noted that coal mined to date includes coal that was originally identified as weathered, but has since been determined to be saleable.

Table 1.2 Total in Place Resources – 300m Depth Limit, Minimum Apparent Seam Thickness of 0.6m

	Resource			
Category	Volume (m <sup>3</sup> ) '000	Thickness (m)	In Place Tonnes (Mt*)	Density (ad) (g/cm <sup>3</sup> )
Measured	135,430	5.36	206.0	1.52
Indicated	135,718	5.51	205.3	1.51
Inferred	7,692	7.36	11.7	1.52
Total	278,840	5.49	423.0	1.52

<sup>\*</sup> Mt = Million metric tonnes (air dried - ad).

Table 1.3 shows the ratio of coking versus thermal resource currently defined for UHG. The in-place coal quality results obtained during the 2008 Norwest campaign showed strong indications that additional seams would have promising metallurgical properties given some degree of beneficiation.

Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia

Table 1.3 UHG in-place Coking versus Thermal Resource (May 31, 2010)

	Coking Coal	Thermal Coal <sup>2</sup>	
Category	(Mt)	(Mt)	Total (Mt)
Measured	85.8	120.2	206.0
Indicated	153.4	51.9	205.3
Inferred		11.7	11.7
Total	239.2	183.8	423.0

It is noted that there is some indication that some of the coal seams, specifically the 0A/0B group coal, may be blended with hard coking coal without significantly degrading overall coking qualities. This could potentially increase resources of coking coal, and is discussed further in this report.

#### Underground Resource

Norwest has identified a coal resource at UHG lying between 300m and 800m in depth that is categorized as an "underground" deposit type, meaning that the probable extraction method would be through underground mining techniques. These resources are considered for future rather than immediate exploitation and were not considered in the scope of 2009 Bankable Feasibility Study (BFS) or in this report.

The total in-place resources below 300m are 157.9Mt<sup>3</sup>, categorized as 88.6Mt Indicated and 69.3Mt Inferred resources. Combined surface and underground mineable resources is 580.9Mt of in-place resources, comprised of 206.0Mt, 293.9Mt and 81.0Mt of Measured, Indicated and Inferred resources, respectively.

Whilst the coal resources below 300m represent a significant addition to the overall UHG resources it must be noted that a reserve estimate has not been made.

#### 1.2.3 Coal Reserves

As with coal resources, Norwest estimation of coal reserves at UHG are defined by the recent BFS and described in the feasibility study report Ukhaa Khudag Project Bankable Feasibility Study, November 13, 2009. To the best of our understanding this estimate of reserves is compliant with the JORC code. It is estimated that total reserves are comprised of 150Mt of coking coal, and a 136Mt of thermal coal.

Includes potential coking coal fractions. See Section 7, Potential for Defining Additional Mineral Resources and Reserves

<sup>3</sup> Air dried tonnes

A summary of the reserve estimate is reported in Table 1.4.

Table 1.4 Summary of Coal Reserve Estimate (May 31, 2010)

	Total R	deserves*	Marketable Reserves**	
	Proven	Probable	Proven	Probable
Mtonnes (ad)	191	95	122	61
Total***	2	86	1	.82

<sup>\*</sup> Excludes 0.4Mt from mine plan within Inferred resource category

#### 1.2.4 Potential for Defining Additional Mineral Resources and Reserves

Two Year Drilling Plan

A drilling program is planned by ER over the course of the next two years covering the complete mine area with a 500m by 500m drill pattern. The objective of the program is to confirm that the Russian drill hole data reflects a higher ash content than is actually encountered during mining (to-date, the ash content in the actual coal mined is lower than that assumed by the geological model). Specifically, mining of Seams 3 and 4 ROM coking coal has indicated that the Russian drillhole data reflects a higher ash. This results in as-mined ash levels being consistently lower than indicated by the geological model. This suggests a higher overall coking coal yield after washing than is currently determined using the geological model, as based on current available data. A higher overall coking yield determined as a result of this drilling program would result in additional quantities of higher-value coking coal (see Section 7, Potential for Defining Additional Mineral Resources and Reserves). The drilling plan will also penetrate to a depth of 600m, thus bringing potentially underground mineable resources into a higher level of confidence.

## Potential for Additional Coking Coal Resources

The 0A/0B seam group has some indication that it may be possible to blend these with the other hard coking coal prior to washing. If this were successful without significantly degrading the key coking properties of the HCC product, the overall value of this seam group would likely increase.

As with Seams 0A and 0B, areas of Seams 5 and 10 showing positive coking characteristics will be submitted to a similar LD bulk sampling and testing program. A thorough understanding of the sizing, washability and coking properties of these seams may lead to their classification as some level of metallurgical reserve.

<sup>\*\*</sup> Includes primary washed product and secondary thermal product, or 'middlings'

<sup>\*\*\*</sup> Rounded

#### 1.3 Summary of Coal Quality

Extensive exploration and coal quality assessment indicates that UHG coal compares very favourably with international and Australian quality ranges, with relatively high Crucible Swelling Number (CSN) and Coke Strength after Reaction (CSR) values, matched with relatively low sulphur content.

Based on the typical quality specifications provided it is believed that the UHG coking coal products would be attractive to the market. North Asian markets represent the best opportunity for any UHG metallurgical coal placed into the seaborne market. The thermal coal product is also a high quality product which should receive acceptance in seaborne markets.

Coking coal is produced as the primary product after coal processing, as well as providing a quantity of thermal coal from the remaining secondary product. Thermal coal is also available from seams with poorer metallurgical qualities, and is to be washed to provide a marketable product.

Table 1.5 UHG in-place Resource Coal Quality

				Volatile	
G .	Moisture %	Ash %	Sulphur %	Matter %	kCal/kg
Category	<u>(ad)</u>	(dry)	(dry)	(dry)	(dry)
Measured	0.54	25.52	0.64	23.39	6,150
Indicated	0.60	24.93	0.69	27.72	6,100
Inferred	0.56	25.45	0.65	26.00	6,050
Total	0.57	25.24	0.66	25.55	6,125

Overall, average in-place coal quality demonstrates a mature, high-rank coal with low moisture, low to moderate sulphur and volatile content, moderate ash content and relatively high heating value. Average CSN values reflect the large quantity of metallurgical grade coal available within the resource. Overall rank of the UHG coal is estimated to be medium volatile bituminous when weighted on in-place resource tonnes (air dried).

Overall, the resource base contains 580.9Mt (through May 31, 2010) of ROM surface and underground mineable coal.

#### 1.4 Production Schedule Summary

Currently the UHG mine is in the process of a five-year 'ramp-up' to meet a steady-state production of 15Mtpa. The coal production targets and waste stripping requirements are for the first five years are summarized in Table 1.6.

This report will focus on the initial five year ramp-up period.

Seams 3 and 4 are currently being mined, with all waste stored in out-of-pit waste dumps.

**Table 1.6 Material Movement Schedule** 

**Total Material Movement Quantities** 

	Thermal Seams 0A, 0B & 0D	Coking Seams 0C, 3 &	Coking Seams 8	Total Mined	Volume	Desti	nation	S/R
Period	(Mt ROM)	4 (Mt ROM)	& 9 (Mt ROM)	(Mtpa ROM)	Waste (Mbcm)	Inpit (Mlcm)	Expit (Mlcm)	(bcm/t ROM)
2010	_	3.8	_	3.8	20.9	_	26.1	5.5
2011	_	7.0	-	7.0	28.8	_	36.0	4.1
2012	0.8	9.9	_	10.7	58.8	_	73.5	5.5
2013	5.0	9.7	_	14.7	59.0	_	73.7	4.0
2014	5.5	9.7		15.2	63.2	3.9	75.1	4.2
Totals	11.3	40.2	NA	51.4	230.7	3.9	284.4	4.5

# 1.5 Summary of Coal Handling and Preparation Plant Facilities

The coal handling and preparation plant (CHPP) is an integral part of the UHG project and will enable the operation to produce high-value saleable coking and thermal coal products. The high efficiency CHPP is now under construction.

The CHPP is being developed in four construction phases to match the expansion of the mine. These include the initial 5Mtpa phase followed by the addition of second coal preparation plant module (CPP) to expand mine operations to 10Mtpa (estimated to be commissioned by September, 2011). The latter also includes the expansion of the ROM coal handling plant (CHP). When the rail line is completed, a rail integration phase will be implemented (estimated by the end of 2012). This will include the product coal handling and train load out elements of the CHP. Finally, a third CPP module will be constructed to allow mine operations to achieve ultimate 15Mtpa ROM capacity (also estimated to be completed by the end of 2012).

#### 1.6 Transportation

Currently, coal is transported from UHG (and another smaller producer in the area) to the Chinese border via an unpaved transportation corridor, constructed in 2008. Construction on a new paved road between UHG and Gashuun Sukhait is to be fully completed by September, 2011, and substantially completed by the start of 2011 with sections to be used as and when they are ready. This will accommodate the increased production from UHG prior to completion of a railway link by the start of 2013.

A feasibility-level study and report on the proposed haulroad has been prepared by Leighton, with assistance from Snowy Mountains Engineering Corporation (SMEC) and others (see Feasibility Study Report (Draft), M1006 – UHG Coal Haul Road Project: Ukhaa Khudag to Gashuun Sukhait, May, 2010). Two haul road designs have been proposed. The 'base case' plan features a road pavement design to standards typical of the Mongolian Highway Standards. This design will likely require extensive maintenance in order to withstand the anticipated traffic volume. An alternate design is also proposed that features a more robust pavement surface, assuming that axle loads are reduced to 16t through the use of double trailer 'road train' vehicles. The 'base case' design was assumed for the purposes of this report, subject to enhanced capital estimates.

A railway is the next development stage of the transportation infrastructure, and is essential to further reduction in transportation costs Energy Resources Rail LLC (ERR), a wholly-owned subsidiary of MMC, will construct a single-track railway with a length of 236km to the border with China replacing the current trucking operation. Construction of the rail is currently estimated to be completed by the beginning of 2013.

# 1.7 Project Operating and Capital Costs

Since publication of the BFS, various operating and capital cost estimates have been revised based on updated planning work to account for the more aggressive schedule. Revised operating cost estimates are summarized in Table 1.7 (does not include road or rail transportation cost or SG&A costs). All cash operating costs are reported in US\$, exclusive of VAT, on a 2010 constant-dollar, un-inflated and are un-escalated. ROM tonnes are reported on an air-dried basis (adb).

Table 1.7 Cash Operating Cost Summary (US\$000)

	2010	2011	2012	2013	2014
ROM Coal (000 tonnes, adb)	3,782	7,003	10,729	14,722	15,247
Mining & Operations					
Mining	\$20.90	\$24.85	\$ 28.82	\$ 21.32	\$ 21.28
Coal Processing/Handling*	\$ 1.13	\$ 3.60	\$ 3.74	\$ 3.00	\$ 3.52
Total (\$/ROM t)	\$22.03	\$28.45	\$ 32.56	\$ 24.32	\$ 24.80

<sup>\*</sup> Includes all processing, handing, water and power supply and distribution costs.

The estimated capital costs for the five year period, 2010 through 2014, are summarized in Table 1.8. These capital estimates exclude the railway which will be a separate profit center. All costs reported here are inclusive of VAT and Mongolian duties, but exclusive of inflation, contingencies, etc. Costs are reported in US\$, on a 2010 constant-dollar, un-inflated and un-escalated basis.

Table 1.8 Capital Cost to Reach Full Production (US\$000)

	2010	2011	2012	2013	2014
Mining	\$ 3,975	\$ 8,579	\$ 3,760	\$ 0	\$ 0
CHPP	\$101,688	\$105,024	\$110,278	\$ 0	\$ 0
Tailings Dam	\$ 10,785	\$ 0	\$ 2,522	\$ 3,079	\$ 0
3 x 6MW Power Plant	\$ 26,729	\$ 4,474	\$ 0	\$ 0	\$ 0
Power Distribution	\$ 6,400	\$ 0	\$ 0	\$ 0	\$ 0
Water Supply/Distribution	\$ 23,120	\$ 4,136	\$ 19,451	\$ 1,040	\$ 0
Coal Haulage & Transport*	\$ 33,140	\$ 27,845	\$ 0	\$ 0	\$ 0
Site Infrastructure	\$ 6,910	\$ 7,387	\$ 8,926	\$ 9,328	\$ 8,926
Other	\$ 4,523	\$ 5,302	\$ 4,951	\$17,551	\$ 6,211
Total CAPEX	\$217,271	\$162,748	\$149,888	\$30,997	\$15,136

<sup>\*</sup> Includes ER's 50% share of coal haulroad costs, plus \$10M for 100 coal haul trucks in 2011.

In general, geological conditions such as the favorable coking characteristics of much of the UHG coal (in particular, Seam 3A) and the low strip-ratio arising from the thick seams of coal and gentle dip of much of the deposit, contribute to UHG's low cost structure. Other contributing factors include the relatively low degree of in-seam parting and dilution, as well as the friable nature of the coal reducing blasting costs).

# 1.8 Effective Date of Report

The effective date for the date included in this report is May 31, 2010.

#### 2. QUALIFICATIONS OF NORWEST

Norwest Corporation is a world-recognized international consultant to the mining and energy resources industries. Norwest has over 270 employees and associates based out of offices through Canada and the US, as well as representatives throughout the world.

Norwest's broad range of service professionals often come from extensive careers in industry with a wide variety of expertise in mine planning, resources/reserves reporting, evaluation, due diligence reviews, management, resource optimization, coal processing and handling, hydrology, geotechnical review, environmental management, mine safety, and other related fields.

Norwest has over 30 years of experience in performing mining studies and resource/reserve estimates. With over 10 years of direct experience on the Tavan Tolgoi deposit, its role in preparing the 2009 BFS study of UHG on behalf of ER, as well as its experience with numerous Mongolian clients and mining projects (including a study of the Baganuur mine, SouthGobi Energy Resources' Ovoot Tolgoi mine, and various other projects) Norwest considers itself well qualified to prepare this ITR.

#### 3. DISCLAIMER

#### 3.1 Disclaiming Statement

Norwest has conducted an independent technical review of the UHG coal mining project and related production assets. Site visits were made by Norwest professional involved with preparation of a recent Bankable Feasibility Study, as well as this report. Certain aspects of the study were prepared by parties other than Norwest, and their work independently reviewed by Norwest for inclusion in the BFS and this ITR. Norwest has exercised all due care in reviewing the supplied information and believes that the basic assumptions are factual and correct, and the interpretations reasonable. The accuracy of the conclusions in this report largely relies on the accuracy of the supplied data. Norwest does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from investment or other financial decisions or actions.

#### 4. PROPERTY DESCRIPTION

#### 4.1 Description and Location

Mongolia is a landlocked country in East-Central Asia, encompassed by Russia and China. Ulaanbaatar (UB), the capital and largest city, is home to about 38% of the population.

At 1,564,116 square kilometres and a population of approximately three million people, Mongolia is one of the most sparsely populated countries in the world. It is also the world's second-largest landlocked country after Kazakhstan. Much of Mongolia is covered by steppes, with mountains to the north and west and the Gobi Desert to the south. This results in little arable land, and thus approximately thirty percent of the country's population is nomadic, or semi-nomadic.

Mongolia is divided into 21 provinces (singular, aimag), which are in turn divided into smaller districts. The UHG coal deposit is located in the Omnogovi aimag, located in the south of the country in the Gobi Desert (see Figure 4.1). Omnogovi is Mongolia's largest aimag with a population of 48,000 (2005). The small town of Tsogttsetsii, located approximately 7km from the project site, serves as the soum, or district center, as well as an administrative and logistical hub for the UHG project. The project site itself is located approximately 540km from Ulaanbaatar and 200km from the Chinese border, referred to as Gashuunsukhait and Ganjimadao, on the Mongolian and Chinese sides of the border, respectively.

# 4.2 UHG Project Description

ER was awarded the UHG lease within the Tavan Tolgoi coalfield located in Ömnögovi Aimag, south-central Mongolia. ER has established an operating coal mine on the UHG lease and intends to expand production through the construction of additional facilities.

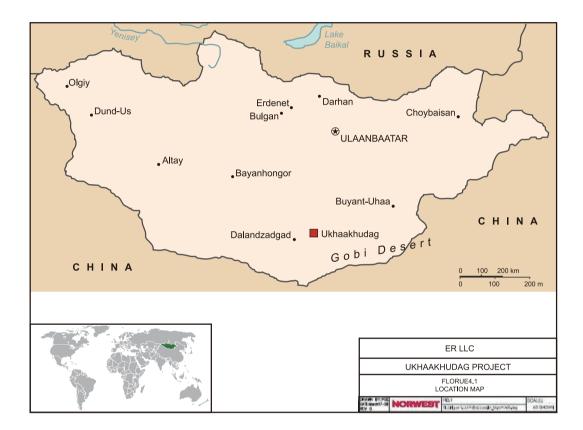


Figure 4.1 General Location Map

The project proposes that mining operations expand to produce 15Mtpa at steady-state, through surface mining using truck/shovel applications. By start of 2011, all coal will be washed at site to produce two coal products; hard coking coal (HCC), and a high quality thermal coal. By 2013 a railway link will be completed, reducing the cost to bring UHG coal to the Target Market Area (TMR) identified in China. The secondary product from washing will be used as fuel supply for a mine-mouth 18MW power plant. A supply of process water, essential to the project, has been secured from two nearby locations, and will be pumped via a pipeline to the project site.

#### 4.3 Access & Infrastructure

Currently installed infrastructure at UHG is as follows:

#### 4.3.1 General Access

The Dalanzadgad Airport has one paved runway and is served by regular domestic flights from and to UB by several commercial flyers. The South Gobi has relatively poor road infrastructure which means that it can take 10 hours or more to drive from UB to Dalanzadgad. Once in Dalanzadgad, it takes approximately two hours to make the 90km journey to the project site.

# 4.3.2 Airstrip

For efficient and safe staff rotations, as well as emergency evacuation, an airstrip has been constructed just north of Tsogttsetsii soum (see Photo 4.1).



Photo 4.1 Plane on Airstrip with Fire Engine in Support

# 4.3.3 Ger Camp

A temporary camp of approximately 170 'gers' (semi-rigid structures) has already been established at the project site, approximately 1km from the Tsogttsetsii soum, to accommodate about 650 people. The facilities include permanent shower/washing/toilet facility as well as large gers for offices, cooking and eating.

## 4.3.4 Mine Camp

A self-contained mine camp, located adjacent to the existing ger camp, has been completed. This new facility, to accommodate a total of about 650 persons, and includes 150 rooms, canteen, and a recreation area (see Photo 4.2). The mine camp will serve employees of the entire project (the mine, washing plant, power plants, etc.) with the exception of ERR, which will maintain a separate camp for the railway workers.



Photo 4.2 Mine Camp (Interior)

ER provides bus transportation for employees from camp and Tsogttsetsii soum to the job site.

#### 4.3.5 Water Distribution

The internal water distribution around the mine site will be supplied from Maiga Mountain reservoir, immediately to the east of the mine site. Maiga Mountain reservoir itself will contain the bulk of the water supply to be used for potable water, fire water flows and industrial flows. Potable water treatment will be at the reservoir.

#### 4.3.6 Power Supply & Distribution

Power is to be generated via an on-site power plant with capacity of 3x6MW units. Construction is underway (see Photo 4.3) with the first unit expected to be completed by October, 2010, the second by January, 2011, and the third and final unit completed mid-2011. Additional power will be from the Mandalgovi – Tavan Tolgoi – Oyu Tolgoi transmission line, construction of which will begin shortly by a consortium of Korean, Chinese and Mongolian companies. A contract has been negotiated and signed by the Mongolian Ministry of Mineral Resources and Energy, and is scheduled to be completed in May, 2012.

Power from the generating facilities will be distributed to the via 10kV switchyard to the main sub-station. From this point the power will be distributed at 35kV via an overhead powerline distribution network to the various mine facilities which are based on 24 hours per day, 7 days per week, 365 days per year.



**Photo 4.3 Power Plant Construction** 

# 4.4 Climate & Physiography

#### 4.4.1 Climate

Mongolia has an extreme continental climate with long, cold winters and short summers, during which most of its annual precipitation falls. Precipitation is highest in the north and lowest in the south, which receives 10 to 20cm annually. The Gobi desert, in which the project is located, has some regions which receive no precipitation at all in most years. Average temperatures in Dalanzadgad range from mild (approximately 15°C) in the summer to extremely cold (-21°C) in the winter. Early spring can bring dust/snow squalls that can greatly impair vision and safe mining operations. This has been accounted for in mine planning. In general, the extreme climatic swings at the minesite do not prohibit safe and efficient mining operations.

# 4.4.2 Topography

Topography within the Project region features gently rolling desert plains with minor relief (several small hills are located in the surrounding regions). The terrain underlain by coal bearing formations has relief of approximately 45m, from a low of 1,500m in the eastern portion of the project area to a high of 1,545m in the west.

# 4.5 History

# 4.5.1 Regional History

The Tavan Tolgoi district has undergone an extensive amount of exploration and related coal testing and reporting. The first systematic exploration of the area commenced in the 1950's with a thorough exploration and quality testing program relying on boreholes, coreholes, trenching and other bulk sampling. This exploration continued through the 1970's.

Several feasibility studies were conducted covering the various coalfields of the Tavan Tolgoi district by private as well as government concerns; Tsankhi and UHG coalfields were identified as primary targets for potential mine development. A 1977 feasibility study prepared by the USSR Ministry of Coal Industry, entitled *Feasibility Study for Detailed Exploration of Tavan Tolgoi Coking Coal Deposit with Emphasis towards Possible Coke-Chemical Production*, recommended continued exploration of the area. In response to this recommendation, the Mongolian Ministry of Geology and Mining Industry initiated a reconnaissance exploration program in 1978 covering an area of 100km<sup>2</sup> adjacent to areas previously explored, a program that lasted through 1981.

In 1990 a major feasibility study was completed by the Giproshakht Institute entitled, Feasibility Study of the Mining of the Tavan Tolgoi Coking Coal in the Mongolian Peoples Republic. In 1998, two confirmation drilling and testing projects were conducted, one by Norwest as part of a preliminary feasibility study for the Mongolia Ministry of Infrastructure Development and the other by BHP as part of their commitment to the Mineral Resource Authority of Mongolia. Norwest drilled five coreholes, whereas BHP drilled six coreholes. Coal from these coreholes was subjected to various coal quality and coking tests. In early 1999 the results from these two projects were reported in separate feasibility studies.

ER conducted a 10 hole exploration project on their former exploration license at Tsankhi during the fall of 2007. Subsequently, Norwest produced a geologic model for the entirety of Tavan Tolgoi coalfield along with resource estimations for the various coalfields, provided to ER on January 23, 2008.

#### 4.5.2 Project Involvement: Leighton Asia, Ltd.

Leighton commenced their relationship with ER in 2008 and was engaged to complete a number of mine planning and cost estimate studies ranging from broad scoping studies to detailed mine planning and cost estimation. Leighton LLC (a subsidiary of Leighton Asia Limited) was awarded a mining contract to excavate and manage the initial box cut for the project. Earthworks began in September, 2008. In February, 2009 Leighton were awarded a 6 year contract to undertake all mining activities at the UHG Project; an arrangement that continues as of publication of this ITR. Leighton was then engaged to complete the mine plan and cost estimate that formed the basis for the BFS.

## 4.5.3 Project Involvement: Norwest

As described previously, Norwest's involvement in the assessment and development of the greater Tavan Tolgoi coalfield dates to 1998 when it was awarded a World Bank-funded contract to prepare a Preliminary Feasibility Study of the deposit. This project was followed by an assignment in 2005 for a confidential client to drill 5 holes in the Tsankhi area of Tavan Tolgoi and prepare a report on the findings.

In early 2007, after previous experience in the Tavan Tolgoi region for several clients, Norwest commenced working with ER on projects include preparation of geologic models and resource estimates, assessment of various regions with the deposit, assistance on bid development for coal resources and assistance with securing a bid for coal processing and handling.

More recently, Norwest was involved with the preparation of the UHG BFS report. Norwest's specific responsibilities on the Bankable Feasibility Study (BFS) included reviewing the work of the various other consultants involved, and preparing the BFS document.

## 4.6 Project Consultants

Table 4.1 summarizes various consultants that were involved in preparation of the BFS, upon which this ITR is based, as well as currently involved with the Project.

Table 4.1 Consultant Companies and Responsibilities

Company	Responsibility
Norwest Corporation (USA)	Resource estimation and Financial Valuation, geologic modeling, geotechnical study
Leighton Asia Limited (Hong Kong) and Leighton LLC	Life-of-Mine mining plan and associated cost estimates, mine operators
Sedgman Consulting (China) and Sedgman Ltd	Coal Handling & Preparation Plant design and associated cost estimates, contractors
Aquaterra Engineering LLC (Australia)	Water Supply design and associated cost estimates Water Management
DBI GmbH (Germany)	Railway Design and associated cost estimates
Parsons Brinckerhoff Pte Ltd. (China)	Power Plant design
Wood Mackenzie (China)	Coal Marketing studies
Sustainability Consulting (Australia)	Environmental studies
Golder Associates (Australia)	Scoping design of tailings storage facility
Environmental Resources Management (USA).	Socio-Economic studies
SGS Technical Services	Coal analysis and testing
Stewart Laboratories	Coal analysis and testing (post-BFS)
Leighton Asia Limited (Hong Kong) and	Paved Road Feasibility Study
Snowy Mountains Engineering Corporation	
(SMEC)	

Norwest has performed comprehensive reviews of the reports prepared by the consultants listed in Table 4.1. The reviews covered all aspects including technical issues and estimated costs. Where necessary, comments and suggestions for improvements were submitted, which, for the most part, were incorporated into the respective reports.

#### 5. GEOLOGY AND DATABASE

# 5.1 Geology of the UHG Deposit

# 5.1.1 Geologic Setting

The UHG coalfield is located in south-central Mongolia and covers an area of approximately  $10 \text{km}^2$  within the Ulaan Nuur Valley of the Gobi Desert. The coalfield is situated within the Omnogovi Aimag (South Gobi province) about 90km east of Dalanzadgad, the provincial capital, and some 540km south of Ulaanbaatar, the national capital.

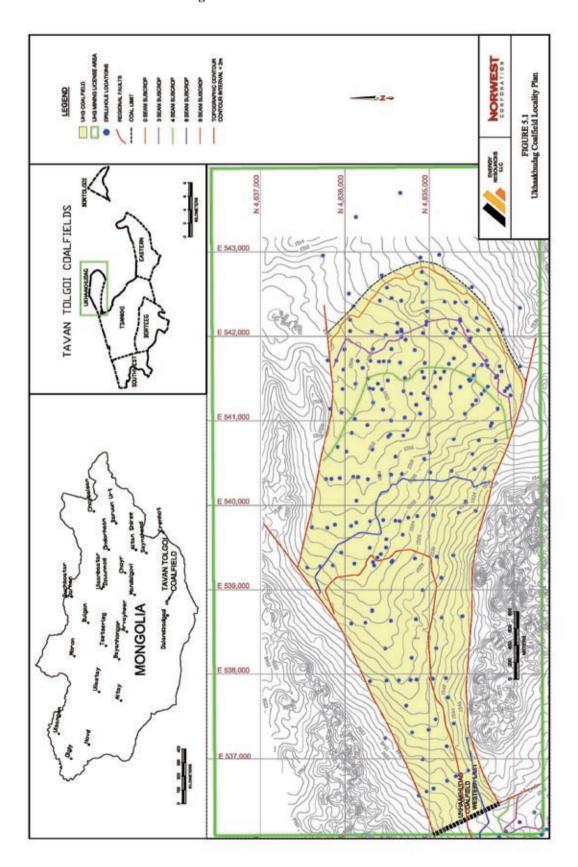
The UHG coalfield is part of greater Tavan Tolgoi coalfield. The Tavan Tolgoi coalfield is separated into six separate subfields, namely Tsankhi, Southwest, Borteeg, Ukhaa Khudag, Eastern and Bortolgoi, as shown in Figure 5.1. The coalfields are separated by either seam crop limits or fault block boundaries. The divisions between these six subfields are not well defined, and indeed have migrated somewhat in the Russian reports from the 1970's on. Generally the UHG coalfield represents the north-eastern extension of the greater Tavan Tolgoi deposit and is encompassed by the Energy Resource's mining license.

Figure 5.2 illustrates the location of interpreted regional scale fault block boundaries, fold axes and extent of coal seam development based on historical records. Coal in the basin is faulted and folded from a moderate to intense degree by post-depositional tectonic events. The fault locations defining the northern and southern limits of the UHG coalfield are primarily derived from historic interpretations of the Russian-Mongolian geological teams, validated through recent drilling, field mapping and interpretation of aerial imagery.

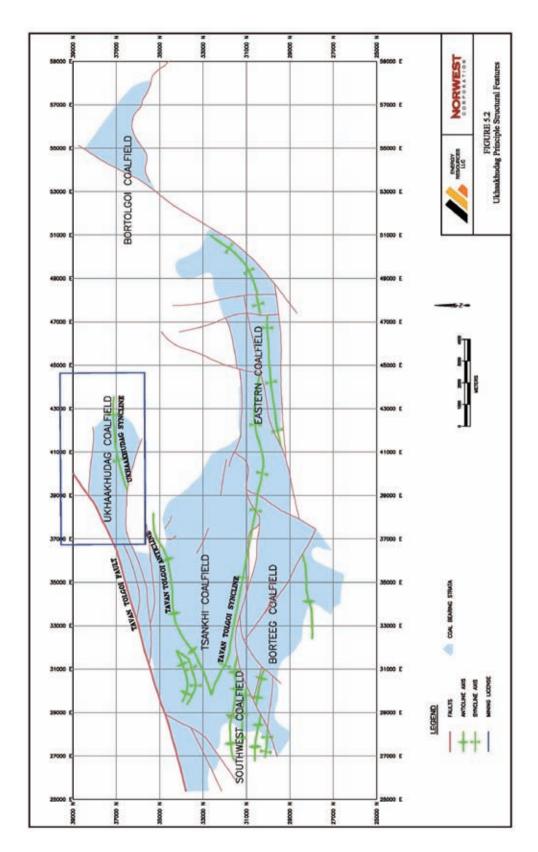
Seventeen named coal seams (Seams 0 through 16) have been identified in the Tavan Tolgoi coalfield, of which Seams 0 through 12 have been identified at UHG. All UHG coal seams occur within the Upper Permian age Tavan Tolgoi Group. These seam groups contain numerous splits, or sub-seams, which amount to 35 distinct and individually modeled coal horizons within the property.

The coal seams at Tavan Tolgoi represent one of the few remaining largely unexploited sources of high-value coking coal in the world. Bulk sampling and drillhole sampling programs by Russian-Mongolian teams and later by other international exploration and mining companies have accumulated sufficient data to recognize the value of the Tavan Tolgoi coalfield as a world class resource for coking coal. Of the 17 coal seams, four seams are known to have favourable coking properties. The remaining seams either do not have coking potential or have not been sufficiently tested to ascertain their coking potential. It is possible, based on the indication of preliminary analytical results, that one or more of these seams may be exploitable as a metallurgical product.

Figure 5.1 UHG Location Plan







All or most coal seams have market potential. The UHG coalfield is estimated by Norwest to contribute 5% to 10% of the total coal resources at Tavan Tolgoi.

# 5.1.2 UHG Geologic Structure

The UHG coalfield is a fault-bounded synclinal coal basin developed within an east-west trending graben structure. The syncline axis plunges towards the west resulting in coal seams dipping predominantly to the west and cropping near-surface along the eastern margins of their occurrence. The major structures controlling coal seam distribution and morphology at UHG are illustrated in the perspective view of the main seam packages in Figures 5.3. The deposit structure can also be seen in cross-section in Figures 5.4 and 5.5.

North fault limit

SEAM

PACKAGES

9

8

4

3

0

0

Figure 5.3 Perspective View of Main Coal Seam Packages
Looking towards the North-East (as is)

# 5.1.3 Coal Seam Stratigraphy

The non-coal rocks of the Tavan Tolgoi Group consist of mudstones, siltstones, sandstones, conglomeratic sandstones and conglomerates. The overburden and interburdens are generally competent, ranging from moderately hard to hard, depending on lithology.

Figure 5.6 shows a generalized a stratigraphic column and coal seam geometry within the UHG coalfield. The primary seams considered for mining are Seams 0, 3, 4, 8 and 9. Of these, Seams 3 and 4 are best developed, thickest and most continuous and contain a substantial portion of the coking coal resource within the license. These two seams, particularly Seam 3, are targeted for production early in mine development. Seams 8 and 9 contribute to the majority of the currently defined coking coal resource in the western half of the property, and do not appear in mine plans for the period 2010-2014. The remaining seams contribute in varying degrees to the metallurgical resource and are suitable for thermal power generation as well.

#### Seam 0 Group

The coal seams of the 0 Seam package are noted for their lower overall coal quality and variability in seam thickness and within-seam partings. The 0A, 0B and 0C Seams are the main seams of interest with the 0C Seam having the most potential to be included as a possible metallurgical product. Both Seams 0C and 0B are relatively thick and show favourable raw CSN<sup>4</sup> values in the eastern half of the property where they are within surface mineable depth.

Despite some variation in coal quality, thickness and partings for the 0 Seam package, there remains some opportunity for selective mining of the 0 Seams either as thermal coal product and potential blend coking coal product given that there appears to be some reasonable coking properties in the 0 Seam package, particularly in Seam 0C. Seam 0B has shown some marginal coking properties and Seam 0A is found to occur with frequent in-seam rock partings and to be an inherently "high-ash" seam that would experience significantly lower yields in wash plant analysis.

## Seam 3 Group

The 3 Seam package is comprised of essentially three seam splits, the 3A, 3B, and 3C. The most prominent by far of these seam splits is the 3A Seam, which likely represents the three splits coalesced into one main seam body. The 3A Seam thickness remains reasonably consistent throughout the property.

Seam 3A makes up over 10% of the total UHG coal resource and is one of the target coal seams showing favourable metallurgical properties. It is for the most part devoid of in-seam partings, particularly in the southeast, and has a relatively low in-place ash content. Metallurgical tests of raw samples show good swelling properties and bulk sample testing also shows that it has good coking characteristics. Raw volatile percentages are likely to be in the ranges of about 22 to 24 percent for most areas of the deposit.

Crucible Swelling Number (also known as FSI, or Free Swelling Index) is a general indicator of coking potential, demonstrating a coal's ability to swell when heated to a specific temperature.

Figure 5.4 Cross-sections C-C' and D-D'

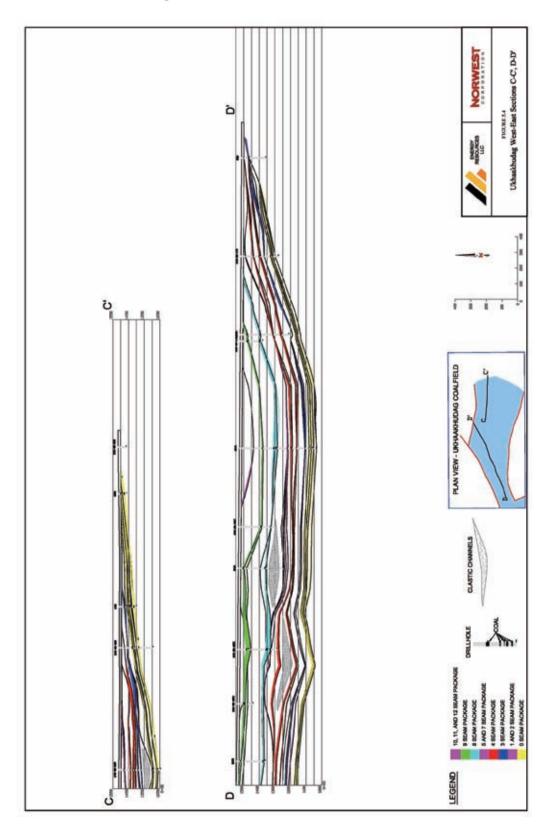


Figure 5.5 Cross-sections G-G' and H-H'

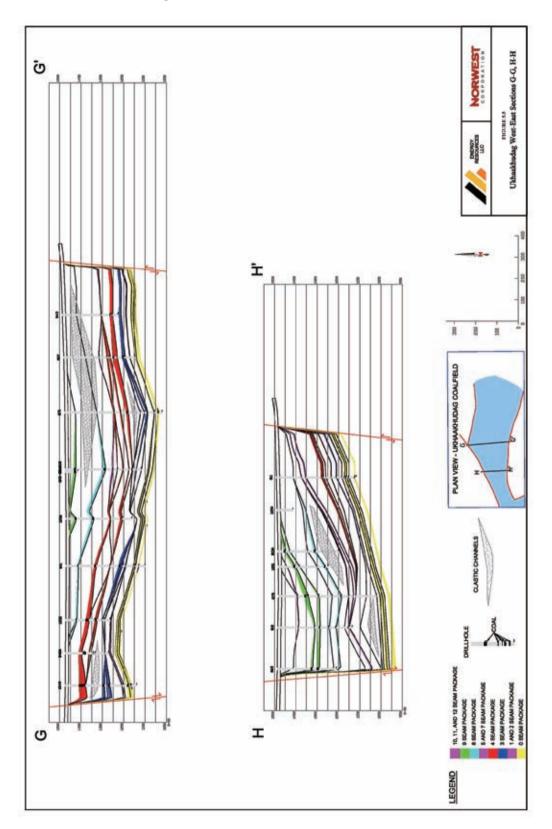
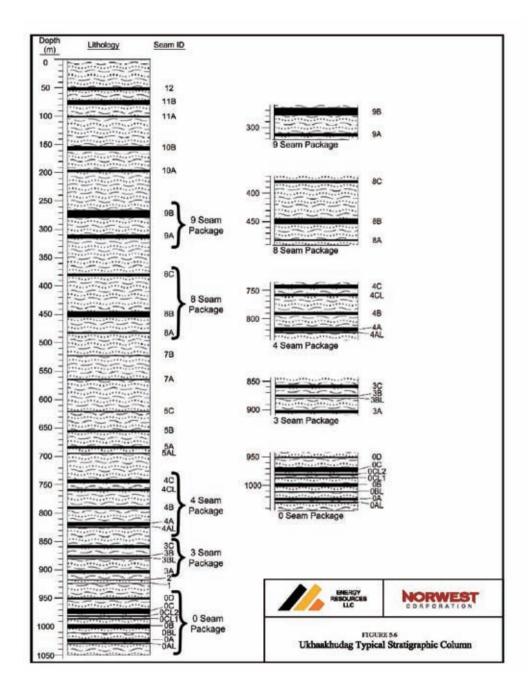


Figure 5.6 Generalized Stratigraphic Column



## Seam 4 Group

The 4A and 4C Seams contribute significantly to the UHG metallurgical coal resource, estimated at 9.7% and 10.3% respectively. Metallurgical testing of raw samples, as well as early bulk sample test results, show that Seams 4A and 4C are likely to produce a high quality metallurgical product. Distribution of raw CSN values show both seams, particularly 4C, to average high values over much of the mine area.

In-place ash content is generally quite good for the 4A and 4C Seams. Occasional high ash zones are typically associated with localized zones of in-seam partings that in some instances may be removable. Sulphur content remains low for the 4A and 4C Seams with some isolated high sulphur (>1%) likely to be beneficiated by coal processing and blending to a suitable product.

# Seam 8 Group

The 8 Seam package is dominated by the 8B Seam split which represents 7.4% of the total UHG resources. The 8 Seam raw volatiles appear to be higher than the average expected volatile matter content of less than 30% (dry basis) for UHG coal seams. This appears to be a trend observed in Seams 8 and those occurring stratigraphically higher. Seam 8 is not encountered in the five year 2010-2014 period.

## Seam 9 Group

The 9 Seam package is split into the 9A and 9B Seams. The 9A Seam has a relatively consistent seam thickness whilst the 9B Seam thickness appears to increase towards the west. Overall volatile content appears to be higher than expectations of less than 30% volatiles (dry basis). Raw sulphur is expected to be less than 1% for most areas of the 9 Seam package, and will be further reduced significantly after coal washing. Seam 9 is not encountered in the five year 2010-2014 period.

#### Remaining Seams

The remaining allegedly and historically non-coking coal seams (1, 2, 5, 7, 10, 11, and 12) have a contribution of almost 9% to the overall resources at UHG. Seams 1 and 2 are predominantly thin and non-mineable across the property. Seams 5 and 7 occur in localized pods, with the Seam 5 group (5B and 5C) showing some degree of coking potential from raw slim-core analyzes. Seams 10 through 12, due to their relatively high position in the stratigraphic sequence, occur with limited extent predominantly in the northwest portion of the property. Seam 10B shows some coking potential while there is insufficient data to characterize Seams 11 and 12. These seams may be classified as metallurgical coal of some type with further development drilling, and hence may represent some upside for additional coking coal reserves.

# 5.2 Geological Database

# 5.2.1 Exploration History

Much of the exploration and development history of the Tavan Tolgoi area has been discussed in a preceding section. Prior to 2008, the UHG coalfield had largely been explored by the Russian-Mongolian teams of the 1980's as part of the larger effort to understand the Tavan Tolgoi deposit. ER conducted an infill drilling and bulk sampling program at UHG in 2008, which was planned and managed by Norwest. The 2008 program sufficiently increased the prior drill hole density and validated the historic Russian data to an extent sufficient for categorizing the UHG mine area as a measured plus indicated resource according to the JORC Code and thereby permitting advanced level mine planning and economic evaluations to be conducted at current international standards. The location of drill holes used in the geologic model and resource estimation is shown in Figure 5.1.

# 5.2.2 Sampling, Sample Preparation, and Quality Analysis

The entire set of Russian holes used in the UHG database were core holes. However, holes with excessive core loss (<70% recovery) were not used in the geologic modeling.

The 2008 drilling campaign was supervised by Norwest and was done to currently acceptable international standards and best practices. The core holes from the 2008 program had good core recovery, over 93% in coal, and were logged and sampled by a Mongolian field team trained and supervised by Norwest personnel. Proper QA/QC practices were stressed throughout the program.

Analytical work was performed by SGS Laboratories Inc. in Tianjin, China. The Tianjin laboratory currently holds ISO-17025 certification, accredited by the CNAS (China National Accreditation Service for Conformity Assessment). The laboratory is certified to ASTM and ISO standards.

As with other coal work, no special security arrangements were made for the shipping and storage of samples. Additional security methods are not commonly employed, as coal is a relatively low-value bulk commodity.

Cores obtained by the Energy Resources infill development drilling campaign are reported to have been handled following procedures similar to that described above. Analytical work is being performed at Stewart Mongolia, LLC, located in Ulaanbaatar and accredited by the MNSA (Mongolia Accreditation System) in compliance with ISO international standards.

# 5.2.3 Geologic Modeling and Methodology

# Geologic Database

The geological database used to compile the geological model incorporates topographic survey data, previous geological mapping and technical reports, field reconnaissance mapping, and drillhole data. Drillhole data was used from both Russian campaigns and the 2008 drilling program. A total of 111 Russian holes were used in the final model, the majority being core holes. The 2008 program included a total of 124 holes, comprised of 17 slim gauge core holes (PQ/HQ), 99 slim rotary holes (100mm), 5 large diameter core/bulk sample locations and 3 pump test well locations. A grand total of 232 holes were used in the creation of the current geologic model with an average drilled depth of approximately 200m. All drilling was vertically oriented.

# Modeling Methodology

Following review and validation of the geological database, a gridded seam modeling approach was selected to complete a digital geological model for UHG. Software utilized in the creation of the UHG model includes the Carlson<sup>®</sup> suite of mining software (formerly known as SurvCADD) and MineSight3D<sup>®</sup>. Both software packages are used internationally in the mining and resource evaluation industry. Most of the modeling was completed using Carlson software whilst MineSight3D was used primarily as a 3D visualization aid for seam correlation purposes.

## 5.3 Additional Ash Modeling

Recent comparisons between coal quality results of the 50m by 50m infill drilling program and the BFS model have shown a consistently lower ash content than originally modeled. These results would seemingly validate the observations that ROM coal quality has been consistently lower in ash than the BFS model predictions, recorded since mining commenced in 2009. The differences in ash content appear to be between 3% and 4% on average across both the 2010 and 2011 mine plan areas.

The most likely explanation for this discrepancy would be a result of the lower core recoveries experienced in the Russian drilling programs and the resulting influence on cumulative seam quality. It is believed that the Russian coring program likely had difficulty in recovering the brittle, friable vitrinite components of a seam in totality, thereby losing some quantity of the low ash fraction of the seam. Even though Russian holes with excessive loss (>30%) were not used in the BFS model, there is still the possibility that loss of some higher quality components of a seam might skew parameters such as ash content in a negative fashion.

The ramifications of this phenomenon are that ROM quality may be better (lower ash) than predicted from the BFS model, and assumed in this study. A decrease in ash content has a positive effect on wash plant yields, which could result in an increase in coking product tonnes, in addition to other parameters affected by ash such as calorific value and CSN.

#### 6. RESOURCE AND RESERVE ESTIMATES

# 6.1 Resources and Reserve Classification System

Coal resources have been estimated from the UHG geological model and tabulated into Measured, Indicated and Inferred confidence classes in accordance with the guidelines stipulated in the 2004 JORC Code. The resource and reserve numbers are reported using the Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code) as a guideline. The code is viewed by Norwest as the most appropriate guideline for the reporting of the UHG coal resources given the wide use of the code in Asia and Australasia.

# 6.1.1 General Procedure and Parameters for Resource Estimation

The resources are reported from the Norwest gridded seam geologic model previously described. The resources tonnes have been limited following set of criteria, namely:

- Assumed to be surface mineable
- Minimum seam height of 0.6m
- Exclusion of in-seam partings greater than 0.5m thick
- Depth from surface cut-off of 300m
- Surface weathering limit of 15m from surface.

#### 6.2 Coal Resources Statement

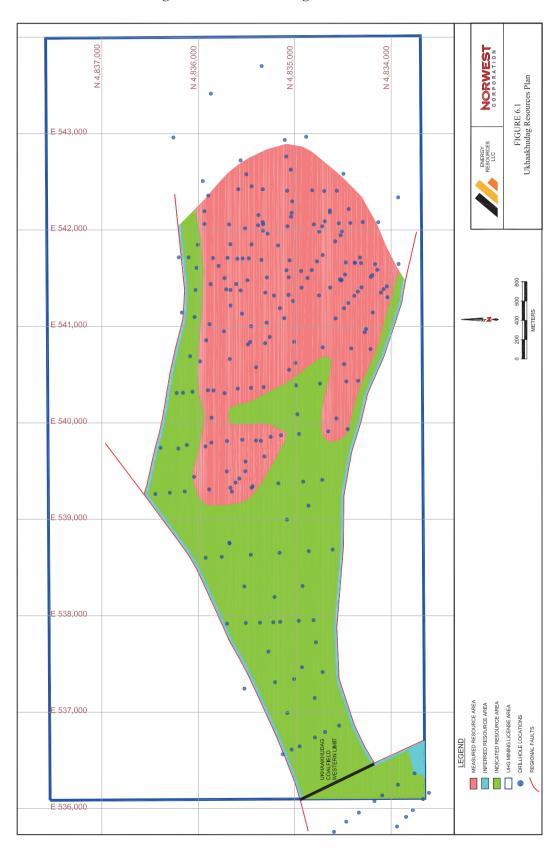
In-place coal resource estimates and associated average raw coal quality derived from the final model are listed in Table 6.1. Figure 6.1 illustrates the distribution on the Measured, Indicated and Inferred resource areas based on distribution of valid points of observation (i.e. drillholes) as described in the JORC code.

Table 6.1 Total in Place Resources by Assurance Category (as of May 31, 2010)

	Resource Volume	Average Thickness	In Place Tonnes	Density (g/cm <sup>3</sup> )	Moisture	Ash %	Sulphur	kCal/kg	Volatile Matter %
Category	(m <sup>3</sup> ) '000	(m)	$\underbrace{  (Mt^1)  }$	(ad)	% (ad)	(dry)	% (dry)	(dry)	(dry)
Measured	135,430	5.36	206.0	1.52	0.55	25.61	0.64	6,145	23.37
Indicated	135,718	5.51	205.3	1.51	0.60	24.93	0.69	6,103	27.72
Inferred	7,692	7.36	11.7	1.52	0.56	25.45	0.65	6,057	26.00
Total	278,840	5.49	423.0	1.52	0.57	25.28	0.66	6,122	25.55

Notes: 1. Mt = Million metric tonnes (air dried - ad)





# 6.3 Product Quality

It has been long known that the Tavan Tolgoi coalfield is a resource potentially rich in premium coking coal. This is the primary attraction to this coalfield. Most seams in the UHG exhibit sought after premium coking attributes that are very amenable to coke making. Seam 0 coal, which has previously been categorised as thermal coal, has potential as a blended coking coal product. There now appears to be some reasonable coking properties in the 0 Seam package, particularly in Seam 0C, whilst Seam 0B has shown some marginal coking properties.

# 6.3.1 Saleable Products

Based on the data to date, it is anticipated that the following products will be produced from UHG in the five period 2010 through 2014.

- Hard coking coal (HCC).
- Thermal product will be produced from the seams that are unsuitable for the production of coking coal, and from the secondary DMC (dense media cyclone circuit) secondary thermal product (+1.2 mm size fraction). The coal washing process is discussed in Section 5 of this report. Thermal ash (Secondary Product) is assumed to be a minimum of 20% ash (average 11-12% ash), although higher ashes would be considered for local domestic production with commensurate increases in yield.

In general, prices for coking coal prices are driven by on the coking characteristics of the coal. Thermal coal prices are dependent on the heat value and ranking (determined in part by the volatile matter (VM) content) of the coal, with penalties levied for unusually high sulphur content. Due to the wide variation in selling price for different coal types, maximum return for the overall project can only be achieved if the quantity of the higher value product types is maximized subject to meeting the required product specification for all consignments. The main product types that have been determined to date include the following.

