寶金國際

ASX ANNOUNCEMENT

26 May 2017

SCHEME OF ARRANGEMENT - CONVENING OF SCHEME MEETING AND DISPATCH OF SCHEME BOOKLET TO SHAREHOLDERS

Blackgold International Holdings Ltd (ASX:BGG) is pleased to advise that:

(1) it has convened a meeting of Blackgold shareholders to consider and vote on the Scheme of Arrangement involving Vibrant Group Limited ("**Scheme**"); and

(2) it has dispatched to Blackgold shareholders the scheme booklet in relation to the Scheme ("**Scheme Booklet**"), together with proxy forms.

The dispatch of the Scheme Booklet follows orders made by the Federal Court of Australia on 24 May 2017 ordering the dispatch of the Scheme Booklet to Blackgold shareholders and the convening and holding of a meeting of Blackgold shareholders to consider and vote on the Scheme ("**Scheme Meeting**").

A colour copy of the Scheme Booklet including the Notice to convene the Scheme Meeting and the Independent Expert's Report, is attached to this announcement.

Shareholders will receive the Scheme Booklet and are encouraged to read it in full. If a Shareholder wishes to receive a colour version of the Scheme Booklet, then it may obtain one by contacting the Blackgold Company Secretary during normal business hours on telephone (08) 9486 4036 (international +61 8 9486 4036) or it can download one from the company's website: www.blackgoldglobal.net

The Scheme Meeting will be held on 26 June 2017, at 11am Perth time.

The Board of Directors continue to unanimously recommend that Blackgold shareholders vote in favour of the Scheme at the upcoming Scheme Meeting, in the absence of a superior proposal, for the reasons set out in the Scheme Booklet.

ENDS

Blackgold International Holdings Limited

Dr. Chi Ho (James) Tong
Chairman

COMPANY DIRECTORS & MANAGEMENT

Directors

Managing Director & CEO	Yuguo Peng
Non-Executive Chairman	Dr Chi Ho (James) Tong
Executive Director	Jun Ou
Non-Executive Director	ZhongHan (John) Wu
Non-Executive Director	Wei-Her (Sophia) Huang
Non-Executive Director	Prof Guangfu Yang

Management

Deputy General Manager, Enterprise Management	Yijiang Peng
Chief Financial Officer	It Phong Tin
Chief Geologist	WenMing Yao

ADDRESS

Australia
Unit 5, Ground Floor,
1 Centro Avenue
Subiaco WA 6008
Australia

China
12th floor, No. 18
MianHua Street, YuZhong District
Chongqing, 400011, China

寶金國際
BLACKGOLD INTERNATIONAL

Blackgold International Holdings Limited

(ACN 145 095 478)

Scheme Booklet

in relation to the proposal for Vibrant Group Limited
to acquire, by way of a Scheme of Arrangement, all of the
ordinary shares in Blackgold International Holdings Limited
which it does not already own or control

The Directors of Blackgold International Holdings Limited unanimously
recommend that you vote in favour of the Scheme of Arrangement,
in the absence of a Superior Proposal.

Each Director of Blackgold International Holdings Limited intends to vote
the Blackgold Shares which they own or control in favour of the
Scheme of Arrangement, in the absence of a Superior Proposal.

A Notice of Scheme Meeting is included as Annexure D to this Scheme Booklet.

A proxy form for the Scheme Meeting accompanies this Scheme Booklet.

The Scheme Meeting will be held on Monday 26 June 2017 at 11am Perth time
at 38 Station Street, Subiaco, Perth, Western Australia, Australia.

This is an important document and requires your immediate attention.

You should read it carefully and in its entirety before deciding whether or not to vote in favour
of the Scheme of Arrangement.

If you are in any doubt as to what you should do, you should consult your professional adviser.

Important Notices

Date of this document

This Scheme Booklet is dated 26 May 2017.

Nature of this document

This Scheme Booklet provides Blackgold Shareholders with information about the proposed acquisition of Blackgold by Vibrant Group Limited by way of a Scheme of Arrangement.

If you have sold all of your Blackgold shares, then please ignore this Scheme Booklet.

Regulatory Information

This Scheme Booklet contains the explanatory statement for the proposed Scheme of Arrangement between Blackgold and Scheme Shareholders as at the Scheme Record Date for the purposes of Section 412(1) of the Corporations Act. The proposed Scheme is set out in Annexure B of this Scheme Booklet.

A copy of this Scheme Booklet was provided to ASIC for examination in accordance with Section 411(2)(b) of the Corporations Act and was lodged with ASIC for registration under Section 412(6) of the Corporations Act. It was then registered by ASIC under Section 412(6) of the Corporations Act before being sent to Blackgold Shareholders.

ASIC has been requested by Blackgold to provide a statement in accordance with Section 411(17)(b) of the Corporations Act to the effect that ASIC has no objection to the Scheme. If ASIC provides that statement, it will be produced to the Court at the time of the Second Court Hearing to approve the Scheme. Neither ASIC nor any of its officers takes any responsibility for the contents of this Scheme Booklet.

A copy of this Scheme Booklet has been provided to ASX. Neither ASX nor any of its officers takes any responsibility for the contents of this Scheme Booklet.

Important Notice associated with Court Order under Section 411(1) of Corporations Act

The fact that under sub-section 411(1) of the Corporations Act the Court has ordered that a meeting be convened and has approved the explanatory statement required to accompany the notice of meeting does not mean that the Court:

(a) has formed any view as to the merits of the proposed Scheme or as to how members should vote (on this matter, members must reach their own decision); or

(b) has prepared, or is responsible for, the content of, the explanatory statement.

Responsibility for information

Blackgold has been solely responsible for preparing this Scheme Booklet (other than the Independent Expert's Report) and Vibrant and its directors, officers and employees do not assume any responsibility for the accuracy or completeness of this Scheme Booklet, other than Vibrant has been solely responsible for the preparation of the Vibrant Information. Blackgold and its directors, officers and employees do not assume any responsibility for the accuracy or completeness of any Vibrant Information.

Forward looking statements

Certain statements in this Scheme Booklet are about the future or future events.

Blackgold Shareholders should be aware that there are risks, uncertainties, assumptions and other important factors which could cause the actual conduct, results, performance or achievements of Blackgold to be materially different from the forward looking statements expressed or implied in this Scheme Booklet. These risks include the risks set out in Section 6 of this Scheme Booklet.

None of Blackgold, Vibrant, their directors, officers, employees or advisers give any representation, assurance or guarantee that the occurrence of the events expressed or implied in any forward looking statement in this Scheme Booklet will actually occur.

Blackgold Shareholders are cautioned against relying on any such forward looking statements. The forward looking statements in this Scheme Booklet are only made as at the date of this Scheme Booklet. Additionally, statements of intention of Blackgold or Vibrant are present intentions as at the date of this Scheme Booklet and may be subject to change.

Subject to the Corporations Act and other applicable laws, Blackgold and Vibrant disclaim any duty to update any forward looking statements other than with respect to information which they become actually aware of prior to the Scheme Meeting which is material to the making of a decision regarding whether or not to vote in favour of the Scheme.

No investment advice

This Scheme Booklet does not take into account the investment objectives, financial situation, tax position or particular needs of any Blackgold Shareholder or any other person. This Scheme Booklet should not be relied upon as the sole basis of any decision in relation to Blackgold shares.

Blackgold Shareholders should seek independent advice before making any decision regarding the Scheme or their Blackgold Shares.

Privacy

Blackgold and Vibrant may collect personal information in the process of implementing the Scheme.

The information includes your name, contact details, information on your shareholding in Blackgold and the name of persons appointed by you to act as a proxy, attorney or corporate representative at the Scheme Meeting.

The primary purpose of the collection of personal information is to assist Blackgold and Vibrant to conduct the Scheme Meeting and to implement the Scheme. Personal information of the type described above may be disclosed to the Blackgold share registry, advisers, print and mail service providers, authorised securities brokers and Related Bodies Corporate of Blackgold and Vibrant.

Blackgold Shareholders have certain rights to access personal information that has been collected. If you would like to obtain details of information about you which is held by Blackgold, then please contact the company's share registry, Link Market Services, on telephone: 1300 554 474 (toll free within Australia) between the hours of 8:30am to 7:30pm Sydney time Monday to Friday (excluding public holidays) (international: + 61 1300 554 474).

Further information

If you require further information, then you may telephone Blackgold on (08) 9486 4036 (international: +61 8 9486 4036) during Perth business hours or obtain your own independent professional advice.

Defined Terms and Interpretation

A number of defined terms are used in this Scheme Booklet. These defined terms are capitalised and have the meaning set out in Section 12 of the Scheme Booklet.

Section 12 of the Scheme Booklet also explains how to interpret some of the information included in this Scheme Booklet, including dollar amounts and references to time.