# Coking Coals

Coking coal are commonly split into two groups, hard coking coal (HCC) and weak or semi-hard coking coal (SHCC) based on value in coke making. HCC is essential for the production of a strong coke. This coal generally has the ability to make a strong (or hard) coke when coked on its own. Semi-hard coking coal (SHCC) is higher ash versions of HCC, which still has good coke making properties. The term semi-hard is more of a commercial classification rather than one which reflects the strength of the resultant coke. The hard (strong) coking coal at UHG is medium volatile coal with mean maximum vitrinite reflectance values in the range of 1.23% to 1.29%. Semi-hard coking coal (SHCC) (alternatively known in Western markets as "soft coking coal") on the other hand does not produce as strong a coke when coked alone. It tends to be coal with weak coking properties and is commonly added to the coke oven blend to reduce the overall cost of the coal. There is a limit to the proportion of soft and semi-hard coking coal which can be added. Soft coking coal (or SHCC) typically attracts a premium in the market over semi-hard coking coal because of its high fluidity. The softer coking coal at UHG is high volatile coal with mean maximum vitrinite reflectance values in the range of 1.01% to 1.09%. Table 6.2 summarizes the product coking properties of all coking seams, considerable variation in terms of yield and ash, phosphorus, sulphur and coking properties exists between the individual seams.

Table 6.2 Indicative Coal Product Qualities by Seam

Seam	0C	3A	4A	4C	8	9
1.40 Float Ash	12.1	9.4	9.0	7.9	8.2	7.2
1.40 Float Yield	41.0	65.8	66.9	71.7	67.9	66.3
1.45 Float Ash	13.6	10.5	9.8	8.5	9.1	7.7
1.45 Float Yield	54.9	78.7	75.5	78.3	75.5	69.6
Volatiles (ad)	21.3	22.4	22.9	23.9	29.6	31.2
Volatiles (daf)	24.2	24.9	25.4	26.4	32.8	34.1
Inherent Moisture	0.9	0.7	0.8	0.7	1.1	1.6
Phosphorus (ad)	0.075	0.117	0.089	0.134	0.102	0.126
Total Sulphur (ad)	0.4	0.6	0.4	0.7	0.8	0.4
CSN	81/2	81/2	8	8	6	5
Fluidity ddpm	26	168	435	564	364	1560
Sapozhnikov Y mm	12	13.5	13.5	15	16	15.5
Sapozhnikov X mm	14	18.5	21.0	20.5	27	30.5
G Index	80	85	87	88	92	90
Reactives Vitrinite %	64.1	63.9	55.8	58.2	65.5	60.7
Reflectance %	1.29	1.25	1.23	1.28	1.01	1.09
CSR measured	69.5	64.8	69.4	66.3	39.5	40.4
CRI measured	21.3	28.4	24.1	25.3	40.0	40.0

In Figure 6.2, the key hard and semi-hard coking coal properties of the UHG coal are compared with the world and Australian quality ranges. In the key CSN (crucible swelling) and CSR (coke strength after reaction) parameters, UHG premium HCC rank near the top of the categories. Conversely, UHG is at the low end of sulphur content. With the exception of phosphorus content, the UHG coal mostly falls in the acceptable-to-premium quality parameter ranges.

100 Aus Range 90 World Range an ▲ Ukhaa Khudag HCC 60 Ukhaa Khudag SHCC 50 40 30 20 10 (%ar) (be%) (%ad) ×10) CSN (x10) Ash (%ad) F.C.(%ad) (%ad; x100) ě CSR Max (x10) (%ad; M Σ Ž. 8

Figure 6.2 Comparison of Key UHG Coking Coal Properties with World and Australian Ranges<sup>5</sup>

#### Thermal Coal

The lowest 0A and 0B seams are too low yielding, too high in ash, and contain relatively poor coking properties in the coarsest fractions to produce a hard coking coal, despite being of the appropriate rank. Hence these shall be washed at higher cutpoints to produce a higher yielding, higher ash thermal product<sup>6</sup>. This will be medium volatile rank with an expected specific heat is expected to be approximately 6800kcal/kg (as received). The ash content will be in the 11% to 12% (ad) range. Seams 0C, 3A and 4A will produce a secondary thermal product derived from rewashing the coarse rejects (+1.4mm). This will be medium volatile rank with an expected specific heat is expected to be approximately 6,400 to 6,700kcal/kg (as received). The ash content will be in the 18% to 20% (ad) range. Seams 8 and 9 will similarly produce a secondary thermal product, but in the high volatile range, and are not encountered in the five year 2010-2014 period. The expected specific heat is expected to be approximately 5900kcal/kg (as received). The ash content will be in the range of 21% (ad).

Barlow Jonker Pty Ltd. Ukhaa Khudag Coal Market Report. Sydney, Australia, August 2008. Figure 57, Page 102.

At the time of this writing, further carbonization testing is planned to be performed to determine if Seams 0A and 0B can be blended with the other HCCs to produce an acceptable coking coal.

# 6.3.2 Fluid and Plastic Properties of UHG Coking Coal

There are several important tests that are used to characterize key coking properties of the candidate coal seams.

In order to successfully produce coke, a given coal must be able to coalesce or melt, giving off volatile gases and vapours. Then it must pass into a fluid stage and finally solidify. This progression of is the plastic range as recorded by change temperature. Two important test are routinely performed help understand the true coking capacity of any given coal and how it fits with other coking coal.

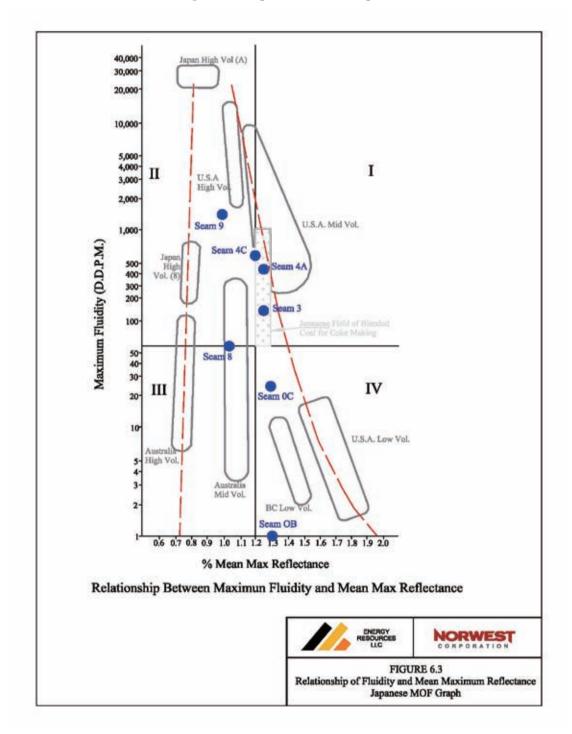
## Fluid Properties

The principal test for fluidity is the Gieseler test. Its results are reported in dial-divisions-per-minute (ddpm). The fluidity results are routinely plotted against vitrinite reflectance on the Japanese MOF graph. This graph is very useful in determining how to blend a particular coal with other coal to make a proper coke product.

As can be seen in Figure 6.3 (MOF graph) all of the UHG coal is well positioned, i.e., in close proximity to the field for an ideal coke. It is interesting to note that Seam 0C, which exhibits many premium coking attributes very similar to Seams 3A, 4A and 4C, has a slightly lower fluidity. In the case of Seam 0C, the fluidity is probably slightly depressed due to its higher intrinsic ash content. Nonetheless, it fits very well other HCC of UHG.

Another outcome of the Gieseler fluidity testing is the recording of the temperature range as the heated coal passes from initial melting, fluidization and then to re-solidification. Figure 6.4 in the blending discussion below show the ranges of each UHG coal. Alternatively in the Chinese market, a test called Sapozhnikov is often performed. The Sapozhnikov test will generally have a good correlation with Gieseler. Figure 6.4 depicts this correlation for the UHG seams.

Figure 6.3 Japanese MOF Graph



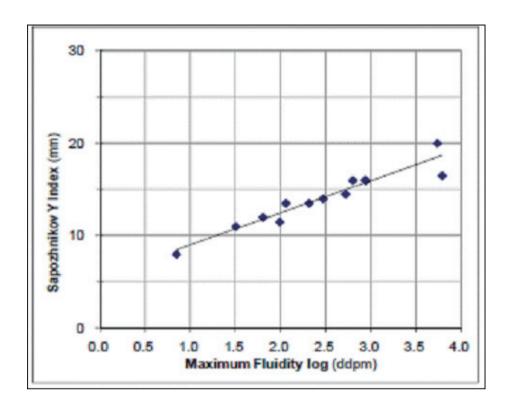


Figure 6.4 Correlation between Sapozhnikov Y Parameter and Gieseler Fluidity

# Plastic Properties

Another important test for indicative coking potential of a coal is the measure of its swelling or plastic properties. The dilatation test measures the amount of contraction or shrinkage when the coal begins to melt. As temperature rises and time continues through the plastic phase of heating, the melted coal will often expand (dilatation). Note that the temperature range in the dilatation test is very similar to fluidity phase measured in the Gieseler test. Figures 6.5 and 6.6 indicate dilatation results for a variety of UHG coal. Figure 6.7 plots the UHG dilatation results against VM as well as many well known coking coal products worldwide.

Figure 6.5 Seams 0c, 3A, 4A, and 4C Dilatation

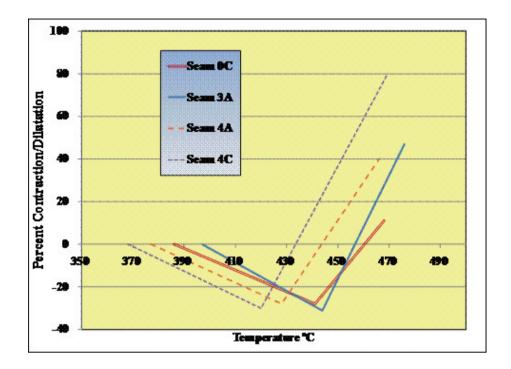
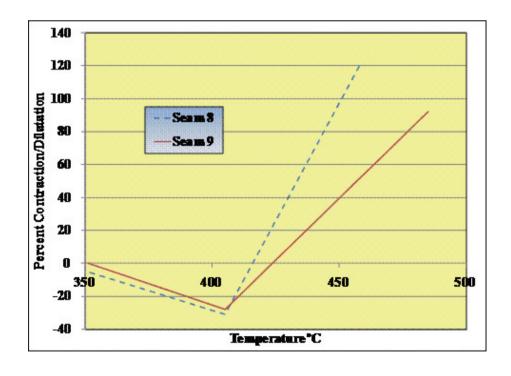
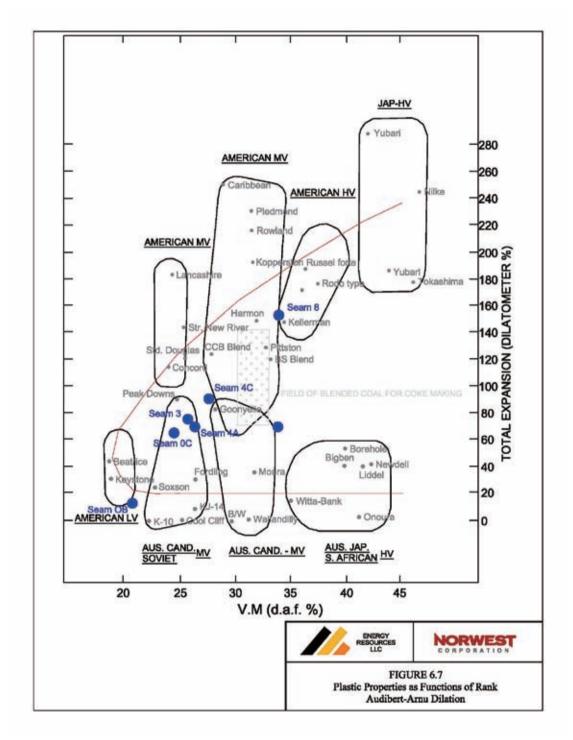


Figure 6.6 Seams 8 and 9 Dilatation







## Coke Strength

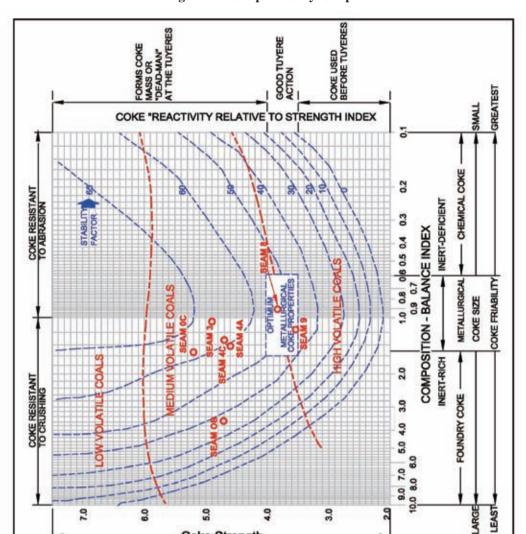
In addition to physical testing of coal to determine its coking potential leading candidate coal such as UHG is subjected to small scale oven testing to produce an actual coke sample. After the coke is formed, strength tests on the coke are performed. The importance of strength relates to when coke lumps descend in the blast furnace. They are subjected to reaction with counter-current CO<sub>2</sub> and to abrasion as they rub together and against the walls of the furnace. These concurrent processes physically weaken and chemically react with the coke lumps, producing an excess of fines that can decrease burden permeability and result in increased coke rates and lost hot metal production. Perhaps the key indicator whether the UHG coal is premium hard or semi-hard coking coal is the strength of the derived coke. Several tests related to coke strength were performed to test the physical properties of the coke.

For the UHG coal, ER/Norwest directed SGS to prepare 75 kg clean coking coal samples to be tested in small scale coke ovens. Key coke strength results of those tests are reported in Table 6.3. As can be seen, the CSR results for Seams 0C, 3A, 4A and 4C are remarkably high. Of special note is the Seam 0C, which will likely be classified as a semi-hard coking coal due to higher intrinsic ash, nonetheless produces a very strong coke. As expected, semi-hard Seams 8 and 9 produced lower coke strength and stability values, but are not encountered in the five year 2010-2014 period.

Table 6.3 Indicative Coke Strengths of UHG Coal

	Coke Reactivity	Coke Strength		
Seam	Index	after Reaction	Stability Factor	Hardness Factor
0C	21.3	69.5	64.2	67.5
3A	28.4	64.8	67.5	68.8
4A	24.1	69.4	68.2	70.9
4C	25.3	66.3	67.6	71.2
8	40.0	39.5	51.4	64.2
9	40.0	40.4	51.9	63.6

Another means for predicting coke strength is the Shapiro-Gray graph. This is very useful since it uses petrographic data of the coal itself instead of actual oven tests. Figure 6.8 indicates that all of the key UHG coal falls into the metallurgical coal group necessary for blast furnace operations. This graph is also useful for predetermining coal blends for coke making. Note that the stability predictions in the Shapiro-Gray graph closely correlate with the actual coke stability values in Table 6.3.



Coke Strength

Figure 6.8 Shapiro-Gray Graph

FIGURE 6.8 Comparative Coke Strength vs. Composite Balance Index Shapiro-Gray Graph

# 6.3.3 Blending for Product Quality

UHG will produce coal from a total of approximately 8 distinct seams/plies with a wide range of coal quality. The quality can be expected to also vary within the same seam on a regional nature to some degree, but a comprehensive suite of coal quality cores analyzed to standard procedures will be necessary to determine this pattern accurately. This will be determined from the two year slim core exploration program on the UHG deposit to be commenced this year. Figure 6.9 depicts the softening through re-solidification temperature range determined by the Gieseler fluidity test.

Softening Softening Plactic Range C Solidification 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 485 500 505 Seam 4C Seam 8 Seam 9

Figure 6.9 Comparative Plastic Ranges of UHG Coal

Figures 6.10 and 6.11 show the petrographic groupings of vitrinoid types for hard coking and semi-hard coking coal. Note the close statistical matching of vitrinite maceral-types within each coking coal product type.

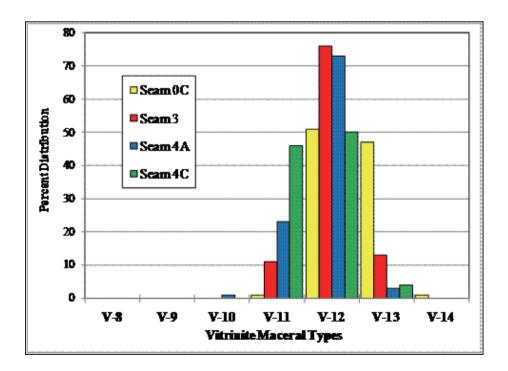


Figure 6.10 Vitrinoid Distributions for Hard Coking Coal

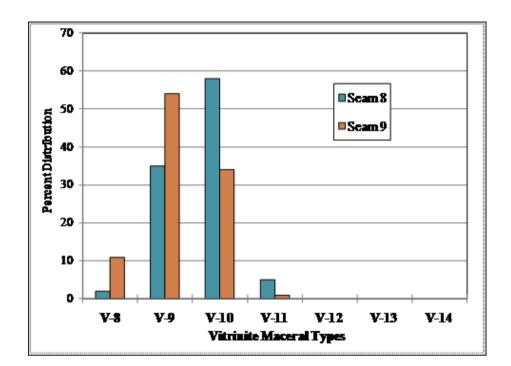


Figure 6.11 Vitrinoid Distribution for Semi-Hard Coking Coal

Hard Coking Coal

Four seam groups are suitable for producing premium hard coking coal: Seams 0C, 3, 4A and 4C. Phosphorus in particular is relatively high overall, and increases for the upper coking coal seams, so coal will be sourced from a combination of seams to meet the average product specification for each shipment. This will be achieved on the stockpiles based on a building up blended stockpiles of perhaps 30,000 tonnes each, scheduled from the appropriate combination of different mining faces. Seam 0C in particular will need to be blended in as a regular component of the blend due to its high intrinsic ash level and as it becomes a major component of the resource after the initial development years. Seam 0C, if marketed as a standalone, would technically be classified as a "semi-hard" coking coal due to its higher ash content.

## Thermal Coal

The lowest 0A and 0B seams are too low yielding, too high in ash, and contain relatively poor coking properties in the coarsest fractions to produce a hard coking coal, despite being of the appropriate rank. Hence it is recommended that they be washed at higher cutpoints to produce a higher yielding, higher ash thermal coal product. As discussed in this report, Norwest has recommended that the potential for Seams 0A and 0B to be blended with coking coal (in order to increase the amount of saleable coking coal) be investigated further.

#### 6.4 Estimate of Reserves

Norwest estimation of coal reserves at UHG are defined by the recent BFS and described in the feasibility study report *Ukhaa Khudag Project Bankable Feasibility Study*, November 13, 2009. To the best of our understanding this estimate of reserves is compliant with *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the JORC code).

# 6.4.1 Procedure and Parameters for Reserve Estimation

A geologic "block" model of the resource base was generated, and portions of the base assigned to Measured, Indicated and (negligible) Inferred resource categories. The BFS then demonstrated the economic viability of portions of that resource base as reserves. Those portions of reserves contained within the Measured and Indicated resources were then classified as Proven and Probable reserves, respectively. In addition, an estimate was made of the quantity of clean, saleable that may be produced from the Proven and Probable coal reserves.

Specifically, the following were considered in Norwest's reserve estimate:

- Geologic model and resource estimate
- Geotechnical considerations
- Hydrological considerations
- Mine planning, including pit and scheduling optimization
- Coal handling, processing, and preparation
- Rail transport
- Water supply
- Mine infrastructure
- Health, safety and environmental considerations
- Socio-Economic considerations
- Assessment of permits, approvals, legal opinion and business position
- Market study
- Financial valuation of the Project.

#### 6.4.2 Reserves Statement

A summary of the reserve estimate is reported in Table 6.4 (see Appendix A for complete reserve estimate).

Table 6.4 Summary of Coal Reserve Estimate (May 31, 2010)

	Total R	eserves*	Marketable Reserves**	
	Proven	Probable	Proven	Probable
Mtonnes	191	95	122	61
Total***	2	86	1	82

<sup>\*</sup> Excludes 0.4Mt from mine plan within Inferred resource category

# 7. POTENTIAL FOR DEFINING ADDITIONAL MINERAL RESOURCES AND RESERVES

#### 7.1 Two Year Drilling Plan

A drilling program is planned by ER over the course of the next two years that would effectively increase the drilling density across the entire UHG property to a 500m by 500m spacing. The objective of the program is to tighten the control and accuracy of the UHG geologic model for detailed mine planning purposes and to confirm indications that the Russian drill hole data (and by extension, the current model used as the basis of this report) reflects a higher ash content than is actually encountered during mining. Additionally, seams other than the four traditional coking seams (Seams 3, 4, 8, and 9) will be investigated for potential inclusion as a metallurgical grade resource.

Drilling to date has shown that Seams 5 and 10 have the potential, where occurring with a low to moderate ash content, to be classified as a coking coal. A property-wide program as proposed would identify those areas using slim gauge core samples, and provide target areas for more thorough investigations of their metallurgical properties.

The program would also serve to tighten the drill hole spacing in the far west portion of the property where the uppermost seams occur. Past drilling campaigns have only one or two core samples of Seams 11 and 12 and little is currently known of the coking potential for these seams. While not of great areal extent they could still contribute to the overall coking coal resource at UHG.

<sup>\*\*</sup> Includes primary washed product and secondary product

<sup>\*\*\*</sup> Rounded

#### 7.2 Potential for Additional Mineral Resources

The UHG reserve contains several coal seams that may present upside resource value relative to the reporting in the Bankable Feasibility Study. Seams that Norwest believes merit further examination include the 0A/0B group, Seam 5 and Seam 10.

## 7.2.1 Seam Group 0A/0B

The 0A/0B seam group has some indication that it may be possible to blend these with the other hard coking coal prior to washing. If this were to work without significantly degrading the key coking properties of the HCC product, then the overall value of this seam group would like increase.

For this reason, Norwest has recommended that Seam 0B be sampled again from large diameter (LD) cores. Preferably, several locations are drilled to better understand the character of 0B (and 0A) and if there is any variability to this major resource. Norwest understands that ER is planning to undertake these recommendations in the summer of 2010.

#### 7.2.2 Seam 5 and 10

Seams 5 and 10 will likely be better defined after the two year drilling program has thoroughly sampled them with slim gauge coring. As with Seams 0A and 0B, areas showing positive coking characteristics should be submitted to a similar LD bulk sampling and testing program. A thorough understanding of the sizing, washability and coking properties of these seams may lead to their classification as some level of metallurgical reserve.

# 7.2.3 Underground Mining Resource

Norwest has identified a coal resource at UHG lying below 300m in depth that is categorized as an "underground" deposit type, meaning that the probable extraction method would be through underground mining techniques. Norwest has used JORC criteria to estimate coal resources occurring between 300m and 800m according to the criteria shown in Table 7.1. These resources are considered for future rather than immediate exploitation and were not considered in the scope of the BFS.

#### **Table 7.1 Resource Limiting Criteria**

Minimum depth from surface	300m
Maximum depth from surface <sup>7</sup>	800m
Minimum apparent seam thickness	1.5m
Maximum mineable parting thickness	0.5m
Main seams below 300m surface	8B, 4C, 4B, 4A, 3C,
	3B, 3A, 0C, 0B, 0A

Maximum seam depth for the deposit is 712m from surface for Seam 0A

The total in-place resources below 300m (i.e., underground mineable resources) are summarized in Table 7.2, with an estimated break-out of relative quantities of coal suitable for coking and thermal products, as indicated from bulk sample testing. Whilst the coal resources below 300m represent a significant addition to the overall UHG resources it must be noted that a reserve estimate has not been made.

Table 7.2 Underground Mineable Resources with Coking and Thermal Product Potential (in-place)

	Indicated		Infe	erred	Total		
Seam	Coking Tonnes (Mt <sup>1</sup> )	Thermal Tonnes (Mt¹)	Coking Tonnes (Mt <sup>1</sup> )	Thermal Tonnes (Mt <sup>1</sup> )	Coking Tonnes (Mt <sup>1</sup> )	Thermal Tonnes (Mt <sup>1</sup> )	
8B	5.6	_	0.4	_	6.0	_	
4C	10.2	_	7.3	_	17.5	_	
4B	4.3	_	12.2	_	16.5	_	
4A	3.9	_	1.7	_	5.6	_	
3C	0.9	_	0.0	_	0.9	_	
3B	0.4	_	1.7	_	2.1	_	
3A	6.0	_	5.4	_	11.4	_	
0C	19.4	_	13.5	_	32.9	_	
0B	_	16.0	_	14.5	_	30.5	
0A		21.9		12.6		34.5	
Total	50.7	37.9	42.2	27.1	92.9	65.0	

Notes: 1. Mt = Million metric tonnes (air dried-ad)

An additional objective of the Two Year Drilling Plan (500m x 500m) is to target coal occurrences below 300m in depth and further delineate potentially mineable underground resources. Current plans call for these holes to penetrate up to 600m below ground surface and subject retrieved coal samples to a comprehensive analytical suite including washability a metallurgical characterization. This will serve to increase the level of geologic assurance for JORC compliant reporting of potential underground resources as well as increase the limiting lower depth of current estimates. Underground resources were restricted to 600m below surface as existing drilling does not support seam continuity or quality beyond this depth. Practical underground mining does occur at greater depths and the quantity of underground resource would likely increase with greater geologic assurance and with conservative extrapolation beyond the 600m depth limit.

# 8. MINE OPERATIONS

# 8.1 Overview

# 8.1.1 Background

Currently, the mining operations at UHG are managed by Leighton under a relationship style contract with ER. Leighton were also contracted during the recent BFS to complete a LOM mine plan and associated mining cost estimate for the UHG Coal Project.

As part of the BFS, Norwest reviewed the work performed by Leighton with the purpose of determining the integrity of the technical work and cost estimation. Following review, Leighton's work was used the basis of the BFS.

# 8.1.2 Proposed Life-of-Mine Operations

Coal will be mined using hydraulic excavators and rear dump trucks. Initially, lower-ash coking coal will be mined and transported by truck directly to the Chinese border for sale to customers in China. Coal will washed to produce a coking coal product, as and when the coal washing plant comes on-line.

A coal washing plant is currently being constructed in three 5Mtpa stages of ROM coal to reach a total capacity of 15Mtpa at the beginning of 2013. Waste material will be stripped using large hydraulic excavators and shovels and will be transported to ex-pit and/or in-pit waste dumps.

Figure 8.1 generally illustrates site plan.

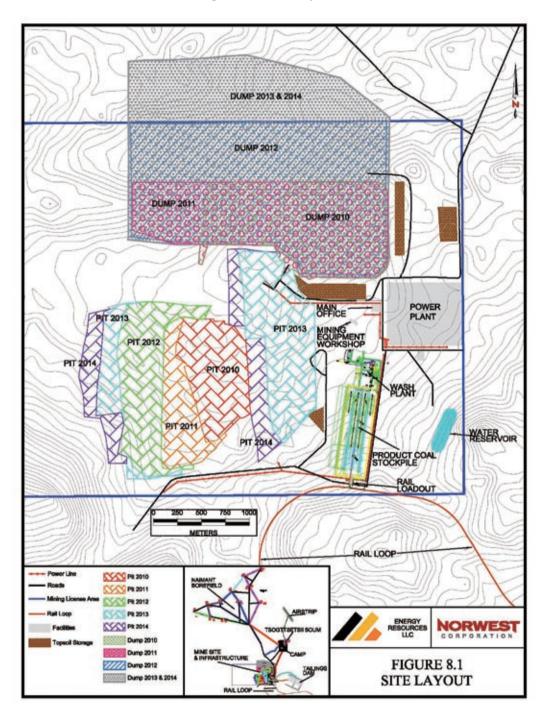
# 8.2 Current Mining Operations

From March, 2009 through May, 2010, Leighton have removed 12.6Mbcm of waste material, and have produced 3.0Mt of ROM coal. Waste is currently being hauled and dumped in out-of-pit waste dumps.

Waste is stripped with a variety of hydraulic shovels and mining equipment, with appropriate support equipment, including:

- Liebherr R996 hydraulic shovel (34m<sup>3</sup>) (one unit)
- Liebherr R984 hydraulic shovel (7.7m<sup>3</sup>) (one unit)
- Liebherr R9250 hydraulic shovel (15m<sup>3</sup>) (two units)
- Cat 785C mining trucks (150 tonne capacity) (nine units)
- Cat 793 mining trucks (240 tonne capacity) (four units)
- Cat D10 tractor dozer (three units)
- Cat 16G motor grader (one unit).

Figure 8.1 Site Layout



A low-ash coking coal that does not require washing (3 and 4 seams) is selectively mined and blended through ROM stockpiles. There is currently no coal handling, processing or beneficiation of the ROM coal. Coal is currently loaded into transport trucks for third-party delivery to markets across the Chinese border.

Photo 8.1 shows recent mining operations at UHG.

Photo 8.1 Surface Mining Operation at UHG



# 8.3 Production Schedule

Mine planning has been executed in order to achieve the production schedule required by ER. Several optimization scenarios were run, using the 'Whittle' software package, to fully understand the impact of unwashed and washed product coal on pit shells. The final optimization model was broken into two parts; unwashed and washed product coal and adjusted to achieve a LOM schedule.

# 8.3.1 Project Ramp-Up

Mine planning was performed in order to generate an optimized mine plan for the 'ramp-up' period to achieve a 'steady-state' production of 15Mtpa. This is considered to be a sensitive and critical period of the Project. The ability to achieve higher production levels will depend in many factors including availability of equipment and labour. The 'ramp-up' schedule required by ER in order to make sales targets is as follows:

- 2010 3.8 Mt ROM coal
- 2011 7.0 Mt ROM coal
- 2012 10.7 Mt ROM coal
- 2013 14.7 Mt ROM coal
- 2014 15.2 Mt ROM coal

The ramp-up schedule initially targets low-ash coking coal that is beneficiated by the customers at their own facilities in China (after 2011, all coal is to be beneficiated in ER's CHPP). This allows time for:

- Construction of the CHPP. The modular design of the CHPP allows a gradual phasing-in of CHPP capacity until a steady-state production of 15Mtpa at the start of 2013. The 5Mtpa phase of the CHPP will be operational by the beginning of 2011, and the 10Mtpa phase by September 1, 2011.
- Training of mine equipment operators. ER now has a \$1M equipment simulator on site which is being used to train equipment operators in the correct and safe methods of operating equipment.
- Developing the mine infrastructure.
- Pre-marketing acceptance of the UHG coking coal products by end users (the ROM coal is being washed at washplants in Inner Mongolia and the product coking coal is then being used to produce coke for a number of steel mills).

Table 8.1 summarizes the coal production schedule and stripping requirements for the LOM.

**Table 8.1 Material Movement Schedule** 

Total	Material	Movement	Quantities
-------	----------	----------	------------

	Thermal Seams 0A, 0B & 0D	Coking Seams 0C, 3 &	Coking Seams 8	Total Mined	Volume	Desti	nation	S/R
Period	(Mt ROM)	4 (Mt ROM)	& 9 (Mt ROM)	(Mtpa ROM)	Waste (Mbcm)	Inpit (Mlcm)	Expit (Mlcm)	(bcm/t ROM)
2010	_	3.8	-	3.8	20.9	_	26.1	5.5
2011	_	7.0	_	7.0	28.8	_	36.0	4.1
2012	0.8	9.9	_	10.7	58.8	_	73.5	5.5
2013	5.0	9.7	-	14.7	59.0	_	73.7	4.0
2014	5.5	9.7		15.2	63.2	3.9	75.1	4.2
Totals	11.3	40.2	NA	51.4	230.7	3.9	284.4	4.5

The make-up of wash plant feed, by product type, is shown on Figure 8.2.

Raw Product and Washplant Coal Feed (AD) 16 14 Feed Rate (Mtpa) 12 10 8 6 4 2010 2011 2012 2013 2014 ■ Thermal ■ Hard Coking ■ Semi Hard Coking

Figure 8.2 Raw Product and Wash Plant Feed by Coal Type

The quantity of coal produced, by product type, either through direct sales (through 2010) or after coal washing (post-2010) is shown on Figure 8.3.

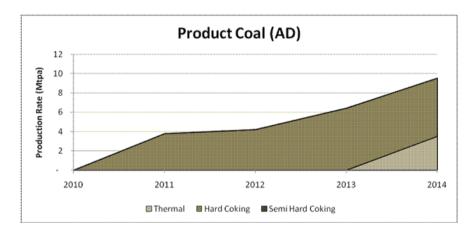


Figure 8.3 Coal Product Tonnes by Coal Type

# 8.3.2 'Steady-State' Production

The Project reaches a 'steady-state' production rate of 15Mtpa in 2013 and maintains that level throughout the LOM.

# 8.4 Mining Contract

Leighton is currently under contract with ER to perform contract mining services at the UHG mine. The contract term is for 70 months, and will continue through the 'ramp-up' period until UHG reaches a steady state production of 15Mtpa. In fact, the contract is renewed, or 're-set' every time Leighton is obliged to make a major capital investment in mining equipment, and so the contract is likely to be renewed several times over the current give year 'ramp-up' period, and Leighton will almost certainly continue to perform contract mining services.

# 8.5 Mine Equipment

A brief review of the most appropriate combination of loaders was conducted for this study including the following:

- Electric rope shovels
- Front end loaders (FEL)
- Hydraulic shovels (with either electric or diesel power)
- Diesel over hydraulic excavators (backhoes).

Draglines were not considered due to the dipping multiple seams that will be encountered in this operation. In addition, draglines are not widely used in Mongolia<sup>8</sup> or in neighboring China. Rope shovels were deemed to be unsuitable due to their high capital costs and relative lack of mobility. The following combination of hydraulic shovels and hydraulic excavators was selected.

# 8.5.1 Coal Mining Fleets

- 100t class diesel-powered hydraulic excavators with 6.7m<sup>3</sup> buckets loading 150t capacity rear dump trucks with standard body configuration (90m<sup>3</sup> capacity).
- 250t class diesel-powered hydraulic excavators with 19m³ buckets loading 150t capacity rear dump trucks with oversized coal body configuration (115m³ capacity).

# 8.5.2 Waste Mining Fleets

- 250t class diesel-powered hydraulic excavators with 15m<sup>3</sup> buckets loading 150t capacity mechanical drive rear dump trucks with standard body configuration (90m<sup>3</sup> capacity).
- 600t class diesel-powered hydraulic shovels with 34m³ buckets loading 240t capacity mechanical drive rear dump trucks with standard body configuration.

# 8.5.3 Support Fleets

In addition to the primary earthmoving equipment, there is also support equipment including:

• 425kW-class tractor dozers (Cat D10)

<sup>8</sup> Draglines are used at the Baganuur mine.

- 152-229mm rotary drill (Driltech D45KS)
- 600kW-class front end loader (Cat 992)
- 350kW-class front end loader (Cat 988)
- 235kW-class rubber-tired dozer (Cat 824)
- Water trucks (Cat 785 and 773 chassis)
- Motor graders (Cat 16G and 14G)
- 50 tonne-class rejects trucks (Cat 773)
- Other ancillary equipment including light plants, service trucks, compressors, light excavators, cranes, etc.

Productivity was calculated for each fleet, taking into account factors such as downtime, reasonable annual equipment operating hours, meter hours, truck haul profiles, etc.

By applying equipment productivities to the volumes of material to be handled, fleet sizes were estimated.

### 8.6 Personnel

By applying total equipment hours required to hours available per year, by employee, the total number of operators may be estimated. Support staff was then estimated based on reasonable estimates of what would be appropriate for a project such as UHG.

Tables 8.2 and 8.3 summarize the projected total mining-related employment during the life of the mine for the operating/support workforce and administrative staff, respectively.

Operating, maintenance and general labour have been estimated and include allowances for training; absenteeism and paid non-operating time to ensure maximize equipment utilization. Training requirements during start-up and completion of the production build-up will be higher than the balance of the mine life. Training allowances start at 5% of total operating labour and decrease to 3% once full peak production levels are achieved.

Table 8.2 Workforce and Contractors Employment Summary

ROM Production, Geology & Year Mt Lab. **Total** Maintenance **Operations** 3.8 44 52 193 289 7.0 65 110 367 542 10.7 72. 135 492 699 14.7 75 147 528 750 15.2 77 152 536 765

**Table 8.3 Administrative Employment Summary** 

Years	Administrative	Expatriates	Total
2010	19	9	28
2011	41	9	50
2012	55	9	64
2013	61	9	70
2014	63	9	72

# 8.6.1 Training

Suitable and sufficient training will be critical to the long term success and safety of the UHG operation. To that end a training program is in development and is currently being implemented. A training manager will oversee all aspects of the training program to ensure that it meets both ER's needs as well as statutory obligations.

One example of the commitment of ER and Leighton to ensure adequate training of personnel is the computer simulator currently in-use at the mine site. The facility is contained within an enclosed 15m storage container, and has been designed to exactly simulate working equipment in a variety of conditions. It does this through visualization via a monitor, and hydraulically controlled physical feedback, similar to an aircraft simulator.

# 8.7 Mine Infrastructure

Development mine infrastructure specific for direct support of the mining operations will be provided in two phases as summarized below.

The current infrastructure and facilities for the UHG project include:

- A permanent 'mine camp' including accommodation, recreation, dining and administrative facilities
- Permanent maintenance work shop (see below)
- Transportable office facilities

- Some ger-style training and meeting rooms
- An outdoor storage area for larger items
- A coal assay laboratory
- A ger camp to accommodate additional site personnel.

The current infrastructure has been expanded to include a new workshop complex with an approximate area of 2,300m<sup>2</sup> which is now completed and operational. The expanded workshop includes adequate provision for the following major functions:

- Truck maintenance/repair of the Caterpillar 785/793 trucks
- Light vehicle maintenance/repair
- Welding
- Equipment washing
- Training
- Warehousing
- Office facilities for the maintenance personnel.

Other key facilities<sup>9</sup> include the following:

- Explosives storage area, managed by explosive suppliers.
- Fuel storage, managed by the leading Mongolian fuel suppliers.
- Miscellaneous facilities such as field lunch rooms, ablution facilities, a medical facility, security facilities and fencing.

#### 8.7.1 Second Phase

The workshop complex currently under construction will be expanded in about 2 years to accommodate the larger fleets of mining equipment which will be purchased to meet the higher production rates and stripping ratios.

The Office Complex is described under the chapter "Site Infrastructure"

# 8.8 Water Supply

Several regional and site specific hydrogeological investigations were completed to develop a comprehensive water supply plan for the operation.

The primary water supply is designed to provide the make-up project water requirement, less dust suppression which is estimated to be reliably produced from pit dewatering. A final pit dewatering assessment is ongoing through 2010. It is anticipated that advance dewatering and in-pit sumps will contribute to the overall supply, although the quantities available from dewatering cannot be confirmed at this stage due to ongoing exploration works.

The primary groundwater resource target is the Naimant Depression, approximately 20 km from the mine. The Naimant Depression was investigated using standard geological, geophysical, and hydrogeological techniques, with results demonstrating that the supply and quality will meet project needs up to 117 L/s. A license has been granted for the start-up supply of 51 L/s and additional permissions required for 117 L/s supply are currently being processed with formal approval expected in July 2010.

The start-up water supply design (51 L/s) consists of a network of five existing groundwater wells equipped with standard submersible pumps supplying a transfer station through polyethylene pipelines, which in turn is pumped to a constructed storage pond above the mine containing about 6.5 days water supply. The transfer station consists of a collector tank and booster pump thereby reducing the maximum operating pressure so that lower pressure rated polyethylene pipe can be used for water delivery. Initially, the system will be powered by a diesel generator with conversion to line supply later in the project.

To account for the increased production targets, a 'start-up' borefield (capable of delivering 51 L/s) is to be commissioned in late 2010, with a ramp-up to full production from 12 test production bores (117 L/s) by late 2011. It is expected that additional water will be required, and to that end the nearby Naimdain Khundii basin is currently being explored (approx 40km north of UHG). A preliminary 2009 study established that 100-150 L/s may be available from Naimdain Khundii, which would provide ample excess water supply capacity for expanded UHG operations. Exploration works across Naimdain Khundii are ongoing through 2010 to confirm supply potential and secure formal abstraction rights. A preliminary concept engineering design has been completed for conveyance of water supply from Naimdain Khundii to UHG.

#### 8.9 Geotechnical Assessment

Norwest prepared a slope stability assessment and pit slope design guidelines for the UHG coal mine. The document presents slope stability assessment results and design guidelines for the ultimate pit walls and provides recommendations for operations, maintenance and surveillance. The findings of that Geotechnical assessment, as well as of a follow-up memorandum also prepared by Norwest can, are summarized here.

# 8.9.1 Approach

Norwest made site inspections and researched all available data including:

- Geologic model and interpretations
- Proposed pit shell models
- Geotechnical core logs
- Digital photos of core
- Laboratory test results
- Results of 2008 groundwater assessment
- Groundwater studies for other projects within the region.

This information was used to perform limit equilibrium stability analysis using specialized software. This is the basis for determining slope design parameters.

# 8.9.2 Pit Design Guidelines

The geotechnical report presents preliminary pit slope design guidelines for the footwalls, endwalls and highwalls of the UHG Pits in the initial years of the Project.

#### Footwall Slopes

Design guidelines specific to footwall slopes include the following:

- Footwall slopes are developed parallel to bedding to minimize waste extraction and prevent undercutting potentially unstable strata.
- The footwalls follow competent strata for the maximum height allowable before benching occurs. The maximum height is dependent on rock mass strength and structure. Where bedding angles do not exceed 20°, footwalls are developed fully unbenched.
- Blast designs are carried out to maintain setback distance from footwall to limit damage and maintain a continuous bedding plane. Buffer blasting or trim blasting is carried out along trim rows to limit blast damage to the rock mass.

Footwall slopes require that some natural drainage (to a depth of 5m below the footwall) occurs to achieve acceptable FOS. While shallow dipping footwall slopes (less than 15°) should not require extensive dewatering, steeper footwalls will likely require additional dewatering to drawdown groundwater to depths of 10m below the footwall.

# Endwall Slopes

Depending upon bedding angles, endwalls will be developed as both benched and unbenched slopes. Where endwall bedding does not exceed 20°, design guidelines presented for footwall slopes should be used. The design guidelines presented below are provided for areas where endwall bedding exceeds 20°. Pit slope guidelines meet typical open pit performance criteria and recognize constraints imposed by the mining method and equipment size.

Table 8.4 summarizes the design guidelines which apply to pit endwalls.

Table 8.4 UHG Endwall Pit Slope Design Guidelines

Parameter	Value
Bench Height (m)	50
Bench Width (m)*	50
Bench Face Angle (degrees)**	30
Overall Slope Angle (degrees)	23

<sup>\*</sup> Bench width based upon distance to mine out the nearest underlying coal seam

Highwall Slopes

Table 8.5 summarizes the design guidelines which apply to pit highwalls.

Table 8.5 UHG Highwall Pit Slope Design Guidelines

Parameter	Value	_
Bench Height (m)	20	
Bench Width (m)	11	
Bench Face Angle (degrees)	60-65	
Bench Face Angle Weathered Rock	45	
Overall Slope Angle (degrees)	45	

#### 8.10 Surface Water Management

A current interim water management plan, based upon previous work by Aquaterra, presents conceptual designs for surface water management and mine dewatering/depressurization, including preliminary cost estimates.

<sup>\*\*</sup> Bench face follows bedding angle

# 8.10.1 Drainage Design

Drainage design to manage surface water is developed in two stages.

Stage 1

The Stage 1 drainage plan covers the first seven years of the mine plan and includes an 8.3m diversion drain along the east side of the facilities area and overburden dump. A perimeter drain system to divert and collect surface water drainage, using natural grades where possible, is planned to encompass the 7-year mine block.

Surface water drainage from disturbed areas will be collected and routed through a sediment pond to be located north-east and down-gradient of the out of pit overburden dump.

The main sediment pond with a surface area of 9,600m<sup>2</sup> is planned for the location north-west of the overburden dump at the outlet of the culvert.

Stage 2

The Stage 2 drainage on the eastern and north-eastern portions of the mine and the facilities area remains the same as in Stage 1. As segments of the Stage 1 diversion drain are mined out in Stage 2 being replaced by a new diversion segment located between the mine and the overburden dump and a flood retention structure located at the topographic low point along the western edge of the Stage 2 mine pit.

Other components of the Stage 2 drainage plan include extensions of existing drains, and construction of a new perimeter drain to divert surface drainage from the mine pit and into the flood retention structure located along the western edge of the Stage 2 mine pit.

# 8.10.2 Depressurization Design

The depressurization system was designed to maintain appropriate hydrostatic pressures to ensure mine wall and pit floor stability needed for safe and efficient mining, and maximize water recovery for water supply and to minimize pit inflows. Additional detailed design work is required as mining progresses.

# 8.10.3 In-Pit Stormwater Management

Initially, stormwater will be diverted from the pit through the use of temporary diversions. Stormwater infiltrating the pit will be collected in sumps and pumped to out-of-pit sediment storage ponds.

# 8.10.4 Integrated Mine Water Management

Surface water runoff is an unreliable source of water supply in the South Gobi. However, in-pit water will be used to supplement the main water supply for the washplant, as well as for dust suppression. In-pit sumps function as settling ponds and will be fitted with a standpipe and pump for filling water tankers.

The water pumped from the depressurization bores, and stored at a reservoir adjacent to the mine, provides a more dependable supply that can supplement the supply from Naimant Depression wellfield for use at the coal wash plant, the power plant, and the mine facilities, including potable use. This main water supply from the Naimant wellfield will be developed as the project ramps up, and additional units of the coal wash plant come online.

#### 9. COAL HANDLING AND PREPARATION PLANT

#### 9.1 Introduction

UHG's coal handling and preparation plant (CHPP) is an integral part of the UHG business unit of ER. The capital cost for this facility is significant, with remaining costs approximately US\$220 million (ex-VAT and contingencies). Without the CHPP, high-value saleable coking and thermal coal products would not be possible. The CHPP will ultimately support the handling and processing of 15Mtpa ROM.

#### 9.1.1 CHPP Feasibility Study

A detailed feasibility study was conducted by Sedgman Consulting (Beijing) Co. Ltd. in 2009 and parallels the detailed design and engineering activities of the parent company, Sedgman Limited of Brisbane, Australia.

The Sedgman CHPP feasibility study documented the coal quality analyses, the selection of the processes, and the agreed plant design criteria to which the detailed design is being developed. The study also included a preliminary construction schedule with associated challenges and the basis upon which the capital and operating costs are calculated.

# 9.1.2 CHPP Basis of Design

Norwest developed, on behalf of ER, original technical specifications for the CHPP as well as solicitation of Request for Proposal (RFP) documents The RFP required, at a minimum, the following basis of design:

- CHPP comprising the CPP, coal handling systems and related infrastructure.
- Ultimate production scale of 15Mtpa of ROM to be constructed in 5Mtpa increments to allow for orderly expansion.

- Primary products to be a variety of premium HCC and SHCC for export with 8% to 10% ash as well as potential thermal coal for either export or domestic use and secondary product thermal coal.
- Be developed in four phases of construction to match the expansion of the mine to coincide with the arrival of the railroad and match market demand, as required, to preserve cash flow.
- Be of robust, high availability construction for minimum 6,000 hours per annum operation, i.e., coal-on processing (availabilities of 7,000+ hours per annum are reported for similar CHPP systems in Australia).
- Process design required accounting for the high value of the intended coal product(s); hence, the design must maximize coking coal recovery.

Significant weighting was placed on the last two bulleted items.

# 9.1.3 Contractor Qualifications

The CHPP feasibility study contractor, Sedgman Consulting (Beijing) Co Ltd, is a subsidiary company of Sedgman Limited, the EPCM contractor on the UHG project. Sedgman has a significant history in the successful development, design, construction, operation and maintenance of CHPPs and associated infrastructure.

#### 9.2 Process Selection

Perhaps the most important element of the CHPP is the Coal Preparation Plant (CPP), i.e., the actual coal washing process that is required to upgrade the raw mined coal into a saleable product. Trade-off studies identified that a two-stage dense media cyclone (DMC)-spirals-flotation circuit would maximize the recovery of the hard coking using proven, robust, commercially available coal processing equipment.

Process simulations for each seam further indicated a significant amount of secondary product can also be recovered. While these do not have suitable coking properties, the secondary products from UHG have very good thermal properties for power generation.

# 9.2.1 Saleable Products

Based on the data to date, it is anticipated that the following products may be produced during the five year period 2010 through 2014. Coal quality and yield are indicative only at this stage, and actual values will depend on further testing and marketing studies.

• Hard coking coal, according to the specific seam being mined.

 Thermal product will be produced from the seams that are unsuitable for the production of coking coal, and from the secondary product DMC product.

# 9.3 CHPP Phased Development

By any standards the proposed UHG plant will be one of the world's largest coking coal facilities. The planned expansion of the UHG CHPP facility involves four distinct phases.

- Initial 5Mtpa Phase Coal Handling & Preparation Plant
- 10Mpta Phase 2nd CPP module and expansion of Rejects Handling and ROM CHP
- Rail Integration Phase Product coal handling and train load out facilities of CHP (15Mtpa capacity)
- 15Mpta Phase 3rd CPP module allowing full mine expansion to 15Mtpa (ad).

It is suggested that the reader refer to the attached series of material handling flowsheets for the follow phase descriptions (Figures 9.1 through 9.4.).

# 9.4 Potential Increased Capacity

As noted above, the original design criteria required a minimum annual operating run time of 6,000 hours. This was purposely conservative factoring challenges of operating a large industrial facility in the remote and sparsely populated Gobi. However, Norwest believes the current CHPP design is readily and mechanically capable of achieving 6,500 run hours per annum provided and the operating contract for the CHPP will be based on the operator achieving a minimum of 6,500 operating hours per year.

# 9.5 Staffing and Contract Operations Management

The labour staffing estimates for the operation of the UHG CHPP are based on 12 hour shifts with a three panel roster. The work pattern per roster consists of seven (7) days, seven (7) nights and seven (7) days off. Table 9.1 details the proposed management and administration staff for the four phases.

**Table 9.1 CPP Labour Staffing Requirements** 

			Rail Integration	
Position	5Mtpa Phase	10Mtpa Phase	Phase	15Mtpa Phase
Management/Admin	13	13	13	13
Operators	24 (8 per shift)	30 (10 per shift)	42 (14 per shift)	54 (18 per shift)
Lab Technicians	6 (2 per shift)	6 (2 per shift)	6 (2 per shift)	6 (2 per shift)
Artisans	21 (7 per shift)	27 (9 per shift)	33 (11 per shift)	42 (14 per shift)
Total Day Shift	30	34	40	47
Total Night Shift	17	21	27	34
Total Personnel	64	76	94	115

ER has a contract with Sedgman to provide operation readiness training and to provide contract operations management for the CHPP.

The operations readiness includes training of key workers in Australia (currently underway) prior to commissioning as well as setting up systems for:

- Logistics supply chains and spares requirements
- Management plans (HSE, Operations, Laboratory)
- Maintenance systems, procedures, and inspection requirements
- Implementation of training packages
- Implementation of recruitment strategy.

# 9.6 Project Implementation

The main challenges for the UHG CHPP design and construction are focused around the site remoteness, climatic conditions and the availability of a skilled construction workforce. A number of strategies have been proposed to mitigate these risks, namely:

- Use of Chinese design contractors experienced in cold weather design for the coal handling section of the plant.
- Use of experienced Chinese construction contractors to supplement the Mongolian work force.
- The first phase is now under construction. Most of the civil earthmoving tasks as well as concrete foundations for the CPP were completed late 2009. During June 2010, structural elements of the CHP (first phase) were completed (see Photo 9.1). As can be seen, structural steel erection has commenced.





Figure 9.1 CHPP 5Mtpa Phase Materials Handling Flowsheet

Figure 9.2 CHPP 10Mtpa Phase Materials Handling Flowsheet

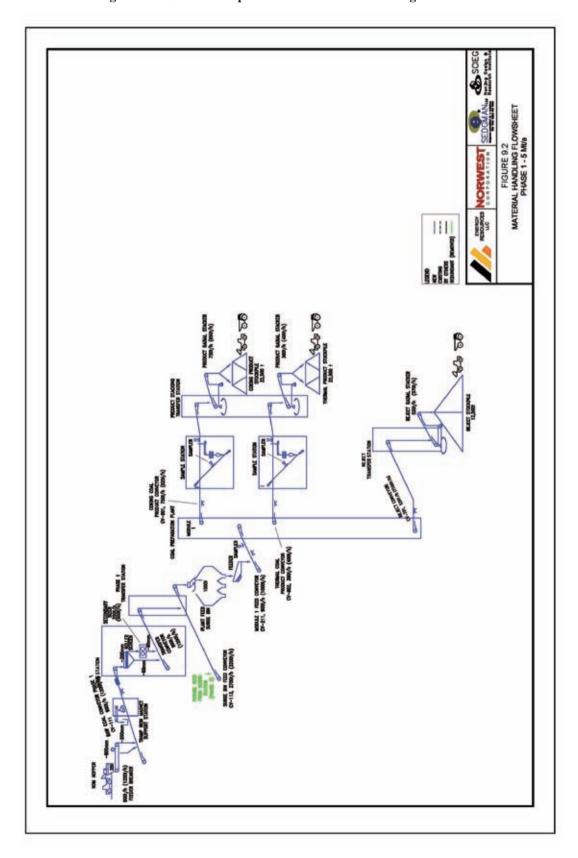


Figure 9.3 CHPP Rail Integration Phase Materials Handling Flowsheet

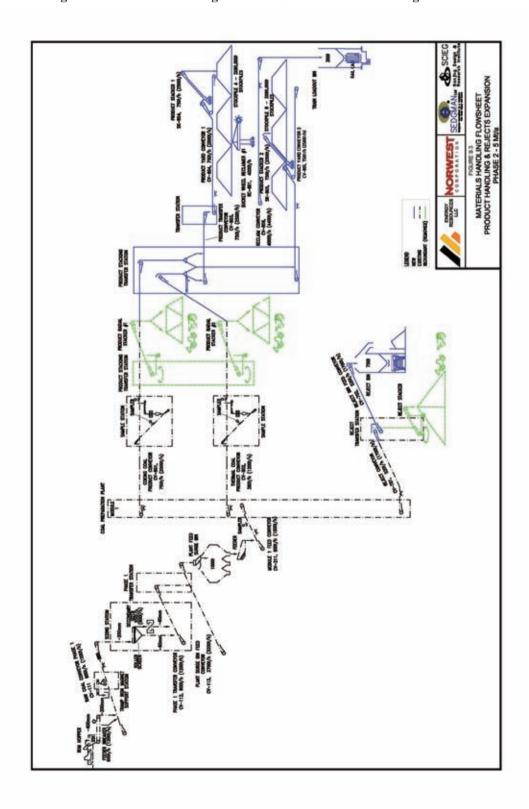
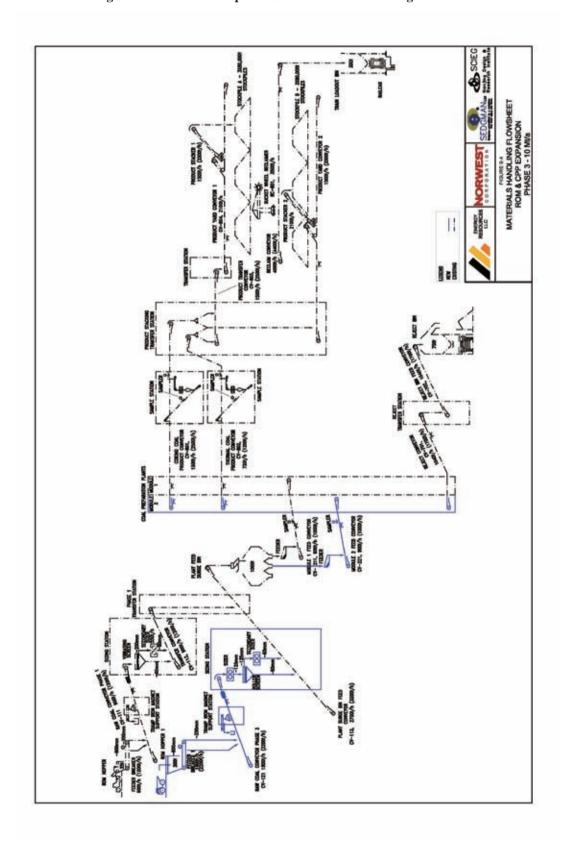


Figure 9.4 CHPP 15Mtpa Phase Materials Handling Flowsheet



# 9.7 Tailings Storage Facility

#### 9.7.1 Introduction

ER appointed Golder Associates to prepare a study for a facility to store tailings and coarse rejects from the coal washing plant (a tailings storage facility (TSF)).

Golder developed a scoping design to accomplish the following:

- Provide sufficient storage capacity for the LOM tailings output.
- Be simple to operate.
- Maximize water return.
- Capable of operating under the extreme weather conditions at the site.

Information provided by Sedgman stated that the coal yield would be about 72%, and about 25% of the reject would be tailings. The tailings would be pumped to the TSF in the form of a slurry with a solids content of around 30% while the coarse rejects would be trucked by the mining contractor. The amount of material to be stored in the TSF is indicated in Table 9.5.

Table 9.2 Amount of Material to be Stored in the TSF

Tailings tonnes	27,033,588
Coarse Reject tonnes	73,189,642
Total Reject Tonnes	100,223,230

ER have identified a site for a valley dam TSF about 3km to the east of the CHPP. The engineering design for the TSF is currently being prepared by Golder.

# 9.7.2 Design Criteria

The UHG site is extremely cold for 6 months of the year and quite warm for the balance of the year. Expected yearly rainfall is about 58mm; therefore runoff is not a major concern. Evaporation from the decant pond during summer and possibly in winter is expected to be as high as 2,588mm. Ice will form on the decant pond for much of the winter.

# 9.7.3 Storage Requirement

While no settling tests have been performed to-date on the tailings, the required total storage capacity was estimated to be about 49Mm<sup>3</sup>.

#### 9.7.4 Water Balance

The amount of water available for re-use from the tailings as it first settles, as supernatant, is estimated to be about 38% of the incoming slurry water volume<sup>10</sup>. After considering evaporation during all climatic seasons, it is estimated the net potential water return would be 36.5%.

# 9.7.5 Foundation Conditions

A geotechnical assessment has been undertaken for the proposed TSF site by Soil Trade LLC and is being used by Golder to develop the scoping TSF design.

# 9.7.6 Slurry Transportation

The slurry will be pumped to the TSF for decantation. For operational and maintenance reasons it is preferable that the slurry pipeline be located on the surface. Based on experience with tailings pipelines in the cold north of Canada it was decided to locate the pipeline on the surface.

# 9.7.7 Celled Operation

The TSF footprint is to be divided into two sections, with each section further divided into a series of cells. Smaller cells are to be operated during the winter and a large cell to be operated during the summer. The cells are developed using waste rock to build the internal dividing walls, while there is an engineered outer containment wall which will also use mainly waste rock.

### 9.7.8 Environmental Issues

- Acid Rock Drainage (ARD) If the tailings contain sufficient reactive pyrite to generate ARD conditions, the tailings deposition operation will need to address ways of minimizing ARD generation.
- Seepage Generally seepage from coal tailings TSFs are not a significant environmental issue.
- Dust The site is very windy and dust storms are frequent through the year. As a
  result the TSF may generate some fugitive dust during these conditions.
- Closure Sand/dust storms are persistent through this region, with about 20 days
  of dust storms at the site per year. Golder suggests that the best closure option would
  be to place a layer of rejects covered with waste rock over the surface of the TSF
  at closure.

No allowance for water harvesting from rainfall has been allowed.

# 10. TRANSPORTATION

# 10.1 Roadway Transportation

The UHG coal mine has already commenced production at a rate of about 2.5Mtpa of (unwashed) coal which is being transported by truck to the Chinese border at Gashuun Sukhait (see Photo 10.1). Transportation is currently along an unpaved road, first constructed in 2008. While ROM coal from UHG will increase to 3.8Mt this year, the majority of coal sold in 2011 will be washed coal. Transportation of coal by truck will continue until the railway is commissioned. Commissioning of the railway is expected to occur in 2013.

The current road has deteriorated since production began at UHG, and is not expected to be adequate for the upcoming increases in production. Hence, a new paved road is already under construction and will be completed by September, 2011. It is expected to be substantially complete by the start of 2011, and sections will be used as and when they are ready. It will have sufficient capacity for transporting volumes from UHG's target plateau capacity of 15.0Mtpa of ROM production, and will serve the operation needs until a rail link is established (proposed beginning of 2013). The paved road will also transport third party volumes for a commercial tariff. Once the rail link is established, the road will be released to the government for public use. A feasibility-level study and report on the proposed haulroad has been prepared by Leighton, with assistance from Snowy Mountains Engineering Corporation (SMEC) and others (see Feasibility Study Report (Draft), M1006 – UHG Coal Haul Road Project: Ukhaa Khudag to Gashuun Sukhait, May, 2010).

Two haul road designs have been proposed. The 'base case' plan features a road pavement design to standards typical of the Mongolian Highway Standards. This design will likely require extensive maintenance in order to withstand the anticipated traffic volume. An alternate design is also proposed that features a more robust pavement surface, assuming that axle loads are reduced to 17-18t through the use of double trailer 'road train' vehicles. The alternate design features a relatively high up-front capital costs for construction, but lower maintenance costs over the life of the road. The 'base case' design was assumed for the purposes of this report, subject to enhanced capital. Other advantages to the use of a permanent haul road include a reduction in the amount of fugitive dust produced, as well as obviating the need for trucks to create destructive "alternative" tracks in order to avoid damaged, and unproductive, road surfaces.

Photo 10.1 UHG Coal Transportation Trucks



# 10.2 Railway Transportation

The new mine and associated facilities will allow the UHG mine to progressively expand the mine production rate in increments of 5Mtpa to 15Mtpa. ERR will construct a railway about 236km in length and with a capacity of 30.0Mtpa to transport coal and other mineral commodities into China via Gashuun Sukhait. From Gashuun Sukhait the trains will move on Chinese railway infrastructure either to their ultimate destinations within China or to Chinese seaports for export to third countries.

An alignment based upon engineering and environmental considerations was developed to serve the Tavan Tolgoi coalfield as well the Ivanhoe Mines/Rio Tinto Oyu Tolgoi copper mine, also located in the region. In addition to UHG, several other companies are interested in using the new railway to haul coal and other commodities to market centers. According to ERR, the projected traffic over the UHG railway to Gashuun Sukhait is estimated at approximately 25Mtpa by 2016.

UHG mine development is supported by infrastructure development projects such as paved road and railway construction.

# 10.3 Railway Infrastructure and Equipment

UHG, at its design capacity of about 9Mtpa (air dried basis) of coal sales, will load about 4.5 trains per day while other mines will increase loading to approximately 12 trains daily. The only interface of UHG-Gashuun Sukhait with other railways will be with the national railway of China at the border crossing of Gashuun Sukhait. ERR will be responsible for all tracks and facilities on Mongolian territory.

Railway infrastructure will include:

- Maintenance Facilities and Operations Control Center
- Terminal Stations
- Border Station at Gashuun Sukhait
- Ganqimaodu Border Terminal
- Intermediate Stations.

# 10.4 Rolling Stock

#### 10.4.1 Introduction

The amount of rolling stock, i.e. the number of wagons and locomotives is defined by the transport volume, the locations and distances to the delivery points, the speed achieved by loaded and empty trains, the turnaround time and the headway.

#### 10.4.2 Diesel Locomotives

Based upon elevation changes and load, the most powerful locomotives have been chosen and double heading is required. The locomotive taken into consideration for the running time calculations is the type ES44ACi diesel locomotive by General Electric, with a maximum power rating of 3,356kW.

# 10.4.3 Wagons

Based upon availability and capacity, the current design calls for aluminum-sided wagons that can carry a net load of 73.4 tonnes (10,000 gross tones/train) while meeting Chinese standards.

# 10.4.4 Number of Wagons

The number of wagons is based on the transport volume, the net load of the trains, the number of trains to be operated, the required headways and the turnaround times to the individual destinations.

The duration of the border crossing procedures has a major impact on the turnaround times. The estimated number of wagons required to transport 28Mtpa is listed below in Table 10.1.

Table 10.1 Estimated Numbers of Wagons Required

Number of Wagons Required

Loading Station		2012	2013	2014	2015	2016
UHG (million net tonnes)		5.85	8.66	8.73	8.42	8.18
UHG to Batou	ERR-owned	89	212	212	212	212
UHG to Ganqimaodao	Leased	246	280	286	266	258
Reserves		54	54	54	54	54
Total number of wagons		389	546	552	532	524

# 11. OPERATING COSTS

#### 11.1 Introduction

Cash operating cost estimates were made by the various contributors for the different aspects of the Project. These are summarized in Table 11.1 (does not include road or rail transportation cost or SG&A costs).

Table 11.1 Mining and Processing Cash Operating Cost Summary (Cash Basis)

	2010	2011	2012	2013	2014
ROM Coal (000 tonnes, adb)	3,782	7,003	10,729	14,722	15,247
Mining & Operations					
Mining	\$20.90	\$24.85	\$ 28.82	\$ 21.32	\$ 21.28
Coal Processing/Handling*	\$ 1.13	\$ 3.60	\$ 3.74	\$ 3.00	\$ 3.52
Total (\$/ROM t)	\$22.03	\$28.45	\$ 32.56	\$ 24.32	\$ 24.80

Includes all processing, handling, water and power supply, and distribution costs.

Table 11.2 Total Cash Operating Cost Summary (Cash Basis) (\$000)

_	2010	2011	2012	2013	2014
Workforce employment	16,040	25,569	28,704	29,916	30,042
Equipment and consumables	38,986	96,707	191,654	201,864	223,452
Fuel, electricity, water and other services	18,202	43,986	81,202	82,269	85,158
On- and off-site administration	16,070	36,288	40,659	42,060	42,106
Environmental protection and monitoring	1,500	2,000	2,000	2,000	2,000
Transportation of workforce	2,470	1,030	1,030	1,150	1,150
Product marketing and transport	67,718	105,910	137,754	130,470	128,334
Non-income taxes, royalties and other					
governmental charges	23,355	47,303	76,046	97,844	95,886
Others^	14,265	31,396	44,797	39,533	34,851
Total	198,605	390,190	603,847	627,107	642,980

<sup>^</sup> Others include contractor fees

For illustrative purpose, the following table summarizes all of our estimated cash operating costs per ROM tonne:

Table 11.3 Total Cash Operating Cost Summary (Cash per ROM tonne basis)(\$/ROM t)

	2010	2011	2012	2013	2014
Workforce employment	4.24	3.65	2.68	2.03	1.97
Equipment and consumables	10.31	13.81	17.86	13.71	14.66
Fuel, electricity, water and other services	4.81	6.28	7.57	5.59	5.59
On and off-site administration	4.25	5.18	3.79	2.86	2.76
Environmental protection and monitoring	0.40	0.29	0.19	0.14	0.13
Transportation of workforce	0.65	0.15	0.10	0.08	0.08
Product marketing and transport	17.90	15.12	12.84	8.86	8.42
Non-income taxes, royalties and other					
governmental charge	6.17	6.75	7.09	6.65	6.29
Others <sup>^</sup>	3.77	4.48	4.18	2.69	2.29
Total	52.51	55.72	56.28	42.60	42.17

Others include contractor fees

It is noted that there is a significant increase in unit cash operating costs over 2011 and 2012. This is due to several factors including a relatively high depreciation and related contractor charges over that period due to the large up-front purchase of mining equipment.

It is noted that since publication of the BFS, various cash operating and capital cost estimates have been revised. In the case of mining costs, estimates have been revised to reflect the expected continued use of Leighton as a contract-miner through the first six years of the

Project. CHPP costs have been revised to reflect a re-design of the coal handling facilities, as well to account for actual costs incurred during the 5Mtpa phase of the CHPP construction schedule. Cost estimates for water supply, and rail and road transportation, are based on revised design work and assumptions about implementation.

All cash operating costs are reported in US\$, exclusive of VAT, on a 2010 constant-dollar, un-inflated and un-escalated basis. Therefore, cash operating costs reported here do not include depreciation.

# 11.2 Proposed Operating Costs: Mining

#### 11.2.1 Introduction

As part of their mine planning efforts, Leighton prepared capital and operating cost estimates. As previously described, the BFS assumed that the mine would be operated by ER, and not by the contractor, Leighton, from Year 2 onwards. However, it is currently expected that Leighton will continue to operate the mine through the first six years of the LOM, and costs have been adjusted accordingly to reflect this cost structure.

In reporting a "contract miner" cost structure instead of an "owner operator" scenario (as used in the BFS), the following were taken into account:

- Updated and revised mine plan.
- Capital depreciation and financing charges were added.
- Operating costs adjusted to reflect no Maintenance and Repair Contract (MARC).
- Equipment operating lives adjusted to reflect no maintenance under typical MARC approach, as opposed to "contractor miner" approach, affecting capital purchase and replacement schedule.

Capital and operating costs were determined through a combination of quoted costs or adjusted cost estimates (e.g., factored historical costs) for major and minor equipment, respectively.

# 11.2.2 Direct Operating Cost Estimate

Leighton uses an in-house software and database system referred to as CATS (Computer Aided Tendering System). CATS was used to estimate costs by major activities, including:

- Drill and Blasting
- Stripping, loading and hauling waste
- Mining, loading and hauling coal

- Ancillary and support operations
- Coal ROM re-handle and wash plant rejects haulage.

Direct operating costs include costs directly related to mining activities and include all labor, materials and equipment costs for drilling and blasting, waste loading and hauling, coal mining and hauling, rejects handling and all support and ancillary operations. Power costs for the project have been accounted for separately.

#### Workforce Labor

Labor costs have been estimated based on current or projected wages and salaries paid at the UHG operation for all expatriate and national (i.e. Mongolian) personnel. In addition, there have been allowances for offsite and overhead labor costs.

Wages and salaries have been adjusted to take into account additional burdens, i.e., they are reported on an "on-costed" basis. (i.e. including all fringe benefits and other allowances.) Factors taken into account in order to derive "on-costed" wages.

#### Materials Costs

The cost of materials includes the cost of all supplies and sundry items that are not directly related to equipment costs. Materials costs therefore do include incidental diesel, explosives, ground engaging tools (GET; for example, buckets), drilling products and accessories, dewatering equipment, IT and offices supplies, safety supplies, tool allowances and other miscellaneous items. However, materials costs do not include costs such as labor, or fuel and major parts for mining equipment.

Through many years of experience, Leighton has built up a network of relationships with material and supplies providers within Australia and Asia. Major materials costs based on formal quotations from those suppliers include:

- Explosives
- GET
- Drilling and blasting supplies
- Other materials (dewatering pipes, safety supplies, etc).

Costs for minor items were based on Leighton's prior experience.

# Equipment Costs

Equipment costs captured in this study have been based on estimated rates including diesel usage rate, tire/track wear and consumption and other miscellaneous items. Also captured are costs of running maintenance and workshop facilities, as well as maintaining a spare parts inventory.

As the majority of mining equipment proposed runs on diesel, fuel represents a significant portion of equipment costs. A unit price of US\$0.90/l (excluding VAT) has been assumed, based on current market conditions.

# 11.2.3 Overhead and Additional Costs

All costs not directly related to production and mining activities have been captured under "Overhead" costs. Although these may be thought of as costs that are incurred regardless of mining production, in fact it is reasonable to assume that these costs will be generally affected by the magnitude of the operations. For this reason, Leighton has estimated these costs according to a phased approach to mine development.

Recruitment, Travel and Allowances

An employee turn-over rate of 25% per annum has been assumed for the purposes of estimating recruitment costs.

Travel expenses for personnel have been made assuming regular international travel for expatriates, and rotational transport for national staff (80% assumed to return to Ulaanbaatar once/rotation, remaining transported to Dalanzadgad).

Support and General Equipment

Costs for support and ancillary equipment has been estimated under these O&A costs. The following general equipment has been included:

- Light, medium and heavy vehicles for transportation of material and people around the mine site.
- Various handlers and cranes.
- Heavy tools (compressors, welders, generators, etc.).
- Other miscellaneous items (mobile light plants, water stand-pipe, etc.).

Site and Office Services

Costs were estimated for items such as maintenance and replacement of computers and associated hardware, computer software, telecommunications and two-way radio communications, office supplies and other general site service and consumables costs.

Safety and Training

Costs were also estimated for supplies and consumables related to safety and training, as well as annual costs and direct expenses.

# Fees and Insurance

Based on prior experience, indirect costs have been estimated for insurance, permitting, legal services and community welfare and inventory holding costs.

#### Additional Costs

Additional costs include the costs of accommodation and messing, as well as a profit component. The margin is calculated based in part on ROI and net book value of mining equipment purchased and used in the operation, as well as on Leighton's performance in meeting certain Key Performance Indicators (KPIs).

# 11.3 Proposed Operating Costs: CHPP

The CHPP life cycle operating costs are summarized below.

Table 11.4 UHG CHPP Life Cycle Cash Operating Cost Summary

	2010	2011	2012	2013	2014
ROM Tonnes (000t, adb)	3,782	7,003	10,729	14,722	15,247
Cash Cost (\$/ROM t)	NA	\$ 2.28	\$ 2.09	\$ 2.11	\$ 2.03

The scope of the operating cost estimated is based on the following interface points:

- Underside of grizzly on the ROM coal bins
- Discharge of product coal from train load out bin
- Discharge into the tailings dam up to 3km away
- Discharge of reject coal from reject bin
- Raw water delivery into clarified water tank
- Water pumps.

The life cycle cost estimate includes all costs associated with:

- Operating labour including all allowances and relief labour
- Maintenance costs including labour
- Safety audits and consumables
- Auxiliary mobile equipment maintenance and diesel usage

- Sampling and analysis, including labour
- Operator training
- Process consumables
- Support services (FIFO Ulaanbaatar)
- Product stockpile management
- Power costs are captured outside of CHPP cost estimates.

The cost estimate excludes all costs associated with:

- Maintenance capital and strategic spares
- VAT
- Power
- Boiler Operating Costs
- ROM stockpile management
- Product haulage
- Rejects haulage
- Site water management
- Set-up costs including workshop and laboratory fit out
- Depreciation and mobile equipment ownership costs
- Local, State and Federal Government charges
- Overheads such as insurance
- Water charges
- Tailings dam construction and extension
- Reclamation and rehabilitation costs
- Accommodation for personnel

- Transport of personnel
- Taxes, royalties, license fees and escalation.

# 11.4 Proposed Operating Costs: Transportation

### 11.4.1 Road Transportation

As described previously, prior to completion of the railway by the start of 2013, coal will be transported along a paved, permanent haul road to the Chinese border. The majority of the coal will be hauled by contractor. The remaining coal will be hauled by ER's transportation company, Trans Gobi LLC (Trans Gobi). Estimated costs are as follows.

**Table 11.5 Road Transportation Operating Cost Summary** 

	2010	2011	2012	2013	2014
ROM Tonnes (000t, adb)	3,782	7,003	10,729	14,722	15,247
ER Transportation (\$/ROM t)	\$ 2.85	\$ 3.09	\$ 2.87	\$ 0.00	\$ 0.00
Contractor Transportation					
(\$/ROM t)	\$13.49	\$ 9.84	\$ 7.88	\$ 0.00	\$ 0.00

Operating costs for Trans Gobi include fuel, maintenance, labour and various overhead expenses. Costs for the contractor are based on a quoted charge of \$18/t, then adjusted for haul distance.

# 11.4.2 Railway Transportation

Based on previous feasibility-study work, direct cash as well as overhead costs for rail transportation are captured under a tariff rate, which is assumed to be levied against ER for every tonne of coal transported by rail. Rail transportation is assumed to begin at the start of 2013, under the current design using a Standard Gauge as its basis.

# 11.5 Proposed Operating Costs: Water Supply

Water supply operating costs will include maintenance (including labor), energy, and replacement costs. Ongoing operations and maintenance costs have been estimated using a number of sources, and are summarized in Table 11.6.

Table 11.6 Water Supply Cash Operating Cost Summary

	2010	2011	2012	2013	2014
ROM Tonnes (000t, adb)	3,782	7,003	10,729	14,722	15,247
Cash Cost (\$/ROM t)	\$ 0.13	\$ 0.29	\$ 0.19	\$ 0.21	\$ 0.21

The power supply will initially be provided by diesel generator, provided and maintained by ER. The power station proposed at the mine site, or power from a transmission line to be completed in mid-2012, may reduce energy costs, but has not been considered.

# 11.6 Proposed Operating Costs: Power Generation

# 11.6.1 Power Generation (3 x 6MW)

The estimated annual operating costs under for the smaller 3 x 6MW unit plant are summarized in Table 11.7.

**Table 11.7 Power Generation Cash Operating Cost Summary** 

	2010	2011	2012*	2013	2014*
ROM Tonnes (000t, adb)	3,782	7,003	10,729	14,722	15,247
Cash Cost (\$/ROM tonne)	\$ 0.29	\$ 0.47	\$ 0.60	\$ 0.22	\$ 0.85

<sup>\*</sup> Includes maintenance costs, \$3.2M in 2012 and \$9.7M in 2014, inclusive of VAT

Excess power will be purchased from a third party (see above for discussion on construction of a transmission line to the South Gobi region, operation mid-2012). It is understood that power would be made available for approximately \$0.10/kWh (115 MNT/kWh). Excess power is not included in Table 11.6.

# 11.6.2 Personnel Requirements

The total required number of people to operate the 3 x 6MW during the five year period 2010-2014 is 134 people.

#### 12. CAPITAL EXPENDITURE

#### 12.1 Introduction

The estimated capital costs for the mining project (five year period, 2010 through 2014) are summarized in Table 12.1. These capital estimates exclude the railway which will be a separate profit center (see Table 12.6).

Table 12.1 Project Capital Cost to Reach Full Production (\$000)

	2010	2011	2012	2013	2014
Mining	\$ 3,975	\$ 8,579	\$ 3,760	\$ 0	\$ 0
CHPP	\$101,688	\$105,024	\$110,278	\$ 0	\$ 0
Tailings Dam	\$ 10,785	\$ 0	\$ 2,522	\$ 3,079	\$ 0
3 x 6MW Power Plant	\$ 26,729	\$ 4,474	\$ 0	\$ 0	\$ 0
Power Distribution	\$ 6,400	\$ 0	\$ 0	\$ 0	\$ 0
Water Supply/Distribution	\$ 23,120	\$ 4,136	\$ 19,451	\$ 1,040	\$ 0
Coal Haulage & Transportation* .	\$ 33,140	\$ 27,845	\$ 0	\$ 0	\$ 0
Site Infrastructure	\$ 6,910	\$ 7,387	\$ 8,926	\$ 9,328	\$ 8,926
Other	\$ 4,523	\$ 5,302	\$ 4,951	\$17,551	\$ 6,211
Total CAPEX	\$217,271	\$162,748	\$149,888	\$30,997	\$15,136

<sup>\*</sup> Includes ER's 50% share of coal haulroad costs, plus \$10M for 100 coal haul trucks in 2011

Unless otherwise specified, all costs reported here are inclusive of VAT and Mongolian duties, import duties, but exclusive of inflation, contingencies, etc. Costs are reported in US\$, on a 2010 constant-dollar basis and are un-inflated and un-escalated.

# 12.2 Proposed Capital Costs: Mining

#### 12.2.1 Introduction

As previously described, the BFS estimated costs under the assumption that Leighton would operate UHG, under a "contract miner" basis, for the first year of mining only; in fact, it is expected that Leighton would operate the mine through the first six years of project "ramp-up".

As before, capital costs were determined through a combination of quoted costs or adjusted cost estimates (e.g., factored historical costs) for major and minor equipment, respectively.

Capital cost estimates for major equipment were provided through Leighton's extensive vendor network, and compared with recent quotations for similar operations in the region. The Leighton group is one of the world's largest purchasers of mining equipment, and is able to realize significant savings in equipment purchase costs. Capital cost estimates are submitted on

a "turn-key" basis and include factors such as sea/land freight, insurances, port charges, erection and commissioning. Equipment costs are primarily based on 1st quarter 2010 pricing with exchange rates of 1620MNT:US\$ and 1.4US\$:EUR applied.

# 12.3 Proposed Capital Costs: CHPP

The estimating procedures were based on applying supply and construction rates to an estimated quantity take-offs, i.e., bills of materials. The UHG capital cost estimate has been established against the following basis of estimate:

- Quantity take-offs were developed from a combination of preliminary designs and recent "as built" information from the Sedgman project database.
- Productivity rates, equipment prices, labor and material rates were drawn from supplier budget prices and the Sedgman cost database for current projects.
- Design, project management and project preliminaries are estimated based on previous experience.

As described previously, the CHPP will be bought online in a phased approach. Table 12.2 is a direct cost capital breakdown for the phases.

Table 12.2 Direct Cost Capital Breakdown for Four Phases<sup>12</sup> (\$000)

	5Mtpa	10Mtpa	Rail Int.	15Mtpa
Raw Coal Handling	\$ 0	\$ 9,602	\$ 0	\$ 3,682
CPP	\$ 0	\$23,858	\$ 0	\$23,127
CPP Services	\$ 0	\$ 707	\$ 0	\$ 599
Reject Handling	\$ 0	\$ 3,711	\$ 0	\$ 71
Product Handling	\$ 0	\$ 4,082	\$38,009	\$ 8,300
Train Loadout	\$ 0	\$ 0	\$ 1,522	\$ 0
General	\$ 0	\$13,577	\$ 1,477	\$ 562
Earthworks	\$ 0	\$ 131	\$ 5,044	\$ 825
Allowances	\$ 0	\$19,749	\$31,555	\$26,035
Duties	\$ 2,208	\$ 1,615	\$ 1,115	\$ 1,230
TOTAL	\$78,325	\$77,033	\$78,723	\$64,430

Based on the proposed project implementation plan, the projected capital expenditure cashflow for the five year period is summarized in the Table 12.3.

Exclusive of VAT, duties and contingencies

Table 12.3 Phased Capital Cost Expenditure Cashflow Summary (\$000)

	2010		2011		2012		2013	2014
5Mtpa Exp Phase	\$ 73	3,094	\$	1,692	\$	0	\$0	\$0
10Mtpa Exp Phase	\$ 28	3,593	\$	56,143	\$	0	\$0	\$0
Rail Int Phase	\$	0	\$	24,745	\$ 61	,850	\$0	\$0
15Mtpa Exp Phase	\$	0	\$	22,444	\$ 48	,428	\$0	\$0
TOTAL	\$101	,688	\$1	105,024	\$110	,278	\$0	\$0

# 12.4 Proposed Capital Costs: Water Supply and On-Site Distribution

The total estimated capital costs to secure the water supply infrastructure (and perform all necessary exploration) are summarized in Table 12.4. This accounts for revisions to the design made since publication of the BFS, to account for additional water requirements arising from a more aggressive ramp-up schedule. Also included are exploration costs to develop the Naimdai depression, an additional source of water that will be required.

Table 12.4 Water Supply and Distribution Capital Cost Expenditure Summary (\$000)

	2010	2011	2012	2013	2014
Capital Cost (\$)	\$23,120	\$4,136	\$19,451	\$1,040	\$0

# 12.4.1 Exploration Costs

The necessary future exploration costs are to account for such items as land surveying, geophysical surveying, drilling, logging and installation and analysis of exploration wells.

# 12.4.2 Water Supply Infrastructure

The capital costs for the water supply infrastructure (off-site water supply as well as site distribution) includes pumps, HDPE and steel pipeline, construction, power supply, a site distribution system and EPCM services.

# 12.5 Proposed Capital Costs: Power Generation

# 12.5.1 Power Generation (3 x 6MW)

The estimated capital costs are based on updated costs, as summarized in Table 12.5.

Table 12.5 Power Generation and Supply Capital Cost Expenditure Summary (\$000)

	2010	2011	2012	2013	2014
12 MW Power Plant	\$23,746	\$ 0	\$0	\$0	\$0
Additional 6 MW turbine	\$ 2,983	\$4,474	\$0	\$0	\$0
TOTAL	\$26,729	\$4,474	\$0	\$0	\$0

In addition, \$6.4M is required in 2010 for installation of an on-site distribution line and sub-station.

# 12.6 Proposed Capital Costs: Rail

Capital expenditures on the railroad are scheduled to begin in 2011, in order to ensure that rail service may begin at the start of 2013. These capital costs are not included in mine project capital cost schedule. Railroad capital costs are inclusive of VAT, without contingencies, are in 2010 constant US dollars.

Table 12.6 Railway Capital Cost Expenditure Summary

	2010	2011	2012	2013	2014
ERR Capex (\$M)	\$0	\$380	\$288	\$21	\$8

### 13. ENVIRONMENTAL MANAGEMENT

There are several potential impacts from the project that must be addressed by ER, however, at this time all identified impacts are manageable with established practices used in these types of projects.

An Environmental and Social Action Plan (ESAP) has been developed by ER to mitigate the negative aspects of the project and enhance potential benefits of the project. Although not finalized, several mitigation measures of major environmental impacts discussed in this report are provided below.

#### 13.1 Environmental Policy: General

ER is fully committed to careful environmental management in order to address some of their stated, core values, including a commitment to perform environmentally and socially, responsible mining operations. Such a management plan covers efficient use of resources, reducing the environmental footprint of the operations, controlling greenhouse gas emissions, recycling and reducing waste and accounting for all environmental aspects of mine closure,

ER have commissioned or performed over 30 individual studies since 2008, to ensure regulatory compliance and adherence to their stated core environmental values.

Legislative platforms include all applicable Mongolian regulations, as well as guiding policies from World Bank/International Finance Corporation (WB/IFC, respectively), Asian Development Bank (ADB) and the European Bank for Reconstruction and Development (EBRD).

ER's core documents include:

- Environmental and Social Impact Assessment (ESIA) for UHG Phase I and II
- Environmental Impact Assessment (EIA)
- Monitoring program documents (baseline data collection)
- UHG Social Impact Assessment
- Integrated Environmental Management Plan (IEMP (ESMP))
- Integrated Environmental Monitoring Program (IEMP)
- Environmental and Social Action Plan (ESAP)
- Mine Closure & Rehabilitation Plan (MCRP)
- Detailed Water Management Plan (DWMP)
- Public Consultation and Disclosure Plan (PCDP)
- Resettlement Action Plan (RAP)
- ESIA/ESAP/IEMP Performance Reports

# 13.2 Air Quality

A Dust Management Plan (DMP) has been proposed. This takes into account the fact that the Project is located in a desert environment with ambient (pre-Project) dust levels that often exceed Mongolian standards. The prime objective of the DMP is to reduce dust emissions from the Project to the extent practicable, in an effort to prevent Project activities from causing ambient dust levels to exceed Mongolian standards.

# 13.3 Flora and Fauna

A Flora and Fauna Management Plan (FFMP) has been developed for the project to protect the natural environment and ecosystems.

#### 13.3.1 Flora

The Project may impact protected plants therefore protection measures need to be considered. For example, the use of rare species and the seeds of rare species in rehabilitation will be considered during reclamation.

### 13.3.2 Fauna

Eight protected species of mammals, six protected bird species, and two protected reptile species have a reasonable potential to be present within the Project area, and efforts will be made to ensure their protection in accordance with Mongolian regulations,

### 13.4 Water Resources

Effective water management is an essential part of ensuring the operational integrity of the Project and of limiting negative environmental impacts associated with the Project during construction and ongoing operation. A Water Resources Management Plan has been developed for the project. The objectives of this Water Management Plan are to:

- Interface with the Erosion and Sediment Control Management Plan.
- Interface with the FFMP.
- Limit Project impacts in nearby areas resulting from groundwater abstraction, particularly on any surrounding sensitive groundwater dependent ecosystems (e.g. springs) and on herder livelihoods.
- Limit impacts of the railway on water resources.
- Minimize the potential for Project impacts on alteration of natural surface water flow patterns/hydrology, including loss of catchment flows due to interception.
- Minimize the potential for Project activities to result in pollution of surface water and groundwater sources.
- Provide sufficient water for dust suppression, process water and other uses.

### 13.5 Water Quality

A comprehensive Waste Management Plan (WMP) has been developed for the project to reduce impacts to water quality. Key objectives of this WMP are to:

- Limit the volume of wastes generated and provide for reusing, recycling, or disposing of wastes that cannot be avoided in a manner that reduces negative impacts to human health and the environment.
- Provide for monitoring and assessment of the waste management process.

The CHPP fine and course reject material may be a source of contamination, especially if it is acid-forming material. Fly ash and bottom ash are capable of introducing trace materials into surface and groundwater if not managed properly. Therefore, an ARD Management Plan

shall be developed to prevent pollution resulting from acid generation from coal mine products including wastes from processing facilities. Facilities will be established to manage mine waste such so as to control acid generation drainage during mine operations and post closure. The acid forming potential of all mine and processing wastes during operations will be quantified to verify management measures are being appropriately applied.

### 14. OCCUPATIONAL HEALTH & SAFETY

ER is committed to goal of zero accidents for all employees and contractors working on site as well visitors who enter, or are near to, the mine site and operations. To achieve this goal, ER has implemented an Occupational Health & Safety (OH&S) policy that sets out standard approaches to risk minimization and operating procedures for reporting of all incidents, including near misses. Visitors to the UHG mine site are briefed on OH&S procedures and receive induction training that includes risk identification. Policies are in place to facilitate subcontractor's compliance with the overall mine OH&S plan. All Contractors are required to meet ER's OH&S standards and policies and to report all incidents and near misses.

### 14.1 Mine Safety

Leighton is currently operating in coordination with ER to ensure that UHG activities are controlled in such a way as to provide a safe and healthy working environment whilst satisfying Mongolian legislative requirements, industry best practice and client's expectation.

A training program is in development and currently being implemented that will ensure all employees may conduct their work in a safe manner. In addition, it is a requirement of Mongolian Labour and OH&S law that all employees are to take safety and hygiene training annually. As part of the Safety Management System implementation, all staff, employees and visitors are subjected to a drug/alcohol testing program.

### 14.2 CHPP

This project has necessarily required a formal process risk identification and management in the CHPP design. This study included reviews during the design phase and secondly recommendations from our operations experience on design improvements.

### 14.3 Work Camp Health and Safety

Workers safety during construction and while living in work camps will be managed consistent with Mongolian laws. Contractors' health and safety programs will be required to meet these standards. Similar requirements will be met by ERR as they pertain to work camps associated with Railway construction.

### 14.4 Contractors Health and Safety

The Contractors Base EHS Requirement Manual shall be provided to all Contractors performing work for UHG Project. Its prime purpose is to provide basic information relating to the HSE standards and the safety behaviours expected from the Contractor while performing work at the ER project. It also references project policies, procedures and other information relevant to a contracting relationship with ER. The UHG Project management, at all levels, is dedicated to assuring that its employees and contractors are provided a safe and healthy place to work on each of its projects.

#### 15. RISK ANALYSIS

### 15.1 Mining Risk

In the previous BFS study, Norwest evaluated each aspect of the mining operation and assigned a Risk Severity level to each ranging from no impact to extreme. No aspects of the mining operations were found to necessitate an extreme rating. With the mine now in operation, Norwest has updated the risk analysis with a description of the mitigating measure ER and Leighton have implemented in order to address project risk.

### 15.1.1 Project Predevelopment

Primary project predevelopment risk consisted of start-up delays to the project arising from delays due to securing equipment, government approvals and construction of infrastructure.

Since the initial risk analysis, the risk of start-up delay has been mitigated through effective project management and building and maintaining of relationships with contractors and vendors. In addition, ER has been responsive to the requirements of the government with respect to permitting, etc.

### 15.1.2 Overburden Production

Risks were initially identified that were related to the nature of the overlying waste. Specifically, these risks arose from issues such as varying physical and geotechnical properties of waste, equipment availability and groundwater issues. The risks included lower-than-expected equipment productivities, increased operating costs, incorrect equipment selection, slope stability issues, etc.

These risks are currently being mitigated in several ways. There is currently a highly detailed precise drilling program underway that consists of drilling holes on an approximate 50m by 50m pattern in the area of short and medium-term interest. This is being supplemented with a larger-scale 500m by 500m drilling program. The primary purpose of these drilling programs is to better delineate coal quality and structure; however, they will also provide useful information concerning the nature of the overlying waste. In addition, Leighton is performing detailed scheduling and mine planning in order to optimize the use of equipment according to waste material type.

### 15.1.3 Coal Mining

Previously identified risks relate to the variability of coal seams and problems related to marketing of coal products. This could lead to decreased or inconsistent production level, increased mining costs, increased coal dilution, etc.

As above, an aggressive drilling program (currently underway) is doing much to mitigate the risks associated with coal mining through improved understanding the of the coal deposit, quality and structure. In addition, Leighton is performing detailed mine planning and scheduling.

### 15.1.4 Overburden Dumps

The primary risks identified for the overburden dumps included slope failure, and Acid Rock Drainage (ARD) as well as erosion control and other environmental effects.

The risks of slope failure are being mitigated through site inspections of the dumps. Further geotechnical analysis of the waste material will be implemented in response to any slope stability problems, if/when they occur. Although the potential waste characterization testing indicates that ARD is unlikely. Although the effects of ARD at a mining operation can be serious, with the relatively low amount of rainfall in the South Gobi it is highly unlikely that ARD would be a problem at UHG. Environmental concerns due to sediment laden runoff from the overburden dumps is being addressed though the use of drainage control structures such as diversion ditches, channels and sediment storage ponds. Such structures are adequately designed to convey water without themselves being eroded, and will be maintained and cleared of accumulated sediments and other debris.

### 15.1.5 Rejects Disposal

There is a risk that coarse reject material, which is to be disposed of in the overburden dumps, may be subject to rapid oxidation and spontaneous combustion. This could lead to air quality and safety issues, or lead to instabilities in dumps if coarse reject materials were to be mixed with other waste.

Spontaneous combustion of coal is a common issue at coal mines, with which Leighton are familiar and experienced. Spontaneous combustion of coarse rejects is somewhat rarer and is not expected. Spontaneous combustion is easily managed by restricting exposure to air and surface moisture. Should spontaneous combustion be observed, then Leighton will mitigate the effects by exercising proven control methods such as encapsulating the rejects material in the overburden waste dumps, or inundating it with water and removing it from contact with other material that may be susceptible to spontaneous combustion.

#### 15.1.6 Maintenance

Risks associated with maintenance include decreased availability and the skill level of maintenance personnel. While decreased equipment availability has a serious detrimental effect on equipment productivity, and therefore operating costs, it is noted that Leighton are a world-class contractor and are considered highly competent in maintaining and operating equipment. It is therefore considered highly unlikely that ineffective maintenance will be a serious issue at UHG.

Leighton have implemented a detailed and proven maintenance program on all their equipment that take into account such issues as scheduled downtimes, spares availability management, and an effective training and mentoring program in order to build and maintain the high skill level that is required. Likewise, the CHPP will be operated by Sedgman, who are also a world class contractor and considered highly competent in design, construction, operation and maintaining of CHPP and related infrastructure.

#### 15.1.7 Equipment

Risks related to equipment include decrease or delayed production due to delays in receiving equipment, spares parts or consumable supplies. This is mitigated by ER and it's contractors through effective long range planning that allows for early negotiations and ordering of the required materials. This either ensures that equipment, parts and supplies are either on hand when needed, or that there is enough time for alternate plans to be made should orders fail.

It is noted that Leighton are among the world's biggest customers of Caterpillar and Leibherr, and therefore gain a purchasing advantage over their competitors, which translate to better costs as well as shorter lead times and other concessions. This will be to ER's advantage. In addition, Sedgman are undertaking a 'readiness study' which will analyze and the requirement for holding spare parts and will streamline the compete supply chain to ensure the highest level of parts and supplies availability.

### 15.1.8 Personnel

The primary risks with personnel are a decrease in production, or increase in operating costs, related shortages in personnel or decreased labour productivity. This may arise from a failure to attract quality employees, a lack of appropriate training, or high employee absenteeism or turnover.

Measures taken to mitigate this include a competitive remuneration and benefits package, with the majority of mine operators travelling from UB on a "fly-in, fly-out" basis. Whenever possible, ER also hires workers from nearby Tsogttsetsii soum, and also plans to construct employee housing at Tsogttsetsii that will house mine workers and their families. In the long term, ER will develop the local labour pool by maintaining excellent relations with the nearby communities, and assisting with the education, health and infrastructure needs of the local

population. Currently, mine workers are housed in the man camp, which includes facilities for messing and recreation and ER allots workers vacation and leave, in order to spend time with their families. ER operates a "dry camp", with a strict no-alcohol or drugs policy that is rigorously enforced, as well as a comprehensive employee health and safety program. Experience has shown that such policies lead to reduced absenteeism and turnover, as well as increased employee morale and productivity.

In addition, ER has set-up an intensive training program for its employees. Leighton operate a "virtual" training facility that reproduces the experience of operating heavy equipment. This allows safe exposure the fundamentals of equipment operation. ER also recognizes that training of the local workforce is an important component of its long term plans for the region, and plans on establishing a technical training college that will equip the local labour pool with the tools they need to compete for the highly-skilled job requirements of the Project.

#### 15.2 Environmental and Social Risk

In the previous BFS a standard qualitative matrix was used to assess potential impacts of the project. Risk ratings for various aspects of the project were assigned based upon likelihood of occurrence and potential consequences. The majority of environmental and social impact risks identified at that time were rated "Low" or "Medium" risk. No risk was identified as being "Extreme". At the time that the qualitative matrix was generated it was noted that all identified impacts were manageable with practises typically employed in other mining projects of the nature of UHG.

The only "environmental features" that were ranked as a "high" risk, were Air Quality, and Fauna/Habitats.

### 15.2.1 Analysis of Impacts: Air Quality

Project emissions that may affect air quality fall into several broad categories:

- Dust emissions from open areas of disturbance such as roads, stockpiles, waste dumps, etc.
- Particulate and gaseous emissions from spontaneous combustion of coal stockpiles.
- Point source emissions from coal fired power plants or stationary diesel generatorsets.
- Non-stationary emissions from mine equipment and vehicles.

### Particulate Emissions

The South Gobi region, with its arid conditions and strong winds, is subject to naturally occurring dust storms that periodically exceed air quality standards for dust and particulate emissions. Such occurrences are likely to increase in the project site because of the increased area of disturbance from the mine and related infrastructure. Other potential sources of particulate emissions include coal dust (generated wherever coal is subject to mechanical handling) as well as fly and bottom ash from the power plant. Dust and particulate emissions can have an adverse affect on the safety of mine workers and local residents, as well as on vegetation.

The affects of particulate emissions is mitigated in several ways. One effective method, very common in the mining industry, is through the use of application of surface water to particulate-generating areas of disturbance. Water may be applied through a variety of different methods, including the use of "water trucks". Surfactant chemicals may also be used to enhance the effectiveness of water spraying.

Particulate emissions from the pit and the CHPP infrastructure will be mitigated through the use of water sprayers, covered conveyors, dust suppression at transfer points and appropriate dump height control and design. Coal ash will be stored in overhead bins at the plant, then hauled in dedicated trucks for disposal in the pit, with fugitive dust controlled with the use of covers or water suppression. Disposal of ash in the pit will be managed and carefully scheduled so that open working area is kept to a minimum. Once a burial area, or "cell" is completed, it will be covered with a layer of waste to prevent further emission.

### Gaseous Emissions

Gaseous emissions of concern include CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub> CO and volatile organic compounds (VOC). Given the low-level of pre-existing industrialization in the region, baseline concentration of gaseous emissions are low, and does not routinely exceed ambient air quality standards. In addition, control technology on equipment is widely available and ER has pledged to implement all measure required in order to meet or exceed standards. For these reasons, gaseous emissions are not considered to pose the level of risk that particulate emissions do. Regular testing and monitoring will be performed to ensure that compliance is met and that there are no adverse safety issues in the workplace.

### 15.2.2 Analysis of Impacts: Fauna/Habitats

Across the UHG mine site area there were three species of mammal listed as being under a protected status within the Mongolian Red Book. In addition, there is one species of bird listed as protected in Appendix II of the Convention on International Trade in Endangered Species (CITES).

Several steps will be taken in order mitigate or minimize the impacts of the mine site on local fauna. The original ecosystem and fauna will be considered before disturbance of any area, and again when considering reclamation. Disturbed areas will be reclaimed progressively to ensure continuation of habitats and protection of fauna. Both baseline monitoring and regular on-going monitoring of fauna will be performed in order to understand the impacts of the mining operations. Finally, fencing will be installed around holes and trenches in order to protect livestock and wild animals.