Contents

1. Key Dates

First Court Hearing	24 May 2017
Date of this Scheme Booklet	26 May 2017
Latest date and time for receipt of Proxy Forms for Scheme Meeting	24 June 2017 at 11am Perth time
Date and time for determining eligibility to vote at Scheme Meeting	24 June 2017 at 5pm Perth time
Scheme Meeting	26 June 2017 at 11am Perth time

If the Scheme is approved by Blackgold Shareholders, then:

Second Court Hearing (for approval of the Scheme) (*indicative only*)	28 June 2017
Outcome of Second Court Hearing announced to ASX	28 June 2017
Effective Date for Scheme Court order lodged with ASIC and announced to ASX Last day for trading in Blackgold Shares on ASX	29 June 2017
Scheme Record Date	6 July 2017
Implementation Date for Scheme Provision of Scheme Consideration to Scheme Shareholders	13 July 2017

Note:

All of the above dates are indicative only and may change.

Any change to the above dates will be announced by Blackgold to the ASX.

2. Letter from the Chairman of Blackgold

Dear Blackgold Shareholder

On 31 October 2016 Blackgold announced to the ASX that it had entered into a binding Scheme Implementation Deed dated 28 October 2016 with Vibrant Group Limited ("**Vibrant**"), under which it is proposed that Vibrant will acquire all of the Blackgold shares that Vibrant does not already own, by way of a Scheme of Arrangement.

Blackgold has agreed to propose the Scheme of Arrangement to Blackgold shareholders. If Blackgold shareholders approve the Scheme of Arrangement (and all other conditions are satisfied or waived), then Blackgold shareholders (other than Vibrant and its related bodies corporate) will receive consideration of 4.5 cents cash per Blackgold share.

The consideration represents a premium to Blackgold's recent trading prices, at a time when the trading volume of Blackgold shares on the ASX has been very low.

While Blackgold continues to have a positive outlook as an ASX listed company, the Blackgold Directors believe that the pricing under the Scheme is very attractive and that it can provide cash proceeds for your shares at a time when there is uncertainty in the Chinese coal industry, very low liquidity for Blackgold shares on the ASX, significant equity market volatility and global economic uncertainty.

Furthermore, the Independent Expert, BDO Corporate Finance (WA) Pty Ltd, has concluded that the Scheme is not fair but reasonable and therefore is in the best interests of Blackgold shareholders.

Blackgold's Managing Director and Chief Executive Officer, Mr Yuguo Peng, is Blackgold's largest shareholder, holding approximately 61.3% of the shares on issue. Mr Peng has expressed his support for the Scheme and that he intends to vote all of his Blackgold shares in favour of the Scheme (in the absence of a superior proposal).

The Blackgold Directors unanimously recommend that you vote in favour of the Scheme, in the absence of a Superior Proposal. Your vote is important and I encourage you to vote in relation to the Scheme, either by attending the Scheme Meeting in person, or by completing and lodging a proxy form. Further information about the Scheme Meeting and how to vote is set out in this Scheme Booklet in Annexure D.

The Scheme Booklet contains important information and I encourage you to read it in full.

Dr Chi Ho (James) Tong
Non Executive Chairman
Blackgold International Holdings Limited

3. Considerations Relevant To Your Vote

3.1 Summary

Advantages of the Scheme and reasons to vote in favour of the Scheme

* Your Directors unanimously recommend that you vote in favour of the Scheme at the Scheme Meeting, in the absence of a Superior Proposal.

* The Independent Expert has concluded that the Scheme is not fair but reasonable and therefore is in the best interests of Blackgold Shareholders.

* The Scheme Consideration of 4.5 cents per Blackgold share represents a premium to Blackgold's historical trading prices on the ASX over the two months before the announcement of the Scheme, in circumstances where the market for Blackgold shares on the ASX is very illiquid.

* The Scheme Consideration delivers certain cash proceeds at a time of uncertainty in the Chinese coal industry, high volatility in equities markets and in an uncertain global economic environment.

* An alternative proposal is considered unlikely and none has emerged as at the date of this Scheme Booklet.

* The Blackgold share price is likely to fall if the Scheme is not implemented.

* No brokerage or stamp duty will be payable on the transfer of your Blackgold Shares under the Scheme.

Advantages of the Scheme and reasons to vote in favour of the Scheme are discussed in more detail in Section 3.2 of this Scheme Booklet.

Disadvantages of the Scheme and reasons why you may choose to vote against the Scheme

* You may disagree with the conclusion of the Blackgold Directors and the Independent Expert and believe that the Scheme is not in your best interests.

* If the Scheme is approved and implemented, you will no longer be a Blackgold Shareholder and you will not participate in any potential upside that may result in being a Blackgold Shareholder.

* The tax consequences of the Scheme for you may not be suitable for your financial position.

* You may consider that there is potential for a superior proposal to be made in relation to Blackgold in the foreseeable future.

Disadvantages of the Scheme and reasons why you may not want to vote in favour of the Scheme are discussed in more detail in Section 3.3 of this Scheme Booklet.

3.2 Advantages of the Scheme and reasons to vote in favour of the Scheme

3.2.1 Your Directors unanimously recommend that you vote in favour of the Scheme at the Scheme Meeting, in the absence of a Superior Proposal

Your Directors believe that the Scheme is in the best interests of Blackgold Shareholders and unanimously recommend that, in the absence of a Superior Proposal, you vote in favour of the Scheme at the Scheme Meeting.

In reaching their recommendation your Directors have had regard to the reasons to vote in favour of, and against, the Scheme, as set out in this Scheme Booklet.

The reasons why your Directors recommend that, in the absence of a Superior Proposal, you vote in favour of the Scheme are that your Directors believe that: (1) the Scheme Consideration is highly attractive; (2) the Scheme provides an opportunity for you to realise a cash value in the near term, which may not be achieved if the Scheme does not proceed; and (3) the Scheme provides cash proceeds for your Blackgold shares at a time when there is uncertainty in the Chinese coal industry, very low liquidity for Blackgold shares on the ASX, significant equity market volatility and global economic uncertainty.

Each Director intends to vote the Blackgold Shares which they own in favour of the Scheme in the absence of a Superior Proposal. The interests of the Directors are set out in Section 11.1 of the Scheme Booklet.

3.2.2 The Independent Expert has concluded that the Scheme is not fair but reasonable and therefore is in the best interests of Blackgold Shareholders

The Independent Expert has assessed the fair value of a Blackgold Share on a 100% controlling interest basis, to be in the range of between $0.074 and $0.367, with a preferred value of $0.224 per share.

The Independent Expert has concluded in Section 2.3 and Section 18 of its Independent Expert's Report that:

> "…in the absence of a superior offer, the Scheme is not fair but reasonable to Shareholders. Therefore, we consider the Scheme to be in the best interests of Shareholders."

The Independent Expert's Report is included as **Annexure A** to this Scheme Booklet and your Directors encourage you to read the report in full.

3.2.3 The Scheme Consideration represents a premium to Blackgold's historical ASX trading prices

The Scheme Consideration of 4.5 cents per Scheme Share, which will be provided if the Scheme is approved and Implemented, represents a premium to Blackgold's historical ASX trading price over the two months before the announcement of the Scheme on 31 October 2016, as summarised in the chart below:

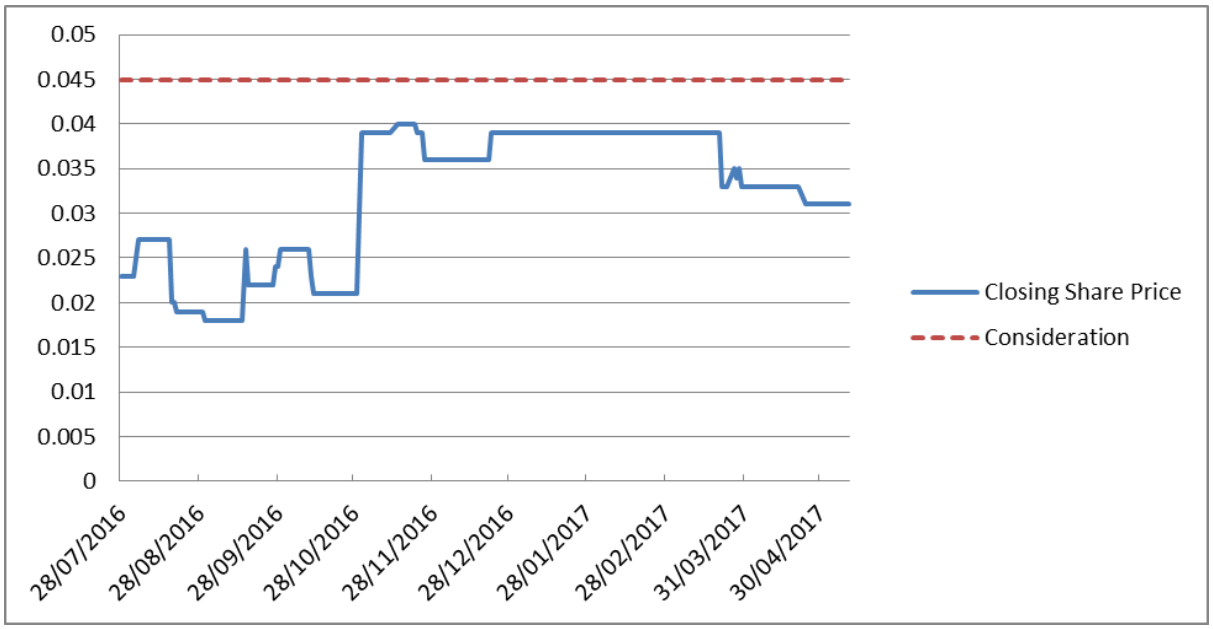

Chart 1 - Blackgold share price from 28 July 2016 to 11 May 2017

The Scheme consideration of A$0.045 per Scheme Share represents:

(1) a 114.29% premium to $0.021, being the last ASX closing price of Blackgold shares on 17 October 2016 (being the day of the last ASX trade before the announcement of the Scheme); and

(2) a 77.87% premium to $0.0253, being the VWAP of Blackgold shares sold on the ASX for one month up to and including 27 October 2016 (being the last trading day before announcement of the Scheme); and

(3) a 100.00% premium to $0.0225, being the VWAP of Blackgold shares sold on ASX for three months up to and including 27 October 2016 (being the last trading day before announcement of the Scheme).