Lawrence D. Henchel
Vice President Geologic Services

January 27, 2012

File No. 12-5593

Dr. Battsengel Gotov Chief Executive Officer Energy Resources LLC Central Tower (15<sup>th</sup> Floor) 2 Sukhbaatar Square, SBD 8 Ulaanbaatar, Mongolia

Subject: 2011 Update of Stated Resources and Reserves

for the Ukhaakhudag Project

Dear Dr. Gotov,

Norwest Corporation (Norwest) has estimated updated coal resources and reserves for the Ukhaakhudag (UHG) mining license. Energy Resources LLC (ER) authorized Norwest to provide a statement of resources and reserves and report in-place coal quality as of December 31, 2011. These estimates are derived from the most current Norwest UHG geologic model, a detailed pit survey as of December 31, 2011 and monthly 2011 coal production reports provided by ER. The Norwest model is described in detail in the Norwest report "UHG Coal Project, South Gobi, Mongolia, Independent Technical Report", (or ITR) dated September 2010.

### **DEFINITIONS**

Definitions of key terms applied in this report are as follows:

- Resource
   A resource is that part of a deposit in such form and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, quality, geologic characteristics and continuity of a resource are known, estimated or interpreted from specific geological evidence and knowledge. Resources are subdivided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
- **Reserve** Reserve is that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. It is the economically mineable part of a Measured or Indicated coal resource.

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- Proved (Measured) Reserves—Reserves for which (a)
  quantity is computed from dimensions revealed from points of
  observation; grade and/or quality are computed from the results
  of detailed sampling and (b) the sites for inspections, sampling,
  and measurement are spaced so closely and the geologic
  character is so well defined that size, shape, depth, continuity
  and mineral content of reserves are well-established.
- **Probable (Indicated) Reserves**—Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation. A probable reserve is the economically mineable part of an Indicated resource.
- Marketable Reserves
   – Marketable reserves are the tonnages of coal, at specified moisture and quality, available for sale after beneficiation of coal reserves. Marketable reserves may be reported in conjunction with, but not instead of, reports of reserves.

EFFECTIVE DATE

The effective date of this resource and reserve statement is December 31, 2011.

### IN-PLACE RESOURCE ESTIMATES

Norwest has compiled detailed tabulations of in-place coal resource tonnes and estimated raw coal qualities for the UHG license area. The resource numbers are reported using the Australasian Code for Reporting of Mineral Resources and Ore Reserves (The JORC Code) as a guideline. The JORC code provides prescribed criteria for the estimation of resources and reserves that are accepted by the international banking and investment communities. Coal resources are inclusive of coal reserves. Coal resources have some potential to be reclassified as reserves in the future, pending the favorable results of additional exploration, investment of capital for project development, improvements in coal markets or mining technology, etc.



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Coal resources have been calculated for areas amenable to extraction by both surface and underground mining methods. Table 1 presents the total resource calculated for the UHG mining license as of December 31, 2011.

Table 1 Total In-Place Coal Resources as of December 31, 2011

Category	Mining Method	Resource Volume (m³) '000	Average Seam Thickness (m)	In Place Tonnes (Mt*)	Density (ad) (g/cm³)
Measured	Surface	128,526	5.29	195.9	1.52
ivicasureu	Underground	-	-	1	ı
Indicated	Surface	135,718	5.51	205.3	1.51
mulcaleu	Underground	57,164	6.55	88.7	1.55
Inferred	Surface	7,692	7.36	11.7	1.52
Illielleu	Underground	45,517	6.46	69.2	1.52
,	Γotal	374,617	5.75	570.8	1.52

<sup>\*</sup> Mt = Million metric tonnes (air dried).

Criteria used in the estimation of each type of resource are given below.

### **Surface Mineable Coal Resource**

Surface mineable resources were calculated for ER by Norwest and presented in an ITR finalized in September 2010. The resources stated in the report were current through May 31, 2010. Norwest calculated surface resources for this update report by two methods:

- Subtracting coal depletions through 2011 (provided by ER) from the ITR estimate.
- 2. Calculating remaining resources using the geologic model and the December 31, 2011, pit surface derived from UHG end-of-year mine surveys (provided by ER).

Minor differences between estimates using these two methods were noted. The variance in results is most likely attributed to insignificant variances in actual density, but minor losses of coal during operations, minor surveying and modeling errors or some combination of these factors may also have an effect.



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The estimate based on depletion of agreed-upon monthly survey quantities has been assumed to be the more accurate, and is the basis of this resource and reserves update.

Surface mineable resources have been limited to a depth from surface of 300m, and at a minimum apparent seam thickness of 0.6m. Coal seam partings greater than 0.6m have been excluded from the resource as these partings are easily separated as waste material using current surface mining practices. Note that 300m is viewed by Norwest as the maximum potential depth limit for surface extraction of coal at UHG.

A depth of weathering limit of 15m below surface has been universally applied and is based on Norwest's observation of drillhole core samples and downhole geophysical log profiles obtained from the 2008 drilling and sampling campaign. All coal within the weathering limit is assumed to be spoiled, and is not included in this resources and reserves estimate. The resource area is further delineated by seam subcrops in the east, the license boundary in the west, and by the margins of the fault-bounded basin to the north and south. The traditional locations of these bounding faults have been used given no conclusive evidence to the contrary, and additional field observations by Norwest have verified non-coal bearing rock formations occurring across these fault boundaries.

The classification of in-place resources into measured, indicated and inferred categories has taken into account the distribution of the validated drillholes as well as the overall confidence in the interpretation of fault locations, structural complexity and coal quality information. The exposures of coal seams in the working pit are considered valid points of observation. Attachment A of this report shows the distribution of the assurance category areas.

Table 2 presents coal resources amenable to surface mining for UHG as of December 31, 2011, divided into Measured, Indicated and Inferred categories of geological assurance.



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Table 2 Total Surface Coal Resources as of December 31, 2011

Category	Resource Volume (m³) '000	Average Seam Thickness (m)	In Place Tonnes (Mt*)	Density (ad) (g/cm³)
Measured	128,526	5.29	195.9	1.52
Indicated	135,718	5.51	205.3	1.51
Inferred	7,692	7.36	11.7	1.52
Total	271,936	5.46	412.9	1.52

<sup>\*</sup> Mt = Million metric tonnes (air dried).

There is an estimated total of 412.9Mt of surface mineable coal resources within the UHG mining license. Measured and Indicated resources account for 401.2Mt (97%) of the total surface resource. Estimated coal quality for the total surface resource is given by assurance category in Table 3.

Table 3 Surface Resource Quality - December 31, 2011

Category	Moisture Content % (ad)	Ash Content % (dry)	Sulphur Content % (dry)	Calorific Value kCal/kg (dry)	Volatile Matter Content % (dry)
Measured	0.54	25.89	0.63	6,118	23.36
Indicated	0.60	24.93	0.69	6,103	27.72
Inferred	0.56	25.45	0.65	6,057	26.00
Total	0.57	25.40	0.66	6,109	25.60

The coal quality values given in Table 3 are for raw (unwashed), inplace coal. UHG coal is predominantly beneficiated through coal processing in order to produce a marketable product. The surface mineable resource is considered a resource for immediate extraction.

Table 4 shows the ratio of in-place potential coking versus thermal surface coal resources estimated for UHG as of December 31, 2011.

Table 4 In-Place Potential Coking Versus Thermal Surface Resources as of December 31, 2011

	·	Thermal Coal**	
Category	Coking Coal* (Mt)	(Mt)	Total (Mt)
Measured	126.1	69.8	195.9
Indicated	164.2	41.1	205.3
Inferred		11.7	11.7
Total	290.3	122.6	412.9

<sup>\*</sup>Includes Seams 0C, 3, 4, 8, and 9.

<sup>\*\*</sup>Includes both proven thermal only seams and seams with unknown coking potential.



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UHG is estimated to contain an estimated 290.3Mt of potential coking coal resources above 300m from ground surface, being comprised entirely within the Measured and Indicated category of assurance. Classified as thermal coal are coal seams that have shown poor or no coking characteristics or seams that have yet to undergo rigorous testing to define their coking potential. A total of 122.6Mt of thermal coal are calculated for the UHG mining license, with 110.9Mt being classified as Measured and Indicated and 11.7Mt as Inferred.

### **Underground Mineable Coal Resource**

Underground coal resources have been estimated for UHG by Norwest and presented in a report to ER dated January 12, 2010. There has been no mining of underground resources as of the effective date of this report, and neither has exploration adjusted the geologic understanding of the deposit. Therefore, estimates of resources amenable to extraction by underground methods remain unchanged from that report.

As 300m from surface is considered the maximum limit for practical surface mining, underground resources have been calculated using this depth as an upper, minimum depth limit. The criteria constraining the underground resource estimate include:

- Minimum depth from surface 300m
- Maximum depth from surface 800m
- Minimum apparent seam thickness 1.5m
- Maximum mineable parting thickness 0.5m
- Main seams included 0A, 0B, 0C, 3A, 3B, 3C, 4A, 4C, and 8B.

Table 5 presents total resources amenable to extraction by underground mining methods using the criteria given above.

Table 5 Total Underground Coal Resources as of December 31, 2011

Category	Resource Volume (m³) '000	Average Thickness (m)	In Place Tonnes (Mt*)	Density (ad) (g/cm³)
Measured	ı	ı	ı	1
Indicated	57,164	6.55	88.6	1.55
Inferred	45,517	6.46	69.3	1.52
Total	102,681	6.51	157.9	1.54

<sup>\*</sup> Mt = Million metric tonnes (air dried).



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The total in-place underground resources between 300m and 800m from surface are 157.9Mt, comprised of 88.6Mt Indicated and 69.3Mt Inferred tonnes. Estimated coal quality for the total underground resource is given by assurance category in Table 6.

Table 6 Underground Resource Quality - December 31, 2011

Category	Moisture Content % (ad)	Ash Content % (dry)	Sulphur Content % (dry)	Calorific Value kCal/kg (dry)	Volatile Matter Content % (dry)
Measured	-	ı	ı	ı	Ī
Indicated	0.42	28.00	0.51	5, 811	24.55
Inferred	0.42	25.32	0.61	6,029	25.03
Total	0.42	26.82	0.55	5,907	24.76

The coal quality values given in Table 6 are for raw (unwashed), in-place coal. The underground resource would presumably undergo coal processing (washing) in order to produce a marketable product. The underground resource is classified as a resource for future extraction and has not been evaluated for potential classification as reserves.

Table 7 shows the ratio of in-place potential coking versus thermal underground coal resources estimated for UHG as of December 31, 2011.

Table 7 In-Place Potential Coking Versus Thermal Underground Resources as of December 31, 2011

Category	Coking Coal (Mt)	Thermal Coal (Mt)	Total (Mt)
Measured	-	-	-
Indicated	50.7	37.9	88.6
Inferred	42.2	27.1	69.3
Total	92.9	65.0	157.9

<sup>\*</sup>Includes Seams 0C, 3, 4, 8, and 9.

An estimated 92.9Mt of potential coking coal and 65.0Mt of thermal in-place resource is calculated for UHG between 300m and 800m depth from ground surface. The coking coal is comprised of 50.7Mt Indicated and 42.2Mt of Inferred resource, while the thermal coal consists of 37.9Mt Indicated and 27.1Mt

<sup>\*\*</sup>Includes both proven thermal only seams and seams with unknown coking potential



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Inferred. Underground mineable seams currently classified as thermal may be found to have suitable properties for a metallurgical product with further investigation of their characteristics, given that coal rank and coking properties tend to improve with increased depth of burial.

### COAL RESERVE ESTIMATES

Coal reserves have been calculated for the UHG mining license by Norwest as of December 31, 2011, by reconciling agreed run-of-mine (ROM) coal production to depletion of the reserves indicated by a detailed end-of-year (2011) survey, then subtracting from the original reserve estimate (detailed methodology determining the economic viability of reserves and their calculation are given in the ITR of September 2010).

Table 8 presents total coal reserves as of December 31, 2011.

Table 8 Total Coal Reserves as of December 31, 2011

	Total Reserves*		Marketabl	le Reserves**
	Proved Probable		Proved	Probable
Coking Coal				
(Mt, ad)	118	84	79	58
Thermal Coal				
(Mt, ad)	62	11	33	3
Sub-Total	180	95	113	61
Total***	2	275		174

<sup>\*</sup>Excludes 0.4Mt from mine plan within Inferred resource category

The classification of coal as reserves is based on industry- standard analysis related to practical and economic mineability, such as: minimum acceptable coal thickness, wash recovery, coal quality, mining costs, market conditions and product price, minimum mineable area tonnage for economic extraction, etc. For the purpose of this estimate, the following assumptions have been made with respect to delineation of reserves at UHG:

 The basis of estimation of reserves as reported in the ITR remains fundamentally unchanged.

<sup>\*\*</sup> Includes primary washed product and secondary product.

<sup>\*\*\*</sup> Rounded



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- The market price has not dropped significantly since the ITR estimate (assumption based on recent and direct experience in the region, along with communication with ER).
- There has been no material change in the coal quality (particularly coking coal quality, assumption based on communication with ER).
- There are no significant increases in the cost of mining as a result of physical variances in coal structure (based on understanding that there has been no material or significant changes in geological structure, coal quality, etc).
- There are no significant increases in the cost of mining as a
  result of logistical factors such as availability of labour,
  availability of equipment, unforeseen geotechnical or
  hydrological conditions, unexpected performance issues of the
  CHPP, issues with transportation of the coal, permitting and
  licensing issues, socio-economic issues, or any other factors
  which could adversely affect the operations (assumption based
  on communication with ER).

### CONCLUSION

A total in-place coal resource of 570.8Mt is estimated for the UHG mining license as of December 31, 2011. The surface mineable resource is classified as a resource for immediate extraction while the underground is considered for future extraction. The surface mineable resource consists of 401.2Mt Measured and Indicated resource and 11.7Mt of Inferred, totaling 412.9Mt. Underground resources are estimated to be 157.9Mt, of which 88.6Mt are Indicated and 69.3Mt are Inferred.

The surface resource contains an estimated 290.3Mt of potential coking coal (70%) and 122.6Mt thermal coal (30%) while the underground resource is calculated to contain 92.9Mt potential coking seams (59%) and 65Mt thermal seams (41%). It is possible that seams currently categorized as thermal may become classified as coking in the future given rigorous evaluation of their potential metallurgical characteristics.

UHG reserves are estimated to contain a total of 275Mt, being comprised of 180Mt Proved and 95Mt Probable reserves.

Marketable reserves are estimated to contain a total of 174Mt, of which 113Mt are Proved and 61Mt Probable reserves.



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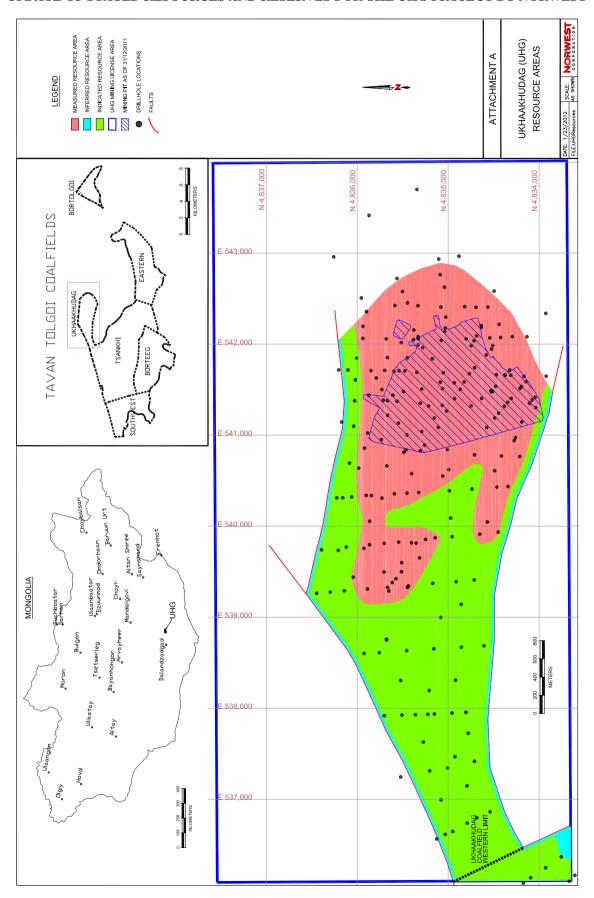
The resources and reserves presented herein are estimates, based on reasonable geologic assurance, for coal resources and reserves for the UHG property. The work has been performed by professional geologists and engineers with available data and using industry-accepted standards.

Sincerely,

NORWEST CORPORATION

Lawrence D. Henchel, PG Vice President Geologic Services

A-114



### STATEMENT OF COAL RESOURCES

### **BARUUN NARAN COAL PROJECT**

UMNOGOVI PROVINCE,

### **MONGOLIA**

Prepared for

Khangad Exploration LLC

By

McElroy Bryan Geological Services Pty Ltd

Report No. 247/3/1

February 2010

### STATEMENT OF COAL RESOURCES: BN COAL PROJECT BY MBGS

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Figure 7.13	Measured and Indicated Coal Resources J600 Seam
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### **APPENDICES**

Appendix A	Resource Block Checklist
Appendix B	ArcMap South to North Sections 37200E to 31200E
Appendix C	Australasian Code for the Reporting of Mineral Resources and Ore Reserves (The JORC Code) September 2004

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### 1. PURPOSE OF RESOURCE STATEMENT

McElroy Bryan Geological Services Pty Ltd (MBGS) have prepared a report for Khangad Exploration LLC on coal resources of the Baruun Naran Coal Deposit in southern Mongolia, which is located in the South Gobi Desert approximately 600km south of the Mongolian capital Ulaanbaatar.

The purpose of the report is to provide an objective assessment of coal resources that are compliant with the Australasian Code for Reporting of Mineral Resources, and Ore Reserves (The JORC Code). A copy of the 2004 JORC Code is included as Appendix C.



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### 2. COMPETENT PERSON STATEMENT

The information in this report to which this statement is attached, that relates to Coal Resources, is based on information compiled and reviewed by Mr. Paul Harrison, who is a Member of the Australasian Institute of Mining and Metallurgy and is a Senior Geologist employed by McElroy Bryan Geological Services Pty Ltd (MBGS).

Paul Harrison has more than 25 years experience in the estimation of coal resources for coal projects and coal mines in Australia. This expertise has been acquired principally through exploration of coal deposits, coal resource deposit modelling assessments for the NSW State Government, evaluation assignments at operating coal mines in Australia and Indonesia, and for coal prospects in Australia's major coal basins. This experience is more than adequate to qualify him as a Competent Person for the purpose of Resource Reporting as defined in the 2004 edition of the JORC Code.

Paul Harrison, B.Sc., M. Aus IMM

Senior Geologist

McElroy Bryan Geological Services Pty. Limited

680 Willoughby Road

Willoughby NSW Australia 2068

The Coal Resource estimates for the Baruun Naran Coal Deposit in the Gobi Desert of southern Mongolia area presented in this report have been carried out in accordance with the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (December 2004) prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.



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### 3. RESOURCE ASSESSMENT CRITERIA

In order to summarise criteria relevant for a resource assessment, a checklist was developed by MBGS, using as a guide the 2004 Checklist of Assessment and Reporting Criteria which is included as Table 1 in the 2004 JORC Code. The sequence of criteria in the checklist reflects a systematic approach to exploring and evaluating resources, typical of best practice used in the coal industry in Australia.

The purpose of the checklist is to:

- establish a platform for the Competent Person to classify the status of the resource on the basis of the responses to criteria prompts,
- draw attention to relevant or material issues pertinent to the estimation of coal resources within the area and
- outline the estimation procedures used and the parameters adopted for the resource estimate.

The checklist for the resource area comprises three sections which address different aspects of the resource estimation process:

- A. Sampling Techniques and Geological Data type, reliability, relevance and density of geoscientific data/points of observation.
- B. Reporting of Exploration Results, Geological Database and Model tenement status, exploration, management of data in the geological database and computer model.
- C. Estimation and Reporting of Mineral Resources integrity of data and validation procedures, outline of the resource estimation process, resource tenement limits and any limitations (geological, geographic, mining title, etc) or exclusion zones relevant to that resource block.



### STATEMENT OF COAL RESOURCES: BN COAL PROJECT BY MBGS

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The checklists for the status of geological data, database management, validation and modelling procedures for estimation and reporting resources are presented in Section 5, Tables 5.1, 5.2 and 5.3.

Checklists for resource limits and boundary criteria used to determine resources are presented in Appendix A. Note that for ease of comparison to resource maps, each of the resource tenement checklists in Appendix A has been colour-coded as follows to indicate the status of the resource in that block:

- green Measured Resource
- yellow Indicated Resource
- pink Inferred Resources



### 4. RESOURCE DESCRIPTION

### **4.1** LOCATION AND TENEMENTS

The Baruun Naran property is located in southern Mongolia (Figure 4.1), approximately 600 km south of Ulaanbaatar, the capital of Mongolia. The town of Dalanzadgad (pop. 10,000), the provincial capital of the Umnogovi Province, is located approximately 60 km to the west of the property. Access is by unpaved road from Ulaanbaatar, Dalanzadgad and also from the Chinese border, although construction of a paved road from Ulaanbaatar to Dalanzadgad is planned in the coming years. A recently constructed airport with sealed tarmac is located 8 km west of Dalanzadgad and has replaced the original Russian unsealed landing strip. Reliability of flights to and from Dalanzadgad is dependent on wind direction at Ulaanbaatar, which has a single north-west orientated runway. The Baruun Naran property is in an entirely natural state with no paved roads and the exploration camp comprised a kitchen, accommodation and office gers with a sled mounted amenity block setup temporarily, during periods of exploratory field work.

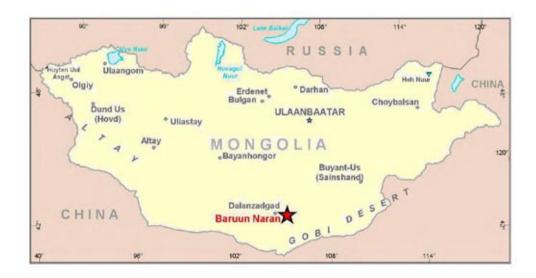


Figure 4.1 Location of Baruun Naran coal project in Southern Mongolia.



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The Baruun Naran mining license 14493A (Figure 4.2), in the Umnogovi Aimag (province), covers 4,485.64 ha and was converted to a mining license on December 1<sup>st</sup> 2008. Surrounding the Baruun Naran mining license is the Tsaikhar Khudag exploration concession 4326X (total area 90,782.36 ha). The Baruun Naran mining license is valid for 30 years and can be extended twice more for 20 years each, or a total of 70 years.



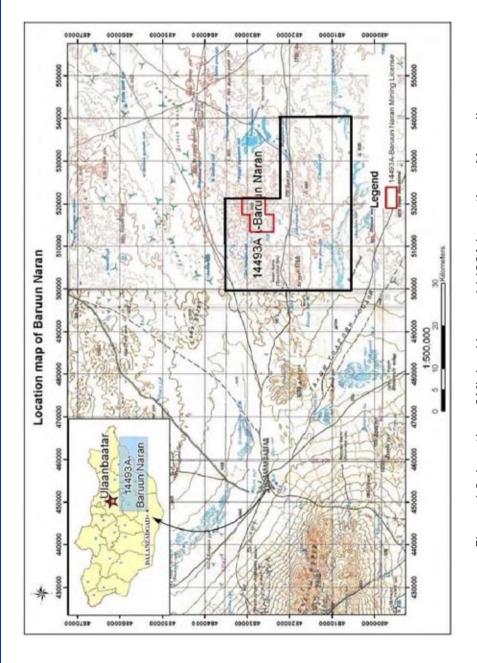


Figure 4.2: Location of Mining License 14493A in southern Mongolia.

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#### 4.2 TOPOGRAPHY AND CLIMATE

Surface topographic elevation in the ENE-trending Baruun Naran valley ranges from 1540m on the western end of the license to 1575m at the eastern end, and rises to 1600m above sea level against older Carboniferious rock units which form low hills in the north. The Baruun Naran valley is approximately 22 km long and 2 to 3 km wide.

Climate in the Gobi desert is generally hot and dry in summer and cold and dry in winter, with temperatures ranging from  $-36^{\circ}$  C to  $+38^{\circ}$  C. Strong winds often cause dust storms during spring and summer.

### 4.3 GEOLOGY

### 4.3.1 Stratigraphy

The Baruun Naran coal deposit occurs within an Upper Permian clastic sedimentary unit known as the Tavan Tolgoi Formation. This same formation also hosts the large Tavan Tolgoi coking and thermal coal deposit, located approximately 20 km northeast of Baruun Naran. An ENE-trending belt of Tavan Tolgoi Formation crops out in the Baruun Naran valley representing the western continuation of the Ulaan Nuur coal basin (Figure 4.3). The Ulaan Nuur basin is an asymmetric fault-bounded, ENE-trending syncline, with a very steep northern limb (overturned in part) and a more gently-dipping southern limb. In addition to this folding of coal-bearing strata, seams are truncated by faults in the north, west and south-west. Deformation of Permian sediments occurred during the early Mesozoic Era. Basement rocks are of Carboniferous age on the northern margin of the valley and Devonian on the southern limb. The earliest deposited coal seams are less extensive and onlap onto the older basement rocks.

Khangad Exploration LLC drilling at the northeast end of the Baruun Naran valley has shown that the coal-bearing sequence is unconformably overlain by a 10 to 30 meter sequence of tuffaceous siltstones and mudstones of unknown age that are interpreted by to be reworked volcanic rocks. The basal contact of this unit appears to be an angular unconformity and the unit clearly post-dates folding of the Tavan Tolgoi Formation. Bedrock within the Baruun Naran valley is covered by up to 5m of unconsolidated Quaternary deposits. Weathering of the underlying Permian strata is variable and in early modelling was set at 30m



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below natural surface levels. In November 2008 an oxidation drilling program targeted T500 and H500 seams along subcrop to determine the limit of oxidation (LOX) for thermal and coking coals. Visual estimates of weathering were made, and samples of coal collected every metre were sent to the laboratory to test both calorific value and coking properties. This work indicated that H500 and T500 seams have a calorific value of 32 MJ/kg (daf) at 1-3m below visual base of weathering recorded in drill chip logging, while fresh coal with full coking properties was found 1-3m below this thermal oxidation depth for the H500 seam, and 1-5m deeper for T500 seam.

For T500 seam the thermal LOX depth averaged 19.5m (range 16m-26m) while the LOX for coking properties averaged 23m depth (ranging 18m-29m). In the east H500 had an average thermal LOX of 31m depth (range 24m-38m) and average depth for coking properties of 33m (range 25m-41m) following the trend of deeper weathering towards the east of the deposit. In the Minex geological model the base of weathering grid used for resource estimation was set at the depth where 32 MJ/kg (daf) was achieved in the oxidation boreholes, and elsewhere recorded visual oxidation plus 2m. No igneous intrusions have been identified within coal bearing strata.



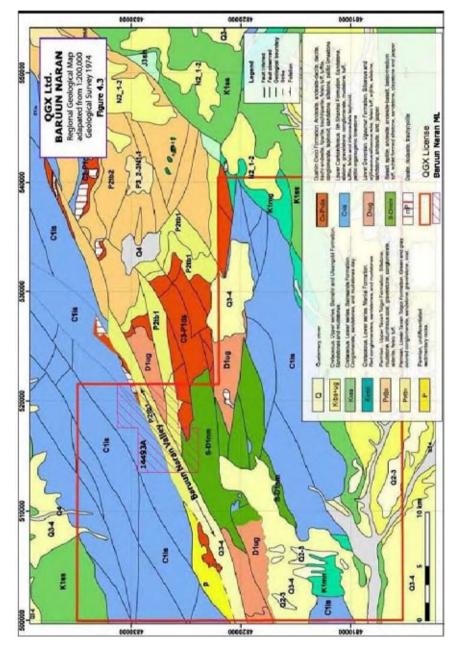


Figure 4.3: Regional Geology Map showing Khangad Exploration LLC License.

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### 4.3.2 Coal Seams

The coal-bearing Tavan Tolgoi Formation within the Baruun Naran valley has a stratigraphic thickness of approximately 1000m. Drilling to date has defined twenty two major coal seams ranging from 0.6m to 16.9m in average true thickness. Determining true thickness of coal seams in this deposit is difficult due to the steeply dipping strata and the mix of vertical and inclined boreholes, all of which deviated to some degree, during drilling. Intersected seam thickness was converted to true thickness by applying a thickness correction factor determined from the angle of the borehole, and the estimated seam dip at the point of drill penetration.

In addition to major seam groups, a number of thin laterally discontinuous coal beds occur in the area as well as fault repetitions of major known seams. Many of these thin seams are highly banded and may be localised discontinuous coal lenses, as often correlation between more than a few holes is difficult.

Coal seams at Baruun Naran have been labelled alpha numerically from oldest to youngest. The major seam in any alphabetic group is designated the "500" seam (e.g., "T500"); Subordinate seams (riders or splits) are numerically greater than "500" if stratigraphically higher in the sequence (e.g., "T510"), or less than "500" if stratigraphically lower in the sequence (e.g., "G400"). The current model includes 132 coal plies, from V seam (top ply V506) to the basal E seam (ply E504). Figure 4.4 shows seam/ply configuration throughout the deposit based on four boreholes from the west to the east from V to F seams.

#### 4.3.3 Structure

Coal seams at Baruun Naran are folded into an asymmetrical syncline which plunges west at approximately 24°. Coal seams subcrop from east to west and can be traced from the southern to the northern limb, around the syncline nose. The north limb is very steep and borehole data indicates it progressively overturns toward the west Figure 5.4, before the coal seams are no longer present. The south limb has a gentler dip of about 40° near the syncline nose (east) but progressively steepens to 75° dip towards the west. The coal sequence is terminated on the north limb by a fault and by a fault or unconformity against Devonian sediments on the southern limb. The western end

### STATEMENT OF COAL RESOURCES: BN COAL PROJECT BY MBGS

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appears faulted against another sedimentary unit with no economic coal seams. Slickensided surfaces commonly occur within drill core and, as well as major bounding faults, numerous minor faults would be expected within the highly deformed sedimentary sequence at Baruun Naran.



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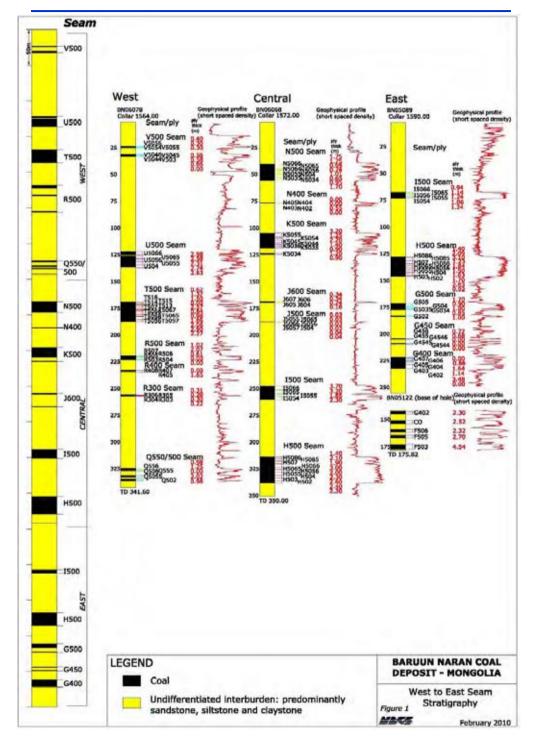


Figure 4.4: West to East Seam Stratigraphy.



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# 5. GEOLOGICAL DATA, MODEL AND ESTIMATION PROCEDURES

### 5.1 SUMMARY OF GEOLOGICAL DATA

The Baruun Naran coal deposit was first explored in 1983 through a program of aerial photo interpretation, geological mapping, trenching and three shallow boreholes. A regional aeromag survey was flown in the 1980's at a 400m height and 2km line spacing. Two additional phases of drilling were completed on the property by Soviet-Mongolian teams in 1990 and 1993 bringing the number of boreholes completed to 24 comprising 3,700m of drilling. The property was later abandoned and QGX was granted an exploration license in 2002, now held by the Kuok Group, through Khangad Exploration LLC.

In April 2005, QGX commenced a systematic drilling program and engaged Norwest Corporation to provide geological consulting services including supervision of drilling and trenching programs. Trenching was carried out with a back hoe to depths of 4m to 7m. The major work programs completed during 2005-6 were geological mapping, 19,000m of trenching, a gradient array resistivity survey, and completion of 350 drill holes totalling over 95,700m.

During 2006 QGX sought MBGS's assistance in seam and ply correlating across the deposit and to provide guidance on geological logging and sampling. A Minex geological model of the deposit was developed by MBGS's Senior Geologist Andrew Paul, during 2005 and 2006. The model required advanced modelling techniques due to the steeply dipping nature of the deposit and the risk of resource over-estimation due to large apparent thicknesses being recorded in borehole intersections.

In 2007 a drilling program was carried out to assess water availability in the region to support a mining/coal processing operation. As part of this program three holes (total 1213 m) were drilled close to the southern boundary of the mining concession. An oxidation drilling program of 38 holes totalling 1533m was completed during 2008. This program included laboratory analyses to investigate the relationship of thermal LOX and coking LOX to the visual base of oxidation, as detailed above. Considerable exploration during 2009 included 71

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holes drilled in the main deposit. This amounted to 13,200m of drilling to define deposit geometry, identify where seams are faulted at depth and improve understanding of coal quality variation. Seven previously drilled boreholes were reopened and extended to deeper seams. Large diameter drilling of 11 holes (~1000m of drilling) recovered 6" and 12" diameter coal cores for washability testing coking properties of H500 and T500 seams. Also in 2009, dewatering of the proposed pit area was investigated with a small number of new boreholes and the reaming out of existing holes. Geotechnical studies were also carried out during 2009 with samples taken in 4 specific boreholes dedicated for geotechnical purposes (rock strength testing etc).



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Table 5.1 Summary of Geological Data

CRITERIA	CONSIDERATIONS
	QGX drillhole collars were surveyed to WGS84 and UTM zone 48N and a local grid established with origin 30,000mE and 30,000mN at 513450E, 4825080N, or 43° 34′ 42″ N Latitude and 105° 9′ 59″ Longitude.
ACCURACY OF SURVEY DATA	The surface topographical survey was carried out by Monmap Engineering Services Co. Ltd. in October 2007. The survey covered 56.6 sq. km. with 65,022 surveyed points spaced at 50-120m. The digital terrain model has been checked against drill hole collar heights with the surveyed topographic model error generally less than 2m but a few locations with differences of 2-4m.
DRILLHOLE TYPES	Only QGX drillholes were used in the model and included both partially cored and non-core structure holes.
DATA DENSITY AND DISTRIBUTION	QGX, being Canadian, designed its exploration drilling pattern for a "complex" deposit under the 43-101 classification system. Boreholes were drilled on section lines spaced either 150m, or 300m apart on the local grid which is orientated perpendicular to the syncline axis. Section lines 150m apart were drilled for 1.1 km west of the H500 subcrop and 1.2km west of the T500 subcrop (at the synclinal nose). Borehole collars on each section line are spaced at 75-100m with seam intersection spacing dependant on borehole dip and seam dip. Once the deposit structure was broadly recognized borehole orientation was designed to intersect seams orthogonally, to reduce apparent thickness intersections as much as possible. Boreholes were drilled at 90° (160 boreholes), 75-85° (16 boreholes), 70° (31 boreholes), 65° (23 boreholes), 60° (37 boreholes), 55° (59 boreholes), 50° (13 boreholes) and 45° (27 boreholes). Coal quality holes are drilled at either 300m or 600m spacing.
GEOLOGICAL LOGGING	Lithological logs are available for all QGX exploration drillholes.
GEOPHYSICAL LOGGING	Geophysical logs were acquired for all 2005-2009 boreholes.
SAMPLING STRATEGY AND SAMPLE RECOVERY	Sampling of 2005 coal quality drillholes (sent to SGS Denver) was not undertaken on a consistent basis as no seam ply system had been established at the time of sampling. Once the ply by ply logging and sampling program commenced in Feb 2006 a more systematic, reliable coal quality database was developed by MBGS with samples dispatched to ACIRL Rockhampton, Australia. The 2009 slim core and large diameter core samples were analysed at SGS-CSTC Minerals Lab (Coal and Coke) Tianjin Port, China. The ply system applied at BN has indicated lateral



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CRITERIA	CONSIDERATIONS
LABORATORY COAL ANALYSIS	variability in quality across the deposit. There are no core holes with valid analyses of the V500, R500, R400, R300 and R200 Seams and default raw ash and ISD values have been assigned to these seams. For other seams where cored recoveries were unsatisfactory, the coal analytical results were excluded from the database for the estimation of coal resources.  Raw coal quality testing was undertaken at three separate laboratories. Testing of 2005 boreholes was conducted at SGS's Denver Laboratory in the USA. This testing was carried out using a now outdated method of crushing to pass 19mm prior to analysis. This procedure is now recognized as giving misleading results, particularly in metallurgical coal products, in situations where product coal is sold after beneficiation. Crushing of 2005 coal samples prior to washability analysis may have degraded the metallurgical characteristics of the coal. From Feb 2006 a dropshatter and wet-tumble pre treatment process replaced the crushing of coal samples. This method reproduced the natural breakage of coal which occurs during mining and handling. Apparent relative density is calculated using a full-immersion technique which is then used to estimate raw ash. Where density/ash indicate potential for metallurgical use, composites are selected for drop-shatter. Higher ash samples were crushed to 12mm prior to analysis. Sub sampling is done to create samples for reserving, raw coal analysis and wet tumbling and sizing at 16, 8, 4, 2, 1, 0.25, 0.125mm. Washability tests at F1.30, F1.35, F1.40, F1.45, F.150, F1.60, and F1.80 are carried out on the wet-tumbled size fractions followed by analysis of each density increment to F1.60 for ash and CSN. From 2009 dry sizing was increased from 32mm to 50mm with wet size samples of 32, 16, 8, 4, 2, 1 and 0.25mm.  Raw coal plies were tested for Relative Density (RD), Apparent Relative Density (ARD), free moisture, air dried moisture, Ash,
OTHER DATA	Volatiles, FC, Total Sulphur (TS), Specific Energy (SE) (gad and daf) and Chlorine.  A gradient array Resistivity survey was carried out in 2005. QGX employed Geomaster (based in Ulaanbaatar, Mongolia) to conduct a gradient-array resistivity survey. The survey was conducted using dipole-dipole resistivity on 1 km sq. blocks along north-south (local grid) trending parallel lines spaced 50 m apart with a 20 m dipole spacing with 100m overlap between lines of 100 m. Monmap Ulaanbaatarsurveyed the grid lines. The gradient-array survey covered a length of 13 km down the Baruun Naran valley. Figure 5.1 shows the location of gradient-array surveyed across

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CRITERIA	CONSIDERATIONS
	the coal resource area.
	The resource estimate in the deposit rely largely on the QGX
	drillholes which have downhole geophysical logs. The structural
	interpretation and modelling of the deposit used both drillhole
	information and gradient array results to assist in subcrop
	definition. Trench data was of limited use due to the deep
COMMENT	weathering at BN.
	The combination of steep dips, faulting at different levels along
	both the north and south limbs, as well as, greater than 20m of
	weathering to the thermal LOX depth, all contribute to the
	complexity of the coal deposit.



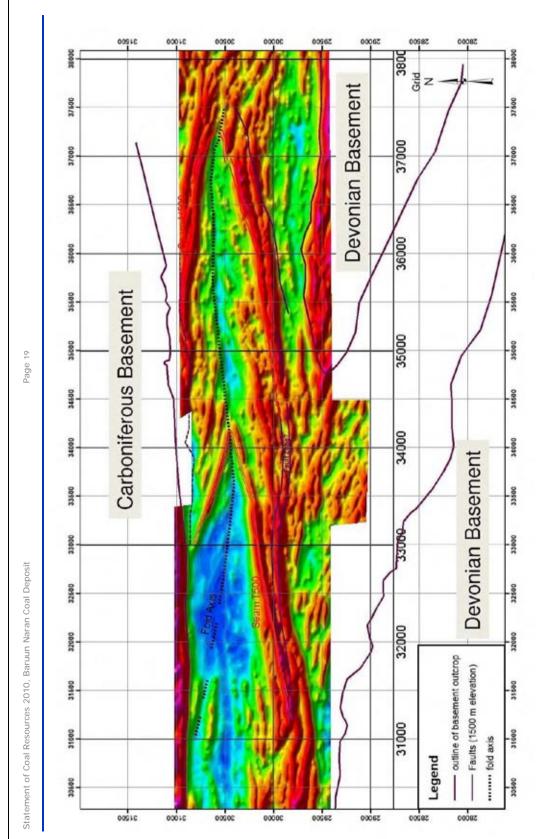


Figure 5.1: Gradient-Array Resistivity at Baruun Naran.

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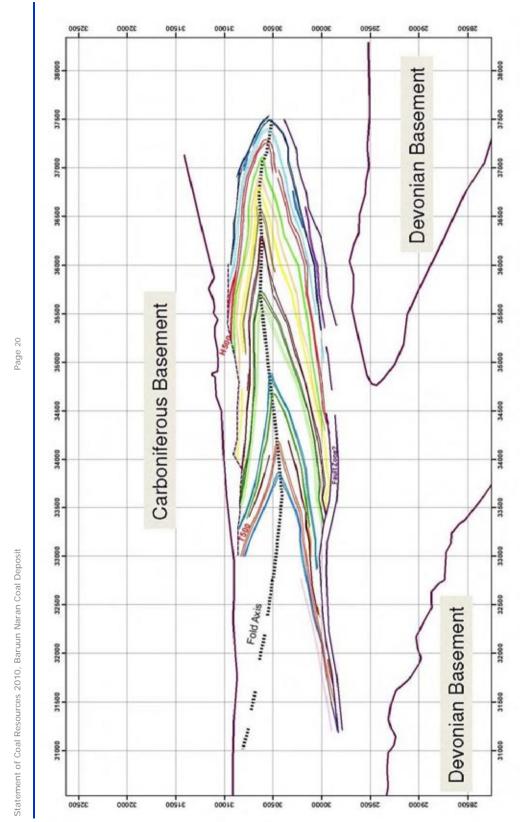


Figure 5.2: Syncline Axis, Bounding Faults and Seam Floors at 1500m R.L.

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## 5.2) STATUS OF GEOLOGICAL DATABASE AND MODEL

The geological database comprises data from 446 drillholes, which total 110,083m of drilling. Initial Minex modelling in 2005 and 2006 has been refined with results of the 2008 and 2009 drill programs. Considerable interpretation of the structure of the deposit was carried out on site by QGX's Senior Geologist, Margaret E. Venable who produced a series of cross sections at 150m or 300m spacing which were imported into the Minex Model as xyz data. These section lines were used as the basis of digitising 2382 strings which were snapped in 3D to seam floor positions along the deviated borehole stem. Interpolation of seam floor R.L. between boreholes was controlled by snapping strings (geometry data) to the imported 2D ArcMap section floors. Strings were connected between sections by joining floor geometry by rib strings. As a result of this, fifteen floor grids were produced in multi-seam multi-variable gridding and used as stacking surfaces in strata building the geological model. Due to the extensive use of the stacking surfaces, no attempt at 3D fault modelling was made as strings were digitised along x,y,z position of faulted and unfaulted seam floors.

Table 5.3 Seam Floor Stacking Surfaces

Stacking	Upper	Lower
Floor	Seam	Seam
V5044SF	V506	V503
U5035SF	U5066	U5035
T5045SF	T516	T5045
R406SF	R507	R406
Q502SF	R405	Q502
N403SF	N5066	N402
K5035SF	K5056	K5035
K405SF	K5034	K405
J604SF	J607	J604
J400SF	J5066	J400
15054SF	15066	15054
H5055SF	H5086	H502
G5015SF	G505	G5015
G403SF	G407	G402
F503SF	F506	E504



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Table 5.4 Summary of Reporting of the Exploration Results

CRITERIA	CONSIDERATIONS
TENEMENT AND LAND TENURE STATUS	Baruun Naran comprises mining license 14493A covering 4,485.64 ha (see Figure 4.2). Surrounding areas are held in exploration concession 4326x which covered 90,782.36 ha but will be reduced in size following regional exploration work.
	The full geological descriptions of cuttings and drillcore recorded in QGX's hardcopy borehole database were not loaded into Minex, rather the top and base of depths seams and plies. The Minex geological database includes drillhole survey including collar, azimuth, dip, as well as the base of thermal weathering horizon and coal seam/ply roof and floor intersections. In addition a borehole deviation tool was run down each drillhole and recorded azimuth, inclination and depth every 50m. Where unsplit seams were recorded the seams were split in accordance with averages across the deposit using the splits.par file.
GEOLOGICAL DATABASE	The structural interpretations from cross sectional studies and gradient array surveys are interpreted and stored in a Minex design database. Geophysical LAS data is available, however only selected geophysical logs have been loaded into the Minex model. Downhole surveys, done every 50m down the drillhole, were loaded into the Minex borehole database and used to deviate the drill strings with depth.
	Two geological databases were required in order to model the steeply dipping coal seams at BN. The first contains the "as drilled" borehole intersections loaded into the deviated drill strings. On this database borehole SQLs were run to convert the drilled seam thickness into "true" seam thickness for nineteen seam groups. This was done by applying 50m depth spaced correction factors to boreholes to convert apparent seam and interburden thicknesses to true thicknesses. This database was used for thickness and interburden gridding. The true thickness intersections were subsequently converted to apparent thickness via the application of grid SQL's which convert true to apparent thickness depending on the interpreted dip of the seam for any given x,y,z location within the deposit. The seam and interburden apparent thickness grids were then stacked using the fifteen stacking surfaces to ensure seam floor z values honoured the drilled borehole intersections.
LITHOLOGICAL DATA AND	Rig geologists entered the lithological data from the original



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CRITERIA	CONSIDERATIONS
SEAM CORRELATION	geological log into Excel spreadsheets at the QGX office on site (see Plate 1); these spreadsheets were forwarded to MBGS for inclusion in the Minex model. MBGS became involved in 2005 and devised a coal seam and ply nomenclature system, which has had some subsequent revisions. Geophysical logs were used to pick seams and divide them into correlatable plies, and lithological logs were used to assess weathering depth. Seam intersections were re-interpreted into correlatable plies and then picked from the geophysical logs and the weathering extracted from the lithological logs. These intervals were entered into a spreadsheet and then uploaded to Minex to form the base modelling information in conjunction with a drillhole collar file. Following the 2008 LOX program thermal weathering depth was recognized as being on average 2m below the visual base of weathering observed in chip logging and this surface has been gridded as a cutting surface to exclude weathered coal from JORC resource estimates. There is a reasonably high level of confidence in the correlation of the seams within the main synclinal structure where the seams occur at shallow depths. Boreholes sited within the syncline between existing ones conformed to the overall structure. Reinterpretation based on 2009 drilling determined that the seams previously thought to roll over into a southern anticline did not actually do so. Thick apparent thickness intersections of seam H which had previously been considered to roll-over, was re-interpreted as the underling F seam, conformable with H seam.
GEOPHYSICAL DATA	Downhole geophysical logs were obtained for QGX drillholes programs and were used to correlate plies, confirm the recovered seam thicknesses and depths and interpret lithologies and structure. The short spaced density, gamma and resistivity tools were used extensively to correlate seams across the deposit.
GEOLOGICAL FEATURES	The QGX Senior Geologist conducted seam correlation work by entering downhole seam intersections and geophysical logs into ArcMap software from which seam cross sections were produced (see Figures 5.3 and 5.4 and Appendix B). These sections were imported into Minex and stored as 2D seismic in a sub program within the Minex modeling package (see Figures 5.5 and 5.6). When the basal seams of the deposit dip to the west they are truncated at depth by a system of east to west orientated faults. In the north the syncline becomes overturned and eventually sheared off by a complex fault system. It was not possible to

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CRITERIA	CONSIDERATIONS
	model the overturned seams on the north limb, due to software limitations in such a geologically complex environment. Grid based software systems do not allow unfaulted seam floors to occur at two different z positions for the same x,y location. An alternative structural interpretation for the north-limb overturn could be a series of overthrusts splaying from the major thrust which ultimately shears off the coal seam sequence further to the west. Where the north limb is truncated against a north-dipping fault plane on the west end, the interpreted fault plane was merged with the thermal weathering grid to limit the extent of the coal seam.
COAL QUALITY DATA	The coal quality database was prepared by Bob Leach (A & B Mylec Pty. Ltd.) from coal quality analyses carried on cores drilled since 2006. Based on the rank and coal quality the estimated in situ moisture is 6%. ID (insitu density) was calculated from air dried RD and air dried moisture% from laboratory analysis converted to 6% moisture using Preston Sanders (see section 5.3). Coal qualities loaded into Minex include ISD (@6% MOI), Raw Ash% (a.d.), Inherent Moisture% (a.d.), SE MJ/Kg (gaf), Volatile Matter% (daf) and ARD. Where a seam had no coal quality testing a set of average default raw coal qualities for were estimated for Rash, ISD and ARD based on comparison of the geophysical logs of seams with actual analysed coal qualities.
GEOLOGI CAL MODEL	The initial Baruun Naran deposit geological model was constructed in 2005 and revised in 2006 using Minex software. These models were superseded by the current model (BN09B) generated using all QGX boreholes drilled since 2005 (boreholes BN05001-BN09070). The BN09B Minex borehole database includes 446 QGX boreholes, including barren boreholes. The topography model was generated by gridding the 65,022 survey points. A Base of Weathering (BOW) grid was generated from descriptions of weathering in the drill holes and merged with the north limb fault plane (BOWFN09.grid). Drill holes were deviated using verticality data. Seams were modeled on a ply basis. A procedure of setting missing seams to zero was employed to take into account seams not present in boreholes due to washouts, facies variation, basement onlap and faulting. The model was developed in Minex 5.3.2 faulting software to allow importing of 2D sections.  Trend lines (strings) were used in the modelling process to control the subcrop of the coal seams where drill hole or trench data was absent.  The model grids were generated on a 10m mesh size.

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CRITERIA	CONSIDERATIONS
	Structural grids were generated using Minex growth techniques modeling methodology and limited to confidence masks.  No seam "working sections" have been developed/ modeled.
MINING FACTORS OR ASSUMPTIONS	No minimum seam thicknesses were applied to the computer model, however, a minimum seam thickness of 0.1m was used to limit the resources.