3.2.4 The Scheme Consideration delivers certain cash proceeds at a time of uncertainty in Chinese coal industry, high volatility in equities markets and in an uncertain global economic environment

The Scheme Consideration provides a high degree of certainty of value and timing.

In contrast, if the Scheme does not proceed, the amount which Blackgold Shareholders will be able to realise for their shares in Blackgold will be uncertain. An investment in Blackgold Shares will be subject to the performance of Blackgold's business from time to time, general economic conditions and movements in the share market, which has been highly volatile in recent times. The Scheme provides certainty for Scheme Shareholders.

3.2.5 An alternative proposal is considered unlikely and none has emerged as at the date of this Scheme Booklet

The Directors consider that an alternative proposal is unlikely. None has emerged as at the date of this Scheme Booklet.

Section 17.1 of the Independent Expert's Report discusses the issue of alternative proposals in further detail.

3.2.6 The Blackgold share price is likely to fall if the Scheme is not implemented

The Blackgold share price rose significantly following the announcement by Blackgold of the Scheme on 31 October 2016, as shown in the chart below:

Chart 2 - Blackgold share price from 29 August 2016 to 14 November 2016

Your Directors believe that if the Scheme is not approved and no Superior Proposal emerges, then the Blackgold Share price is likely to trade below the price at which it has traded since the announcement by Blackgold of the Scheme on 31 October 2016.

Section 17.2 of the Independent Expert's Report discusses the issue of a potential decline in the Blackgold Share price if the Scheme is not approved in further detail.

3.2.7 No brokerage or stamp duty will be payable on the transfer of your Blackgold Shares under the Scheme

Scheme Shareholders will not incur any brokerage or stamp duty on the transfer of their Blackgold Shares under the Scheme.

3.3 Disadvantages of the Scheme and <u>reasons why you may choose to vote against the Scheme</u>

3.3.1 You may disagree with the conclusion of the Blackgold Directors and the Independent Expert and believe that the Scheme is not in your best interests

You may disagree with the conclusion of the Directors and the Independent Expert that the Scheme is in the best interests of Blackgold Shareholders.

3.3.2 If the Scheme is approved and implemented, you will no longer be a Blackgold Shareholder and will not participate in any potential upside that may result from being a Blackgold Shareholder

If the Scheme is approved and implemented, you will cease to be a Blackgold Shareholder. As a result:

(a) you will cease to participate in the future performance and prospects of Blackgold and its business;

(b) you will forego any future dividends from Blackgold and not participate in any potential share price appreciation;

(c) you will lose your rights to vote as a Blackgold Shareholder and therefore your ability as a shareholder to influence the future direction of Blackgold and its business.

You may believe that Blackgold will deliver greater returns over the long term by remaining as a stand-alone, separate company rather than being acquired by Vibrant. However, if you remain as a shareholder in Blackgold then you will be exposed to the risks associated with such an investment. Further information regarding these risks is set out in Section 6.5 of this Scheme Booklet.

3.3.3 The tax consequences of the Scheme for you may not be suitable to your financial position

Implementation of the Scheme may trigger tax consequences for Scheme Shareholders, which may occur earlier than may have otherwise been the case.

Section 10 of this Scheme Booklet provides a general outline of the main Australian taxation implications of the Scheme.

All Blackgold Shareholders should obtain their own tax advice regarding the Scheme.

3.3.4 You may consider that there is potential for a superior proposal to be made in relation to Blackgold in the foreseeable future

You may consider that there is potential for a superior proposal to be made in relation to Blackgold in the foreseeable future. However the Directors consider that an alternative proposal is unlikely. No alternative proposal has emerged as at the date of this Scheme Booklet.

Section 17.1 of the Independent Expert's Report discusses the issue of alternative proposals in further detail.

4. Frequently Asked Questions

Set out below are some frequently asked questions and the answer to each question.

Further information can be found in the Section referred to next to the answer.

	Question:	Answer:	See Section(s):
	Questions about the Scheme and what you will receive:		
1.	What is the Scheme?	The Scheme is a scheme of arrangement under the Corporations Act between Blackgold and Blackgold Shareholders (other than Vibrant in relation to Blackgold Shares which Vibrant owns or controls). If the Scheme becomes Effective, then Vibrant will acquire all of the Blackgold Shares which Vibrant does not already own or control and Blackgold will become a wholly-owned subsidiary of Vibrant. A scheme of arrangement is a statutory procedure under the Corporations Act that is commonly used to enable one company to acquire another company. If the Scheme becomes Effective, then the outcome upon Implementation will be similar to a successful 100% takeover bid for Blackgold.	Section 5
2.	What will I receive?	If the Scheme becomes Effective, then Scheme Shareholders (as defined in the Scheme) will receive the Scheme Consideration of 4.5 cents per Blackgold Share.	Section 5.2
3.	When will I be paid?	If the Scheme becomes Effective, then provision of the Scheme Consideration will be made to Scheme Shareholders from 13 July 2017.	Sections 1 and 8.5 to 8.8
4.	How will I be paid?	All payments will be made by way of bank to bank electronic transfer if Blackgold's share registry holds on the Scheme Record Date full and valid details of the shareholder's Australian bank account, or if not, then by way of an Australian cheque posted to the postal address shown in the Blackgold share register on the Scheme Record Date.	Section 5.2

		Electronic transfers can only be made to a Scheme Shareholder's Australian bank account and **not** a Scheme Shareholder's foreign bank account. Shareholders should check their details are correct and up to date before the Scheme Record Date, by visiting the website of the share registry at www.linkmarketservices.com.au. If Shareholders have not yet provided their Australian bank account details to the share registry, but wish to do so for the purposes of the Scheme, then Shareholders may do so at the website of the share registry at www.linkmarketservices.com.au. Shareholders must ensure that they provide these bank account details **before** the Scheme Record Date.	
5.	What happens if the Scheme does not proceed?	If the Scheme does not proceed, then: (a) you will remain a shareholder in Blackgold; and (b) you will continue to participate in the benefits of being a shareholder in Blackgold along with the risks associated with being a shareholder in Blackgold; and (c) you will not receive the Scheme Consideration; and (d) Blackgold will remain listed on the ASX; and (e) the price of Blackgold Shares is likely to fall shortly after the ASX were to be notified that the Scheme is not proceeding.	Section 5.6
6.	What are the tax implications of the Scheme?	A general summary of the Australian tax implications for Australian residents is set out in Section 10 of this Scheme Booklet. You should seek your own professional advice on the tax consequences applicable to you.	Section 10

7.	Who is Vibrant?	Vibrant is a leading logistics, real estate and financial services group headquartered in Singapore. It offers a comprehensive range of integrated logistics services including international freight forwarding, chemical storage and logistics, warehousing and distribution, and record management. Vibrant is also engaged in the real estate business of property management, development and investment. Its financial services include fund management, financial leasing services, and asset and trust management. The Vibrant Group is the sponsor and manager of Sabana Real Estate Investment Trust (REIT), the world's largest listed Shari'ah compliant REIT.	Section 7
	Questions about the Directors recommendation and intentions, and reasons to vote for or against the Scheme:		
8.	What do the Blackgold Directors recommend?	The Blackgold Directors recommend that Blackgold Shareholders vote in favour of the Scheme, in the absence of a Superior Proposal. Each Blackgold Director intends to vote the Blackgold Shares which they own in favour of the Scheme, in the absence of a Superior Proposal.	Section 3.2
9.	Why are the Blackgold Directors recommending that I vote in favour? What are the advantages of the Scheme ?	The reasons for the recommendation, as well as the advantages of the Scheme, are set out in Sections 3.1 and 3.2.	Section 3.1 and 3.2
10.	What are the reasons why I might not want to vote in favour? What are the disadvantages of the Scheme ?	Reasons why you might not want to vote in favour of the Scheme, as well as the disadvantages of the Scheme, are set out in Sections 3.1 and 3.3.	Section 3.1 and 3.3
11.	What is the opinion of the Independent Expert?	The Independent Expert has assessed the fair value of Blackgold Shares on a 100% controlling interest basis, to be in the range of $0.074 to $0.367, with a preferred value of $0.224. The Independent Expert has concluded that the Scheme is not fair but reasonable and therefore is in the best interests of Blackgold Shareholders.	Independent Expert's Report, Annexure A in this Scheme Booklet