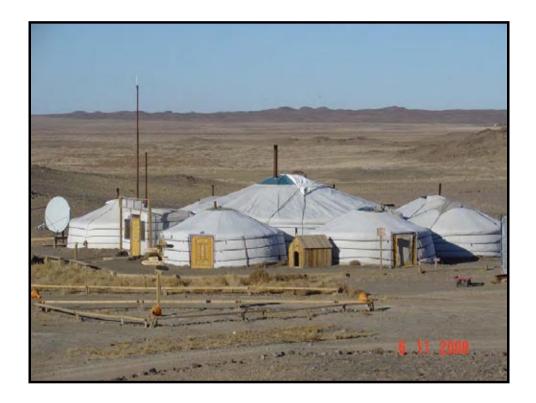


Plate 1: QGX Baruun Naran office – South Gobi desert Mongolia.



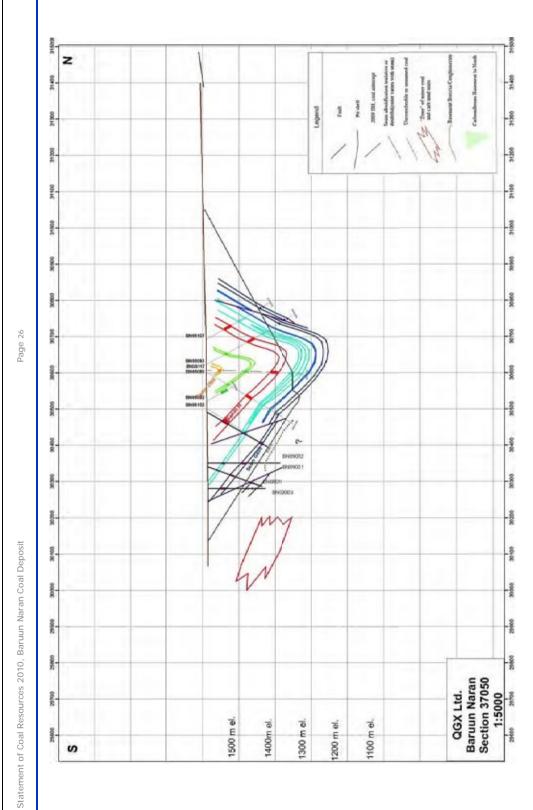
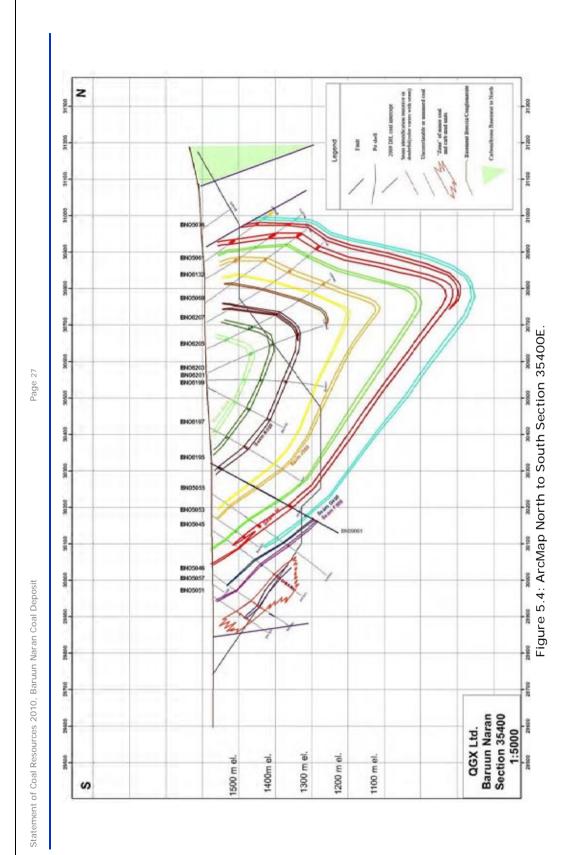


Figure 5.3: ArcMap North to South Section 37050E.

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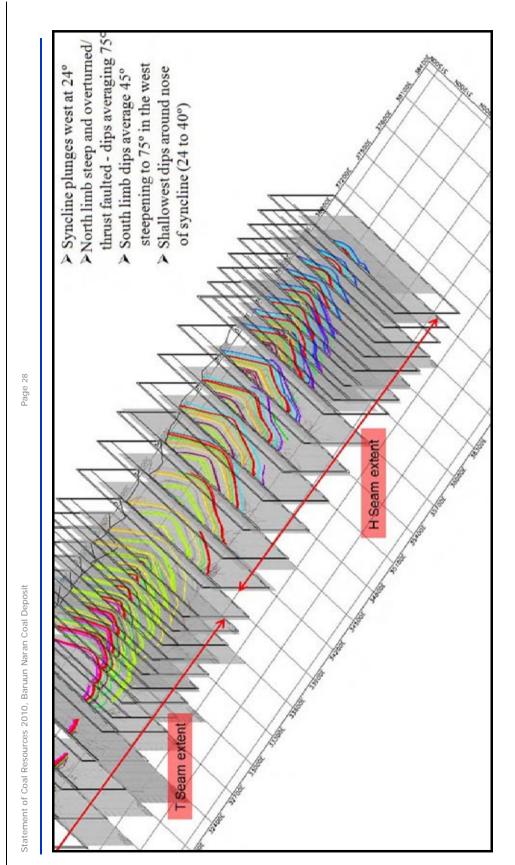


Figure 5.5: ArcMap and Minex section overlay - east.

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Figure 5.6: ArcMap and Minex section overlay - west.

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## 5.3) RESOURCE ESTIMATION PROCEDURE

Resources were estimated by MBGS using the current computer model. Table 5.4 outlines the resource estimation process undertaken in this assessment.

Table 5.5 Estimation Procedures

CRITERIA	CONSIDERATIONS
PARTY RESPONSIBLE FOR RESOURCE ESTIMATION	P. Harrison (McElroy Bryan Geological Services Pty Ltd) undertook the computer modelling.
COMPETENT PERSON	Mr. P. Harrison (McElroy Bryan Geological Services Pty Ltd).
DATE(S)	The topographic model was generated from surface survey pickups acquired in October 2007 using the WGS84 and UTM48 surface datum. Computer modeling was finalized in December 2009 and resource estimation completed in January 2010.
RELATIVE DENSITY	In situ density at 6.0% moisture (estimated in situ moisture content) was determined from the relative density data. The in situ density was derived using the Preston Sanders method which uses RD as a base and adjusts it to account for the in situ moisture.  The Preston Sanders formula is as follows:  Relative Density (in situ) = RDad * (100 - Mad) 100 + Rdad (ISM - Mad) - ISM where:  RDad = Relative Density, air dried basis  Mad = Inherent Moisture, air dried basis  ISM = In situ Moisture (estimated at 6%)  Although Relative Density (RD) measurements were determined on coal cores the large number of seams and plies in the deposit resulted in plies of the V500, R500, R400, R300, R200 and G450 seams required having insufficient coal quality analyses to model RD. For these plies default ISD was estimated by reference to other seams at BN with similar seam/ply ISD values.
METHODOLOGY	The resource estimation was completed using the thickness grids from the uncut computer model (BN09B) with the upper surface of the model limited by the base of weathering / north limb fault plane merged grid. Vertical sided polygon areas were used for the resource estimation. Thickness grids for each of the plies (V506 to E504) were multiplied by both the average in situ density value (ID) and the area of the polygon in Minex. The extent of the drill holes, on a seam basis, was used to limit the polygon areas.



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	The February 2010 estimate of 274 Mt has been made to a depth
	of 400m. The estimate to 300m depth of 212 Mt is less than the
VALIDATION	last resource estimate of 253Mt (July 2007) as both QGX and
	MBGS Geologists have reinterpreted seam correlations and the
	deposit structure as a result of the 2009 drilling program.



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## COAL RESOURCE LIMITS AND CLASSIFICATION

Coal resources from the V500 to E500 seams within Baruun Naran mining license 14493A have been estimated to a depth of 400m below natural topographic surface. North limb resources are limited on the west at about 32850E by truncation against a fault plane, and extend almost 5km to the east to where G400 subcrops at approximately 37700E. On the south limb coal seams extend westward to about 31050E, where they are apparently lost against a bounding fault. Coal intercepts are found west of these limits, but they do not appear to have any lateral continuity (see Figures 5.2 - 5.4).

Baruun Naran has been drilled to a density of cored and geophysically logged non-core holes (see Figure 5.5), sufficient to classify resources in either Measured or Indicated JORC categories. Resource estimates have been categorised as Measured Resources where analysed coal quality cored boreholes are no greater than 300m apart. In areas where more widely spaced coal quality bores are interspersed with geophysically logged non-core holes, resources have been categorised as Indicated Resources.

Where an analysed seam occurs as the last down dip intersection on the south limb and this intersection is correlated to a coal quality core on the north limb, Measured Resources are extrapolated 300m beyond the borehole down dip on both the north and south limbs. Due to steep dips this Measured Resource extrapolation generally extends to 400m depth of cover, the maximum depth to which resources have been estimated.



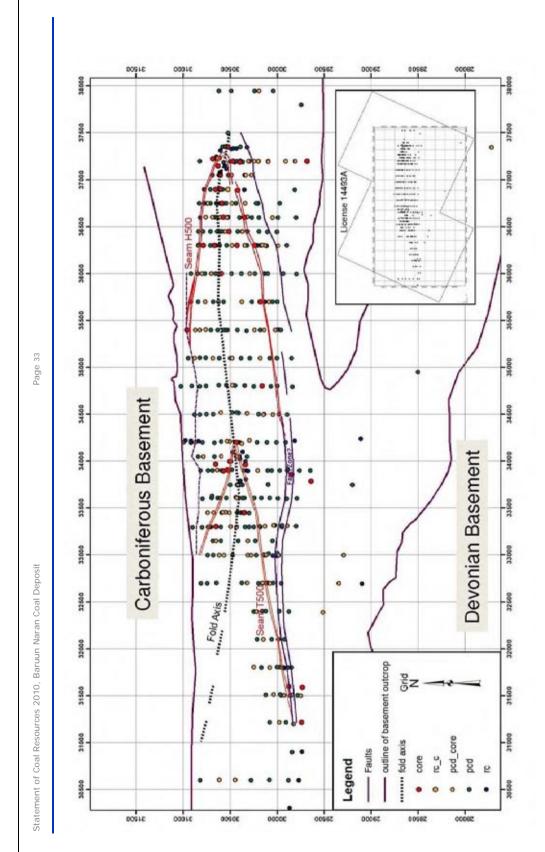


Figure 5.7: Borehole locations and types.

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# 7. COAL RESOURCES

The Baruun Naran coal deposit is estimated to contain approximately 212 million tonnes (Mt) of Measured and Indicated resources to a depth of 300m.

Approximately 70 million tonnes (Mt) of Measured and Indicated resources are estimated to occur from 300m to 400m depth giving a total to 400m depth of approximately 282 million tonnes (Mt) as detailed on Tables 7.1 - 7.3 and Figures 7.1 - 7.22.



Table 7.1 Summary of Indicated Coal Resource Estimates, Baruun Naran Deposit

Resources (Mt)		400m (4)	400m (4)	1.27 1.10	1.27 1.10 2.52	400m (4) 1.27 1.10 2.52 1.16	400m (4) 1.27 1.10 2.52 1.16 1.66	1.27 1.10 2.52 1.16 1.16 0.56	1.10 2.52 1.16 1.16 0.56 0.56	400m (4) 1.27 1.10 2.52 1.16 1.66 0.56 0.65 1.12	400m (4) 1.27 1.10 1.10 1.16 1.66 0.56 0.65 1.12 1.12	400m (4) 1.27 1.10 1.10 1.16 1.66 0.56 0.65 1.12 1.12 1.145	400m (4) 1.27 1.10 1.10 2.52 2.52 1.16 0.56 0.65 1.12 1.79 1.79 2.90	400m (4) 1.17 1.10 1.16 1.16 1.16 0.56 0.65 1.12 1.79 1.45 2.90 0.07	400m (4) 1.27 1.10 2.52 2.52 1.16 1.66 0.65 0.65 1.12 1.79 1.45 2.90 0.07 1.39	400m (4) 1.27 1.10 2.52 2.52 1.16 1.16 0.56 0.65 1.12 1.79 1.45 2.90 0.07 1.39 2.95	400m (4) 1.27 1.10 2.52 2.52 1.16 0.56 0.65 1.12 1.12 1.13 1.145 2.90 0.07 1.39 2.95 2.95	400m (4) 1.27 1.10 2.52 2.52 1.16 0.56 0.65 0.65 1.12 1.79 1.45 2.90 0.07 1.39 2.95 2.95 2.95	400m (4) 1.27 1.10 2.52 1.16 1.16 0.05 0.05 1.12 1.17 1.17 1.17 1.18 2.90 0.07 1.39 2.95 0.42 0.42 1.54 3.11	400m (4) 1.27 1.10 2.52 2.52 1.16 0.65 0.65 0.07 1.39 2.95 0.42 1.54 3.11 0.69	400m (4) 1.27 1.10 2.52 2.52 1.16 0.65 0.65 0.05 1.45 2.90 0.07 1.39 2.95 0.42 1.54 3.11 0.69	1.27 1.10 2.52 2.52 1.16 0.56 0.65 0.65 1.12 1.79 1.79 1.79 1.79 1.39 2.90 0.07 1.39 2.95 0.42 1.54 3.11 0.69	1.10 1.10 1.10 1.16 1.16 0.55 0.65 1.179 1.179 1.179 1.179 1.179 1.179 1.179 1.179 1.179 1.179 1.179 1.179 1.179 1.179 1.179 0.07 0.07 0.07 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69	1.10 1.10 1.10 1.16 1.16 0.55 0.65 1.12 1.12 1.19 1.39 2.95 0.07 0.07 1.39 2.95 0.42 0.42 0.42 0.42 0.42 0.42 0.42 0.42	1.10 1.10 1.10 1.16 1.16 0.55 0.65 1.12 1.79 1.45 2.90 0.07 1.39 2.95 0.42 1.54 0.42 0.42 0.42 0.42 0.42 0.42 0.42 0.4
	300m (4) 400m																								
	Ī				00																				
300m to 400m (4) 1.27	1.27	1.10		2.52	211	1.10	1.66	1.66	1.66	1.66 0.56 0.65 1.12	1.66 1.66 0.65 1.12 1.79	1.16 0.56 0.65 1.12 1.79 1.45	1.16 0.56 0.55 0.65 1.12 1.79 1.79 2.90	1.16 0.56 0.55 0.65 1.12 1.79 1.79 2.90	1.16 0.56 0.65 1.12 1.79 1.79 2.90 0.07	1.16 0.56 0.65 1.12 1.79 1.79 2.90 0.07 1.39 2.95	1.16 0.56 0.65 1.12 1.79 1.79 1.79 0.07 1.39 2.95 0.42	1.16 0.56 0.65 1.12 1.79 1.79 1.79 1.39 2.95 0.42 1.54	1.16 0.56 0.65 1.12 1.79 1.79 1.79 1.39 2.95 0.42 0.42 1.54 3.11	1.16 0.56 0.65 1.12 1.79 1.45 2.90 0.07 0.07 1.39 2.95 0.42 0.42 1.54 3.11	1.16 0.56 0.65 1.12 1.79 1.45 2.90 0.07 0.07 1.39 2.95 0.42 0.42 0.69 0.69	1.16 0.56 0.65 1.12 1.79 1.45 2.90 0.07 0.42 1.54 3.11 0.69 0.44 0.70	1.16 0.65 0.65 1.12 1.79 1.79 1.39 2.90 0.07 1.39 1.54 1.54 3.11 0.69 0.70	1.16 0.65 0.65 1.12 1.79 1.79 1.39 2.90 0.07 1.39 1.54 1.54 3.11 0.69 0.70 0.70	
		1.02	0.10		1.38	177	4111	0.57	0.99	0.57	0.57 0.99 0.78 0.74	0.57 0.99 0.78 0.74 0.80	0.57 0.99 0.78 0.74 0.80	0.57 0.99 0.78 0.74 0.80 2.21 0.25	0.57 0.99 0.74 0.80 0.25 1.02	0.57 0.99 0.78 0.74 0.80 0.25 1.02 1.72	0.57 0.99 0.78 0.74 0.80 0.25 1.02 1.72 0.50	0.57 0.99 0.78 0.74 0.80 0.25 1.02 1.72 0.50 0.50	0.57 0.99 0.78 0.78 0.78 0.22 1.02 1.72 0.50 0.74 0.99	0.57 0.99 0.78 0.78 0.78 0.22 1.02 1.72 0.50 0.74 0.99	0.57 0.99 0.78 0.78 0.74 0.22 1.02 1.72 0.50 0.74 0.99	0.57 0.99 0.78 0.78 0.74 0.21 1.02 1.72 0.50 0.74 0.99 0.99	0.57 0.99 0.74 0.80 0.25 1.02 1.02 1.02 0.50 0.74 0.99 0.05 0.05 0.05 0.05	0.57 0.99 0.74 0.80 0.25 0.25 0.50 0.74 0.99 0.05 0.05 0.05 0.05 0.05 0.05 0.05	
100m 2 to 200m 3 (4) (4) (1.48					1.44	1.76		0.58																	<del>                                     </del>
₽.E					1.00	1.18 1.	0.26 0.																		
(%) (ad) Sub (3) (4) to 1 (2) (2) 1. (2) 20(2) 1. (3) 3 0. (15.8						33.5 1.	40.0(z) 0.																		
e						1.55 3																			
S a			7.90	16.20	4.22	3.12				+															
	(sq.km)	0.45	0.15	0.06	0.36	0.52		0.34	0.34	0.34	0.39 0.24 0.15	0.39 0.24 0.15 0.14	0.39 0.24 0.15 0.14	0.34 0.39 0.24 0.15 0.14 0.21	0.34 0.24 0.15 0.14 0.10 0.10	0.34 0.39 0.24 0.15 0.14 0.21 0.21 0.36	0.34 0.24 0.15 0.14 0.10 0.10 0.10 0.21 0.36 0.56	0.34 0.24 0.15 0.15 0.10 0.10 0.10 0.16 0.26 0.26 0.26 0.26 0.27 0.26 0.26	0.34 0.15 0.15 0.16 0.16 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21	0.34 0.15 0.15 0.16 0.16 0.16 0.16 0.16 0.16	0.34 0.15 0.15 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0.34 0.15 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0.34 0.15 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0.34 0.15 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16	
	Dead	V500	0200	T500	R500		R400	R400	R400 R300 R200	R400 R300 R200 Q500	R300 R200 Q500 N500	R400 R300 Q500 N500 N400	R400 R300 Q500 Q500 N500 N400 K500	R400 R300 Q500 Q500 N500 N400 K500	R400 R300 Q500 N500 N500 K500 K400 J600	R400 R300 Q500 N500 N500 K500 K400 J600 J500	R400 R300 Q500 N500 N500 N500 K400 J600 J600 J600 J600	R400 R300 Q500 N500 N500 N500 K400 1500 1500	R400 R300 R200 Q500 N500 N500 R400 J600 J500 J500 H500 H500	R400 R300 R200 O500 N500 N500 R400 J600 J600 J600 H500 H500 G500	R400 R300 R200 O500 N500 N500 N500 K400 J400 J500 J500 H500 G500 G450	R400 R300 R200 O500 N500 N500 N500 K400 J500 J500 J500 G500 G450 G400	R400 R300 R200 Q500 N500 N500 N500 R400 J500 J500 H500 G450 G400 F500	R400 R300 R200 Q500 N500 N500 N500 K400 J500 J500 J500 H500 G450 G450 G450 G500 E500	R400 R300 R200 Q500 N500 N500 N500 R400 J500 J500 J500 H500 G450 G450 G450 G450 G450 G500 G500 G

Motas:
This table, together with the associated statement, should only be quoted in its entirety
(1) Minimum seam thickness 0,10m - average thickness from true thickness borehole database
(2) Insufficient quality data available for gridding, default estimate.
(3) Borchole database average
(4) No max raw ash criteria used to constrain coal resource estimates.

73 Million Tonnes

TOTAL INDICATED (ROUNDED)

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Table 7.2 Summary of Measured Coal Resource Estimates, Baruun Naran Deposit

As at 1st March 2010

			In situ			Meas	ured Reso	Measured Resources (Million tonnes	on tonnes)	
Seam	Coal area (sq.km)	Average seam thickness (m) (1)	density (g/cc) (6% moisture)	Average ash (%) (ad) (3) (4)	Subcrop to 100m (4)	100m to 200m (4)	200m to 300m (4)	300m to 400m	Total subcrop to 300m (4)	Total 300 to 400m (4)
V500	0.45	4.61	1.48(2)	20(2)	State of			*	-	
0200	0.15	7.90	1.55	33	2.94	3.80	2.89	2.51	9.36	2.51
T500	90.0	16.20	1.42	15.8	8.47	10.92	10.54	7.02	29.93	7.02
R500	0.36	4.22	1.54	28.2	69.0	0.90	0.98	0.97	2.57	0.97
R400	0.52	3.12	1.55	33.5	0.24	0.34	0.42	0.40	1.00	0.40
R300	0.34	1.03	1.55(2)	40.0(2)				1		
R200	0.39	3.03	1.54	30.3	100		100			
0200	0.24	4.39	1.53	28.2	1.16	1.55	1.28	0.63	3.99	0.63
N500	0.15	8.17	1.48	27.2	3.64	5.65	4.79	3.20	14.08	3.20
N400	0.14	7.07	1.54	30.0	2.85	3.49	2.74	1.60	9.08	1.60
K500	0.21	6.12	1.53	29.6	3.67	4.81	3.72	2.59	12.2	2.59
K400	0.10	2.17	1.64	36.2	0.53	0.61	0.10		1.24	
3600	0.36	2.68	1.46	22.3	1.29	1.78	1.36	0.48	4.43	0.48
3500	95.0	4.40	1.41	18.3	1.58	2.59	2.03	0.52	6.20	0.52
3400	0.54	0.57	1.55	30.8			-	1		
1500	0.16	4.83	1.40	18.8	2.6	4.14	3.51	2.00	10.25	2:00
H500	0.14	16.92	1.40	19.9	8.06	12.88	11.88	8.38	32.82	8.38
6500	90.0	6.82	1.57	34.9	2.46	4.42	4.44	3.55	11.32	3.55
G450	0.10	5.76	1.59	38.0	09.0	98.0	0.92	0.37	2.38	0.37
G400	0.13	7.79	1.60	36.9	2.88	4.06	3,35	2.70	10.29	2.70
F500	0.04	8.84	1.51	26.2	1.75	2.75	3.00	3.23	7.50	3.23
E200								•		
Depth Totals				27.4	45.41	65.55	57.95	40.15	16891	40.15
Total	5.34								209.06	90.

Notes:
This table, together with the associated statement, should only be quoted in its entirety
(5) Millimum seam thickness 0.10m – average thickness from true thickness borehole database
(6) Insufficient quality data available for gridding, default estimate.
(7) Borehole database average
(8) No max raw ash criteria applied to resources

209 Million Tonnes TOTAL MEASURED (ROUNDED)

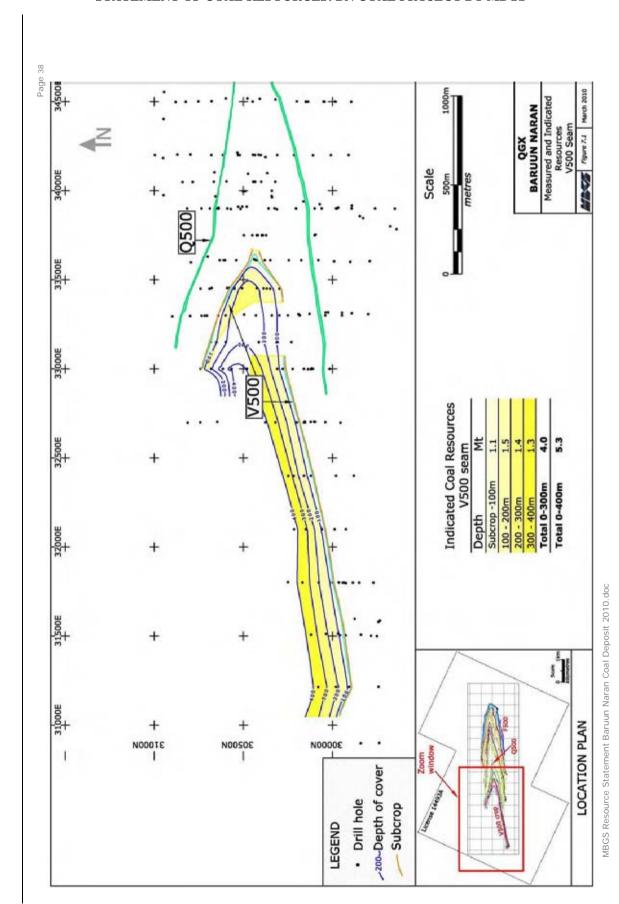
MBGS Resource Statement Baruun Naran Coal Deposit 2010.doc

Table 7.3 Summary of Coal Resource Estimates, Baruun Naran Deposit

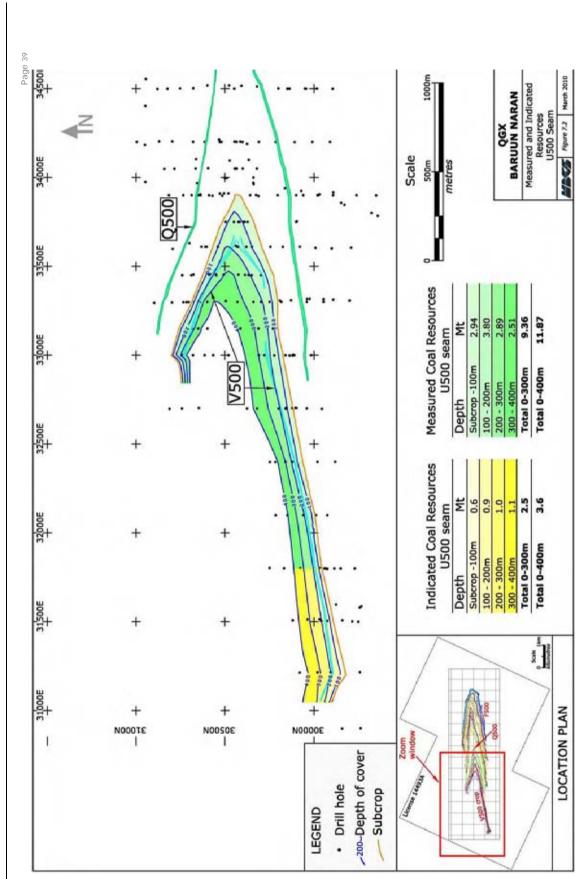
As at 1st March 2010

DEPTH	Average ash (%) (ad)	Measured + Indicated (Rounded) (Mt)	Inferred (Rounded) (Mt)
Subcrop to 100m	25.6	54	0
100m to 200m	26.3	81	0
200m to 300m	26.4	77	0
300m to 400m	26.1	70	0.5
TOTAL 0-300m	26.2	212	0
FOTAL 0-400m	26.1	282	0.5

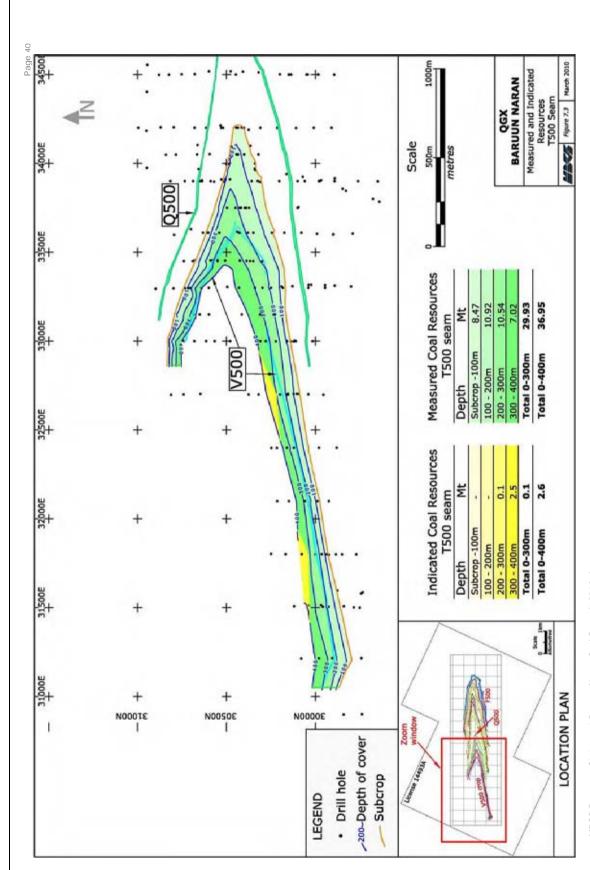
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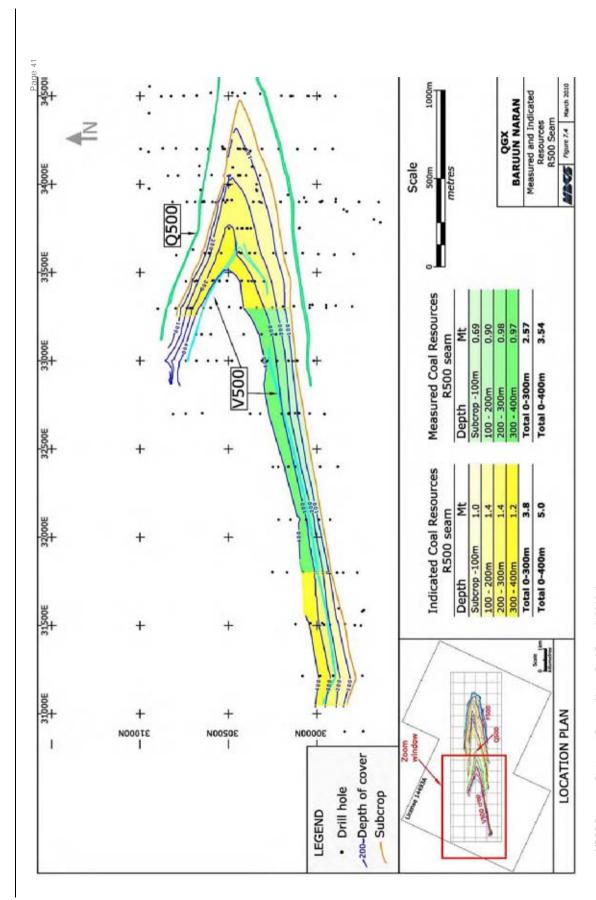
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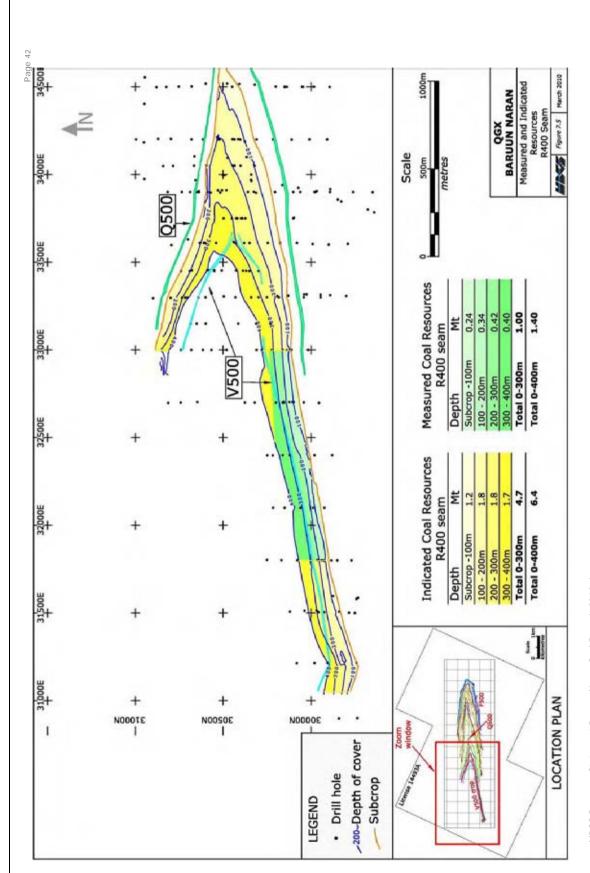
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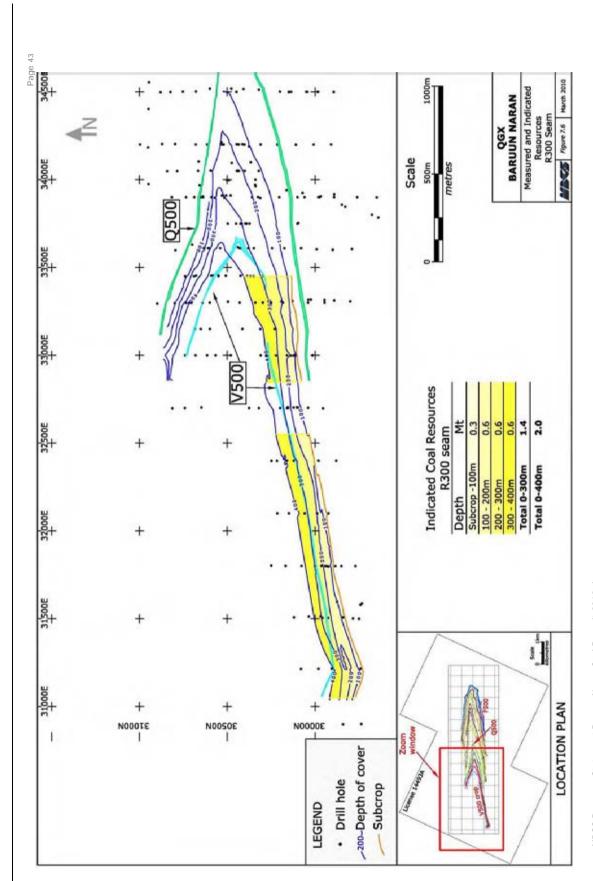
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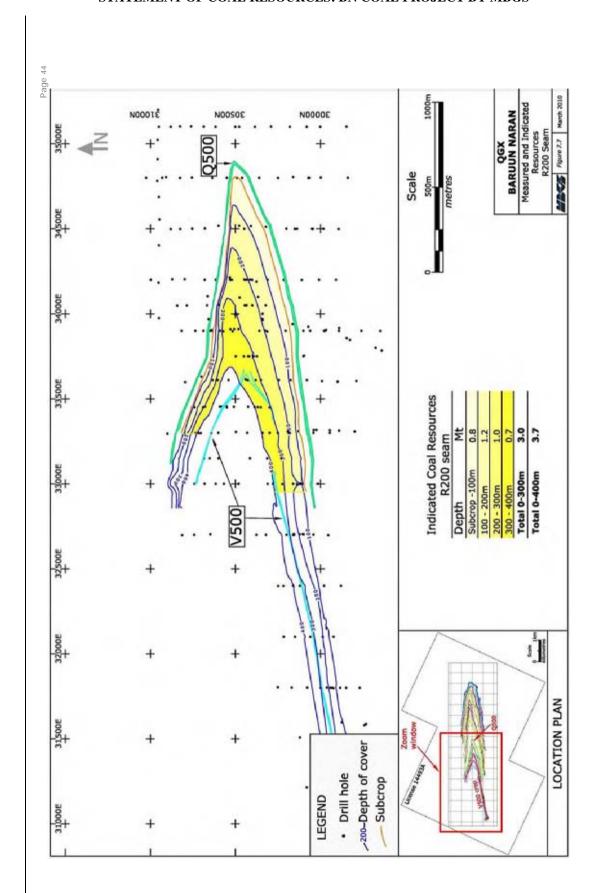
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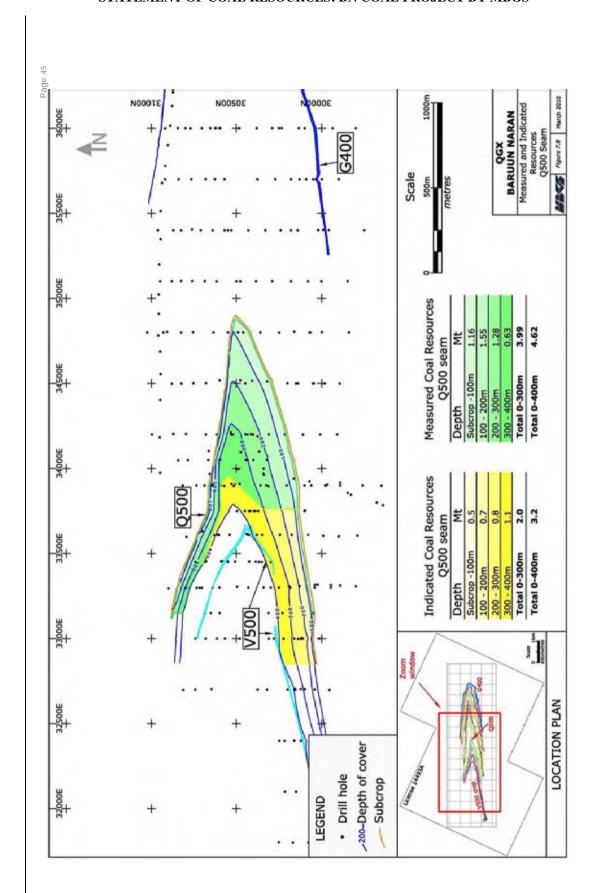
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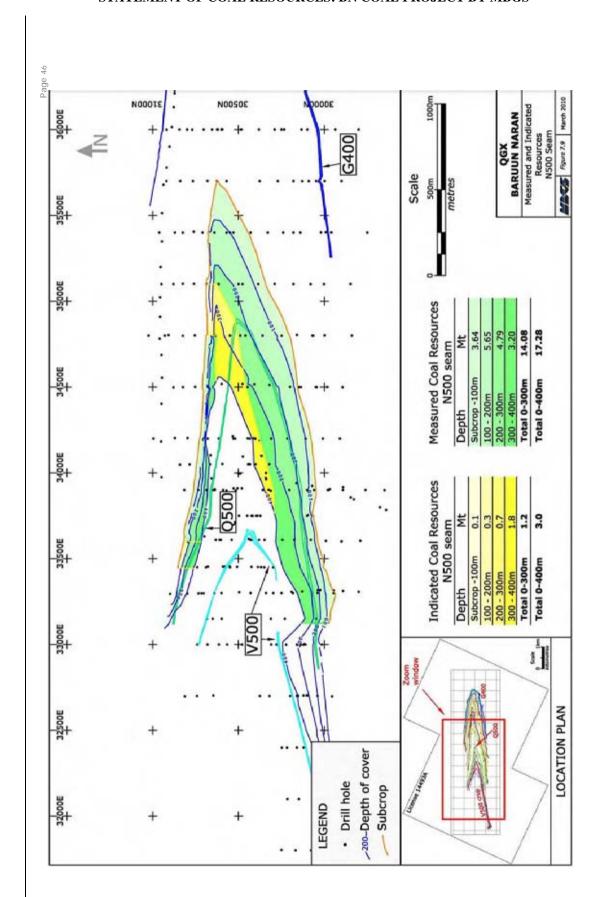
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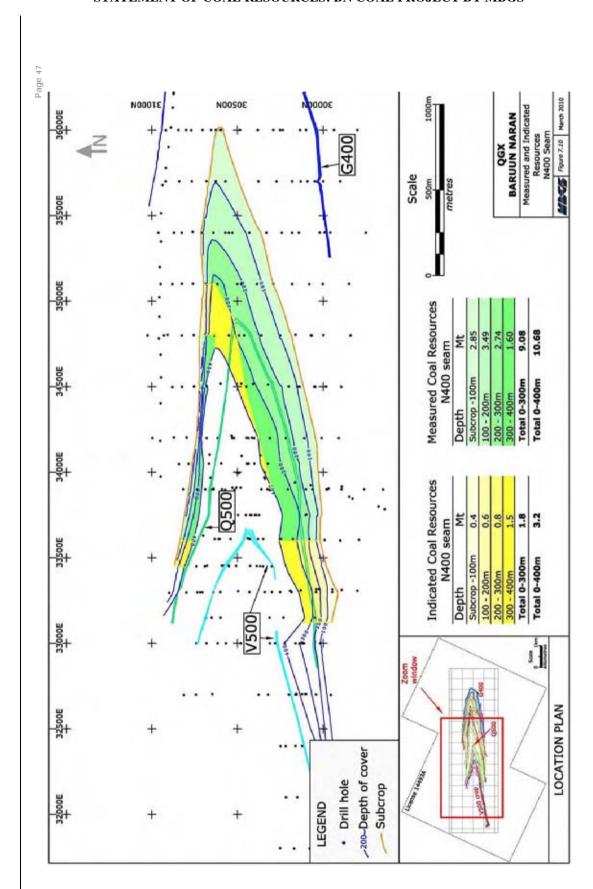
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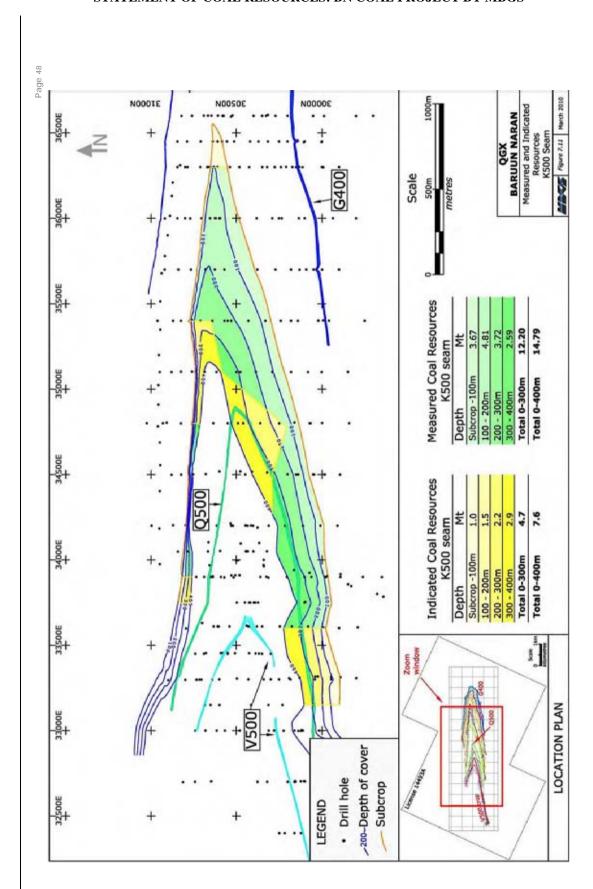
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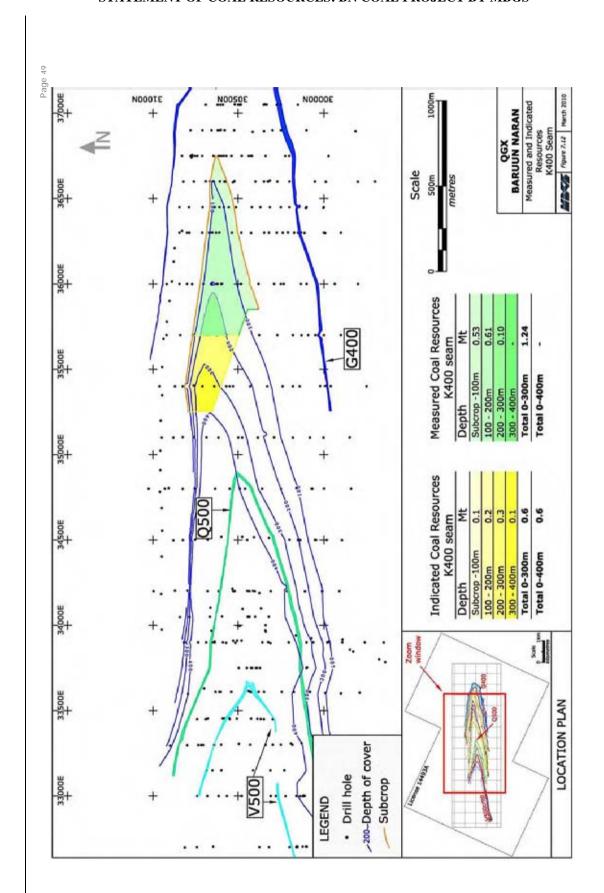
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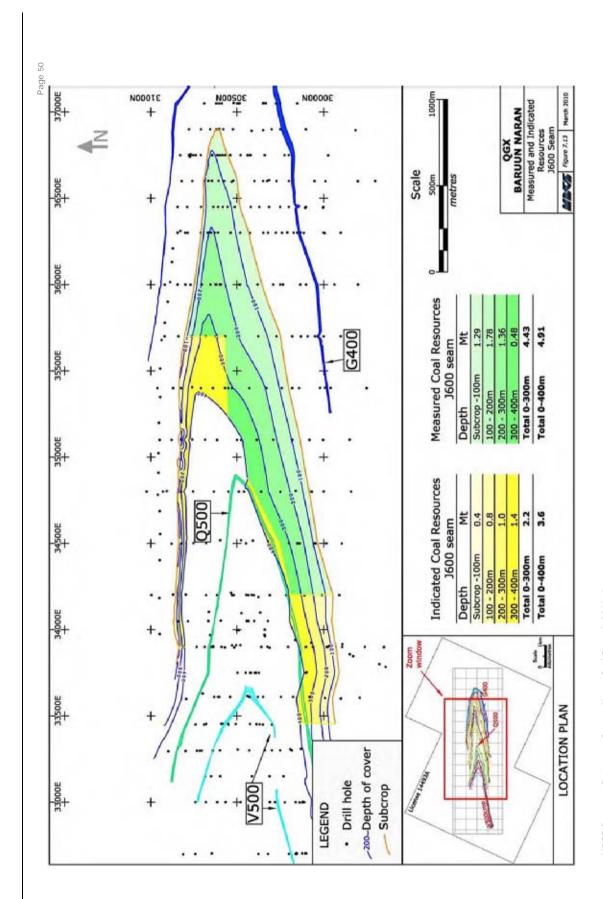
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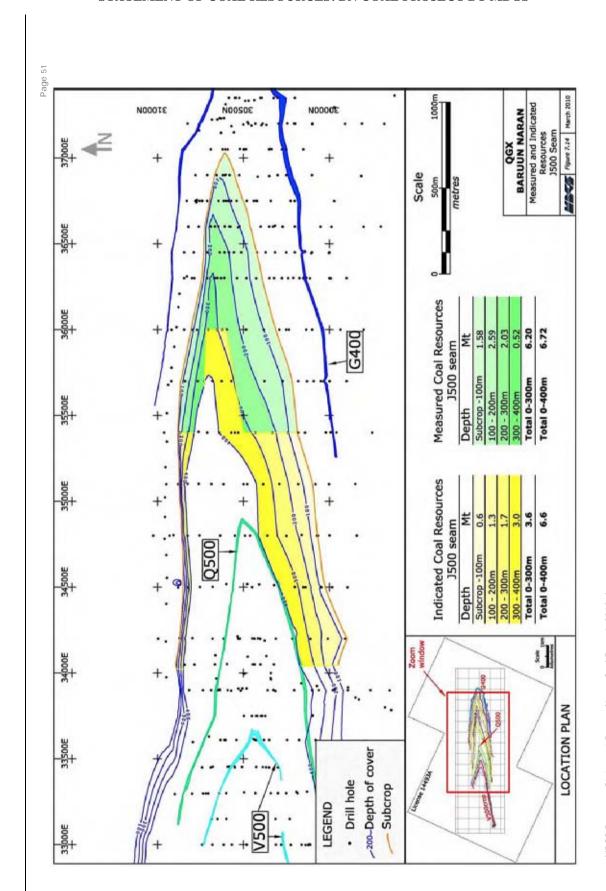
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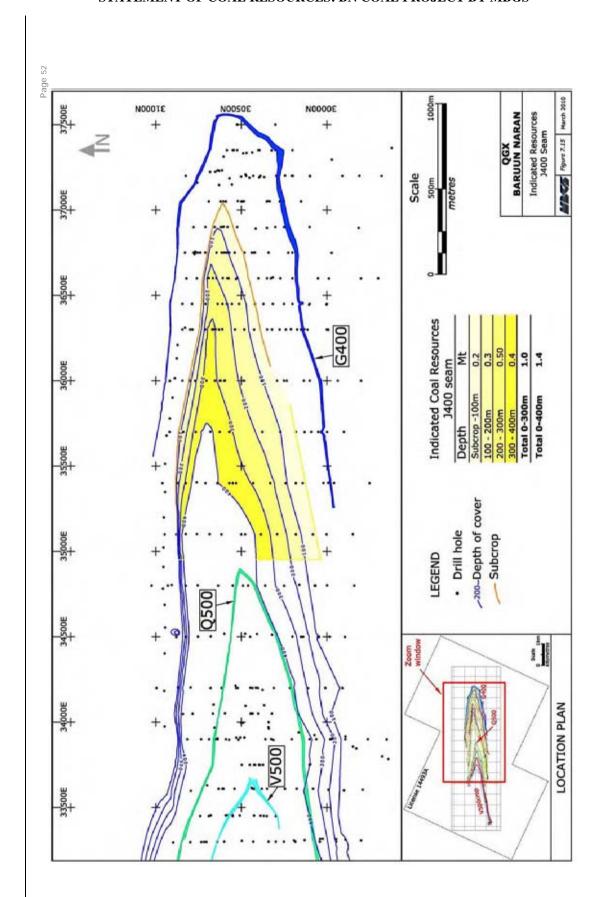
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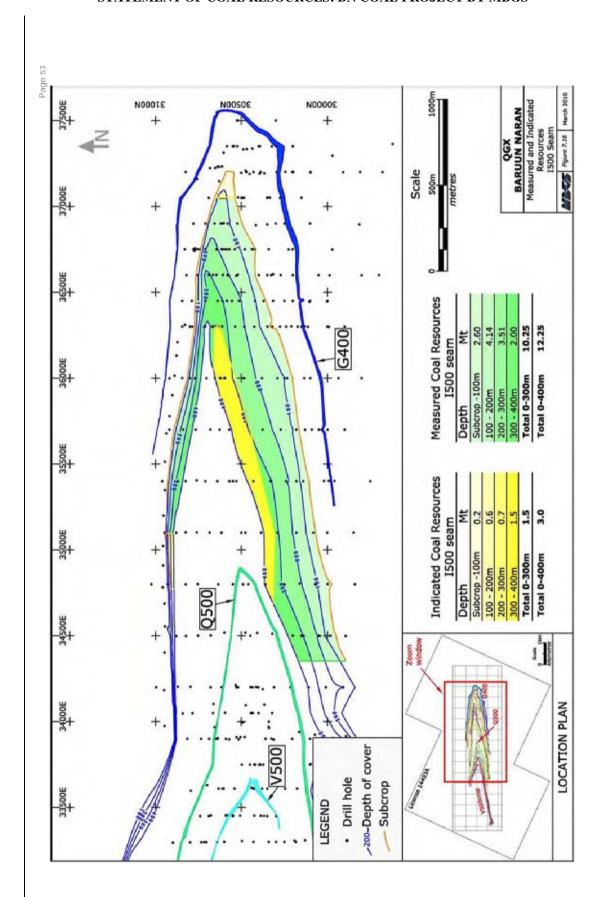
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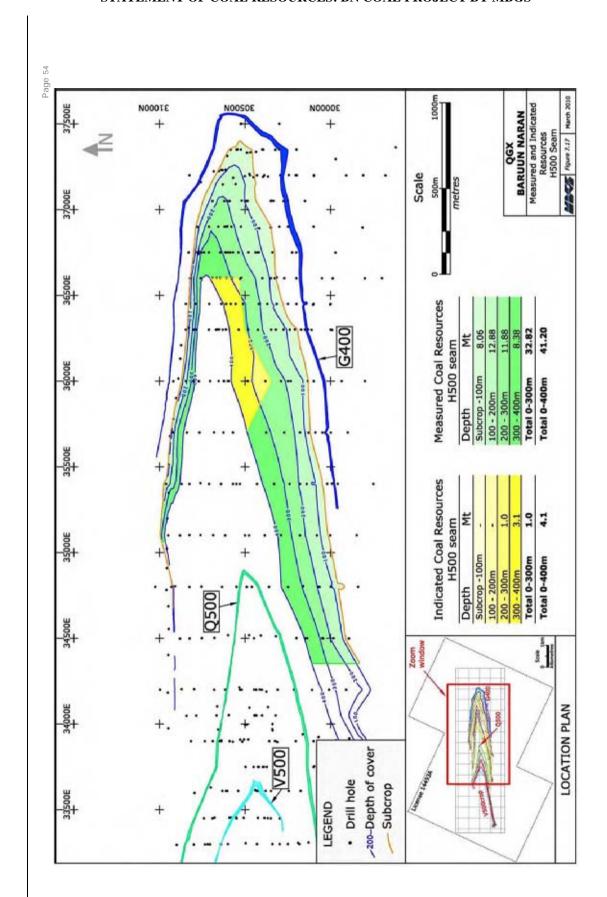
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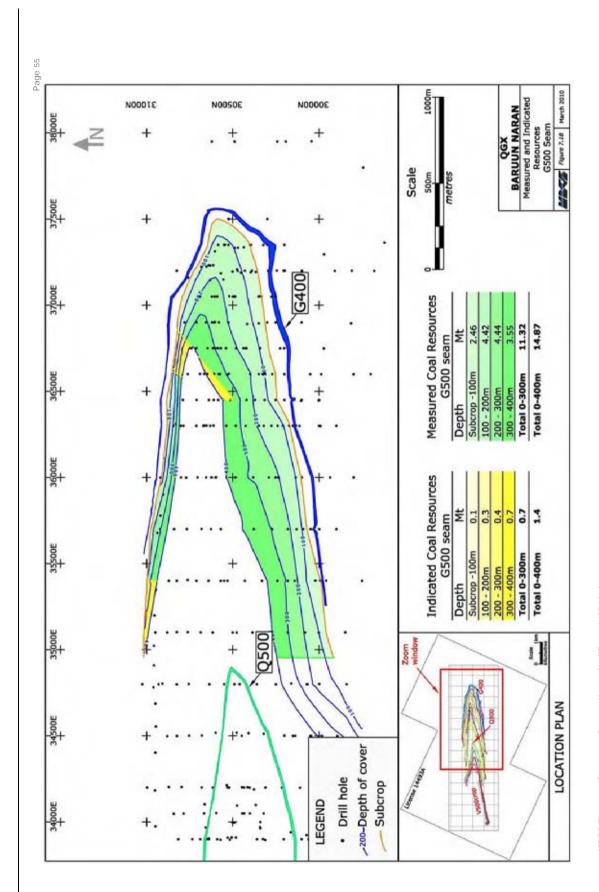
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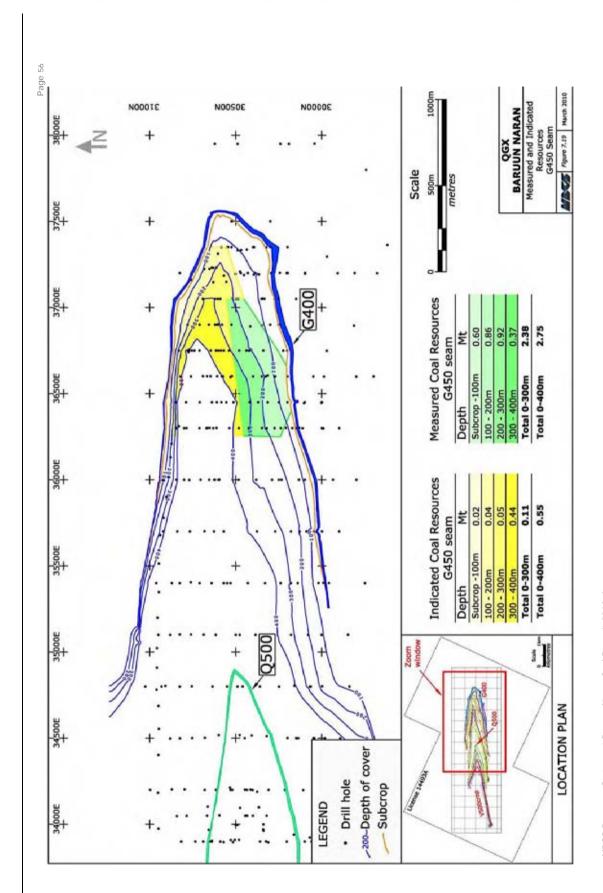
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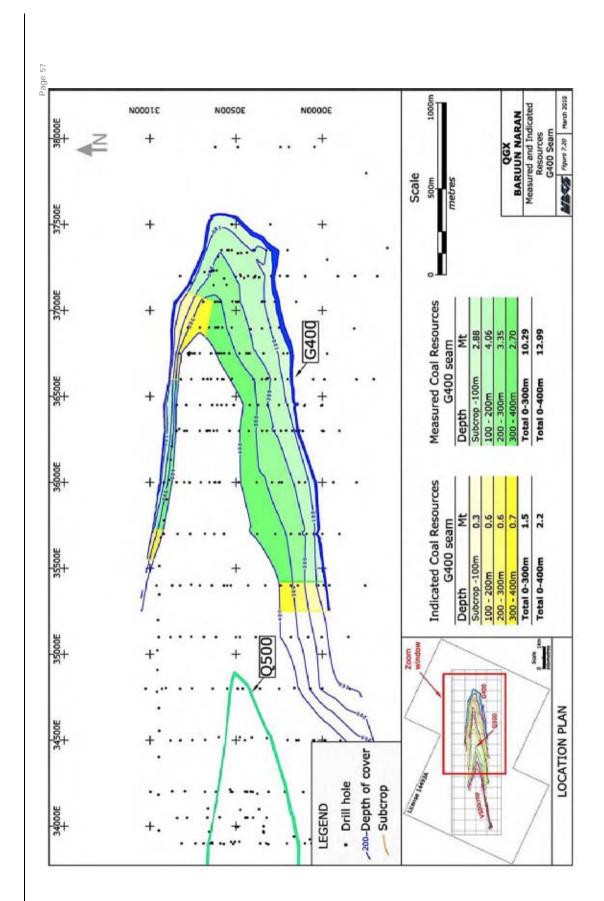
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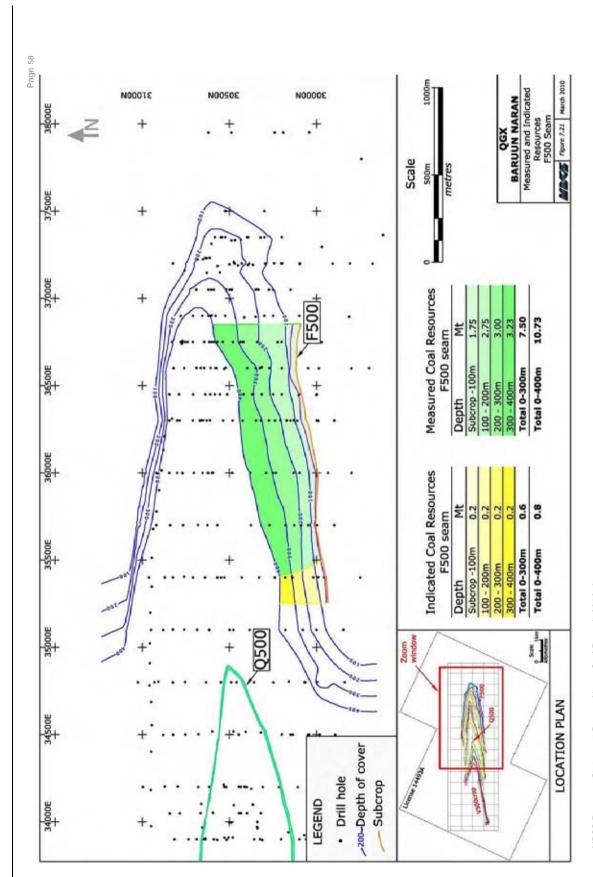
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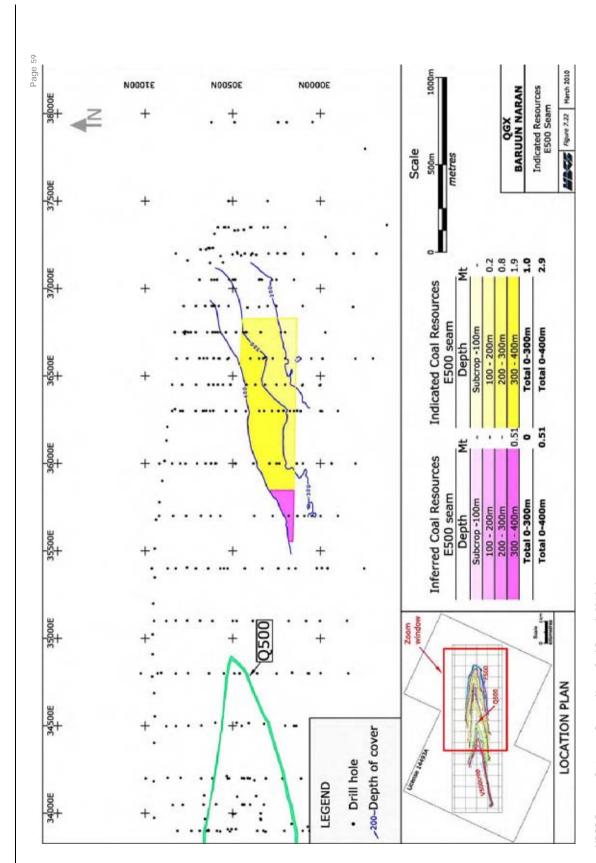
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Statement of Coal Resources 2010 Baruun Naran Coal Deposit