	Questions about the Scheme Meeting:		
12.	When will the Scheme Meeting be held?	The Scheme Meeting will be held on 26 June 2017 at 11am Perth time.	Notice of Scheme Meeting, Annexure D in this Scheme Booklet
13.	Where will the Scheme Meeting be held?	The Scheme Meeting will be held at 38 Station Street, Subiaco, Perth, Western Australia.	Notice of Scheme Meeting, Annexure D in this Scheme Booklet
14.	What vote is required to approve the Scheme?	For the Scheme to proceed, the Scheme Resolution must be passed by Blackgold Shareholders by: (a) a majority in number (more than 50%) of Blackgold Shareholders present and voting on the Scheme Resolution at the Scheme Meeting (either in person or by proxy); and (b) at least 75% of the total number of votes cast on the Scheme Resolution at the Scheme Meeting by Blackgold Shareholders present and voting at the Scheme Meeting (either in person or by proxy). The Court has the discretion to waive the first of these two requirements if it considers it appropriate to do so. Vibrant and its associates (as the term “associate” is defined in Sections 10 to 16 inclusive of Corporations Act 2001) will not vote at the Scheme Meeting any Blackgold shares which they own or control.	Section 9.1
15.	How do I vote if I am not able to attend the Scheme Meeting in person?	If you would like to vote but cannot attend the Scheme Meeting in person, then you should appoint a proxy to vote on your behalf, by completing, signing and returning the original, personalised Proxy Form sent to you with this Scheme Booklet, before 11am Perth time on 24 June 2017.	Sections 9.5 and 9.7 Proxy Form
16.	Am I entitled to vote?	Each Scheme Shareholder who is	Section 9.6

		registered on the Blackgold share register on 24 June 2017 at 5pm Perth time is entitled to attend and vote at the Scheme Meeting.	
17.	When will the result of the Scheme Meeting be known?	The result of the Scheme Meeting will be available shortly after the conclusion of the Scheme Meeting and will be available on the ASX website. Even if the Scheme Resolution is passed at the Scheme Meeting, the Scheme is subject to the approval of the Court at the Second Court Hearing.	Section 1
18.	What happens if I vote against the Scheme, or I don't vote at all at the Scheme Meeting?	If the Scheme Resolution is passed at the Scheme Meeting, then subject to the other Conditions Precedent being satisfied or waived, the Scheme will be implemented and will be binding on all Scheme Shareholders, including those who did not vote at all or voted against the Scheme Resolution.	Section 9.7
	Questions about the Implementation of the Scheme:		
19.	Do I need to sign anything to transfer my Blackgold Shares?	No. If the Scheme becomes Effective, then Blackgold will automatically have authority to sign a share transfer document on behalf of Scheme Shareholders, who will then be provided with the Scheme Consideration.	Sections 8.5 to 8.8
20.	Are there any conditions to be satisfied?	The Scheme must be approved by Blackgold Shareholders by the Requisite Majorities at the Scheme Meeting and also by the Court. The Conditions Precedent which must be satisfied or waived in order for the Scheme to be Implemented are set out in Section 5.5 of this Scheme Booklet.	Sections 5.5, 8.1.2 and 8.5 to 8.8
21.	Will I have to pay brokerage or stamp duty?	No. Scheme Shareholders will not incur any brokerage or stamp duty on the transfer of their Blackgold shares under the Scheme.	Sections 3.2.7 and 5.8
22.	What do I do to ensure that I am paid the Scheme Consideration electronically and not sent a cheque by post to my registered address ?	Visit the website of the share registry at www.linkmarketservices.com.au. Use this website to provide your bank account details to the share registry. Please provide your bank account details **before** the Scheme Record Date.	Sections 5.2 and 8.5 to 8.8

	Further Questions:		
23.	What if I have further questions	If you have further questions, then you may telephone Blackgold on (08) 9486 4036 (international: +61 8 9486 4036) during Perth business hours or obtain your own independent professional advice.	-

Note:

The answers above are a summary only and are general in nature. Blackgold Shareholders should read the Scheme Booklet in its entirety.

5. Summary of the Scheme

5.1 Background

On 31 October 2016 Blackgold announced to the ASX that it had entered into a binding Scheme Implementation Deed dated 28 October 2016 with Vibrant, under which Blackgold agreed to propose the Scheme to Blackgold Shareholders.

A summary of the material terms of the Scheme Implementation Deed is included in Section 8.1 of this Scheme Booklet.

If the Scheme is approved and becomes Effective, then Vibrant will provide the Scheme Consideration to Scheme Shareholders, Vibrant will acquire all Blackgold Shares that Vibrant does not already own or control and Blackgold will become a wholly-owned subsidiary of Vibrant.

5.2 What you will receive

If the Scheme is approved and becomes Effective, then Scheme Shareholders (as defined in the Scheme) will receive the Scheme Consideration of 4.5 cents cash per Scheme Share. Payments to individual Scheme Shareholders will be rounded down to the nearest whole cent.

All cash payments of the Scheme Consideration will be made to Scheme Shareholders by way of bank to bank electronic transfer if Blackgold's share registry holds on the Scheme Record Date full and valid details of the shareholder's Australian bank account, or if not, then by way of an Australian cheque posted to the postal address shown in the Blackgold share register on the Scheme Record Date. Cheques will be in Australian dollars.

Shareholders should check their details are correct and up to date before the Scheme Record Date, by visiting the website of the share registry at www.linkmarketservices.com.au.

For Scheme Shares held in joint names, Blackgold (or its representative) will make the payment payable to the joint holders and will send the bank cheque to the holder whose name appears first in the share register as at the Scheme Record Date.

Blackgold (or its representative) may cancel a cheque issued to a Scheme Shareholder if the cheque:

(a) is returned to Blackgold (or its representative); or

(b) has not been presented for payment within 6 months after the date of the cheque.

During the period of 1 year commencing on the Implementation Date, on request from a Scheme Shareholder, Blackgold (or its representative) must re-issue a cheque that was previously cancelled.

The *Unclaimed Money Act* 1990 (WA) will apply to any Scheme Consideration which becomes "unclaimed money" as defined in the *Unclaimed Money Act* 1990

(WA), together with the legislation in any other State or Territory of Australia relating to unclaimed monies if that particular legislation is applicable to the Scheme Consideration in the circumstances.

5.3 Recommendations and voting intentions of Blackgold Directors

Your Directors unanimously recommend that you vote in favour of the Scheme, in the absence of a Superior Proposal.

Each Director intends to vote all Blackgold shares held or controlled by them in favour of the Scheme, in the absence of a Superior Proposal.

The interests of the Directors are disclosed in Section 11.1 of this Scheme Booklet.

5.4 Independent Expert's conclusion

Your Directors commissioned the Independent Expert to prepare a report on whether the Scheme is, in the opinion of the Independent Expert, in the best interests of Blackgold Shareholders (other than Vibrant shareholders).

The Independent Expert has assessed the fair value of Blackgold Shares on a 100% controlling interest basis, to be in the range of between $0.074 and $0.367, with a preferred value of $0.224.

The Independent Expert has concluded in Section 2.3 and Section 18 of its Independent Expert's Report that:

> "…in the absence of a superior offer, the Scheme is not fair but reasonable to Shareholders. Therefore, we consider the Scheme to be in the best interests of Shareholders."

The Independent Expert's Report is included as **Annexure A** to this Scheme Booklet and your Directors encourage you to read the report in full.

5.5 Conditions to the implementation of the Scheme

The implementation of the Scheme is subject to a number of conditions which must be satisfied (or waived).

The Scheme will not become Effective until each of the following conditions has been fulfilled or has been validly waived (as the case may be):-

(a) no Material Adverse Change in respect of Blackgold (Target) occurs or becomes known to Vibrant (Bidder), and no Material Adverse Matter in respect of Target becomes known to Bidder, after the date of the Scheme Implementation Deed and before 8.00 am on the Second Court Date;

(b) no Target Prescribed Event occurs or becomes known to Bidder after the date of the Scheme Implementation Deed and before 8.00 am on the Second Court Date;

(c) the Target Warranties are true and correct in all material respects on the date of the Scheme Implementation Deed and as at 8.00 am on the

Second Court Date (unless any warranty relates to an earlier date, in which case as at such date);

(d) the Bidder Warranties are true and correct in all material respects on the date of the Scheme Implementation Deed and as at 8.00 am on the Second Court Date (unless any warranty relates to an earlier date, in which case as at such date);

(e) the Independent Expert issues the Independent Expert's Report which concludes that the Scheme is in the best interests of Scheme Shareholders before the date on which the Explanatory Memorandum is registered by ASIC under the Corporations Act and the Independent Expert does not change that conclusion or withdraw its report prior to 8.00 am on the Second Court Date;

(f) Scheme Shareholders approve the Scheme by the majorities required under section 411(4)(a) of the Corporations Act in relation to the Scheme Meeting convened by the Court;

(g) the Court approves the Scheme in accordance with section 411(4)(b) of the Corporations Act;

(h) the Treasurer of the Commonwealth of Australia has either:

(i) provided written notice which is unconditional or subject only to conditions reasonably acceptable to both Bidder and Target that there is no objection under the Foreign Acquisitions and Takeovers Act 1975 (Cth) or Australian foreign investment policy to the Scheme; or