Appendix A

# APPENDIX A

# RESOURCE BLOCK CHECKLIST

PROJECT/MINE NAME	Baruun Naran		
MINING/EXPLORATION TITLE	Mining License 14493A granted 1st December 2008 can be		
	renewed for up to 70yrs. Surrounding exploration license		
	Tsaikhar Khudag exploration concession 4326X (total area		
	90,782.36 Ha).		
RESOURCE BLOCK(S) ID	Baruun Naran		
RESOURCE CLASSIFICATION	Measured Resource	Indicated	Inferred Resource
		Resource	illierred Resource
	V500, U500,T510, T500, R500, R400, R300, R200, Q550,		
COAL SEAM(S)	Q500, N500, N400, K500, K400,J600, I500, H500, G500,		
	G450, G400, F500 and E500.		
POTENTIAL EXTRACTION METHODS	Open Cut		
	All seam subcrop within License 14493A. The east to west		
	orientated syncline plunges to the west at 24°. The north limb is		
GEOLOGY	steep 75° to overturned towards the west. South limb less steep		
	- 45° steepening to 75° in the west. Shallowest dips close to		
	subcrop around the synclinal nose – 40°.		

RESO	RESOURCE LIMITS/LIMITATIONS (Resource Block Limits)			
		Considerations		
AREA	AREAL LIMITS			
C1	Lease Boundaries	The coal resources are located within the current mining license.		
C2	Infrastructure	No permanent structures exist.		
С3	Environmental/ Historical Features	Extremes of climate occur with seasonal changes.		
C4	Native Title interests	N/A		
C5	Mine workings	Nil to date.		
C6	Data limits	Resource limits defined from drilling.		
GEOLOGICAL LIMITS				
C7	Seam thickness limitations	N/A		
C8	Interburden thickness	N/A		
С9	Subcrop	Subcrops clearly defined in the east. Towards the west and northwest resources are truncated at depth by faulting		
C10	Overburden	Depth slices of 100m to each seam.		
C11	Strip Ratio	N/A		
C12	Quality parameters	Due to the large number of seams and plies quality will require		

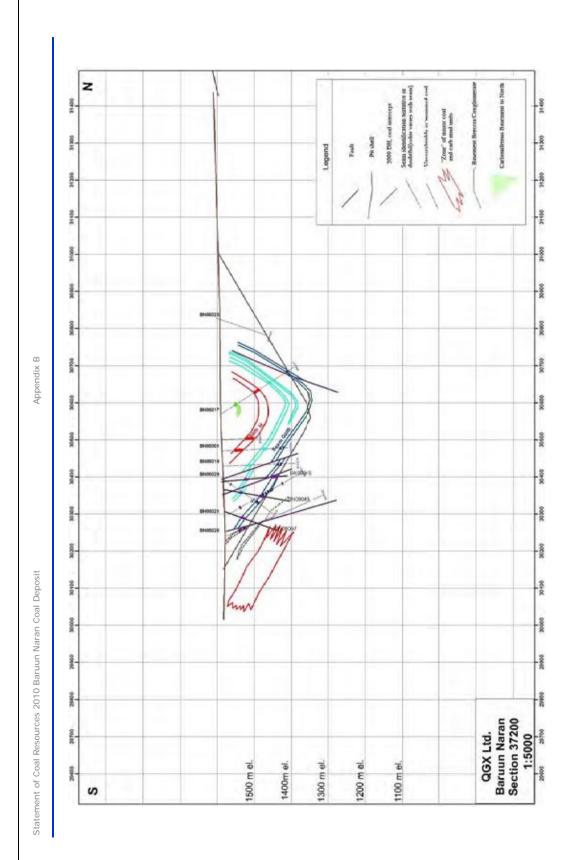
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Statement of Coal Resources 2010 Baruun Naran Coal Deposit

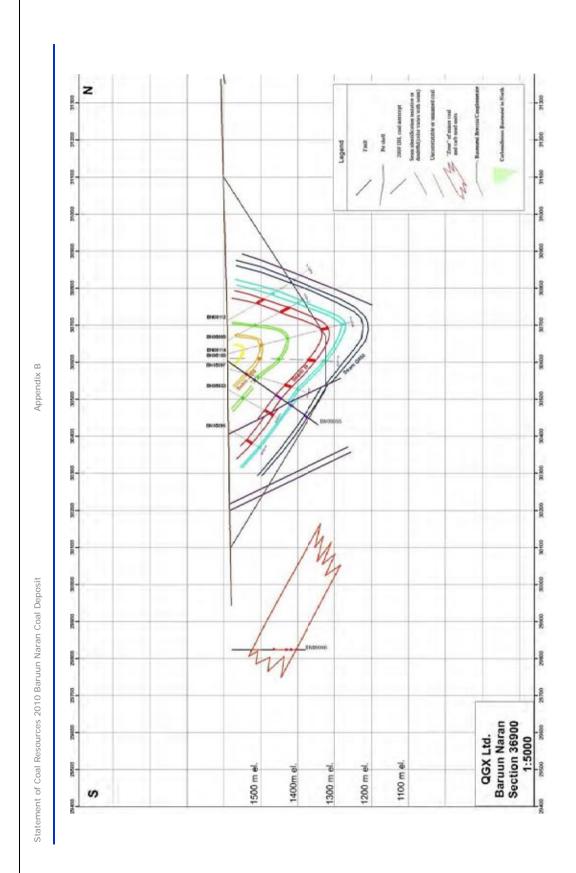
Appendix A

		further analysis at the coal face, during mining.
C13	Structure - faults, seam dip	Large and small scale faulting is expected across the deposit.  Large bounding faults occur and smaller scale faulting is expected throughout the coal seam sequence.
C14	Igneous bodies	None identified from exploration.
C15	Other	
	COMMENT	

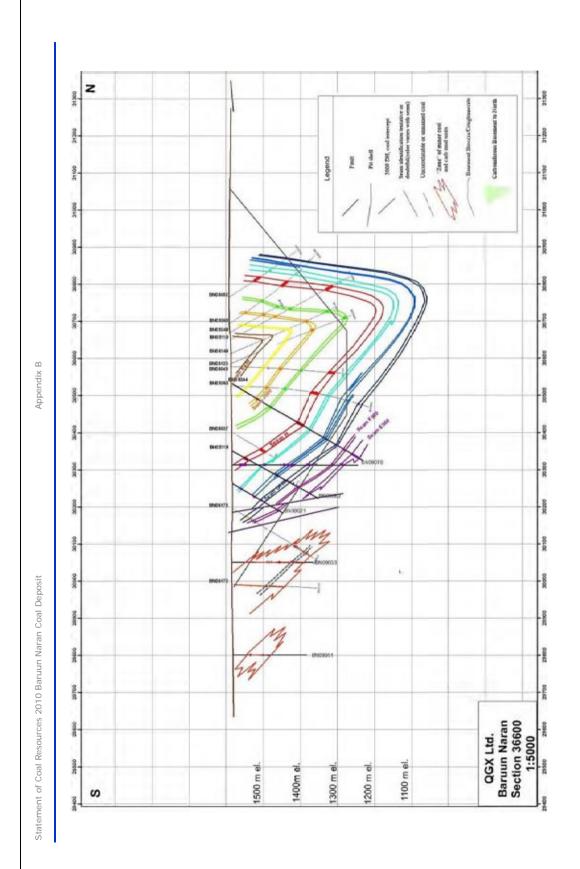




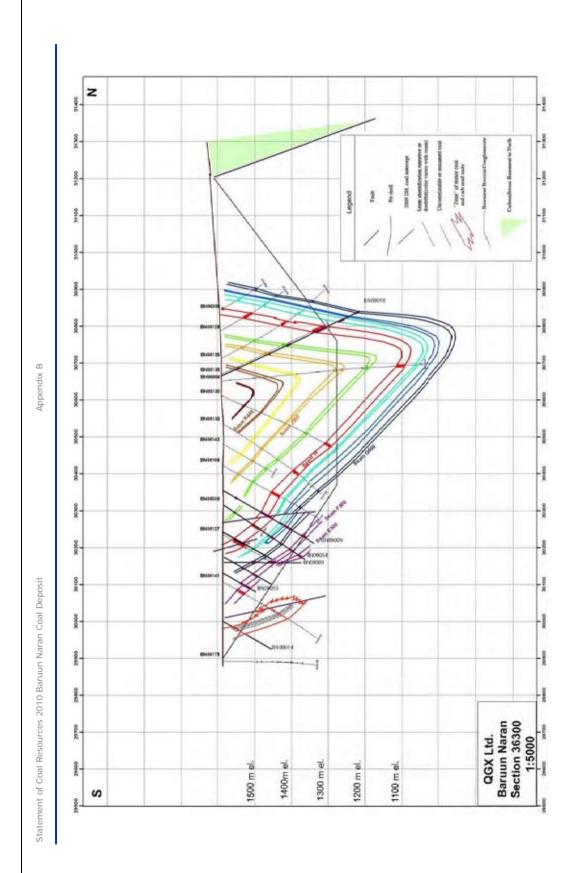
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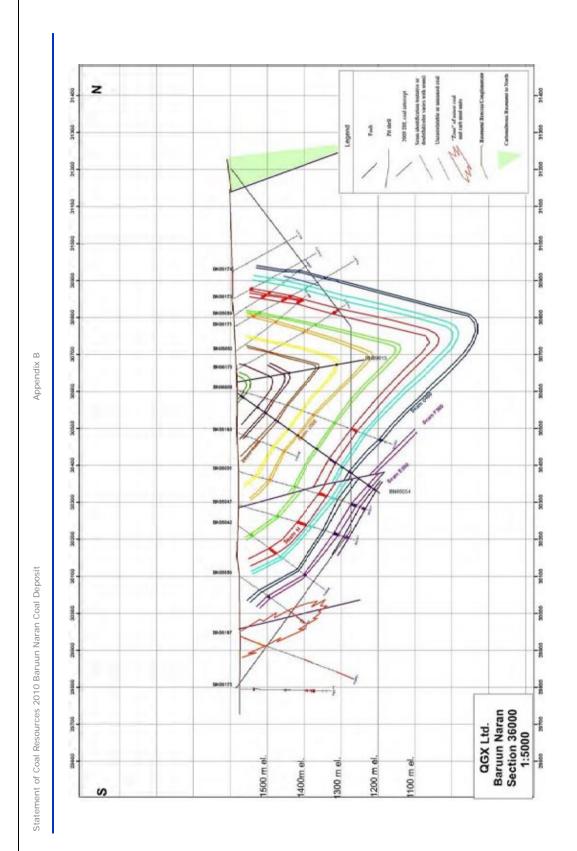
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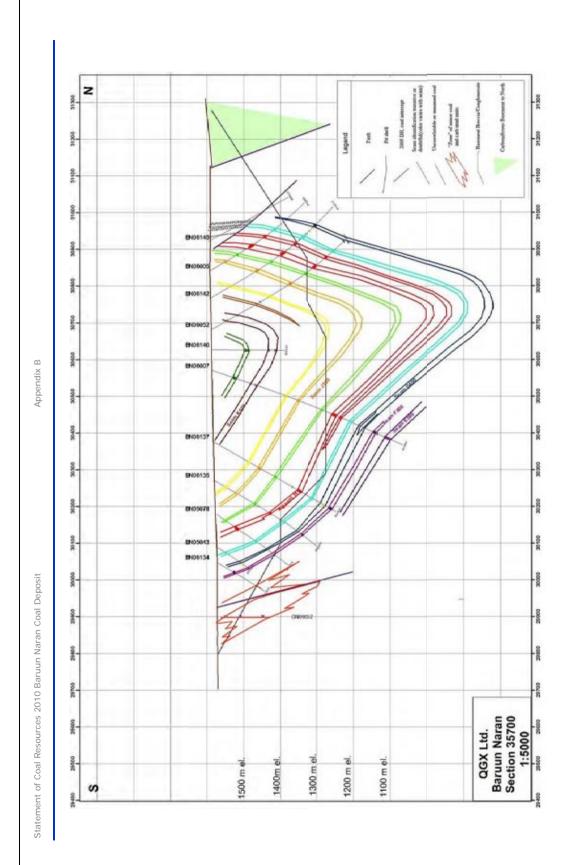
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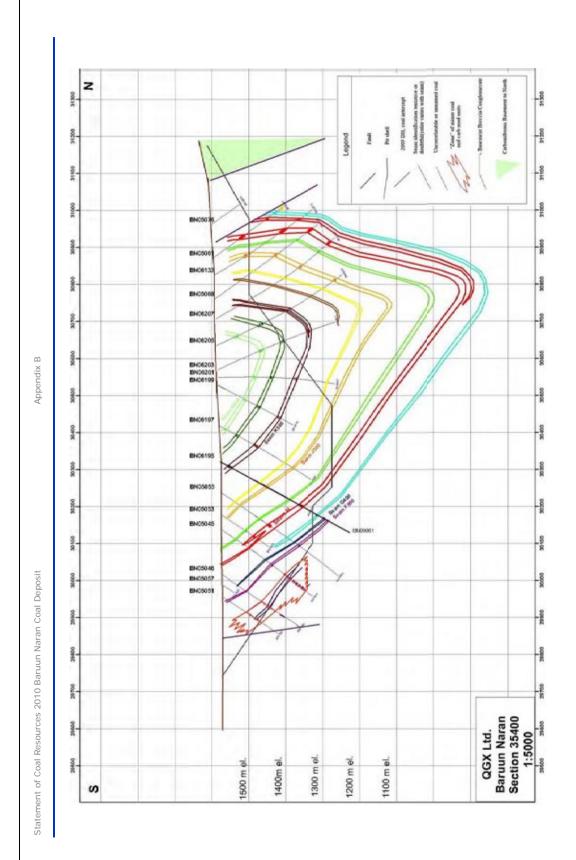
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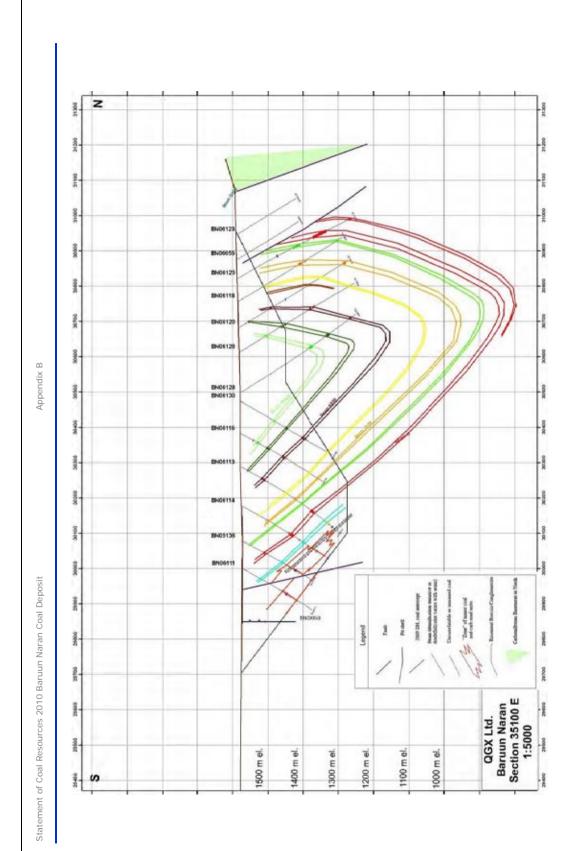
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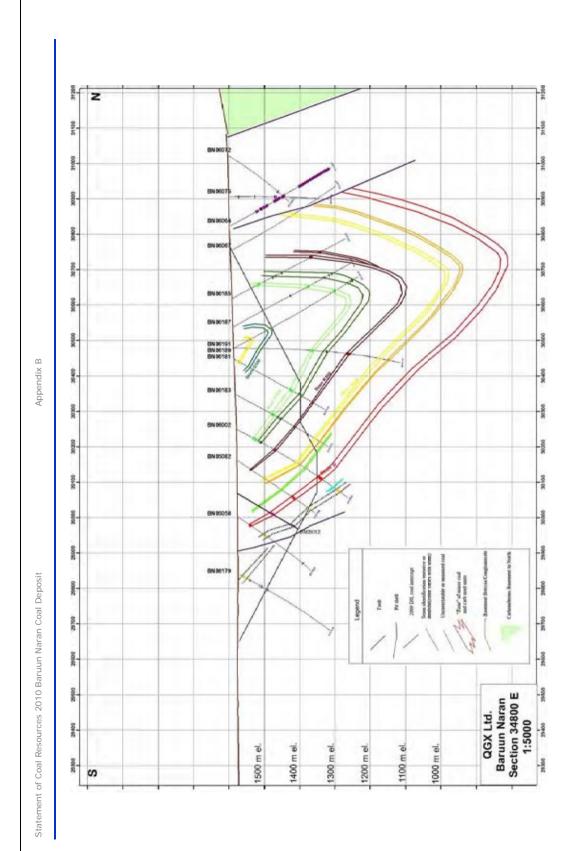
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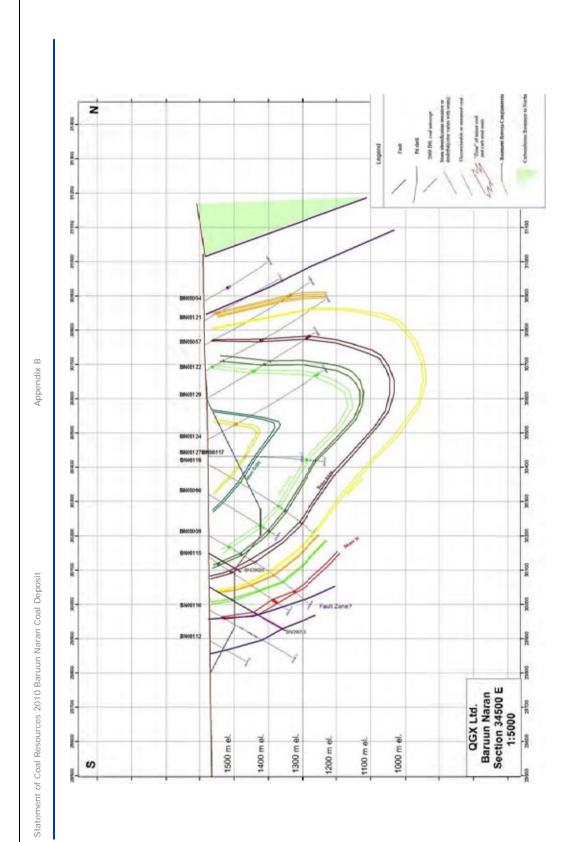
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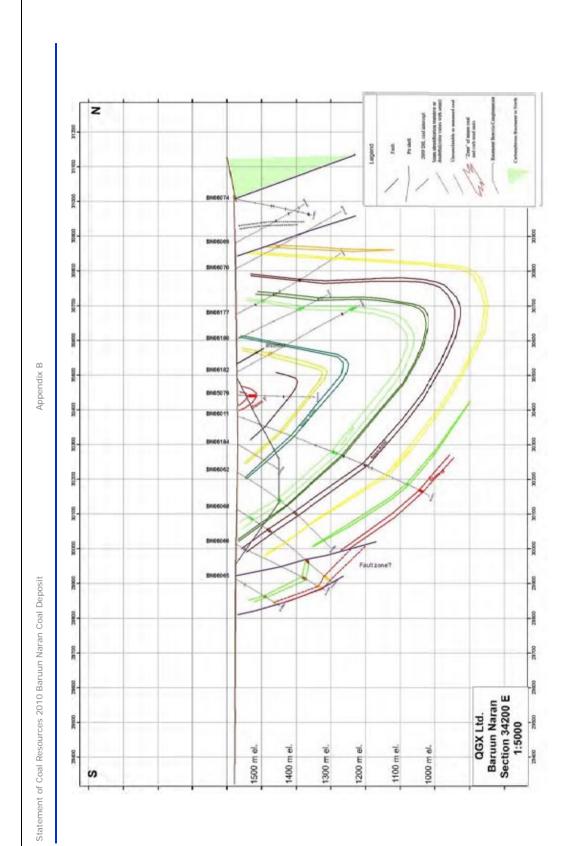
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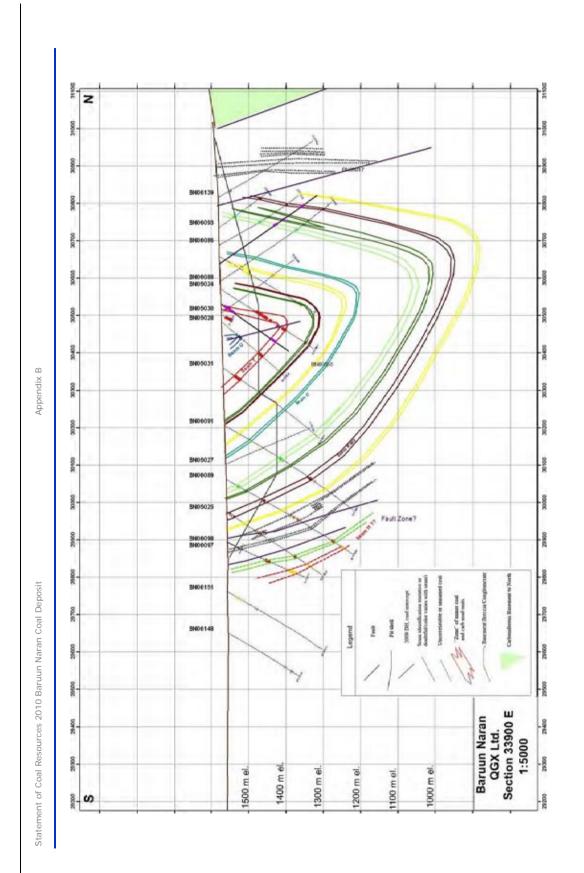
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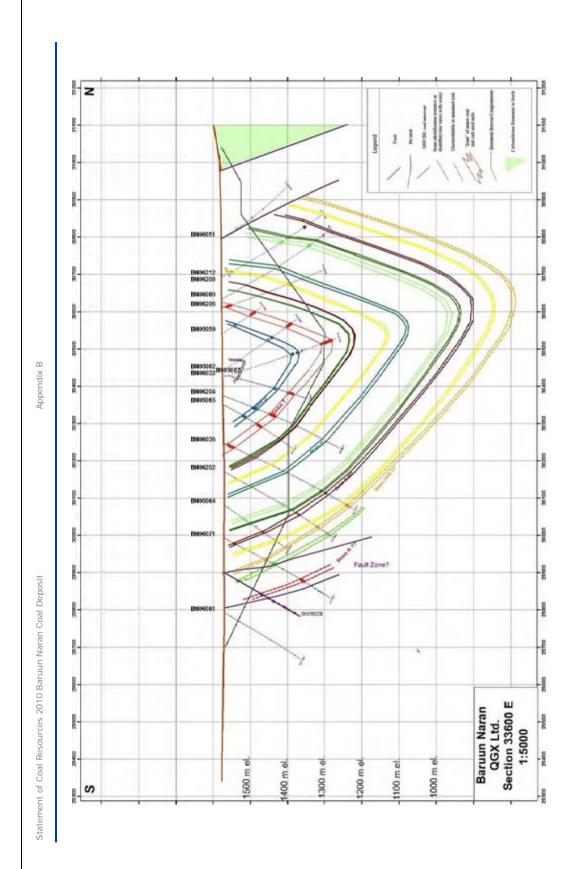
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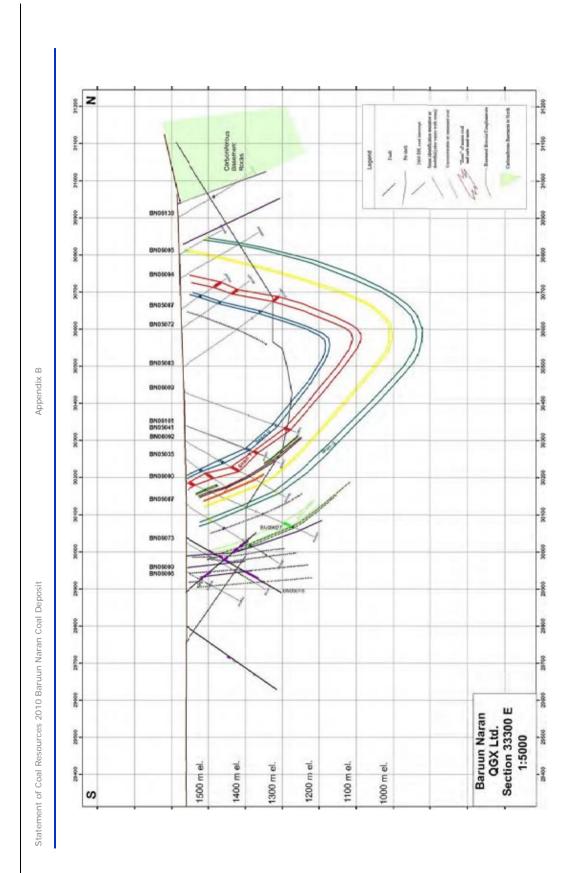
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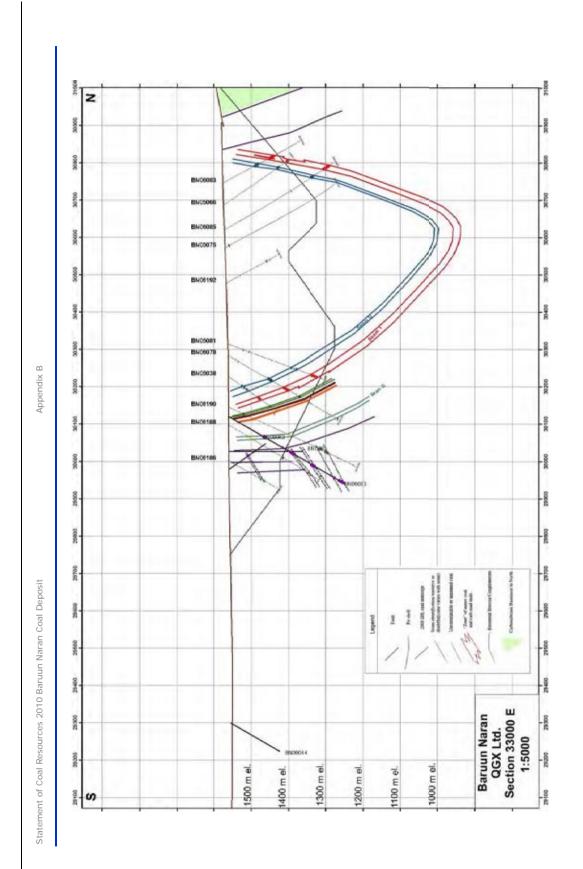
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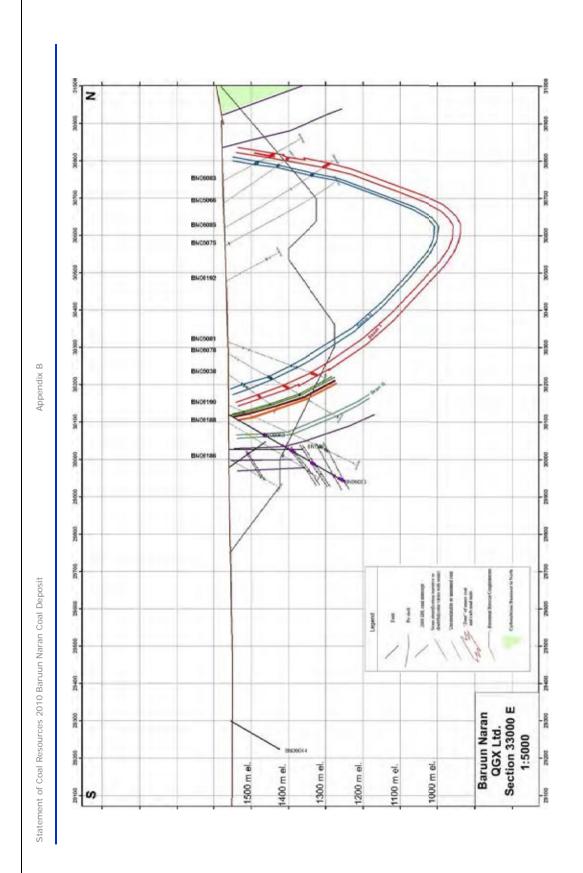
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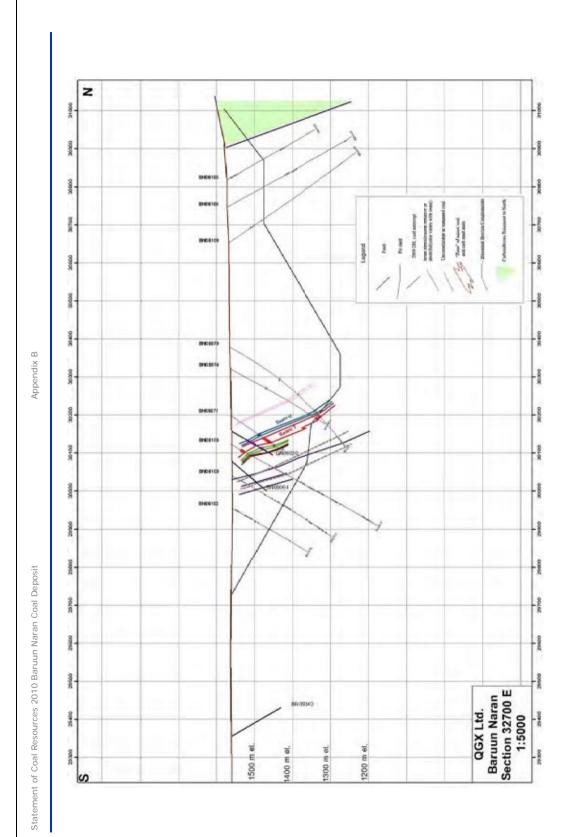
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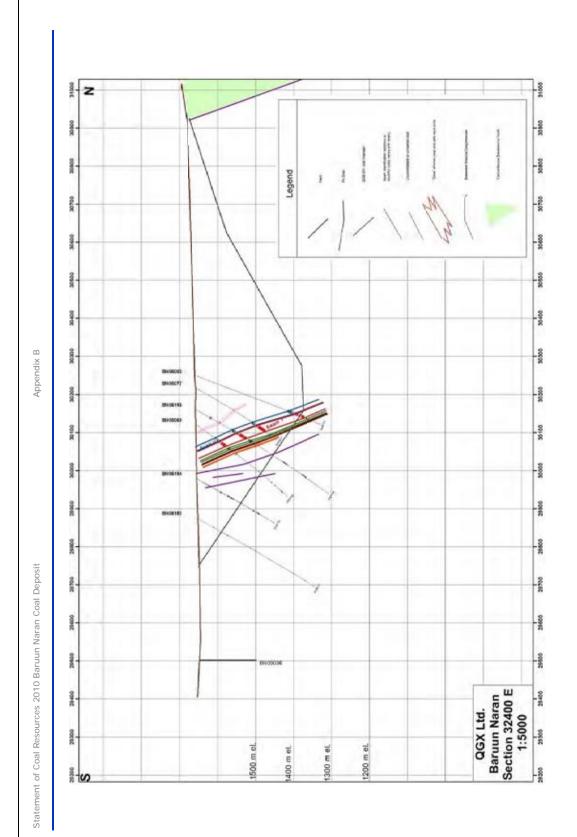
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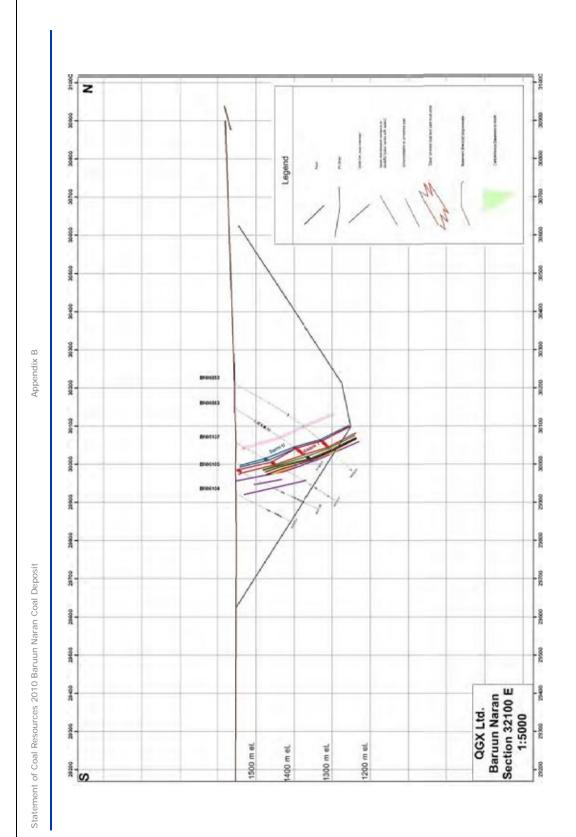
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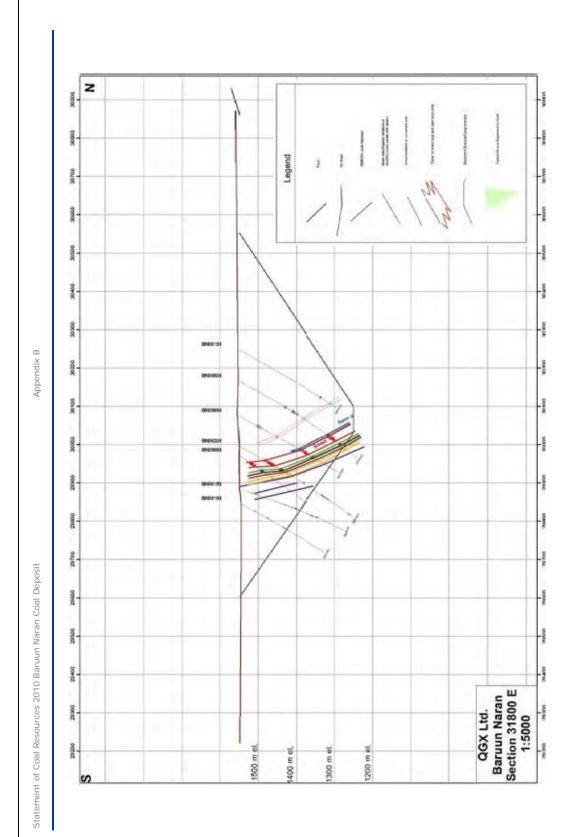
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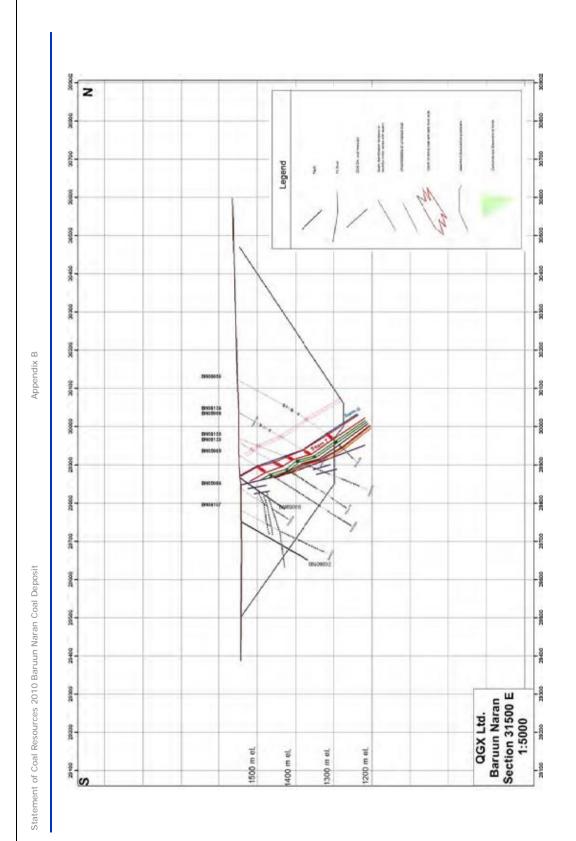
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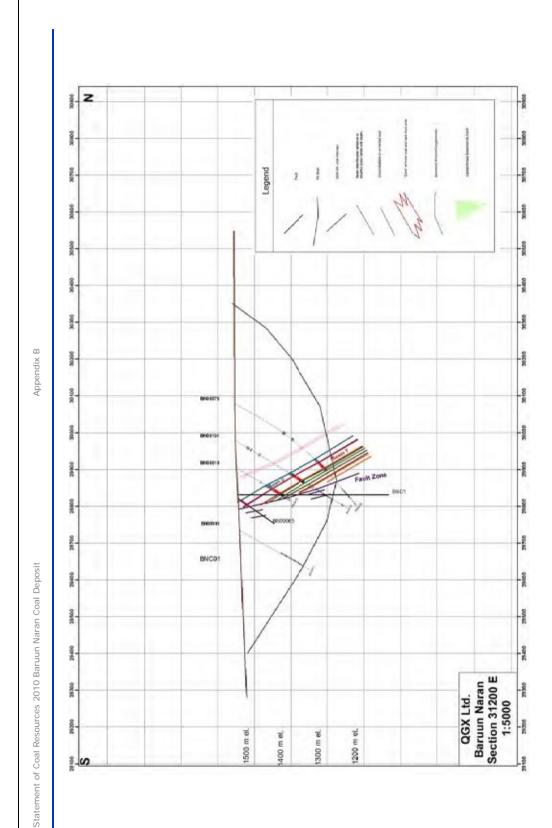
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Statement of Coal Resources 2010 Baruun Naran Coal Deposit

Appendix C

# APPENDIX C

# AUSTRALASIAN CODE FOR THE REPORTING OF

MINERAL RESOURCES AND ORE RESERVES

(THE JORC CODE)

December 2004



# Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves









# **Effective December 2004**

Prepared by:
The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC)

THE 2004 AUSTRALASIAN CODE FOR REPORTING EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES (THE JORC CODE)

#### **FOREWORD**

1. The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code' or 'the Code') sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The Joint Ore Reserves Committee ('JORC') was established in 1971 and published several reports containing recommendations on the classification and Public Reporting of Ore Reserves prior to the release of the first edition of the JORC Code in 1989.

Revised and updated editions of the Code were issued in 1992, 1996 and 1999. This 2004 edition supersedes all previous editions.

Concurrently with the evolution of the JORC Code, the Combined Reserves International Reporting Standards Committee ('CRIRSCO'), initially a committee of the Council of Mining and Metallurgical Institutions ('CMMI'), has, since 1994, been working to create a set of standard international definitions for reporting Mineral

Resources and Mineral (Ore) Reserves, modelled on those of the JORC Code.

Representatives of bodies from participating countries (Australia, Canada, South Africa, USA and UK) reached provisional agreement on standard definitions for reporting in 1997. This was followed in 1998 by an agreement to incorporate the CMMI definitions into the International Framework Classification for Reserves and Resources – Solid Fuels and Mineral Commodities, developed by the United Nations Economic Commission for Europe ('UN-ECE').