(ii) become precluded from exercising any power to make an order under the Foreign Acquisitions and Takeovers Act 1975 (Cth) in relation to the Scheme;

(i) before 8.00 am on the Second Court Date, ASIC has issued or provided such consents, waivers or approvals or done such other things as are reasonably necessary to implement the Scheme;

(j) before 8.00 am on the Second Court Date, Bidder Shareholders approve the Bidder Shareholder Resolutions by the requisite majorities (if applicable);

(k) before 8.00 am on the Second Court Date, ASX provides such consents and approvals as are reasonably necessary to implement the Scheme, subject to any conditions which ASX may reasonably require, including implementation of the Scheme;

(l) no Regulatory Authority has:

(i) undertaken a judicial proceeding seeking to enjoin, restrain or otherwise prohibit or impose adverse conditions on the Scheme which remain in effect as at 8.00 am on the Second Court Date; or

(ii) issued an order, decree or ruling prohibiting or imposing adverse conditions on or otherwise preventing completion of the Scheme

which remains in effect as at 8.00 am on the Second Court Date; or

(iii) declined to issue an order, decree, ruling, notification or communication by 8.00 am on the Second Court Date that is required for the Scheme to be implemented in accordance with the Scheme Implementation Deed;

(m) Bidder receives all consents and/or approvals required by the Ministry of Commerce in People's Republic of China for the implementation of the Scheme on terms acceptable to Bidder, acting reasonably (if applicable); and

(n) before 8.00am on the Second Court Date, all required Third Party Consents are granted or obtained by the relevant member of the Target Group in respect of or in connection with the Scheme, on terms acceptable to Bidder (acting reasonably), and those Third Party Consents are not withdrawn, cancelled or revoked before that time.

The conditions are set out in full in the Scheme Implementation Deed.

On 20 March 2017 Blackgold released its financial report for the financial year ending 31 October 2016. That financial report showed that Blackgold had recognised an impairment of non-current assets in its Statement of Financial Position, including its mine development and its property, plant and equipment. This impairment gave Vibrant a right to terminate the Scheme Implementation Deed and thereby the Scheme. Vibrant entered into a Deed of Waiver dated 21 March 2017, confirming that Vibrant wishes to proceed with the Scheme and stating that Vibrant will, for the purpose of Blackgold's impairment of assets, waive the condition in the Scheme Implementation Deed that there be no Material Adverse Change in the assets of Blackgold before the Court hearing to approve the Scheme (condition (a) in clause 3.1 of the Scheme Implementation Deed, as mentioned above in conditions (a) to (n)).

As at the date of this Scheme Booklet, Blackgold is not aware of any circumstances that would cause any condition to not be satisfied.

As at the date of this Scheme Booklet, condition (h) (being FIRB approval) above has already been satisfied.

The Scheme will only be implemented if all of the conditions set out above are satisfied or waived. If all of the conditions set out above are not satisfied or waived, then the Scheme will **not** be implemented.

5.6 If the Scheme does not proceed

If the Scheme does not proceed for any reason, then Blackgold Shareholders will continue to hold their Blackgold Shares and will not receive the Scheme Consideration.

If the Scheme does not proceed, then in the absence of an alternative proposal, the Blackgold Directors intend to continue to operate the Blackgold business in the ordinary course of business.

If the Scheme does not proceed, then Blackgold Shareholders will continue to participate in the benefits of being a shareholder in Blackgold, along with being exposed to the rights relating to an investment in Blackgold. The main risks relating to an investment in shares in Blackgold are set out in Section 6.5 of this Scheme Booklet.

Before the Scheme Meeting, Blackgold estimates that it will have incurred transaction costs of approximately A$490,000 (plus GST) in total in relation to the Scheme. These costs will be payable by Blackgold regardless of whether or not the Scheme becomes Effective.

5.7 Australian tax implications

If the Scheme is approved, the transfer of Blackgold Shares under the Scheme will have tax consequences for Blackgold Shareholders.

You should seek your own professional advice on the tax consequences applicable to you. A general summary of the Australian tax implications for Australian resident and non-residents is set out in Section 10 of this Scheme Booklet.

5.8 No brokerage or stamp duty

Scheme Shareholders will not incur any brokerage or stamp duty on the transfer of their Blackgold Shares under the Scheme.

6. Information about Blackgold

6.1 Introduction

Blackgold is an Australian public company, limited by shares. It was incorporated under Australian law in Western Australia on 8 July 2010. It was listed on the ASX on 22 February 2011.

The company's registered office is located at Unit 5, Ground Floor, 1 Centro Avenue, Subiaco, Western Australia, 6008.

6.2 Business Operations

Blackgold owns four underground thermal coal mines in the People's Republic of China. These mines are:

(a) the Caotong mine in Fengjie County, Chongqing;

(b) the Heiwan mine in Fengjie County, Chongqing;

(c) the Baolong mine in Wushan County, Chongqing; and

(d) the Changhong mine in the area bordering Xishui County of Guizhou and Qijiang County of Chongqing.

Further information about the four mines is set out in the report of the Technical Assessment and Valuation Expert.

Blackgold is also engaged in the commodity logistics business and the coal trading business.

Further information about Blackgold and its businesses is set out in the Independent Expert's Report in section 5.

6.3 Blackgold Board of Directors and Senior Management

The Board of Directors of Blackgold comprises:

Dr Chi Ho (James) Tong – Non-Executive Chairman
Mr Yuguo Peng – Managing Director, Chief Executive Officer
Mr Jun Ou – Executive Director
Ms Wei-Her (Sophia) Huang – Non-Executive Director
Mr Zhonghan (John) Wu – Non-Executive Director
Professor Guangfu Yang – Non-Executive Director

The Chief Financial Officer is Mr It Phong Tin.

6.4 Blackgold Capital Structure

As at the date of this document, Blackgold had 888,003,622 fully paid ordinary shares, nil partly-paid ordinary shares, nil preference shares/preferred shares and nil options on issue.

Substantial Shareholders of Blackgold Shares are:

(1) Lucky Magic Enterprises Limited, a company controlled by Mr Peng;

(2) HSBC Custody Nominees (Australia) Limited;

(3) Prima Network Financial Group Limited, a company controlled by Dr Tong; and

(4) Singapore Enterprises Pte Ltd, a company controlled by Vibrant.

The top 20 Blackgold shareholders own or control a total of 96% of Blackgold Shares.

6.5 Risks relating to holding shares in Blackgold

There are risks involved in holding shares in Blackgold, including general risks such as share markets falling and changing global economic conditions.

Set out below are the key risks relating to holding shares in Blackgold. These key risks can be broadly categorised into: (1) risks relating to conducting business in the People's Republic of China; and (2) risks relating to the Blackgold businesses and the industries in which Blackgold operates.

The information below is a summary only and general in nature and it is not a definitive list of all possible risks.

6.5.1 Risks relating to conducting business in the People's Republic of China

Substantially all of Blackgold's assets are located in China and all of its revenue is sourced from China. Accordingly, Blackgold's financial condition, results of operations and growth prospects are to a significant degree subject to economic, political and legal developments in China.

Adverse changes in China's economic, political and social conditions as well as governmental policies could have a material adverse effect on China's overall economic growth, which could in turn adversely affect Blackgold's financial condition and results of operations.

The economic, political and social conditions in China differ from those in more developed countries in many respects, including structure, government involvement, level of development, growth rate, control of foreign exchange, capital reinvestment, allocation of resources, rate of inflation and trade balance position. For the past three decades, the PRC Government has implemented economic reform and measures emphasizing the utilization of market forces in the development of the PRC economy. Blackgold cannot predict whether the resulting changes will have any adverse effect on its current or future business, financial condition or results of operations. Despite these economic reforms and measures, the PRC Government continues to play a significant role in

regulating industrial development, allocation of natural resources, production, pricing and management of currency, and there can be no assurance that the PRC Government will continue to pursue a policy of economic reform or that the direction of reform will continue to be market friendly.

Blackgold's ability to successfully expand its business in China depends on a number of external factors, including macro-economic and other market conditions, and credit availability from lending institutions. The China Banking Regulatory Commission began implementing restrictions on bank lending in early 2010. Stricter lending policies in China may affect Blackgold's ability to obtain external financing, which may reduce its ability to implement its expansion strategies. Blackgold cannot assure shareholders that the PRC Government will not implement any additional measures to tighten lending standards, or that, if any such measure is implemented, it will not adversely affect Blackgold's future results of operations or profitability.

Demand for Blackgold's coal products and its business, financial condition and results of operations may be materially and adversely affected by the following factors:

(1) political instability or changes in social conditions in China;

(2) changes in laws, regulations, and administrative directives or the interpretation thereof;

(3) measures which may be introduced to control inflation or deflation;

(4) changes in the rate or method of taxation; and

(5) reductions in tariff protection and other import and export restrictions.

Changes in foreign exchange regulations and future movements in the exchange rate of Renminbi may adversely affect Blackgold's financial condition, results of operations and its ability to pay dividends.

Further, Blackgold cannot assure shareholders that the PRC authorities will not impose further restrictions on methods by which the Renminbi can be converted into foreign currencies. If such measures are imposed in the future, Blackgold's financial condition, results of operations and growth prospects may be materially and adversely affected.

The PRC legal system is continuously evolving and has inherent uncertainties that could limit the legal protection available to shareholders.

The legal system in China is based on the civil law system. Unlike the common law system, prior legal decisions and judgments have limited significance for guidance. China is still in the process of developing a comprehensive statutory framework. Since 1979, the PRC Government has established a commercial law system, and has made significant progress in promulgating laws and regulations relating to economic affairs and matters such as corporate organization and governance, foreign investment, commerce, taxation and trade. However, many of these laws and regulations are relatively new, and the implementation and interpretation of these laws and regulations remains uncertain in many areas. In addition, the Chinese legal system is based in part on

government policies and administrative rules that may have a retrospective effect. As a result, Blackgold may not be aware of its violation of these policies and rules until some time after the violation. Furthermore, the legal protections available to Blackgold under these laws, rules and regulations may be limited. Any litigation or regulatory enforcement action in China may be protracted and could result in substantial costs and diversion of resources and management attention.

6.5.2 Risks relating to Blackgold businesses and industries in which Blackgold operates

(1) Regulations, policies and controls applicable to Blackgold and its business generally

Blackgold's business operations are extensively impacted by regulations, policies and controls of the PRC Government. Any regulation, policy or control changes may cause Blackgold to incur significant compliance costs.

Blackgold, like other coal producers in China, is subject to extensive national and local governmental regulations, policies and controls. The liabilities, costs, obligations and requirements associated with these laws and regulations may be significant and may delay the commencement of, or cause interruptions in, its operations. Failure to comply with the applicable mining laws and regulations may even result in the suspension of its operations and thus materially and adversely affect its business and results of operations. Additionally, there can be no assurance that the relevant government agencies will not modify such laws or regulations or impose additional or more stringent laws or regulations on Blackgold. Compliance with such laws or regulations may require Blackgold to incur significant costs or other obligations or liabilities.

(2) Coal production volume regulations

Coal production volume is subject to regulations by the relevant PRC government authorities and could be limited and/or capped as a result of policies to reduce carbon emissions and curb coal consumption. The National Development and Reform Commission (NDRC) announced that coal domestic production and consumption will be capped to reduce carbon emissions. If the production volume of its coal products is capped for a prolonged period of time due to regulatory control, its business, financial condition and results of operations would be materially and adversely affected.

(3) Mining safety regulations and permits

The State Administration of Coal Mine Safety of the PRC (SACMS) is responsible for implementing and supervising the implementation of the relevant safety laws and regulations applicable to coal mines and coal mining operations, as well as conducting regular safety supervision and inspections of coal producers pursuant to the applicable production safety and mining safety laws and regulations. Coal producers that fail to comply with the relevant safety laws and regulations are subject to fines, penalties or even suspension of operations. In addition, each coal operating

enterprise is required to obtain a production safety permit from the SACMS or the relevant provincial bureau. The production safety permit is valid for an initial period of three years, after which they could be renewed.

Blackgold cannot assure shareholders that it will be successful in procuring or renewing the necessary production safety permits or comply with the relevant safety laws and regulations. Any failure to do so could have material and adverse effects on its corporate image, the reputation and credibility of its management, its financial condition and results of operations. Any remedial measures Blackgold is required to adopt may be costly and would adversely affect its financial condition.

(4) Coal exploration, mining and production rights

The exploration, mining and production of coal reserves in China are subject to registration with, and the approval of, the relevant PRC Government authorities. The relevant PRC Government authorities can at any time either tighten or relax restrictions on coal exploration, mining and production rights. Blackgold cannot assure shareholders that it will be successful in procuring or renewing the necessary exploration permits, that any initial exploration work will reveal a deposit worthy of development, or that Blackgold will be successful in procuring or renewing the necessary mining permits and any failure to procure or renew exploration, mining permits could have a material adverse effect on its business and results of operations.

The mining licence for Blackgold's Caotang mine was renewed on 14 March 2017 for a licence period from 28 December 2016 to 27 December 2019.

Further information about the Caotang mine and Blackgold's mining licence renewal application is contained in Section 10.1.3 of the Independent Expert's Report.

(5) Environmental protection policies

Blackgold is subject to extensive and increasingly stringent environmental protection laws and regulations that impose fees for the discharge of waste substances, require the establishment of reserves for land rehabilitation, and impose fines for serious environmental offences. The PRC Government, adopting a rigorous approach when enforcing the applicable laws and regulations and implementing increasingly stringent environmental standards, may shut down any facility that fails to comply with orders and require it to correct or cease operations that raise environmental concerns. If Blackgold fails to comply with existing or future environmental laws and regulations, it may be required to pay penalties or fines or take remedial actions, any of which could have a material adverse effect on its business, operations, financial condition and results of operations.

(6) Coal markets and coal prices

Blackgold's business, profitability and results of operations are susceptible to the cyclical nature of coal markets and are vulnerable to fluctuations in coal prices.

As the majority of its revenue is derived from sales of coal, its business, profitability and results of operations are substantially dependent on the domestic and international supply of and demand for coal. The domestic and international coal markets are cyclical and have in the past experienced significant fluctuations in supply, demand and prices from year to year. These fluctuations are caused by numerous factors beyond its control, including, among others:

- global and domestic economic conditions and competition from other energy sources;
- global and domestic supply of thermal coal;
- the growth rate and expansion in industries with high demand for coal, such as the power and steel industries; and
- the indirect influence on domestic coal prices of the PRC Government through its regulation of on-grid tariffs.

There can be no assurance that the domestic or international markets for coal products will not experience excess supply or that the domestic or international demand for coal products will continue to grow. An over-supply of, or significant decline in demand for, coal products may have a material adverse effect on Blackgold's business, profitability and results of operations.

(7) Production safety and operating hazards

Blackgold's coal mining operations are exposed to inherent risks relating to production safety and operating hazards.

Blackgold's coal mining operations are subject to a number of operational risks, some of which are beyond its control, which could delay the production and delivery of coal. These risks include unexpected maintenance or technical problems, inclement or hazardous weather conditions and natural disasters, industrial accidents, power or fuel supply interruptions and critical equipment failure, including malfunction and breakdown of principal equipment used in its coal mining operations and which would require considerable time to replace.

In addition, mining accidents or safety hazards occurring at neighbouring mines operated by third-party mine operators could have a severe impact on its coal mining operations and even create safety hazards in its mines. The occurrence of any accident at these neighbouring mines could interfere with and materially and adversely affect its business.

These risks and hazards may result in personal injury, damage to, or destruction of, properties or production facilities, environmental damage, delay in production and delivery of its coal products and damage to its reputation. In addition, breakdown of equipment, difficulties or delays in obtaining replacement equipment, natural disasters, industrial accidents or

other misfortunes could temporarily disrupt its operations, which in turn may also materially and adversely affect its business, financial condition, results of operations and growth prospects.

(8) Coal resources and reserves

Blackgold's coal resources and reserves are estimates based on a number of assumptions and it may produce less coal than its current estimates.

Blackgold bases its production, revenue and expenditure plans on its coal resource and reserve data. The coal reserve data are estimates based on assumptions, knowledge, experience and industry practice which have been prepared in accordance with the JORC Code and have been reviewed and verified by Al Maynard & Associates Pty Ltd. The coal resource and reserve data and production targets are only estimates and may differ materially from its actual mining results. Estimates which were valid when made may change significantly when new information becomes available. There are many factors, assumptions and variables beyond its control that result in inherent uncertainties in estimating resources and reserves. Blackgold's actual volume of reserves and rates of production may be different from these estimates due to various factors, including those outside its control. In addition, fluctuations in the price of coal, production costs and transportation costs of coal or a variation in recovery rates may render it necessary to revise the estimates of coal reserves. If such revision results in a substantial reduction in recoverable resources and reserves at one or more of its mines, it could materially and adversely affect its financial condition, results of operations and growth prospects.

If the amount of coal produced at Blackgold's mines is reduced, then Blackgold's financial condition, results of operations and growth prospects may be materially and adversely affected.

(9) Key personnel

Blackgold depends on certain key personnel for its future success.

Blackgold's future success and ability to operate effectively are substantially dependent upon the continued service, performance and commitment of its key executives, particularly Mr. Peng, its Chief Executive Officer, Executive Director and a controlling shareholder of Blackgold. In addition, Blackgold relies substantially on the experience and knowledge of its geological experts, technical personnel and management officers. Blackgold cannot prevent its key personnel from terminating their respective contracts in accordance with the relevant agreed-upon conditions. In addition, finding suitable replacements for such key personnel could be difficult and time-consuming, and competition for such experienced personnel is intense. The loss of the services of one or more of its key personnel due to their departure or other reasons could materially and adversely affect its business, financial condition and results of operations. Blackgold's success also depends on the ability of its management team to cooperate effectively as a group. Furthermore, Blackgold's ability to recruit and train skilled operating and maintenance personnel is a key factor to the success of its business. If it fails to recruit, train and retain such personnel, its business, financial condition and results of operations could be materially and adversely affected.

(10) Blackgold's current financing facilities

Blackgold's business may be affected if its current financing facilities are withdrawn or it is unable to secure new financing.