As a result of the CRIRSCO/CMMI initiative, considerable progress has been made towards widespread adoption of consistent reporting standards throughout the world. These are embodied in the similar codes, guidelines and standards published and adopted by the relevant professional bodies in Australia, Canada, South Africa, USA, UK, Ireland and many countries in Europe. The definitions in this edition of the JORC Code are either identical to, or not materially different from, those international definitions.

#### INTRODUCTION

- 2. In this edition of the JORC Code, important terms and their definitions are highlighted in **bold** text. The guidelines are placed after the respective Code clauses using *indented italics*. They are intended to provide assistance and guidance to readers. They do not form part of the Code, but should be considered persuasive when interpreting the Code. Indented italics are also used for Appendix 1 'Generic Terms and Equivalents', and Table 1 'Check List of Assessment and Reporting Criteria' to make it clear that they are also part of the guidelines, and that the latter is not mandatory for reporting purposes.
- 3. The Code has been adopted by The Australasian Institute of Mining and Metallurgy (The AuslMM') and the Australian Institute of Geoscientists ('AIG') and is therefore binding on members of those organisations. It is endorsed by the Minerals Council of Australia, and the Securities Institute of Australia as a contribution to good practice. The Code has also been adopted by and included in the listing rules of the Australian ('ASX') and New Zealand ('NZX') Stock Exchanges.

The ASX and NZX have, since 1989 and 1992 respectively, incorporated the Code into their listing rules. Under these listing rules, a Public Report must

be prepared in accordance with the Code if it includes a statement on Exploration Results, Mineral Resources or Ore Reserves. The incorporation of the Code imposes certain specific requirements on mining or exploration companies reporting to the ASX and NZX. The 2004 edition of the Code has included much of the relevant material previously found only in the listing rules concerning the reporting of Exploration Results and the naming of the Competent Person. Despite the inclusion of this material in the Code it is strongly recommended that users of the Code familiarise themselves with those listing rules which relate to Public Reporting of Exploration Results, Mineral Resources and Ore Reserves.

The JORC Code requires the Competent Person(s), on whose work the Public Report of Exploration Results, Mineral Resources or Ore Reserves is based, to be named in the report. The report or attached statement must say that the person consents to the inclusion in the report of the matters based on their information in the form and context in which it appears, and must include the name of the person's firm or employer. Refer to Clause 8 of the Code.

# **SCOPE**

- 4. The main principles governing the operation and application of the JORC Code are transparency, materiality and competence.
- Transparency requires that the reader of a Public Report is provided with sufficient information, the presentation of which is clear and unambiguous, to understand the report and is not misled.
- Materiality requires that a Public Report contains all
  the relevant information which investors and their
  professional advisers would reasonably require, and
  reasonably expect to find in the report, for the purpose
  of making a reasoned and balanced judgement regarding
  the Exploration Results, Mineral Resources or Ore
  Reserves being reported.

Note: Code is in normal typeface, guidelines are in indented italics, definitions are in bold.

THE 2004 AUSTRALASIAN CODE FOR REPORTING EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES (THE JORC CODE)

- Competence requires that the Public Report be based on work that is the responsibility of suitably qualified and experienced persons who are subject to an enforceable professional code of ethics.
- 5. Reference in the Code to a Public Report or Public Reporting is to a report or reporting on Exploration Results, Mineral Resources or Ore Reserves, prepared for the purpose of informing investors or potential investors and their advisers. This includes a report or reporting to satisfy regulatory requirements.

The Code is a required minimum standard for Public Reporting. JORC also recommends its adoption as a minimum standard for other reporting. Companies are encouraged to provide information in their Public Reports which is as comprehensive as possible.

Public Reports include but are not limited to: company annual reports, quarterly reports and other reports to Australian and New Zealand Stock Exchanges, or as required by law. The Code applies to other publicly released company information in the form of postings on company web sites and briefings for shareholders, stockbrokers and investment analysts. The Code also applies to the following reports if they have been prepared for the purposes described in Clause 5: environmental statements; Information Memoranda; Expert Reports, and technical papers referring to Exploration Results, Mineral Resources or Ore Reserves.

For companies issuing concise annual reports, or other summary reports, inclusion of all material information relating to Exploration Results, Mineral Resources and Ore Reserves is recommended. In cases where summary information is presented it should be clearly stated that it is a summary, and a reference attached giving the location of the Codecompliant Public Reports or Public Reporting on which the summary is based.

It is recognised that companies can be required to issue reports into more than one regulatory jurisdiction, with compliance standards that may differ from this Code. It is recommended that such reports include a statement alerting the reader to this situation. Where members of The AusIMM and the AIG are required to report in other jurisdictions, they are obliged to comply with the requirements of those jurisdictions.

The term 'regulatory requirements' as used in Clause 5 is not intended to cover reports provided to State and Federal Government agencies for statutory purposes, where providing information to the investing public is not the primary intent. If such reports become available to the public, they would not

normally be regarded as Public Reports under the JORC Code (see also guidelines to Clauses 19 and 37).

Reference in the Code to 'documentation' is to internal company documents prepared as a basis for, or to support, a Public Report.

It is recognised that situations may arise where documentation prepared by Competent Persons for internal company or similar non-public purposes does not comply with the JORC Code. In such situations, it is recommended that the documentation includes a prominent statement to this effect. This will make it less likely that non-complying documentation will be used to compile Public Reports, since Clause 8 requires Public Reports to fairly reflect Exploration Results, Mineral Resource and/or Ore Reserve estimates, and supporting documentation, prepared by a Competent Person.

While every effort has been made within the Code and Guidelines to cover most situations likely to be encountered in Public Reporting, there may be occasions when doubt exists as to the appropriate form of disclosure. On such occasions, users of the Code and those compiling reports to comply with the Code should be guided by its intent, which is to provide a minimum standard for Public Reporting, and to ensure that such reporting contains all information which investors and their professional advisers would reasonably require, and reasonably expect to find in the report, for the purpose of making of a reasoned and balanced judgement regarding the Exploration Results, Mineral Resources or Ore Reserves being reported.

6. The Code is applicable to all solid minerals, including diamonds, other gemstones, industrial minerals and coal, for which Public Reporting of Exploration Results, Mineral Resources and Ore Reserves is required by the Australian and New Zealand Stock Exchanges.

The JORC Code is cited by the 'Code and Guidelines for Technical Assessment and/or Valuation of Mineral and Petroleum Assets and Mineral and Petroleum Securities for Independent Expert Reports' (the 'VALMIN Code') as the applicable standard for the public reporting of Exploration Results, Mineral Resources and Ore Reserves. References to 'technical and economic studies' and 'feasibility studies' in the JORC Code are not intended as references to Technical Assessments or Valuations as defined in the VALMIN Code.

7. JORC recognises that further review of the Code and Guidelines will be required from time to time.

THE 2004 AUSTRALASIAN CODE FOR REPORTING EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES (THE JORC CODE)

## COMPETENCE AND RESPONSIBILITY

8. A Public Report concerning a company's Exploration Results, Mineral Resources or Ore Reserves is the responsibility of the company acting through its Board of Directors. Any such report must be based on, and fairly reflect the information and supporting documentation prepared by a Competent Person or Persons. A company issuing a Public Report shall disclose the name(s) of the Competent Person is a full-time employee of the company, and, if not, name the Competent Person's employer. The report shall be issued with the written consent of the Competent Person or Persons as to the form and context in which it appears.

Appropriate forms of compliance statements may be as follows (delete bullet points which do not apply):

• If the required information is in the report:

"The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by (insert name of Competent Person), who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy or the Australian Institute of Geoscientists or a 'Recognised Overseas Professional Organisation' ('ROPO') included in a list promulgated by the ASX from time to time (select as appropriate and if a ROPO insert name of ROPO)": or

• If the required information is included in an attached statement:

"The information in the report to which this statement is attached that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by (insert name of Competent Person), who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy or the Australian Institute of Geoscientists or a 'Recognised Overseas Professional Organisation' ('ROPO') included in a list promulgated by the ASX from time to time (select as appropriate and if a ROPO insert name of ROPO)".

• If the Competent Person is a full-time employee of the company:

"(Insert name of Competent Person) is a full-time employee of the company".

 If the Competent Person is not a full-time employee of the company:

"(Insert name of Competent Person) is employed by (insert name of Competent Person's employer)".

For all reports:

"(Insert name of Competent Person) has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he (or she) is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. (Insert name of Competent Person) consents to the inclusion in the report of the matters based on his (or her) information in the form and context in which it appears".

- 9. Documentation detailing Exploration Results, Mineral Resource and Ore Reserve estimates, on which a Public Report on Exploration Results, Mineral Resources and Ore Reserves is based, must be prepared by, or under the direction of, and signed by, a Competent Person or Persons. The documentation must provide a fair representation of the Exploration Results, Mineral Resources or Ore Reserves being reported.
- 10.A 'Competent Person' is a person who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy, or of the Australian Institute of Geoscientists, or of a 'Recognised Overseas Professional Organisation' ('ROPO') included in a list promulgated from time to time.

A 'Competent Person' must have a minimum of five years experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which that person is undertaking.

If the Competent Person is preparing a report on Exploration Results, the relevant experience must be in exploration. If the Competent Person is estimating, or supervising the estimation of Mineral Resources, the relevant experience must be in the estimation, assessment and evaluation of Mineral Resources. If the Competent Person is estimating, or supervising the estimation of Ore Reserves, the relevant experience must be in the estimation, assessment, evaluation and economic extraction of Ore Reserves.

The key qualifier in the definition of a Competent Person is the word 'relevant'. Determination of what constitutes relevant experience can be a difficult area and common sense has to be exercised. For example, in estimating Mineral Resources for vein gold mineralisation, experience in a high-nugget, vein-type mineralisation such as tin, uranium etc. will probably be relevant whereas experience in (say) massive base metal deposits may not be. As a second example, to qualify as a Competent Person in the estimation of Ore Reserves for alluvial gold deposits, considerable (probably at least five years) experience in the evaluation and economic extraction of this type of mineralisation would be needed. This is due to the characteristics of gold in alluvial systems, the particle sizing of the host sediment, and the low grades involved. Experience with placer deposits containing minerals other than gold may not necessarily provide appropriate relevant experience.

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The key word 'relevant' also means that it is not always necessary for a person to have five years experience in each and every type of deposit in order to act as a Competent Person if that person has relevant experience in other deposit types. For example, a person with (say) 20 years experience in estimating Mineral Resources for a variety of metalliferous hard-rock deposit types may not require five years specific experience in (say) porphyry copper deposits in order to act as a Competent Person. Relevant experience in the other deposit types could count towards the required experience in relation to porphyry copper deposits.

In addition to experience in the style of mineralisation, a Competent Person taking responsibility for the compilation of Exploration Results or Mineral Resource estimates should have sufficient experience in the sampling and analytical techniques relevant to the deposit under consideration to be aware of problems which could affect the reliability of data. Some appreciation of extraction and processing techniques applicable to that deposit type may also be important.

As a general guide, persons being called upon to act as Competent Persons should be clearly satisfied in their own minds that they could face their peers and demonstrate competence in the commodity, type of deposit and situation under consideration. If doubt exists, the person should either seek opinions from appropriately experienced colleagues or should decline to act as a Competent Person.

Estimation of Mineral Resources may be a team effort (for example, involving one person or team collecting

the data and another person or team preparing the estimate). Estimation of Ore Reserves is very commonly a team effort involving several technical disciplines. It is recommended that, where there is clear division of responsibility within a team, each Competent Person and his or her contribution should be identified, and responsibility accepted for that particular contribution. If only one Competent Person signs the Mineral Resource or Ore Reserve documentation, that person is responsible and accountable for the whole of the documentation under the Code. It is important in this situation that the Competent Person accepting overall responsibility for a Mineral Resource or Ore Reserve estimate and supporting documentation prepared in whole or in part by others, is satisfied that the work of the other contributors is acceptable.

Complaints made in respect of the professional work of a Competent Person will be dealt with under the disciplinary procedures of the professional organisation to which the Competent Person belongs.

When an Australian or New Zealand Stock Exchange listed company with overseas interests wishes to report overseas Exploration Results, Mineral Resource or Ore Reserve estimates prepared by a person who is not a member of The AusIMM, the AIG or a ROPO, it is necessary for the company to nominate a Competent Person or Persons to take responsibility for the Exploration Results, Mineral Resource or Ore Reserve estimate. The Competent Person or Persons undertaking this activity should appreciate that they are accepting full responsibility for the estimate and supporting documentation under Stock Exchange listing rules and should not treat the procedure merely as a 'rubber-stamping' exercise.

## REPORTING TERMINOLOGY

11. Public Reports dealing with Exploration Results, Mineral Resources or Ore Reserves must only use the terms set out in Figure 1.

The term 'Modifying Factors' is defined to include mining, metallurgical, economic, marketing, legal, environmental, social and governmental considerations.

Figure 1 sets out the framework for classifying tonnage and grade estimates to reflect different levels of geological confidence and different degrees of technical and economic evaluation. Mineral Resources can be estimated mainly by a geologist on the basis of geoscientific information with some input from other disciplines. Ore Reserves, which are a modified sub-set of the Indicated and Measured Mineral Resources (shown within the dashed outline in Figure 1), require consideration of the Modifying Factors affecting extraction, and

should in most instances be estimated with input from a range of disciplines.

Measured Mineral Resources may convert to either Proved Ore Reserves or Probable Ore Reserves. The Competent Person may convert Measured Mineral Resources to Probable Ore Reserves because of uncertainties associated with some or all of the Modifying Factors which are taken into account in the conversion from Mineral Resources to Ore Reserves. This relationship is shown by the broken arrow in Figure 1. Although the trend of the broken arrow includes a vertical component, it does not, in this instance, imply a reduction in the level of geological knowledge or confidence. In such a situation these Modifying Factors should be fully explained.

Refer also to the guidelines to Clause 31.

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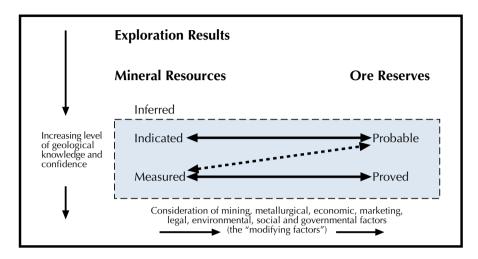


Figure 1. General relationship between Exploration Results, Mineral Resources and Ore Reserves

## **REPORTING – GENERAL**

- 12. Public Reports concerning a company's Exploration Results, Mineral Resources or Ore Reserves should include a description of the style and nature of the mineralisation.
- 13.A company must disclose any relevant information concerning a mineral deposit that could materially influence the economic value of that deposit to the company. A company must promptly report any material changes in its Mineral Resources or Ore Reserves.
- 14. Companies must review and publicly report on their Mineral Resources and Ore Reserves at least annually.
- 15. Throughout the Code, if appropriate, 'quality' may be substituted for 'grade' and 'volume' may be substituted for 'tonnage'. (Refer Appendix 1 – Table of Generic Terms and Equivalents).

# REPORTING OF EXPLORATION RESULTS

16.Exploration Results include data and information generated by exploration programmes that may be of use to investors. The Exploration Results may or may not be part of a formal declaration of Mineral Resources or Ore Reserves.

The reporting of such information is common in the early stages of exploration when the quantity of data available is generally not sufficient to allow any reasonable estimates of Mineral Resources.

If a company reports Exploration Results in relation to mineralisation not classified as a Mineral Resource or an Ore Reserve, then estimates of tonnages and average grade must not be assigned to the mineralisation unless the situation is covered by Clause 18, and then only in strict accordance with the requirements of that clause.

Examples of Exploration Results include results of outcrop sampling, assays of drill hole intercepts, geochemical results and geophysical survey results.

17. Public Reports of Exploration Results must contain sufficient information to allow a considered and balanced

judgement of their significance. Reports must include relevant information such as exploration context, type and method of sampling, sampling intervals and methods, relevant sample locations, distribution, dimensions and relative location of all relevant assay data, data aggregation methods, land tenure status plus information on any of the other criteria listed in Table 1 that are material to an assessment.

Public Reports of Exploration Results must not be presented so as to unreasonably imply that potentially economic mineralisation has been discovered. If true widths of mineralisation are not reported, an appropriate qualification must be included in the Public Report.

Where assay and analytical results are reported, they must be reported using one of the following methods, selected as the most appropriate by the Competent Person:

- either by listing all results, along with sample intervals (or size, in the case of bulk samples), or
- by reporting weighted average grades of mineralised zones, indicating clearly how the grades were calculated.

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Reporting of selected information such as isolated assays, isolated drill holes, assays of panned concentrates or supergene enriched soils or surface samples, without placing them in perspective is unacceptable.

Table 1 is a check list and guideline to which those preparing reports on Exploration Results, Mineral Resources and Ore Reserves should refer. The check list is not prescriptive and, as always, relevance and materiality are overriding principles which determine what information should be publicly reported.

18. It is recognised that it is common practice for a company to comment on and discuss its exploration in terms of

target size and type. Any such information relating to exploration targets must be expressed so that it cannot be misrepresented or misconstrued as an estimate of Mineral Resources or Ore Reserves. The terms Resource(s) or Reserve(s) must not be used in this context. Any statement referring to potential quantity and grade of the target must be expressed as ranges and must include (1) a detailed explanation of the basis for the statement, and (2) a proximate statement that the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

## REPORTING OF MINERAL RESOURCES

19. A 'Mineral Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

Portions of a deposit that do not have reasonable prospects for eventual economic extraction must not be included in a Mineral Resource. If the judgement as to 'eventual economic extraction' relies on untested practices or assumptions, this is a material matter which must be disclosed in a public report.

The term 'Mineral Resource' covers mineralisation, including dumps and tailings, which has been identified and estimated through exploration and sampling and within which Ore Reserves may be defined by the consideration and application of the Modifying Factors.

The term 'reasonable prospects for eventual economic extraction' implies a judgement (albeit preliminary) by the Competent Person in respect of the technical and economic factors likely to influence the prospect of economic extraction, including the approximate mining parameters. In other words, a Mineral Resource is not an inventory of all mineralisation drilled or sampled, regardless of cut-off grade, likely mining dimensions, location or continuity. It is a realistic inventory of mineralisation which, under assumed and justifiable technical and economic conditions, might, in whole or in part, become economically extractable.

Where considered appropriate by the Competent Person, Mineral Resource estimates may include material below the selected cut-off grade to ensure that the Mineral Resources comprise bodies of mineralisation of adequate size and continuity to properly consider the most appropriate approach to mining. Documentation of Mineral Resource estimates should clearly identify any diluting material included, and Public Reports should include commentary on the matter if considered material.

Any material assumptions made in determining the 'reasonable prospects for eventual economic extraction' should be clearly stated in the Public Report.

Interpretation of the word 'eventual' in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron ore, bauxite and other bulk minerals or commodities, it may be reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years. However for the majority of gold deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time.

Any adjustment made to the data for the purpose of making the Mineral Resource estimate, for example by cutting or factoring grades, should be clearly stated and described in the Public Report.

Certain reports (eg: inventory coal reports, exploration reports to government and other similar reports not intended primarily for providing information for investment purposes) may require full disclosure of all mineralisation, including some material that does not have reasonable prospects for eventual economic extraction. Such estimates of mineralisation would not qualify as Mineral Resources or Ore Reserves in terms of the JORC Code (refer also to the guidelines to Clauses 5 and 37).

20. An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not

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verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource.

The Inferred category is intended to cover situations where a mineral concentration or occurrence has been identified and limited measurements and sampling completed, but where the data are insufficient to allow the geological and/or grade continuity to be confidently interpreted. Commonly, it would be reasonable to expect that the majority of Inferred Mineral Resources would upgrade to Indicated Mineral Resources with continued exploration. However, due to the uncertainty of Inferred Mineral Resources, it should not be assumed that such upgrading will always occur.

Confidence in the estimate of Inferred Mineral Resources is usually not sufficient to allow the results of the application of technical and economic parameters to be used for detailed planning. For this reason, there is no direct link from an Inferred Resource to any category of Ore Reserves (see Figure 1).

Caution should be exercised if this category is considered in technical and economic studies.

21.An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource, but has a higher level of confidence than that applying to an Inferred Mineral Resource.

Mineralisation may be classified as an Indicated Mineral Resource when the nature, quality, amount and distribution of data are such as to allow confident interpretation of the geological framework and to assume continuity of mineralisation.

Confidence in the estimate is sufficient to allow the application of technical and economic parameters, and to enable an evaluation of economic viability.

22. A 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

Mineralisation may be classified as a Measured Mineral Resource when the nature, quality, amount and distribution of data are such as to leave no reasonable doubt, in the opinion of the Competent Person determining the Mineral Resource, that the tonnage and grade of the mineralisation can be estimated to within close limits, and that any variation from the estimate would be unlikely to significantly affect potential economic viability.

This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

Confidence in the estimate is sufficient to allow the application of technical and economic parameters and to enable an evaluation of economic viability that has a greater degree of certainty than an evaluation based on an Indicated Mineral Resource.

23. The choice of the appropriate category of Mineral Resource depends upon the quantity, distribution and quality of data available and the level of confidence that attaches to those data. The appropriate Mineral Resource category must be determined by a Competent Person or Persons.

> Mineral Resource classification is a matter for skilled judgement and Competent Persons should take into account those items in Table 1 which relate to confidence in Mineral Resource estimation.

> In deciding between Measured Mineral Resources and Indicated Mineral Resources, Competent Persons may find it useful to consider, in addition to the phrases in the two definitions relating to geological and grade continuity in Clauses 21 and 22, the phrase in the guideline to the definition for Measured Mineral Resources: '.... any variation from the estimate would be unlikely to significantly affect potential economic viability'.

In deciding between Indicated Mineral Resources and Inferred Mineral Resources, Competent Persons may wish to take into account, in addition to the phrases in the two definitions in Clauses 20 and 21 relating to geological and grade continuity, the guideline to the definition for Indicated Mineral Resources: 'Confidence in the estimate is sufficient to allow the application of technical and economic parameters and to enable an evaluation of economic viability', which contrasts with the guideline to the definition for Inferred Mineral Resources: 'Confidence in the estimate of Inferred Mineral Resources is usually not sufficient to allow the results

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of the application of technical and economic parameters to be used for detailed planning.' and 'Caution should be exercised if this category is considered in technical and economic studies'.

The Competent Person should take into consideration issues of the style of mineralisation and cut-off grade when assessing geological and grade continuity.

Cut-off grades chosen for the estimation should be realistic in relation to the style of mineralisation.

24. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. Reporting of tonnage and grade figures should reflect the relative uncertainty of the estimate by rounding off to appropriately significant figures and, in the case of Inferred Mineral Resources, by qualification with terms such as 'approximately'.

In most situations, rounding to the second significant figure should be sufficient. For example 10,863,000 tonnes at 8.23 per cent should be stated as 11 million tonnes at 8.2 per cent. There will be occasions, however, where rounding to the first significant figure may be necessary in order to convey properly the uncertainties in estimation. This would usually be the case with Inferred Mineral Resources.

To emphasise the imprecise nature of a Mineral Resource estimate, the final result should always be referred to as an estimate not a calculation.

Competent Persons are encouraged, where appropriate, to discuss the relative accuracy and/or confidence of the Mineral Resource estimates. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnage or volume. Where a statement of the relative accuracy and/or confidence is not possible, a qualitative discussion of the uncertainties should be provided (refer to Table 1).

25.Public Reports of Mineral Resources must specify one or more of the categories of 'Inferred', 'Indicated' and 'Measured'. Categories must not be reported in a combined form unless details for the individual categories are also provided. Mineral Resources must not be reported in terms of contained metal or mineral content unless corresponding tonnages and grades are also presented. Mineral Resources must not be aggregated with Ore Reserves.

Public Reporting of tonnages and grades outside the categories covered by the Code is not permitted unless the situation is covered by Clause 18, and then only in strict accordance with the requirements of that clause.

Estimates of tonnage and grade outside of the categories covered by the Code may be useful for a

company in its internal calculations and evaluation processes, but their inclusion in Public Reports could cause confusion.

26.Table 1 provides, in a summary form, a list of the main criteria which should be considered when preparing reports on Exploration Results, Mineral Resources and Ore Reserves. These criteria need not be discussed in a Public Report unless they materially affect estimation or classification of the Mineral Resources.

It is not necessary, when publicly reporting, to comment on each item in Table 1, but it is essential to discuss any matters which might materially affect the reader's understanding or interpretation of the results or estimates being reported. This is particularly important where inadequate or uncertain data affect the reliability of, or confidence in, a statement of Exploration Results or an estimate of Mineral Resources or Ore Reserves; for example, poor sample recovery, poor repeatability of assay or laboratory results, limited information on bulk densities etc.

If there is doubt about what should be reported, it is better to err on the side of providing too much information rather than too little.

Uncertainties in any of the criteria listed in Table 1 that could lead to under- or over-statement of resources should be disclosed.

Mineral Resource estimates are sometimes reported after adjustment from reconciliation with production data. Such adjustments should be clearly stated in a Public Report of Mineral Resources and the nature of the adjustment or modification described.

27. The words 'ore' and 'reserves' must not be used in describing Mineral Resource estimates as the terms imply technical feasibility and economic viability and are only appropriate when all relevant Modifying Factors have been considered. Reports and statements should continue to refer to the appropriate category or categories of Mineral Resources until technical feasibility and economic viability have been established. If reevaluation indicates that the Ore Reserves are no longer viable, the Ore Reserves must be reclassified as Mineral Resources or removed from Mineral Resource/Ore Reserve statements.

It is not intended that re-classification from Ore Reserves to Mineral Resources or vice versa should be applied as a result of changes expected to be of a short term or temporary nature, or where company management has made a deliberate decision to operate on a non-economic basis. Examples of such situations might be commodity price fluctuations expected to be of short duration, mine emergency of a non-permanent nature, transport strike etc.

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# REPORTING OF ORE RESERVES

28. An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.

In reporting Ore Reserves, information on estimated mineral processing recovery factors is very important, and should always be included in Public Reports.

Ore Reserves are those portions of Mineral Resources which, after the application of all mining factors, result in an estimated tonnage and grade which, in the opinion of the Competent Person making the estimates, can be the basis of a viable project, after taking account of all relevant Modifying Factors.

Ore Reserves are reported as inclusive of marginally economic material and diluting material delivered for treatment or dispatched from the mine without treatment.

The term 'economically mineable' implies that extraction of the Ore Reserve has been demonstrated to be viable under reasonable financial assumptions. What constitutes the term 'realistically assumed' will vary with the type of deposit, the level of study that has been carried out and the financial criteria of the individual company. For this reason, there can be no fixed definition for the term 'economically mineable'.

In order to achieve the required level of confidence in the Modifying Factors, appropriate studies will have been carried out prior to determination of the Ore Reserves. The studies will have determined a mine plan that is technically achievable and economically viable and from which the Ore Reserves can be derived. It may not be necessary for these studies to be at the level of a final feasibility study.

The term 'Ore Reserve' need not necessarily signify that extraction facilities are in place or operative, or that all necessary approvals or sales contracts have been received. It does signify that there are reasonable expectations of such approvals or contracts. The Competent Person should consider the materiality of any unresolved matter that is dependent on a third party on which extraction is contingent. If there is doubt about what should be reported, it is better to err on the side of providing too much information rather than too little.

Any adjustment made to the data for the purpose of making the Ore Reserve estimate, for example by cutting or factoring grades, should be clearly stated and described in the Public Report.

Where companies prefer to use the term 'Mineral Reserves' in their Public Reports, e.g. for reporting industrial minerals or for reporting outside Australasia, they should state clearly that this is being used with the same meaning as 'Ore Reserves', defined in this Code. If preferred by the reporting company, 'Ore Reserve' and 'Mineral Resource' estimates for coal may be reported as 'Coal Reserve' and 'Coal Reserve' estimates.

JORC prefers the term 'Ore Reserve' because it assists in maintaining a clear distinction between a 'Mineral Resource' and an 'Ore Reserve'.

29. A 'Probable Ore Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors These assessments demonstrate at the time of reporting that extraction could reasonably be justified.

A Probable Ore Reserve has a lower level of confidence than a Proved Ore Reserve but is of sufficient quality to serve as the basis for a decision on the development of the deposit.

30.A 'Proved Ore Reserve' is the economically mineable part of a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.

A Proved Ore Reserve represents the highest confidence category of reserve estimate. The style of mineralisation or other factors could mean that Proved Ore Reserves are not achievable in some deposits.

31. The choice of the appropriate category of Ore Reserve is determined primarily by the relevant level of confidence in the Mineral Resource and after considering any uncertainties in the Modifying Factors. Allocation of the appropriate category must be made by a Competent Person or Persons.

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The Code provides for a direct two-way relationship between Indicated Mineral Resources and Probable Ore Reserves and between Measured Mineral Resources and Proved Ore Reserves. In other words, the level of geological confidence for Probable Ore Reserves is similar to that required for the determination of Indicated Mineral Resources, and the level of geological confidence for Proved Ore Reserves is similar to that required for the determination of Measured Mineral Resources.

The Code also provides for a two-way relationship between Measured Mineral Resources and Probable Ore Reserves. This is to cover a situation where uncertainties associated with any of the Modifying Factors considered when converting Mineral Resources to Ore Reserves may result in there being a lower degree of confidence in the Ore Reserves than in the corresponding Mineral Resources. Such a conversion would not imply a reduction in the level of geological knowledge or confidence.

A Probable Ore Reserve derived from a Measured Mineral Resource may be converted to a Proved Ore Reserve if the uncertainties in the Modifying Factors are removed. No amount of confidence in the Modifying Factors for conversion of a Mineral Resource to an Ore Reserve can override the upper level of confidence that exists in the Mineral Resource. Under no circumstances can an Indicated Mineral Resource be converted directly to a Proved Ore Reserve (see Figure 1).

Application of the category of Proved Ore Reserve implies the highest degree of confidence in the estimate, with consequent expectations in the minds of the readers of the report. These expectations should be borne in mind when categorising a Mineral Resource as Measured.

Refer also to the guidelines in Clause 23 regarding classification of Mineral Resources.

32.Ore Reserve estimates are not precise calculations. Reporting of tonnage and grade figures should reflect the relative uncertainty of the estimate by rounding off to appropriately significant figures. Refer also to Clause 24.

To emphasise the imprecise nature of an Ore Reserve, the final result should always be referred to as an estimate not a calculation.

Competent Persons are encouraged, where appropriate, to discuss the relative accuracy and/or confidence of the Ore Reserve estimates. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnage or volume. Where a statement of the relative accuracy and/or confidence is not possible, a qualitative discussion of the uncertainties should be provided (refer to Table 1).

33. Public Reports of Ore Reserves must specify one or other or both of the categories of 'Proved' and 'Probable'. Reports must not contain combined Proved and Probable Ore Reserve figures unless the relevant figures for each of the categories are also provided. Reports must not present metal or mineral content figures unless corresponding tonnage and grade figures are also given.

Public Reporting of tonnage and grade outside the categories covered by the Code is not permitted unless the situation is covered by Clause 18, and then only in strict accordance with the requirements of that clause.

Estimates of tonnage and grade outside of the categories covered by the Code may be useful for a company in its internal calculations and evaluation processes, but their inclusion in Public Reports could cause confusion.

Ore Reserves may incorporate material (dilution) which is not part of the original Mineral Resource. It is essential that this fundamental difference between Mineral Resources and Ore Reserves is borne in mind and caution exercised if attempting to draw conclusions from a comparison of the two.

When revised Ore Reserve and Mineral Resource statements are publicly reported they should be accompanied by reconciliation with previous statements. A detailed account of differences between the figures is not essential, but sufficient comment should be made to enable significant changes to be understood by the reader.

34.In situations where figures for both Mineral Resources and Ore Reserves are reported, a statement must be included in the report which clearly indicates whether the Mineral Resources are inclusive of, or additional to the Ore Reserves.

Ore Reserve estimates must not be aggregated with Mineral Resource estimates to report a single combined figure.

In some situations there are reasons for reporting Mineral Resources inclusive of Ore Reserves and in other situations for reporting Mineral Resources additional to Ore Reserves. It must be made clear which form of reporting has been adopted. Appropriate forms of clarifying statements may be:

'The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.' or 'The Measured and Indicated Mineral Resources are additional to the Ore Reserves.'

In the former case, if any Measured and Indicated Mineral Resources have not been modified to produce Ore Reserves for economic or other reasons, the relevant details of these unmodified Mineral Resources should be included in the report. This is

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to assist the reader of the report in making a judgement of the likelihood of the unmodified Measured and Indicated Mineral Resources eventually being converted to Ore Reserves.

Inferred Mineral Resources are by definition always additional to Ore Reserves.

For reasons stated in the guidelines to Clause 33 and in this paragraph, the reported Ore Reserve figures must not be aggregated with the reported Mineral Resource figures. The resulting total is misleading and is capable of being misunderstood or of being misused to give a false impression of a company's prospects.

35. Table 1 provides, in a summary form, a list of the criteria which should be considered when preparing reports on Exploration Results, Mineral Resources and Ore Reserves. These criteria need not be discussed in a Public Report unless they materially affect estimation or classification of the Ore Reserves. Changes in economic or political factors alone may be the basis for significant changes in Ore Reserves and should be reported accordingly.

Ore Reserve estimates are sometimes reported after adjustment from reconciliation with production data. Such adjustments should be clearly stated in a Public Report of Ore Reserves and the nature of the adjustment or modification described.

# REPORTING OF MINERALISED FILL, REMNANTS, PILLARS, LOW GRADE MINERALISATION, STOCKPILES, DUMPS AND TAILINGS

36.The Code applies to the reporting of all potentially economic mineralised material. This can include mineralised fill, remnants, pillars, low grade mineralisation, stockpiles, dumps and tailings (remnant materials) where there are reasonable prospects for eventual economic extraction in the case of Mineral Resources, and where extraction is reasonably justifiable in the case of Ore Reserves. Unless otherwise stated, all other clauses of the Code (including Figure 1) apply.

Any mineralised material as described in this clause can be considered to be similar to in situ mineralisation for the purposes of reporting Mineral Resources and Ore Reserves. Judgements about the mineability of such mineralised material should be made by professionals with relevant experience.

If there are no reasonable prospects for the eventual economic extraction of all or part of the mineralised material as described in this clause, then this material cannot be classified as either Mineral Resources or Ore Reserves. If some portion of the mineralised material is currently sub-economic, but there is a reasonable expectation that it will become

economic, then this material may be classified as a Mineral Resource. If technical and economic studies have demonstrated that economic extraction could reasonably be justified under realistically assumed conditions, then the material may be classified as an Ore Reserve.

The above guidelines apply equally to low grade in situ mineralisation, sometimes referred to as 'mineralised waste' or 'marginal grade material', and often intended for stockpiling and treatment towards the end of mine life. For clarity of understanding, it is recommended that tonnage and grade estimates of such material be itemised separately in Public Reports, although they may be aggregated with total Mineral Resource and Ore Reserve figures.

Stockpiles are defined to include both surface and underground stockpiles, including broken ore in stopes, and can include ore currently in the ore storage system. Mineralised material in the course of being processed (including leaching), if reported, should be reported separately.

## REPORTING OF COAL RESOURCES AND RESERVES

37. Clauses 37 to 39 of the Code address matters that relate specifically to the Public Reporting of Coal Resources and Reserves. Unless otherwise stated, Clauses 1 to 36 of this Code (including Figure 1) apply. Table 1, as part of the guidelines, should be considered persuasive when reporting on Coal Resources and Reserves.

For purposes of Public Reporting, the requirements for coal are generally similar to those for other commodities with the replacement of terms such as 'mineral' by 'coal' and 'grade' by 'quality'.

For guidance on the estimation of Coal Resources and Reserves and on statutory reporting not primarily intended for providing information to the investing public, readers are referred to the 2003 edition of the 'Australian Guidelines for Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves'. These guidelines do not override the provisions and intentions of the JORC Code for Public Reporting.

Because of its impact on planning and land use, governments may require estimates of inventory coal that are not constrained by short to medium term economic considerations. The JORC Code does not cover such estimates. Refer also to the guidelines to Clauses 5 and 19.

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- 38. The terms 'Mineral Resource(s)' and 'Ore Reserve(s)', and the subdivisions of these as defined above, apply also to coal reporting, but if preferred by the reporting company, the terms 'Coal Resource(s)' and 'Coal Reserve(s)' and the appropriate subdivisions may be substituted.
- 39. 'Marketable Coal Reserves', representing beneficiated or otherwise enhanced coal product where modifications due to mining, dilution and processing have been considered, may be publicly reported in conjunction with, but not instead of, reports of Ore (Coal) Reserves. The basis of the predicted yield to achieve Marketable Coal Reserves should be stated.

# REPORTING OF DIAMOND EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES

40. Clauses 40 to 43 of the Code address matters that relate specifically to the Public Reporting of Exploration Results, Mineral Resources and Ore Reserves for diamonds and other gemstones. Unless otherwise stated, Clauses 1 to 36 of this Code (including Figure 1) apply. Table 1, as part of the guidelines, should be considered persuasive when reporting Exploration Results, Mineral Resources and Ore Reserves for diamonds and other gemstones.

For the purposes of Public Reporting, the requirements for diamonds and other gemstones are generally similar to those for other commodities with the replacement of terms such as 'mineral' by 'diamond' and 'grade' by 'grade and average diamond value'. The term 'quality' should not be substituted for 'grade,' since in diamond deposits these have distinctly separate meanings. Other industry guidelines on the estimation and reporting of diamond resources and reserves may be useful but will not under any circumstances override the provisions and intentions of the JORC Code.

A number of characteristics of diamond deposits are different from those of, for example, typical metalliferous and coal deposits and therefore require special consideration. These include the generally low mineral content and variability of primary and placer deposits, the particulate nature of diamonds, the specialised requirement for diamond valuation and the inherent difficulties and uncertainties in the estimation of diamond resources and reserves.

41. Reports of diamonds recovered from sampling programs must provide material information relating to the basis on which the sample is taken, the method of recovery and the recovery of the diamonds. The weight of diamonds recovered may only be omitted from the report when the diamonds are considered to be too small to be of commercial significance. This lower cut-off size should be stated.

The stone size distribution and price of diamonds and other gemstones are critical components of the resource and reserve estimates. At an early exploration stage, sampling and delineation drilling will not usually provide this information, which relies on large diameter drilling and, in particular, bulk sampling.

In order to demonstrate that a resource has reasonable prospects for economic extraction, some appreciation of the likely stone size distribution and price is necessary, however preliminary. To determine an Inferred Resource in simple, single-facies or single-phase deposits, such information may be obtainable by representative large diameter drilling. More often, some form of bulk sampling, such as pitting and trenching, would be employed to provide larger sample parcels.

In order to progress to an Indicated Resource, and from there to a Probable Reserve, it is likely that much more extensive bulk sampling would be needed to fully determine the stone size distribution and value. Commonly such bulk samples would be obtained by underground development designed to obtain sufficient diamonds to enable a confident estimate of price.

In complex deposits, it may be very difficult to ensure that the bulk samples taken are truly representative of the whole deposit. The lack of direct bulk sampling, and the uncertainty in demonstrating spatial continuity of size and price relationships should be persuasive in determining the appropriate resource category.

- 42. Where diamond Mineral Resource or Ore Reserve grades (carats per tonne) are based on correlations between the frequency of occurrence of micro-diamonds and of commercial size stones, this must be stated, the reliability of the procedure must be explained and the cut-off sieve size for micro-diamonds reported.
- 43. For Public Reports dealing with diamond or other gemstone mineralisation, it is a requirement that any reported valuation of a parcel of diamonds or gemstones be accompanied by a statement verifying the independence of the valuation. The valuation must be based on a report from a demonstrably reputable and qualified expert.

If a valuation of a parcel of diamonds is reported, the weight in carats and the lower cut-off size of the contained diamonds must be stated and the value of the diamonds must be given in US dollars per carat. Where the valuation is used in the estimation of diamond Mineral Resources or Ore Reserves, the valuation must be based on a parcel representative of the size, shape

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and colour distributions of the diamond population in the deposit.

Diamond valuations should not be reported for samples of diamonds processed using total liberation methods.

Table 1 provides in summary form, a list of the main criteria which should be considered when preparing reports on Exploration Results, Mineral Resources and Ore Reserves for diamonds and other gemstones.

# REPORTING OF INDUSTRIAL MINERALS EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES

44. Industrial minerals are covered by the JORC Code if they meet the criteria set out in Clauses 5 and 6 of the Code. For the purpose of the JORC Code, industrial minerals can be considered to cover commodities such as kaolin, phosphate, limestone, talc etc.

When reporting information and estimates for industrial minerals, the key principles and purpose of the JORC Code apply and should be borne in mind. Assays may not always be relevant, and other quality criteria may be more applicable. If criteria such as deleterious minerals or physical properties are of more relevance than the composition of the bulk mineral itself, then they should be reported accordingly.

The factors underpinning the estimation of Mineral Resources and Ore Reserves for industrial minerals are the same as those for other deposit types covered by the JORC Code. It may be necessary, prior to the reporting of a Mineral Resource or Ore Reserve, to take particular account of certain key characteristics or qualities such as likely product specifications,

proximity to markets and general product marketability.

For some industrial minerals, it is common practice to report the saleable product rather than the 'asmined' product, which is traditionally regarded as the Ore Reserve. JORC's preference is that, if the saleable product is reported, it should be in conjunction with, not instead of, reporting of the Ore Reserve. However, it is recognised that commercial sensitivities may not always permit this preferred style of reporting. It is important that, in all situations where the saleable product is reported, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

Some industrial mineral deposits may be capable of yielding products suitable for more than one application and/or specification. If considered material by the reporting company, such multiple products should be quantified either separately or as a percentage of the bulk deposit.

# TABLE 1 CHECK LIST OF ASSESSMENT AND REPORTING CRITERIA

Table 1 is a check list and guideline which those preparing reports on Exploration Results, Mineral Resources and Ore Reserves should use as a reference. The check list is not prescriptive and, as always, relevance and materiality are overriding principles that determine what information should be publicly reported. It is, however, important to report any matters that might materially affect a reader's understanding or interpretation of the results or estimates being reported. This is particularly important where inadequate or uncertain data affect the reliability of, or confidence in, a statement of Exploration Results or an estimate of Mineral Resources or Ore Reserves.

The order and grouping of criteria in Table 1 reflects the normal systematic approach to exploration and evaluation. Criteria in the first group 'Sampling Techniques and Data' apply to all succeeding groups. In the remainder of the table, criteria listed in preceding groups would often apply to succeeding groups and should be considered when estimating and reporting.

Criteria	Explanation				
Sampling Techniques and Data (criteria in this group apply to all succeeding groups)					
Sampling techniques.  • Nature and quality of sampling (eg. cut channels, random chips etc.) and me taken to ensure sample representivity.					
Drilling techniques.	Drill type (eg. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka etc.) and details (eg. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).				

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Criteria	Explanation				
Sampling Techniques and Data					
Drill sample recovery.	<ul> <li>(criteria in this group apply to all succeeding groups)</li> <li>Whether core and chip sample recoveries have been properly recorded and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>				
Logging.	<ul> <li>Whether core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.</li> </ul>				
Sub-sampling techniques and sample preparation.	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected.</li> <li>Whether sample sizes are appropriate to the grainsize of the material being sampled.</li> </ul>				
Quality of assay data and laboratory tests.	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie. lack of bias) and precision have been established.</li> </ul>				
Verification of sampling and assaying.	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>				
Location of data points.	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Quality and adequacy of topographic control.</li> </ul>				
Data spacing and distribution.	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>				
Orientation of data in relation to geological structure.	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>				
Audits or reviews.	The results of any audits or reviews of sampling techniques and data.				
	Reporting of Exploration Results  (criteria listed in the preceding group apply also to this group)				
Mineral tenement and land tenure status.	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>				
Exploration done by other parties.	Acknowledgment and appraisal of exploration by other parties.				
Geology.	Deposit type, geological setting and style of mineralisation.				

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Criteria	Explanation			
Reporting of Exploration Results  (criteria listed in the preceding group apply also to this group)				
Data aggregation methods.	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg. cutting of high grades) and cut-off grades are usually material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>			
Relationship between mineralisation widths and intercept lengths.	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down-hole lengths are reported, there should be a clear statement to this effect (eg. 'downhole length, true width not known').</li> </ul>			
Diagrams.	Where possible, maps and sections (with scales) and tabulations of intercepts should be included for any material discovery being reported if such diagrams significantly clarify the report.			
Balanced reporting.	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.			
Other substantive exploration data.	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.			
Further work.	The nature and scale of planned further work (eg. tests for lateral extensions or depth extensions or large-scale step-out drilling).			
(criteria listed	Estimation and Reporting of Mineral Resources in the first group, and where relevant in the second group, apply also to this group)			
Database integrity.	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.      Data validation procedures used.			
Geological interpretation.	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>			
Dimensions.	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.			
Estimation and modelling techniques.	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, maximum distance of extrapolation from data points.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> </ul>			

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Criteria	Explanation				
	<ul> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>				
Moisture.	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.				
Cut-off parameters.	The basis of the adopted cut-off grade(s) or quality parameters applied.				
Mining factors or assumptions.	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no assumptions have been made, this should be reported.				
Metallurgical factors or assumptions.	The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported.				
Bulk density.	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.				
Classification.	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors. i.e. relative confidence in tonnage/grade computations, confidence in continuity of geology and metal values, quality, quantity and distribution of the data.</li> <li>Whether the result appropriately reflects the Competent Person(s)' view of the deposit.</li> </ul>				
Audits or reviews.	The results of any audits or reviews of Mineral Resource estimates.				
Discussion of relative accuracy/confidence.  • Where appropriate a statement of the relative accuracy and/or confidence in the Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical price to quantify the relative accuracy of the resource within stated confidence limits such an approach is not deemed appropriate, a qualitative discussion of the fact which could affect the relative accuracy and confidence of the estimate.  • The statement should specify whether it relates to global or local estimates, and state the relevant tonnages or volumes, which should be relevant to technical a economic evaluation. Documentation should include assumptions made and the procedures used.  • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.					
(criteria licted in	Estimation and Reporting of Ore Reserves the first group, and where relevant in other preceding groups, apply also to this group)				
Mineral Resource estimate for conversion to Ore Reserves.	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>				
Study status.	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code does not require that a final feasibility study has been undertaken to convert Mineral Resources to Ore Reserves, but it does require that appropriate studies will have been carried that will have determined a mine plan that is technically achievable and economically viable, and that all Modifying Factors have been considered.</li> </ul>				
Cut-off parameters.	The basis of the cut-off grade(s) or quality parameters applied.				

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Criteria	Explanation				
Mining factors or assumptions.	<ul> <li>The method and assumptions used to convert the Mineral Resource to an Ore Reserve (ie either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice of, the nature and the appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (eg. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit optimisation (if appropriate).</li> <li>The mining dilution factors, mining recovery factors, and minimum mining widths used.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>				
Metallurgical factors or assumptions.	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical testwork undertaken and the metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale testwork and the degree to which such samples are representative of the orebody as a whole.</li> </ul>				
Cost and revenue factors.	<ul> <li>The derivation of, or assumptions made, regarding projected capital and operating costs</li> <li>The assumptions made regarding revenue including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>				
Market assessment.	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirement prior to a supply contract.</li> </ul>				
Other.	<ul> <li>The effect, if any, of natural risk, infrastructure, environmental, legal, marketing, social or governmental factors on the likely viability of a project and/or on the estimation and classification of the Ore Reserves.</li> <li>The status of titles and approvals critical to the viability of the project, such as mining leases, discharge permits, government and statutory approvals.</li> </ul>				
Classification.	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person(s)' view of the deposit.</li> <li>The proportion of Probable Ore Reserves which have been derived from Measured Mineral Resources (if any).</li> </ul>				
Audits or reviews.	The results of any audits or reviews of Ore Reserve estimates.				
Discussion of relative accuracy/confidence.	<ul> <li>Where appropriate a statement of the relative accuracy and/or confidence in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages or volumes, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>				

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Criteria	Explanation				
(criteria listed in c 'Guidelines for the Re	timation and Reporting of Diamonds and other Gemstones of ther relevant groups also apply to this group; additional guidelines are available in the porting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices of established by the Canadian Institute of Mining, Metallurgy and Petroleum.)				
Indicator minerals.	Reports of indicator minerals, such as chemically/physically distinctive garnet, ilmen chrome spinel and chrome diopside, should be prepared by a suitably qualified labora				
Source of diamonds.	Details of the form, shape, size and colour of the diamonds and the nature of the source of diamonds (primary or secondary) including the rock type and geological environment.				
Sample collection.	<ul> <li>Type of sample, whether outcrop, boulders, drill core, reverse circulation drill cuttings, gravel, stream sediment or soil, and purpose, e.g. large diameter drilling to establish stones per unit of volume or bulk samples to establish stone size distribution.</li> <li>Sample size, distribution and representativity.</li> </ul>				
Sample treatment.	<ul> <li>Type of facility, treatment rate, and accreditation.</li> <li>Sample size reduction. Bottom screen size, top screen size and re-crush.</li> <li>Processes (dense media separation, grease, X-ray, hand-sorting etc.).</li> <li>Process efficiency, tailings auditing and granulometry.</li> <li>Laboratory used, type of process for micro diamonds and accreditation.</li> </ul>				
Carat.	• One fifth (0.2) of a gram (often defined as a metric carat or MC).				
Sample grade.	<ul> <li>Sample grade in this section of Table 1 is used in the context of carats per units of narea or volume.</li> <li>The sample grade above the specified lower cut-off sieve size should be reported a carats per dry metric tonne and/or carats per 100 dry metric tonnes. For alluvial deposample grades quoted in carats per square metre or carats per cubic metre are acceptable if accompanied by a volume to weight basis for calculation.</li> <li>In addition to general requirements to assess volume and density there is a need to rel stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) derive sample grade (carats per tonne).</li> </ul>				
Reporting of Exploration Results.	<ul> <li>Complete set of sieve data using a standard progression of sieve sizes per facies. Bulk sampling results, global sample grade per facies. Spatial structure analysis and grade distribution. Stone size and number distribution. Sample head feed and tailings particle granulometry.</li> <li>Sample density determination.</li> <li>Percent concentrate and undersize per sample.</li> <li>Sample grade with change in bottom cut-off screen size.</li> <li>Adjustments made to size distribution for sample plant performance and performance on a commercial scale.</li> <li>If appropriate or employed, geostatistical techniques applied to model stone size, distribution or frequency from size distribution of exploration diamond samples.</li> <li>The weight of diamonds may only be omitted from the report when the diamonds are considered too small to be of commercial significance. This lower cut-off size should be stated.</li> </ul>				
Grade estimation for reporting Mineral Resources and Ore Reserves.	<ul> <li>Description of the sample type and the spatial arrangement of drilling or sampling designed for grade estimation.</li> <li>The sample crush size and its relationship to that achievable in a commercial treatment processes.</li> <li>Total number of diamonds greater than the specified and reported lower cut-off sieves in the sample grade above the specified lower cut-off sieve size.</li> </ul>				
<ul> <li>Valuations should not be reported for samples of diamonds processed using total liberation method, which is commonly used for processing exploration samples.</li> <li>To the extent that such information is not deemed commercially sensitive, Public R should include:         <ul> <li>Diamonds quantities by appropriate screen size per facies or depth.</li> <li>Details of parcel valued.</li> <li>Number of stones, carats, lower size cut-off per facies or depth.</li> </ul> </li> </ul>					

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Criteria	Explanation				
	<ul> <li>The average \$/carat and \$/tonne value at the selected bottom cut-off should be reported in US Dollars. The value per carat is of critical importance in demonstrating project value.</li> <li>The basis for the price (e.g. dealer buying price, dealer selling price etc.).</li> <li>An assessment of diamond breakage.</li> </ul>				
Security and integrity.	<ul> <li>Accredited process audit.</li> <li>Whether samples were sealed after excavation.</li> <li>Valuer location, escort, delivery, cleaning losses, reconciliation with recorded sample carats and number of stones.</li> <li>Core samples washed prior to treatment for micro diamonds.</li> <li>Audit samples treated at alternative facility.</li> <li>Results of tailings checks.</li> <li>Recovery of tracer monitors used in sampling and treatment.</li> <li>Geophysical (logged) density and particle density.</li> <li>Cross validation of sample weights, wet and dry, with hole volume and density, moisture factor.</li> </ul>				
Classification.	• In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive grade (carats per tonne). The elements of uncertainty in these estimates should be considered, and classification developed accordingly.				