Blackgold relies on financing facilities such as bank loans and letters of credit, among others, to finance its operations. If its current financing is withdrawn or if it encounters difficulties in obtaining the necessary financing due to various reasons such as the discontinuation of the existing guarantees securing its facilities by its guarantors, supply constraints on the part of its suppliers and/or unavailability of financing which is in turn due to various reasons such as inability to secure financing on acceptable terms and/or credit market conditions. This may materially affect its business, financial performance, financial condition and results of operations.

6.6 Blackgold Financial Information

Blackgold's financial year ends on 31 October.

Set out below is Blackgold's consolidated statement of financial position as at 31 October 2016.

The audited financial position as at 31 October 2016 was released to the ASX by Blackgold on 20 March 2017. Blackgold shareholders are strongly encouraged to read this information in full.

Consolidated Statement of Financial Position as at 31 October 2016:

	Consolidated 31.10.2016 AUD'000	Consolidated 31.10.2015 AUD'000
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	13,315	18,319
Held-to-maturity investments	-	7,389
Trade and other receivables	109,179	225,824
Amount owing from a related party	70	-
Inventories	6,625	1,894
TOTAL CURRENT ASSETS	129,189	253,426
NON-CURRENT ASSETS		
Investments accounted for using the equity method	375	431
Other financial assets	3,884	4,434
Property, plant and equipment	69,710	105,145
Land use rights	83	98
Mine development	148,554	201,567
Intangible assets - goodwill	2,181	2,489
Intangible assets - other	1,307	2,235
TOTAL NON-CURRENT ASSETS	226,094	316,399
TOTAL ASSETS	**355,283**	**569,825**

	Consolidated 31.10.2016 AUD'000	Consolidated 31.10.2015 AUD'000
LIABILITIES		
CURRENT LIABILITIES		
Trade and other payables	24,574	150,963
Amount owing to a related party	622	641
Amount owing to an associate	264	93
Borrowings	102,359	112,714
Financial liabilities	21,096	19,944
Deferred consideration	-	-
Provision for taxation	3,738	4,053
TOTAL CURRENT LIABILITIES	152,653	288,408
NON-CURRENT LIABILITIES		
Borrowings	-	5,329
Provision for restoration costs	2,036	1,775
Deferred tax liabilities	1,980	2,588
TOTAL NON-CURRENT LIABILITIES	4,016	9,692
TOTAL LIABILITIES	**156,669**	**298,100**
NET ASSETS	**198,614**	**271,725**

	Consolidated 31.10.2016 AUD'000	Consolidated 31.10.2015 AUD'000
EQUITY		
Share capital	65,363	65,363
Retained earnings	127,656	169,852
Merger deficit reserve	(28,186)	(28,186)
Statutory reserve	4,368	3,841
Foreign currency translation reserve	29,413	60,766
Options reserve	-	89
TOTAL EQUITY	**198,614**	**271,725**

Set out below is Blackgold's consolidated statement of profit or loss for the year ended 31 October 2016.

The audited financial performance for the financial year ended 31 October 2016 was released to the ASX by Blackgold on 20 March 2017. Blackgold shareholders are strongly encouraged to read this information in full.

Consolidated Statement of Profit or Loss for year ended 31 October 2016:

	Consolidated 31.10.2016 AUD'000	Consolidated 31.10.2015 AUD'000
Revenue	350,288	419,401
Cost of sales	(325,255)	(387,053)
Gross profit	25,033	32,348
Other income	7,433	12,371
	32,466	44,719
Changes in fair value of financial liabilities at fair value through profit or loss	989	2,659
Distribution and marketing expenses	(1,454)	(2,779)
Administrative expenses	(5,771)	(8,378)
Other expenses	(8,373)	(4,762)
Finance costs	(9,751)	(11,166)
Impairment of non-current assets	(49,209)	(4,126)
Reversal of impairment of non-current assets	-	18,881
Share of profit and loss in an associate using equity method	(57)	39
(Loss) / Profit before taxation	(41,160)	35,087
Income Tax Expense	(598)	(976)
(Loss) / Profit for the year attributable to members of the parent entity	(41,758)	34,111
Other Comprehensive Income, Net of Tax		
Item that may be re-classified subsequently to profit or loss		
- Exchange differences on translating foreign controlled entities	(31,353)	35,595
Total Comprehensive (Loss) / Income for the Year Attributable to Members of the Parent Entity	**(73,111)**	**69,706**
Earnings Per Share		
Basic (loss) / earnings per share (cents)	(4.70)	3.84
Diluted (loss) / earnings per share (cents)	(4.70)	3.49

6.7 Material Changes to Blackgold's Financial Position

To the knowledge of the Blackgold Directors, the financial position of Blackgold has **not** materially changed since the date of last balance sheet (statement of financial position) laid before the company in general meeting or sent to Blackgold shareholders in accordance with Section 314 or 317 of the Corporations Act, being the financial year ended 31 October 2016.

6.8 Blackgold Outlook and Recent Developments

As mentioned above, Blackgold owns four coal mines in the Chongqing region in the People's Republic of China. Blackgold is the largest non-state owned coal mining company in the Chongqing region.

The People's Republic of China is the largest producer and consumer of coal in the world. It is also the largest user of coal-derived electricity, generating an estimated 73% of domestic electricity production from coal in 2014.

Total coal production and consumption within China peaked in 2013 and has dropped continuously since then. The Chinese central government issued a direction in April 2016 curbing construction of new coal-fired electricity plants throughout China. In 2015 the National Energy Agency issued a moratorium banning new coal mines in China for a period of three years and closure of thousands of small coal mines.

On 28 February 2017 Blackgold released its Quarterly Activities Report for the quarter period from 1 November 2016 to 31 January 2017.

Recent Developments in Coal Produced by Blackgold

Blackgold produced 245,421 tonnes of raw coal in 1Q 2017 from the Caotang and Heiwan Mines, which was approximately 11.0% lower than Blackgold's total production of 275,852 tonnes achieved in 1Q 2016.

Recent Developments in Coal Sold by Blackgold

The total volume of coal sold by Blackgold was approximately 0.3 MT in 1Q 2017, which was approximately 15.7% lower than the total volume of coal sold by Blackgold in 1Q 2016.

Recent Developments in Coal Trading by Blackgold

Blackgold's trading arm sold approximately 0.9 MT in 1Q 2017, which is approximately 1.2% higher as compared to 4Q 2016.

Further information about the coal industry in China and its future is set out in the Independent Expert's Report, including in section 8 of that report which is entitled Industry Analysis.

6.9 Blackgold Directors' Intentions Regarding Continuation of Business of Blackgold

The Blackgold Directors' intentions regarding the continuation of the business of Blackgold, if the Scheme is Implemented, is that the business will continue in its present form.

6.10 Blackgold Directors' Intentions Regarding Any Major Changes to be Made to Business of Blackgold

The Blackgold Directors' intentions regarding any major changes to be made to the business of Blackgold, if the Scheme is Implemented, is that no major changes will be made. There will be no redeployment of any fixed assets of the company.

6.11 Blackgold Directors' Intentions Regarding Future Employment of Present Employees of Blackgold

The Blackgold Directors' intentions regarding the future employment of present employees of Blackgold, if the Scheme is Implemented, is that all present employees will be retained.

6.12 Public Information Available For Inspection

Blackgold is a disclosing entity for the purposes of Section 111AC(1) of the Corporations Act and is subject to regular reporting and disclosure obligations.

Blackgold has an obligation under the Listing Rules (subject to some prescribed exceptions) to notify ASX immediately of any information concerning it, of which it becomes aware, that a reasonable person would expect to have a material effect on the price or the value of Blackgold Shares.

Blackgold's recent announcements are available from the ASX website. Further announcements will continue to be made on the ASX website after the date of this Scheme Booklet.

7. Information about Vibrant Group Limited

7.1 Introduction

Vibrant Group Limited was incorporated in Singapore under Singapore law in 1986 and listed on the SGX-ST in 1995. It was formerly known as Freight Links Express Holdings Limited.

Vibrant's registered office is located at 51 Penjuru Road, #04-00, Freight Links Express Logisticentre, Singapore, 609143.

7.2 Business Operations

The Vibrant Group is a leading logistics, real estate and financial services group headquartered in Singapore. It offers a comprehensive range of integrated logistics services including international freight forwarding, chemical storage and logistics, warehousing and distribution, and record management. The Vibrant Group is also engaged in the real estate business of property management, development and investment.

Its financial services include fund management, financial leasing services, and asset and trust management. The Vibrant Group is the sponsor and manager of Sabana Real Estate Investment Trust (REIT), the world's largest listed Shari'ah compliant REIT.

7.3 Vibrant Board of Directors

The Vibrant Board of Directors comprises:

Mr Sebastian Tan Cher Liang, PBM – Chairman, Independent Non-Executive Director
Mr Eric Khua Kian Keong – Executive Director, Chief Executive Officer
Mr Henry Chua Tiong Hock – Executive Director
Mr Thomas Woo Sai Meng – Executive Director
Mr Khua Hock Su – Non-Executive Director
Mr Derek Loh Eu Tse – Independent Non-Executive Director

7.4 Vibrant Capital Structure and Market Capitalisation

As at the date of this Scheme Booklet, Vibrant has an issued and paid-up share capital of 601,499,495 ordinary shares (excluding treasury shares). It also has nil partly-paid ordinary shares, nil preference shares/preferred shares and nil options on issue.