# APPENDIX 1 GENERIC TERMS AND EQUIVALENTS

Throughout the Code, certain words are used in a general sense when a more specific meaning might be attached to them by particular commodity groups within the industry. In order to avoid unnecessary duplication, a non-exclusive list of generic terms is tabulated below together with other terms that may be regarded as synonymous for the purposes of this document.

Generic Term	Synonyms and Similar Terms	Intended Generalised Meaning
Tonnage	Quantity, Volume	An expression of the amount of material of interest irrespective of the units of measurement (which should be stated when figures are reported)
Grade	Quality, Assay, Analysis (Value)	Any physical or chemical measurement of the characteristics of the material of interest in samples or product. Note that the term quality has special meaning for diamonds and other gemstones. The units of measurement should be stated when figures are reported.
Metallurgy	Processing, Beneficiation, Preparation, Concentration	Physical and/or chemical separation of constituents of interest from a larger mass of material. Methods employed to prepare a final marketable product from material as mined. Examples include screening, flotation, magnetic separation, leaching, washing, roasting etc.
Recovery	Yield	The percentage of material of initial interest that is extracted during mining and/or processing. A measure of mining or processing efficiency.
Mineralisation	Type of deposit, orebody, style of mineralisation.	Any single mineral or combination of minerals occurring in a mass, or deposit, of economic interest. The term is intended to cover all forms in which mineralisation might occur, whether by class of deposit, mode of occurrence, genesis or composition.
Ore Reserves	Mineral Reserves	'Ore Reserves' is preferred under the JORC Code but 'Mineral Reserves' is in common use in other countries and is generally accepted. Other descriptors can be used to clarify the meaning e.g. coal reserves, diamond reserves etc.
Cut off grade	Product specifications	The lowest grade, or quality, of mineralised material that qualifies as economically mineable and available in a given deposit. May be defined on the basis of economic evaluation, or on physical or chemical attributes that define an acceptable product specification.

## JORC RESERVE REPORT: BN COAL PROJECT BY SRK CONSULTING



# JORC Reserve Report: Baruun Naran Coal Project, Mongolia

Report prepared by



March, 2011

Project Code: KER001

March 2011

# JORC Reserve Report: Baruun Naran Coal Project, Mongolia KER001

Document Reference: KER001 JORC Reserve Report Rev 3

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**Principal Consultant** 

March 2011

# SRK Report Distribution Record

Project Number: KER001

Date Issued: 23 March, 2011

Name/Title	Company	
Mr Graham Wong	Khangad Exploration LLC	

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3	23/03/2011	Neville Terry	Report issued to Client	

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KER001 JORC Reserve Report Baruun Naran Rev 3

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# **Executive Summary**

## Summary of Principal Objectives

SRK Consulting (Australasia) Pty Ltd trading as SRK Consulting ("SRK") has prepared an independent evaluation of the Coal Reserves of the Baruun Naran Coal Project ("BN"). The purpose of the evaluation is to provide an objective assessment of the Coal Reserves in accordance with the Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code), 2004 for public reporting. The Reserve report has been endorsed with appropriate qualifications by the Competent Person.

The coal tenement known as Baruun Naran is located in the south Gobi desert of the Umnogovi Province of Mongolia. The project area is situated approximately 600 kilometers ("km") south of Ulaan Baatar the capital city of Mongolia and approximately 60km east of Dalanzadgad the capital town of Umngovi province.

This Statement of Coal Reserve has been carried out according to SRK's interpretation of the JORC Code. The JORC Resource Statement by Mr Paul Harrison of MBGS (McElroy Bryan Geological Services Pty Ltd) in February 2010 was used to develop the Recoverable Reserve tonnes after the application of mining parameters, mine design and other modifying factors as summarised in the Table ES1 below:

**Table ES1: Modifying Factors** 

Seam roof & floor coal loss	0.2m		
Seam roof & floor dilution	0.2m		
Mining loss including loss in transportation and handling at port	5%		
Minimum mining thickness minable coal seam	0.3m		
ROM Moisture, air dried	2%		
In situ Moisture (Estimated)	6%		
Product Moisture, Coking	11%		
Product Moisture, Thermal	9%		
High Wall Batter Angle (Based on Geotechnical Report Ross Seedsman)	Varies as per Geo tech report		
Low Wall Batter Angle(Based on Geotechnical Report Ross Seedsman)	17 <sup>0</sup>		
Mining Cost	SRK		
Coal Processing costs	DaDi Engineering		
Power Costs Report	Sino Coal Institute		
The Reserves for BN coal blocks are economic based on the information and costs used at the time of this report	SRK		
Government Documents / approvals Supplied by Client	Client		
JORC Resource Report McElroy Bryan Geological Services (MBGS)	MBGS		
LOX Drilling Report for T & H Seams	MBGS		
Environment Report	SMEC		
Coal Quality Report	Bob Leach Pty Ltd		
Geotechnical Report	Seedsman Geotechnics Pty Ltd		
Hydrogeology Report BUN West	SMEC		
Hydrogeology Report Mine Pit	Aquaterra		
Water Pumping and Pipeline	Prestige Engineering		

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# **Reserves Summary**

The following table summarises the Reserves estimates within the area of Baruun Naran Coal Project, as at February 2011.

Table ES2: Statement of Coal Reserves for Baruun Naran, February 2011

		Coal Reserves, Mt (Million tonnes)		
Seam	Average	With Mining Losses (0.2m) and		
Ceam	Thickness (m)	Handling Losses (5%)		
		Probable (Mt)	Proved (Mt)	Total (Mt)
V500	4.61	2.60		2.60
U500	7.90	1.99	7.44	9.43
T500	16.20	0.08	24.73	24.82
R500	4.22	2.58	1.74	4.32
R400	3.12	1.15	0.25	1.40
R300	1.03	0.78		0.78
R200	3.03	2.11		2.11
Q500	4.39	1.27	2.52	3.79
N500	8.17	0.91	10.69	11.60
N400	7.07	1.49	7.50	8.98
K500	6.12	3.91	10.15	14.06
K400	2.17	0.57	1.18	1.75
J600	2.68	2.40	3.27	5.67
J500	4.40	4.84	4.93	9.78
J400	0.57	1.22		1.22
1500	4.83	2.54	10.37	12.91
H500	16.92	3.56	35.82	39.38
G500	6.82	0.97	10.32	11.29
G450	5.76	0.57	2.86	3.43
G400	7.79	1.23	7.26	8.49
F500	8.84	0.51	6.84	7.35
E500	5.54	0.02	0.10	0.12
Total Coal (Mt)		37.30	147.97	185.27
Total Waste (Mbcm)				1156.99
Average Stripping Ratio (bcm/t)				6.24

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# Disclaimer

The opinions expressed in this Report have been based on the information supplied to SRK Consulting (Australasia) Pty Ltd (SRK) by Khangad Exploration LLC (Khangad). The opinions in this Report are provided in response to a specific request from Khangad to do so. SRK has exercised all due care in reviewing the supplied information. Whilst SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

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## List of Abbreviations

<u>Abbreviation</u>	<u>Meaning</u>
0	degrees
°C	degrees Celsius
admn	administration
AMSL	Above mean sea level

AusIMM Australasian Institute of Mining and Metallurgy

bcm/t bank cubic metre per tonne

cm centimetre

Capex Capital cost estimates

Dep depreciation

Coal Reserve A Coal Reserve is the economically mineable part of a Measured or

Indicated Coal Resource. Coal Reserve estimates including diluting materials and are adjusted for losses that may occur when the coal is mined. Appropriate assessments, which may include feasibility studies, have been carried out. These assessments should include proper consideration of all relevant 'modifying factors' such as mining methods, beneficiation, and economic, marketing, legal, environmental, social and governmental factors. These assessments should demonstrate that at the time of reporting, economic extraction could reasonably be justified. Coal Reserves are subdivided in order of increasing confidence into Probable Coal Reserves and Proved

Coal Reserves.

JORC Code Australia Code for Reporting of Mineral Resources and Ore Reserves,

prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC), September 1999. Updated

December 2004. Internationally accepted reporting code.

JORC Committee Joint Ore Reserves Committee of The Australasian Institute of Mining

and Metallurgy, Australian Institute of Geoscientists and Minerals

Council of Australia

ha hectare
km kilometre(s)
M\$ million US dollars

m metre(s)
mm millimetre(s)
NPV net present value
Opex Operating cost estimates

ROM Run of Mine

SRK Consulting (Australasia) Pty Ltd trading as SRK Consulting

BN Baruun Naran Coal Project

MBGS McElroy Bryan Geological Services Pty Ltd

Mt million tonnes

Mtpamillion tonnes per annumMj/kgmillion joules per kilogramMbcmmillion bank cubic metre

t tonnes

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# 1. Introduction and Scope of Report

Khangad Exploration LLC requested SRK to prepare a JORC compliant Reserve Statement for the Baruun Naran Coal deposit in Umnigovi province in southern Mongolia. This report covers the methods, parameters and results for the Reserve tonnage estimation of the Baruun Naran coal project.

## 1.1 Background of the Project

The Baruun Naran coal deposit was first explored in 1983. Two additional phases of drilling were completed on the property by Soviet Mongolian teams in 1990 and 1993. The property was later abandoned and QGX was granted an exploration license in 2002, now held by the Kuok Group, through Khangad Exploration LLC.

In April 2005, QGX commenced a systematic drilling program and engaged Norwest Corporation to provide geological consulting services including supervision of drilling and trenching programs. In 2007 a drilling program was carried out to assess water availability in the region to support a mining/coal processing operation. An oxidation drilling program was completed during 2008.

Considerable exploration was carried out in the main deposit during 2009. This defined the deposit geometry, identified where seams are faulted at depth and improved the understanding of coal quality variation. Geotechnical studies were also carried out during 2009.

The Baruun Naran mining license 14493A (Figure 3.2), in the Umnogovi Aimag (province), covers 4,485.64 ha and was converted to a mining license on December 1<sup>st</sup>, 2008. Surrounding the Baruun Naran mining license is the "Baruun Naran" exploration concession 4326X (total area 90,782.36 ha).

# Programme Objectives and Work Programme

## 2.1 Programme Objectives

The objective of this work is to provide an independent evaluation of the Coal Reserves contained within Baruun Naran mining license 14493A which covers 4,485.64 ha.

The evaluation will provide an objective assessment of the Reserve in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2004).

## 2.2 Coal Reserves Estimates

This Statement of Coal Reserves estimates for the Baruun Naran Coal Project has been prepared by Neville Terry of SRK. The purpose of this report is to provide an assessment of the coal reserves compliant with the Guidelines of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves", (the "JORC Code") December 2004, prepared by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy ("AusIMM") and the Australasian Institute of Geoscientists and Minerals Council of Australia.

## 2.3 Reporting Code

This Statement of Coal Reserves has been carried out according to SRK's interpretation of the JORC Code. The Resource Statement: JORC Resource Report: Baruun Naran Coal Project, Umnogovi Province, Mongolia, used as the basis for reserves estimation has been compiled by Mr Paul Harrison of MBGS. Paul Harrison is a qualified geologist and is a Member of the AuslMM. He has sufficient experience in coal geology and resource evaluation to qualify as a Competent Person under the JORC code. Under the listing rules of the Australian Stock Exchange, a public report must be prepared in accordance with the 2004 JORC Code if it includes a statement of coal resources or coal reserves. The 2004 JORC Code has been accepted as the basis for consistent public reporting of resources and reserves by many international mining companies.

Under the JORC Code only Measured and Indicated Coal Resources can be considered for conversion to Coal Reserves after consideration of the "Modifying Factors" including mining, processing, economic, environmental, and social and government factors.

To convert Resources to Reserves it must be demonstrated that extraction could be justified after applying reasonable investment assumptions. The highest confidence level establishes Proved Reserves from Measured Resources and a lesser confidence level establishes Probable Reserves from Indicated Resources. A level of uncertainty in any one or more of the Modifying Factors may result in Measured Resources converting to Probable Reserves depending on materiality. A high level of uncertainty in any one or more of the Modifying Factors may preclude the conversion of the affected Resources to Reserves.

## 2.4 Methodology

This report was compiled from JORC Resource Report: Baruun Naran Coal Project, Umnogovi Province, Mongolia, February 2010.

## 2.5 Statement of SRK Independence

SRK has no prior association with Khangad Exploration LLC in regards to the mineral assets that are the subject of this Report. SRK has no beneficial interest in the outcome of the technical assessment being capable of affecting its independence.

### JORC RESERVE REPORT: BN COAL PROJECT BY SRK CONSULTING

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SRK's fee for completing this Report is based on its normal professional daily rates plus reimbursement of incidental expenses. The payment of that professional fee is not contingent upon the outcome of the Report.

# 2.6 Statement of Competence

The estimates of Coal Reserves for the Baruun Naran Coal Project, Umnigovi Province, Mongolia presented in this report have been carried out in accordance with the Guidelines of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves", ("JORC Code") December 2004, prepared by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy ("AusIMM") and the Australasian Institute of Geoscientists and Minerals Council of Australia.

The information in the report to which this statement is attached, that relates to Baruun Naran Coal Block Reserves, is based on information reviewed by Mr Neville Terry, who is a Member of the AuslMM and is a full time employee of SRK.

He is a Principal Consultant (Mining) and has almost 30 years' experience working in the mining industry. He has held positions including Mine Manager, Operations Manager, and Senior Mining Engineer and has also been Managing Director of his own consultancy firm

Mr Terry has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 JORC Code.

Mr Terry consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

(Signed)

**Neville Terry**, BEng (Mining) BAppSc (Applied Geology) BEd, Grad Dip Management

Date: 23 March 2011

## 2.7 Material Compliances and Qualifications

Mr Neville Terry, a Competent Person in accordance with the requirements of the JORC Code, has estimated the Coal Reserve of the Baruun Naran Coal Project.

Mr Terry has visited the site and it was a greenfield project at the time of the site visit.

The Reserve estimation reporting complies with all of the major requirements of the JORC Code, with the following qualifications:

- The effective date of the Baruun Naran Reserve as reported by SRK is February 2011.
- The Reserve model and estimations were developed using Minex mine planning software system, a worldwide industry proven system used primarily for coal mining operations.
- Seam roof and floor coal loss and dilution considered to be 0.2 m.
- Mining loss envisaged at 5% including loss in transportation and handling at borders.
- Minimum mining thickness of 0.3 m of coal seam.
- Mine economics were considered when estimating the reserves for Baruun Naran coal project.
- The mine boundary limits are within the limiting boundaries of MBGS JORC Resource Report, February 2010 for the Baruun Naran Coal Project.
- Other modifying factors like environmental, social, legal and governmental factors may influence the reserves given below (See Table ES1 and Figure 4 1).

## 2.8 Limitations

After due enquiry in accordance with the scope of work and subject to the limitations of the Report hereunder, SRK confirms that:

- The input, handling, computation and output of the geological data and Coal Resource and Reserve information have been conducted in a professional and accurate manner, to the high standards expected.
- The interpretation, estimation and reporting of the Coal Reserve Statement has been conducted in a professional and competent manner, to the high standards expected within the Geosciences and mining professions, and in accordance with the principles and definitions of the JORC Code.
- In conducting this assessment, SRK has addressed and assessed all activities and technical matters
  that might reasonably be considered relevant and material to such an assessment conducted to
  internationally accepted standards. Based on observations and a review of available documentation,
  SRK has, after reasonable enquiry, been satisfied that there are no other relevant material issues
  outstanding.
- The conclusions presented in this report are professional opinions based solely upon SRK's interpretations of the documentation received and other available information, as referenced in this Report. These conclusions are intended exclusively for the purposes stated herein.
- For these reasons, prospective estimators must make their own assumptions and their own assessments of the subject matter of this Report.

Opinions presented in this report apply to the conditions and features as noted in the documentation, and those reasonably foreseeable. These opinions cannot necessarily apply to conditions and features that may arise after the date of this report, about which SRK have had no prior knowledge nor had the opportunity to evaluate.

## JORC RESERVE REPORT: BN COAL PROJECT BY SRK CONSULTING

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## 2.9 Consents

SRK consents to this Report being included, in full, in the Khangad Exploration LLC prospectus, data room, and presentations etc, in the form and context in which the technical assessment is provided, and not for any other purpose.

SRK provides this consent on the basis that the technical assessments expressed in the Summary and in the individual sections of this Report are considered with, and not independently of, the information set out in the complete Report.

## Location and Environment

The Baruun Naran property is located in southern Mongolia (Figure 3 1), in the Aimag (province) of Umnogovi approximately 500 km south of Ulaanbaatar, the capital of Mongolia. The town of Dalanzadgad (population 10,000), the provincial capital, is located 61 km to the west of the property. The property is being legally surveyed, and except for the commencement of certain mine works, is in an entirely natural state with no paved roads or permanent dwellings.



Figure 3-1: Location of Khangad's Baruun Naran coal project in southern Mongolia

The project area is characterized by gently rolling desert plains with scattered small hills and ridges. Scrubby desert plants and sparse grasses growing on a thin soil cover characterize the vegetation.

Topographic elevation in the project area ranges from 1500 to 1700 m above men sea level (AMSL). The deposit is located within a discrete, ENE trending valley, herein referred to as the Baruun Naran valley. This valley, from which the coal deposit takes its name, is approximately 22 km long and 2 to 3 km wide. The floor of the valley is relatively flat and is bounded to the north and south by low hills and ridges that rise approximately 25 m to 100 m above the valley floor.

The deposit is located in the South Gobi desert where the climate is generally hot and dry in the summer and cold and dry in the winter. The annual average maximum daily and minimum daily temperatures are +38°C and 36°C respectively. The area receives most of its rain from June to September. The prevailing winds are generally from the northwest and west and dust storms often occur during the spring and summer months. Winds are strongest in spring and summer whereas the autumn and winter winds are generally light.

The Baruun Naran mining license 14493A (Figure 3 2), in the Umnogovi Aimag (province), covers 4,485.64 ha and was converted to a mining license on December 1<sup>st</sup>, 2008. Surrounding the Baruun Naran mining license is the "Baruun Naran" exploration concession 4326X (total area 90,782.36 ha).

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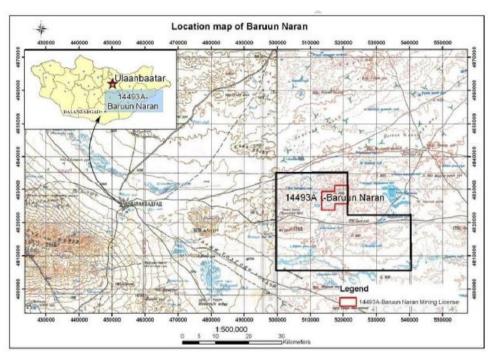


Figure 3-2: Location of Baruun Naran Mining and Exploration Licenses in Southern Mongolia

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# 4. Basis for Reserves Estimate

# 4.1 Estimation Methodology

The geological model that has been used to prepare the current JORC Resource Report for the Baruun Naran Coal Project, has also been used to generate pit designs and estimate the reserves. In the estimation of Coal Reserves a number of issues/parameters /Modifying Factors have to be addressed.

Examples of possible Modifying Factors are

- Mining Parameters;
- Cost Revenue Factors;
- Metallurgical factors;
- Cut off Parameters and Pit Limits;
- Geo technical parameters.

A more comprehensive list the various Modifying Factors that may be considered in developing an estimate of Reserve tonnes when converting Resource Tonnes to Reserves, is shown below.

# 4.2 Modifying Factors

Figure 4 1 outlines the factors used to estimate the Reserve Tonnage for the Baruun Naran operation.

Table 4-1: Summary of Modifying Factors

Seam roof & floor coal loss	0.2m	
Seam roof & floor dilution	0.2m	
Mining loss including loss in transportation and handling at port	5%	
Minimum mining thickness minable coal seam	0.3m	
ROM Moisture, air dried	2%	
In situ Moisture (Estimated)	6%	
Product Moisture, Coking	11%	
Product Moisture, Thermal	9%	
High Wall Batter Angle (Based on Geotechnical Report Ross Seedsman)	Varies as per Geo tech report	
Low Wall Batter Angle(Based on Geotechnical Report Ross Seedsman)	17 <sup>0</sup>	
Mining Cost	SRK	
Coal Processing costs	DaDi Engineering	
Power Costs Report by Sino Coal	Sino Coal Institute	
The Reserves for BN coal blocks are economic based on the information and costs used at the time of this report	SRK	
Government Documents / approvals Supplied by Client	Client	
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Hydrogeology Report BUN West	SMEC	
Hydrogeology Report Mine Pit	Aquaterra	
Water Pumping and Pipeline	Prestige Engineering	

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## 4.2.1 Reserves

This Statement of Coal Reserves has been carried out according to SRK's interpretation of the JORC Code. The JORC Resource Statement by Mr Paul Harrison of MBGS in February 2010 was used to develop the Recoverable Reserve tonnes after the application of mining parameters, mine design and other modifying factors

The Statement of Coal Reserves for Baruun Naran is shown in Table 4 2.

Table 4-2: Statement of Coal Reserves for Baruun Naran, February 2011

	Average Thickness (m)	Coal Reserves, Mt (Million tonnes)  With Mining Losses (0.2m) and Handling Losses (5%)		
Seam				
		Probable (Mt)	Proved (Mt)	Total (Mt)
V500	4.61	2.60		2.60
U500	7.90	1.99	7.44	9.43
T500	16.20	0.08	24.73	24.82
R500	4.22	2.58	1.74	4.32
R400	3.12	1.15	0.25	1.40
R300	1.03	0.78		0.78
R200	3.03	2.11		2.11
Q500	4.39	1.27	2.52	3.79
N500	8.17	0.91	10.69	11.60
N400	7.07	1.49	7.50	8.98
K500	6.12	3.91	10.15	14.06
K400	2.17	0.57	1.18	1.75
J600	2.68	2.40	3.27	5.67
J500	4.40	4.84	4.93	9.78
J400	0.57	1.22		1.22
1500	4.83	2.54	10.37	12.91
H500	16.92	3.56	35.82	39.38
G500	6.82	0.97	10.32	11.29
G450	5.76	0.57	2.86	3.43
G400	7.79	1.23	7.26	8.49
F500	8.84	0.51	6.84	7.35
E500	5.54	0.02	0.10	0.12
Total Coal (Mt)		37.30	147.97	185.27
Total Waste (Mbcm)				1156.99
Average Stripping Ratio (bcm/t)				6.24

Figure 4 1 summarises the estimated Reserve tonnes by seam.

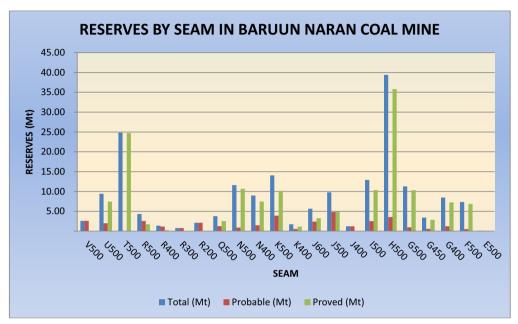


Figure 4-1: Reserves by Seam

In summary, there is an estimated total of 185.27 Mt of Reserves, comprising of 37.30 Mt of Probable and 147.97 Mt of Proved Reserves. Of these Reserves, there is an estimated 120.82 Mt of Coking Coal and 64.45 Mt of Thermal Coal as shown in Table 4 3 below.

Table 4-3: Summary of Estimated Reserve Tonnes

	Coal F	Reserves (Mt)	
Туре	Total (Mt)	Probable (Mt)	Proved (Mt)
Coking	120.82	20.85	99.97
Thermal	64.45	16.45	48.00
Total	185.27	37.30	147.97

### 4.2.2 Annual Production Rate

The total Reserves Proven and Probable are 185.27 Mt at an average stripping ratio of 6.24. (See Figure 4.2) Based on this tonnage and coal production target suggested by the client, the annual production was estimated at 10 million tonnes per annum (Mtpa) giving a 20+ year life of mine. Figure 4.4 outlines the assumed annual production rate. It will be achieved by mining seam T500 initially in the central part of the block and later from Seams H500 and others in the eastern part of the block.

The following is the production rate given in Table 4.4 which gives total mine life of 21 years for Baruun Naran coal project.

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**Table 4-4: Annual Production Rate** 

Year	1	2	3	4	5	6	7	8	9	10	11-21	Total
Coal Production (Mt)	1.02	3.06	7.09	10.03	10.03	10.00	10.00	10.01	10.02	10.05	103.97	185.27

### 4.3 Parameters and Pit Limits

### 4.3.1 The Pit Limit Restrictions

Figure 4 2 shows a plan of the Baruun Naran mine lease area and final pit layout. The pit limit restrictions are governed by the geological resource boundary. The mining limits have been determined by considering physical limitations within the geological resource, mining parameters, economic factors and general modifying factors as outlined in Table 4 1.

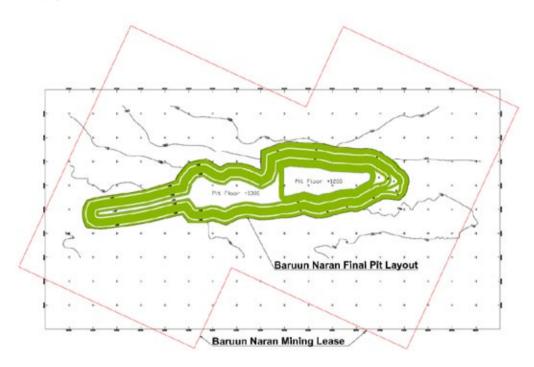


Figure 4-2: Final Pit Layout, Baruun Naran Coal Project

#### 4.3.2 Batters

The high wall batters (slope) adopted were those recommended by the Geotechnical Investigation conducted by the **Seedsman Geotechnics Pty Ltd.** 

To facilitate mine planning at feasibility level, a design line for high wall slope with the form of maximum bench height = 68.8 0.6\* bedding dip has been recommended by the study. Recognising the presence of small scale normal faults and the possibility of buckling of thin slabs, a 6 8 m wide bench has been used at the final wall. This resulted in the inter ramp slopes in between 32° and 50° (Recommended 37° 68°).

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Surficial deposits and the weathered strata were laid back at  $45^{\circ}$  on batters of 20 m height, with benches of a minimum of 5 m width.

The **low wall batter** has been set at an average of 17° based on the horizontal pit floor. SRK recommends that further geotechnical investigations should be conducted to investigate the stability of the toe of the low wall and the maximum height of the low wall dump which has been designed at this stage at about 380 400 m. The Ex pit dump has been designed at 14 17° for the varying dump height of 60 100 m.

# 4.4 Mining Parameters

The mining parameters applied to the resource model for deriving mining quantities were selected based on the use of excavators and trucks.

An allowance of 5% loss has been made to modelled opencut coal tonnages to cater for geological losses which are not defined at this time. The 5% loss also considers general mining losses which are separate from and additional to seam loss and dilution due to exposure and mining (which are estimated separately below). These general mining losses includes strip edge losses, blasting losses, and losses around access ramps etc.

Because of the number of plys and partings in many of the seams it has been assumed that partings less than 300 mm will be mined as coal.

Coal seam/ply losses due to exposure and mining have been estimated based on the proposed excavator and truck mining method at 0.1 m on the roof and 0.1 m on the seam/ply floor, making a total loss of 0.2 m per seam/ply. Dilution has been allowed of 0.1 m on the roof and 0.1 m on the seam floor, making a total waste gain of 0.2 m per seam/ply.

Minir	ng Parameters for Baruun Naran C	oal Proj	ject
SI. No.	Particulars	Unit	Value
1	Roof loss	cm	10
2	Floor loss	cm	10
3	Roof dilution	cm	10
4	Floor dilution	cm	10
5	Minimum Mining Thickness	cm	30
6	Overall Mining Loss	%	5

**Table 4-5: Mining Parameters** 

# 4.5 Blasting

Coal will be free dig but overburden and interburden will require drilling and blasting for its removal.

# 4.6 Mining Method

The shape of the Baruun Naran coal deposit delineates the mining area of Baruun Naran project. The deposit is a plunging synclinal structure. Coal seams at Baruun Naran are folded into an asymmetrical syncline which plunges west at approximately 24°. Coal seams subcrop from east to west and can be traced from the southern to the northern limb, around the syncline nose (Figure 4 3). The north limb is very steep, dip averaging 75°. The south limb has a gentler dip of about 40° near the syncline nose (east) but progressively steepens to 75° dip towards the west.

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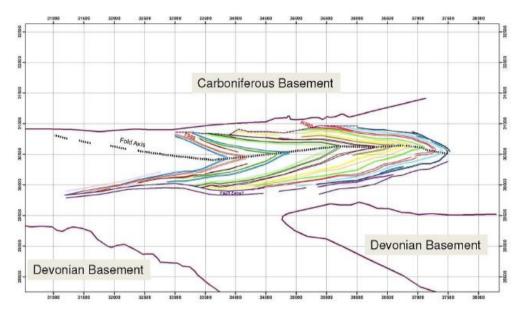


Figure 4-3: Syncline Axis, Bounding Faults & Seam subcrops at 1500m RL, Baruun Naran Coal Project

There are 22 seams identified and within these seam there exists multiple plies of coal, interburden and partings. Some 120 to 130 coal plies have been identified. Some of these plies are thick enough to be mined separately while others are thin and have thin partings of waste in between. Any parting within a seam that is less than 300 mm will be mined as coal any parting above 300 mm has been planned to be mined separately as waste material.

The open cut operation will consist of a multi seam strip mining operation, utilising trucks and excavators. It is anticipated that all mining and coal handling and preparation will be carried on an owner operator basis.

# 4.7 Mine Plan

The open cut operation will consist of opening of two box cuts both in the central part of the property on T seam and in the eastern part of the block over H seam. Mining will continue simultaneously in both the pits for next 2 years. However, from year 3, mining will be concentrated in the central pit, which will also move towards in the western area and continue up to year 8. From Year 9, mining activities will be carried out only in the eastern pit. In both the pits, multi seam strip mining operation will be carried out by utilising trucks and excavators.

The basic assumption for the selected mining sequence was to get optimum steady annual quantities of coking coal as well as thermal coal from the Baruun Naran pit. Mining sequences have been developed in such a way that the overall stripping ratio is consistent over longer period of mine life. The proposed mining sequence is also consistent with the annual product coking coal requirement, mine equipment requirement, early back fill and ease of mine operation.

This exposes low ratio coal and offers the shortest haul distance for the waste to the out of pit waste dump. Mining will progress in a westerly direction initially in the central pit. In pit dumping will commence as soon as possible from year 9 when mining operations shift in the eastern pit thus keeping the out of pit dumping of waste to a minimum.

Coal will be mined and transported to the Run of Mine ("ROM"), where it will be stockpiled. The ROM Coal will be crushed and washed at the CHPP at site before selling it to the market in China. Initially, product coal will be transported by road trucks to the buyer but it is proposed to be transported by rail which is upcoming at nearby Mongolian Mining Corporation "Ukhaa Hudog" mine about 40 km from the Baruun Naran mine for which a spur will be built to the Baruun Naran mine. There will be two types of product coal available from the Baruun Naran mine, coking coal and thermal coal.

Figure 4 4 shows the mining sequence over the life of the mine.

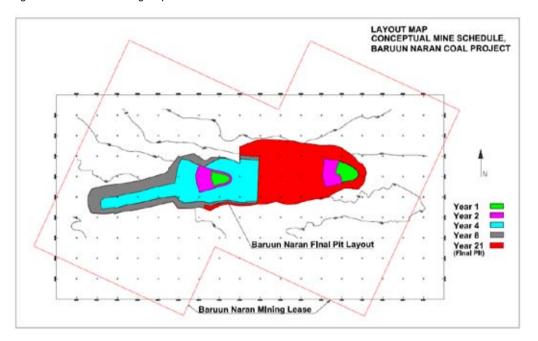


Figure 4-4: Mining Sequence, Baruun Naran Coal Project

### 4.7.1 Waste Dumps

Initially, waste will be trucked to an out of pit waste dump located in the south of the Baruun Naran central and east pit within the lease boundary. Back filling of previously mined out areas will commence from year 9.

### 4.7.2 Mining Volume/Tonnage

Table 4 6 and Figure 4 5 summarizes the waste and coal mined over the mine life of 21 years. Annual ROM coking and thermal coal production is given in Table 4 7 and Table 4 6.

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Year 1	7	3	4	5	9	7	8	6	10	11	10 11 12 13 14 15 16 17 18 19 20 21	13	14	15	16	17	18	19	20	21	Total
<b>Waste,</b> 9 38 25 40	25 40	99 99 00 69	99 99	68 47	99 69	99 69	70 25	73 35	73 57	62 02	69 56         70 25         73 35         73 57         70 79         67 69         50 04         53 57         53 22         51 17         51 17         51 97         52 30         18 68	50 04	53 57	53 22	51 17	51 17	51 17	51 97	52 30	18 68	1156.99
Coal, Mt 1 02 3 06 7 09 10 03 10 03 10 00	3 06	60 2	10 03	10 03		10 00	10 01	10 02	10 05	10 06	10 00 10 01 10 02 10 05 10 06 10 05 10 06 10 03 10 04 10 04 10 03 10 03 10 03 10 00 10 00 3 59	10 03	10 04	10 04	10 03	10 03	10 03	10 02	10 06		185.27
Stripping         9 20         8 30         8 32           Lount         bcm/t         bcm/t         control         control	8 30		9 9	6 83	96 9	96 9	7 02	7 32	7 32	7 04	6 96 7 02 7 32 7 32 7 04 6 74 4 99	4 99	534 530 510 510 510 519 520 520	5 30	5 10	5 10	5 10	5 19	5 20	5 20	6.24

Table 4-7: ROM Coking and Thermal Coal Production Summary, Baruun Naran Coal Project

					=			2	2				, ( m			2	į					
Year	1	2	3	4	5	9	7	œ	6	10	11	12	13	14	15	16	17	18	19	10 11 12 13 14 15 16 17 18 19 20 21 Total	21	Total
Coking Coal, Mt	66 0	2 61	4 51	6 2 9	6 24	6 19	6 19	6 27	6 64	6 19 6 27 6 64 6 66	6 61	6 21	6 20	6 25	6 34	6 2 9	6 2 9	661         621         620         625         634         679         679         679         687	6 87	6 91 2 47 <b>120.82</b>	2 47	120.82
Thermal Coal, Mt         0 03         0 45         2 58         3 74         3 79	0 03	0 45	2 58	3 74	3 79	3 81	3 81	3 74	3 38	3 39	3 44	3 84	3 83	3 79	3 70	3 24	3 24	3 24	3 15	381         374         338         344         384         383         379         370         324         324         324         315         315         112	1 12	64.45
<b>Total</b> 1 02 3 06 7 09 10 03 10 03 <b>Coal. Mt</b>	1 02	3 06	60 2	10 03	10 03	10 00	10 00	10 01	10 02	10 05	10 06	10 05	10 03	10 04	10 04	10 03	10 03	10 03	10 02	10 00 10 01 10 02 10 05 10 06 10 06 10 05 10 00 10 1	3 59	185.27

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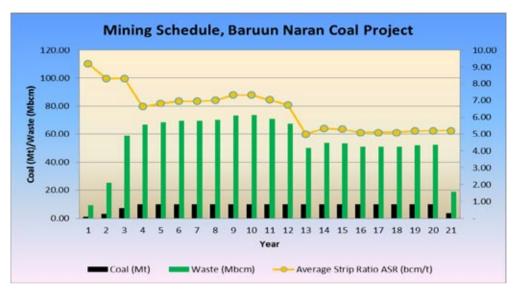


Figure 4-5: Coal Mining, Waste Removal Schedule with Annual Stripping Ratio

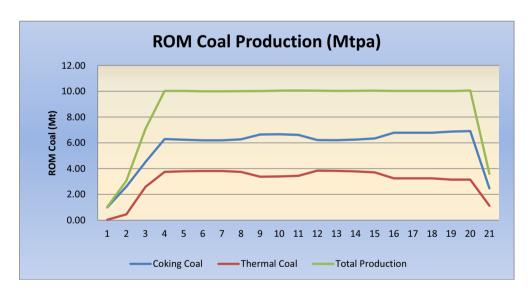


Figure 4-6: ROM Coking Coal & Thermal Coal Production from Baruun Naran Mine

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### 4.8 Cost and Revenue Factors

SRK estimated the operating and capital costs (see Appendix 1) and also used an in house NPV based economic model (see Appendix 4) to show the project and reserves are "economic".

### 4.9 Marketing and Product Specifications

Appendix 2 summarises the in situ quality of the seams.

It has been assumed that the coal will be processed after crushing. It is also assumed that the two types of product coal, coking coal and thermal coal will be sold in the market.

### 4.10 Other Relevant Factors

This mining lease, Baruun Naran, will be a standalone mine.

It is anticipated that further work including additional exploration/production drilling, optimisation studies and detailed mine planning will occur in the region which may then require further updated Coal Resources and Coal Reserves estimates. If this is the case, then the results may impact on the conclusions contained in this report by the resource and reserve tonnes being increased.

### 4.10.1 Hydrogeology

Khangad Exploration LLC has completed a hydrology and hydro geological study for the area and it is concluded that no issues will impede the operation.

### 4.10.2 Environmental

SMEC have conducted the environmental study for Baruun Naran area and have submitted the draft report. SRK have reviewed the report and believe it provides adequate guidelines to facilitate mining the Baruun Naran area.

### 4.10.3 Social and Political

Khangad Exploration LLC is in possession of the land within the Baruun Naran Mining Lease and also has the land use right.

### 4.11 Results

Total Open Cut Recoverable Coal Reserves allowing for mining and handling losses are 185 Million tonnes ("Mt") including 148 Mt of Proved Recoverable Coal Reserves and 37 Mt of Probable Recoverable Coal Reserves.

The Summary of Recoverable Reserve estimates are shown by seam in Appendix 3.

As started earlier, this Statement of Coal Reserves has been carried out according to SRK's interpretation of the JORC Code. The JORC Resource Statement by Mr Paul Harrison of MBGS in February 2010 was used to develop the Recoverable Reserve tonnes after the application of mining parameters, mine design and other modifying factors.

It is worthy of note that, based on the above modifying factors, virtually all of the Resource Tonnes, as identified in the resource report by MBGS, were Measured or Indicated. These were able to be converted to Reserve Tonnes after the application of the modifying factors as stated in Section 4.2.

In addition, it is reasonable to say that the depth of drilling limited the economic pit shell. And, it is reasonable to determine that with further geologic work and drilling, the reserves and pit could be extended.

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Therefore, there is a potential that further ongoing infill and deeper drilling between existing drill holes and further exploration drilling could result in additional coal tonnes being located at depths below the current designed pit shell. This may then lead to an update/increase of the Coal Resources and Coal Reserves estimates.

It must also be noted that, this will result in the final depth of the open cut to be significantly deeper than the current designed depths. This will lead to additional modifying factors that will have to be applied.

The major anticipated modifying factor will be the Geotechnical Parameters/Issues. A detailed and extensive Geotechnical Study will have to be conducted, and at these depths, one may have to revise the mining method.

These are only two factors and there will be others. However, considering the possible the current coal price trend and future price of coal it is worthy to consider a preliminary investigation estimating the possible addition tonnes that could be mined at a deeper depth.

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# 5. Conclusions and Recommendations

Total Open Cut Recoverable Coal Reserves allowing for mining and handling losses are 185 Million tonnes ("Mt") including 148 Mt of Proved Recoverable Coal Reserves and 37 Mt of Probable Recoverable Coal Reserves. Of these total reserves, 121 Mt is Coking Coal and 64 Mt is Thermal Coal.

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# **Appendices**

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Appendix 1

SRK Consulting | KER001: JORC Reserve Report: Baruun Naran Coal Project March 2011 **Appendix 1:** Capital Costs and Operating Costs

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Capital Expenditure on Baruun Naran Mine	Fleet (US\$M)
Capital Experialtare on Bardan Naran Mille	i icci (Cowin)

	nture on Baruun Naran M		Unit	Total
Equipment	Size		price	capital
		Population	US\$M	US\$M
Waste				
Hydraulic Excavator	550+ tonne	2	11.42	22.84
Hydraulic Excavator	350 tonne	4	6.65	26.60
Hydraulic Excavator	250 tonne	3	4.91	14.74
Haul Truck	240 Ton	14	4.15	58.14
Haul Truck	150 Ton	44	2.49	109.77
Drill	219 279 mm hole dia.	3	1.54	4.61
Track Dozer	860 HP "U" blade	4	1.76	7.04
Track Dozer	580 HP "SU" blade	5	1.25	6.25
Sub total (Waste)				249.99
Coal				
Hydraulic Excavator	250 tonne	2	4.67	9.34
Haul Truck	150 Ton	10	2.49	24.95
Track Dozer	580 HP coal blade	2	1.47	2.93
ROM Wheel Dozer	500 HP coal blade	1	1.33	1.33
Sub total (Coal)				38.55
Support				
Grader	280HP	7	0.78	5.48
Diesel B'hoe	2.8 m3 bucket	1	0.59	0.59
Front End Loader	7 to 12m3 coal bucket	2	0.72	1.44
Front End Loader	20 to 25m3 coal bucket	2	2.22	4.44
Diesel Fuel Truck	100 Ton	2	0.96	1.93
Service Lube/Fuel/Coolant	50 Ton	2	0.62	1.24
Boom Truck		2	0.35	0.70
120 T Crane		1	1.23	1.23
Fire Tender		1	0.06	0.06
Tyre handler (Front end Loader) Water Truck fitted with fire		2	0.92	1.83
fighting	100 Ton	6	0.90	5.39
Sub total (Support)				24.33
Total Capital (Mine Fleet), US\$M as at 11 <sup>th</sup> February 2011				312.87

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# Estimates on Baruun Naran Mine Infrastructure Capital Expenditure (US\$)

Particulars	Unit	Capex
Road works including 25 km coal road to ER to china	USD	345,000
Industrial building Including Admn facilities	USD	11,575,320
Accommodation camp	USD	9,397,370
Coal laboratory	USD	920,290
Communications & IT	USD	3,029,729
Water works and pipeline incl. BN Well	USD	21,288,381
Generator sets and Light towers	USD	3,596,900
Power supply incl BN Power plant	USD	59,742,082
Rail Spur to BN	USD	55,200,000
Light Vehicles	USD	4,297,978
Furniture & fittings, computers and softwares	USD	652,128
Survey equipments etc	USD	2,010,000
Feasibility and other studies incl. production drilling	USD	5,200,000
Concrete Batching Plant, Weighbridges & crusher	USD	2,371,760
Mine Fencing	USD	122,733
Mine Dewatering & Surface Water Management	USD	14,957,554
CHPP	USD	174,029,226
Total Capital Expenditure on Mine Infrastructure (US\$M) as at 11 <sup>th</sup> February 2011		368.74

### Unit Cost Summary for Baruun Naran Coal Project

A. Cash Cost		
Direct Mining Operating Cost		
Labour Cost	USD/ROM t	2.12
Repair & Maintenance	USD/ROM t	5.99
Fuel	USD/ROM t	7.57
Explosives	USD/ROM t	1.84
Insurance, land and admn overhead	USD/ROM t	3.10
Direct Mining Opex	USD/ROM t	20.62
Mine Infra Operating Cost		
CHPP	USD/ROM t	4.17
BN Power Plant	USD/ROM t	0.43
Other Mine Infrastructure Cost	USD/ROM t	1.74
Mine Infra Opex	USD/ROM t	6.34
Mine Operating Cost (Opex)	USD/ROM t	26.96
Mine Operating Cost (Opex)	USD/Product t	39.57
B. Unit Capital and Loan Interest Cost		
Unit cost on Capex (Depreciation)	USD/ROM t	5.54
Unit cost on Loan (Interest)	USD/ROM t	1.08
Unit Cost of Production (Dep & Interest)	USD/ROM t	6.62
Unit Cost of Production (Dep & Interest)	USD/Product t	9.72
Baruun Naran Cost of Operations		
Total Unit Cost of Production	USD/ROM t	33.58
Total Unit Cost of Production	USD/Product t	49.29

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Appendix 1

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Appendix 2: In-situ Quality

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### Raw Coal Quality, Baruun Naran Coal Project

- Air dried moisture (ad) 2%,
- Variable ash ply by ply (8% to 40%),
- Total Sulphur (TS) varying from 0.4% to 1.5%,
- Calorific value typically 34Mj/kg to 35Mj/kg on a dry, ash free basis (CVdaf),
- Raw CSN 2 to 7. All seams showed some capacity to provide caking swell indicating the
  coal is generally be suited to coking coal production (subject to the influence of other
  properties).
- Chlorine averaged 0.03% to 0.04%.

Seam	In-situ density	Average ash	Raw CSN
	g/cc @ 6% in-situ Moisture	% ad	(Average)
V500	1.48	20.00	3
U500	1.55	33.00	3
T500	1.42	15.80	4
R500	1.54	28.20	3
R400	1.55	33.50	3
R300	1.55	40.00	3
R200	1.54	30.30	3
Q500	1.53	28.20	3
N500	1.48	27.20	3
N400	1.54	30.00	3
K500	1.53	29.60	3.5
K400	1.64	36.20	3.5
J600	1.46	22.30	3
J500	1.41	18.30	3
J400	1.55	30.80	3
1500	1.40	18.80	4
H500	1.40	19.90	4
G500	1.57	34.90	3
G450	1.59	38.00	3
G400	1.60	36.90	3
F500	1.51	26.20	2
E500	1.56	37.10	

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Appendix 3: Recoverable Reserves

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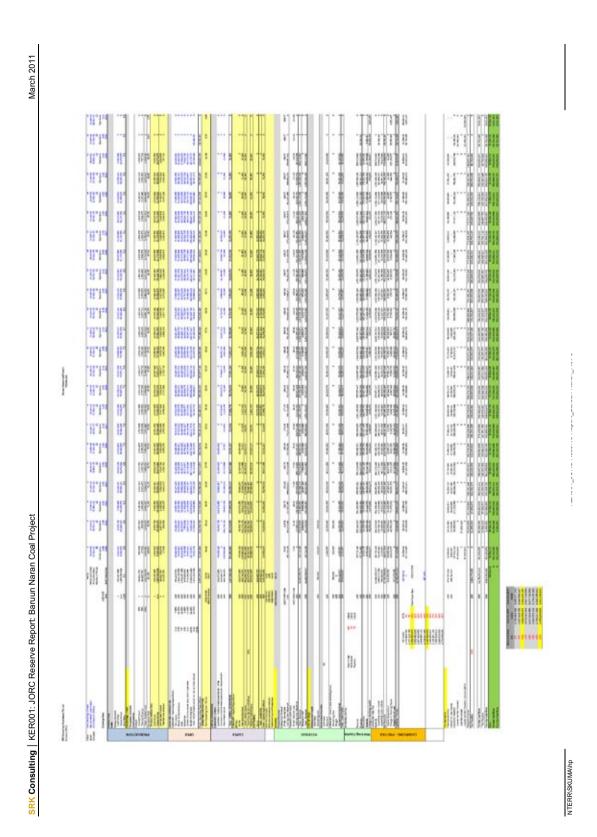
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	Recoverable Coal	l Reserves, Mt (M	illion tonnes)
Seam	With Mining Loss	es (0.2m) and Ha (5%)	ndling Losses
	Probable (Mt)	Proved (Mt)	Total (Mt)
V500	2.60		2.60
U500	1.99	7.44	9.43
T500	0.08	24.73	24.82
R500	2.58	1.74	4.32
R400	1.15	0.25	1.40
R300	0.78		0.78
R200	2.11		2.11
Q500	1.27	2.52	3.79
N500	0.91	10.69	11.60
N400	1.49	7.50	8.98
K500	3.91	10.15	14.06
K400	0.57	1.18	1.75
J600	2.40	3.27	5.67
J500	4.84	4.93	9.78
J400	1.22		1.22
1500	2.54	10.37	12.91
H500	3.56	35.82	39.38
G500	0.97	10.32	11.29
G450	0.57	2.86	3.43
G400	1.23	7.26	8.49
F500	0.51	6.84	7.35
E500	0.02	0.10	0.12
Total Coal (Mt)	37.30	147.97	185.27
Total Waste (Mbcm)			1156.99
Average Stripping Ratio (bcm/t)			6.24

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