As at the date of this Scheme Booklet, Mr Eric Khua Kian Keong controls 56.44% of the issued shares of Vibrant by virtue of: (i) his 2.96% direct interest in Vibrant; and (ii) his 51.0% controlling interest in Vibrant Capital Pte. Ltd. (Vibrant Capital Pte. Ltd. is a 53.48% shareholder of Vibrant).

There are no other shareholders in Vibrant who have an interest in Vibrant shares of 5% or more.

As at 11 April 2017 Vibrant's market capitalisation was approximately S$240.6 million.

7.5 Rationale for Vibrant's Proposed Acquisition of Blackgold

Vibrant's acquisition of Blackgold will result in the integration of Blackgold's logistics business into Vibrant's logistics business, accordingly expanding the Vibrant Group's existing commodity logistics and commodity trading business, and is in line with the Vibrant Group's investment strategy to redeploy its capital more efficiently for higher yield investments.

7.6 Vibrant's Intentions if Scheme is Implemented

On completion of the Scheme, it is the intent of Vibrant to accelerate the growth of existing commodity logistics and commodity trading business, while exploring various opportunities to best realise value for its shareholders.

The intentions of Vibrant in Section 7 (including this Section 7.6 and Sections 7.7, 7.8 and 7.9 below) are statements of current intention and are based on information concerning Blackgold and its business which is presently known to Vibrant as at the date of this Scheme Booklet. If new material information becomes available or a circumstance materially changes, then an intention of Vibrant may change, depending on the information which becomes available or the circumstance which changes.

7.7 Vibrant Intentions Regarding Continuation of Business of Blackgold

Vibrant's intentions, as at the date of this Scheme Booklet, regarding the continuation of the business of Blackgold, if the Scheme is Implemented, is that the business will continue in its present form.

7.8 Vibrant's Intentions Regarding Any Major Changes to be Made to Business of Blackgold

Vibrant's intentions, as at the date of this Scheme Booklet, regarding any major changes to be made to the business of Blackgold, if the Scheme is Implemented, is that no major changes will be made and that there will be no redeployment of any fixed assets of Blackgold.

7.9 Vibrant's Intentions Regarding Blackgold Board and Future Employment of Present Employees of Blackgold

Given that the implementation of the Scheme would result in Blackgold becoming a wholly-owned subsidiary of Vibrant, Vibrant intends to reconstitute the Blackgold Board to the extent possible without affecting the transition and the organisational stability of Blackgold.

Vibrant's intentions regarding the future employment of present employees of Blackgold, if the Scheme is Implemented, is that all present employees will be retained.

7.10 Vibrant's Funding Arrangements For Provision of Scheme Consideration

The Scheme Consideration is 100% cash.

If the Scheme is implemented, Scheme Shareholders will become entitled to receive the Scheme Consideration of AU$0.045 per Scheme Share, which will be payable by Vibrant.

In addition, the Scheme is not conditional on Vibrant obtaining debt finance to fund the payment of the Scheme Consideration.

Based on Blackgold's total issued share capital as at the date of this Scheme Booklet, the total amount of cash required to be paid by Vibrant to Scheme Shareholders under the Scheme is AU$37,635,863. Applying an AUD/SGD exchange rate of 1.00:1.039 as at 11 May 2017, this equals approximately SGD39,103,661.

As at 31 January 2017, Vibrant (on a consolidated basis) had a total cash and cash equivalents of SGD 51,514,000, which exceeds the maximum total Scheme Consideration payable by Vibrant. This cash and cash equivalents is not subject to security interests, rights of set off or other arrangements that might materially affect Vibrant's ability to fund the payment of the Scheme Consideration.

On the basis of the above, Vibrant is of the opinion that it has reasonable basis for forming the view and holds the view, that it will be able to satisfy its payment obligations under the Scheme, as well as the costs associated with the Scheme.

7.11 Vibrant Financial Information

Vibrant's financial year ends on 30 April. All Vibrant financial information is presented in Singapore dollars.

Set out below is Vibrant's Consolidated Statement of Financial Position as at 31 October 2016:

		As at 31 October 2016	**As at 30 April 2016**	**As at 30 April 2015**
		S$,000	S$,000	S$,000
Non-current assets:				
Property, plant and equipment		273,862	276,182	235,249
Intangible assets		472	472	472
Investment properties		112,276	250,426	102,474
Subsidiaries		-	-	-
Associates		123,574	97,290	92,402
Other investments		33,167	55,606	69,919
Deferred tax assets		2,008	2,551	651
Trade and other receivables		55,592	55,733	59,518
		600,951	**738,260**	**560,685**
Current assets:				
Other investments		98,119	72,573	84,502
Development properties		-	-	137,954
Construction in progress		54,908	51,556	-
Inventories		527	505	409
Trade and other receivables		160,702	158,319	120,351
Cash and cash equivalents		34,649	23,088	23,260
Assets classified as held for disposal		25	29	6,351
		348,930	**306,070**	**372,827**

Total assets		**949,881**	**1,044,330**	**933,512**
Equity attributable to owners of the Company				
Share capital		139,854	122,476	111,551
Perpetual securities		97,947	97,947	97,947
Other reserves		(2,912)	1,900	2,264
Accumulated profits		144,623	148,848	160,534
		379,512	**371,171**	**372,296**
Non-controlling interests		67,828	80,288	65,830
Total equity		**447,340**	**451,459**	**438,126**
Non-current liabilities:				
Loans and borrowings		116,928	141,387	175,349
Notes payable		-	101,509	101,074
Trade and other payables		40,022	41,732	16,483
Provisions		3,574	3,549	5,058
Deferred tax liabilities		7,260	6,328	2,136
		167,784	**294,505**	**300,100**
Current liabilities:				
Loans and borrowings		129,218	206,020	108,120
Notes payable		101,747	-	-
Current tax payable		9,690	8,534	8,378
Trade and other payables		93,966	83,672	78,507
Provisions		136	136	134
Liabilities classified as held for disposal		-	4	147
		334,757	**298,366**	**195,286**
Total liabilities		**502,541**	**592,871**	**495,386**
Total equity and liabilities		**949,881**	**1,044,330**	**933,512**

Set out below is Vibrant's Consolidated Income Statement for the financial half year ended 31 October 2016:

Consolidated Income Statement for Financial Half Year ended 31 October 2016:

		Half Year ended 31 October 2016	**Year ended 30 April 2016**	**Year Ended 30 April 2015**
		S$,000	S$,000	S$,000
Revenue		90,802	280,731	203,204
Cost of sales		(60,518)	(217,322)	(139,151)
Gross profit		**30,284**	**63,409**	**64,053**
Other income		10,664	51,464	34,853
Administrative expenses		(21,673)	(41,582)	(53,325)
Other operating expenses		(2,065)	(40,313)	(12,085)
Profit from operations		**17,210**	**32,978**	**33,496**
Finance income		2,524	5,377	3,428
Finance costs		(6,722)	(12,919)	(9,486)
Net finance costs		**(4,198)**	**(7,542)**	**(6,058)**

Share of profits of associates, net of tax		3,427	6,950	1,727
Profit before income tax		**16,439**	**32,386**	**29,165**
Income tax expense		(3,531)	(3,628)	(2,562)
Profit for the period		**12,908**	**28,758**	**26,603**
Profit attributable to:				
Owners of the Company		9,428	10,023	30,003
Non-controlling interest		3,480	18,735	(3,400)
Profit for the period		**12,908**	**28,758**	**26,603**

7.12 Vibrant's Interests in Blackgold Shares

As at the date of this Scheme Booklet, Vibrant has a Relevant Interest in a total of 51,651,103 Blackgold Shares, representing approximately 5.8165% of the total issued share capital of Blackgold, based on a total of 888,003,622 Blackgold shares on issue. Vibrant's Relevant Interest is held through a company named Singapore Enterprises Pte Ltd, a company controlled by Vibrant.

As at the date of this Scheme Booklet, Vibrant's Voting Power in Blackgold is 5.8165%.

7.13 Vibrant's acquisition of Blackgold Shares

During the period of 4 months before the date of this Scheme Booklet, Vibrant or an associate of Vibrant has **not** acquired any Blackgold Shares.

7.14 Vibrant and benefits provided to Blackgold shareholders

During the period of 4 months before the date of this Scheme Booklet, Vibrant or an associate of Vibrant has **not** given, or offered to give, or agreed to give a benefit, to a person and the benefit was likely to induce that person (or an associate) to vote in favour of the Scheme and the benefit was not offered to all holders of Blackgold shares.

8. Implementation of the Scheme

8.1 Scheme Implementation Deed

On 28 October 2016 Blackgold and Vibrant entered into a Scheme Implementation Deed under which Blackgold agreed to propose the Scheme to Blackgold shareholders.

The Scheme Implementation Deed sets out the duties and obligations of Blackgold and Vibrant in connection with the implementation of the Scheme.

A summary of the key elements of the Scheme Implementation Deed is set out below. A full copy is available on the ASX's website, attached to the Blackgold announcement of the Scheme which was dated 28 October 2016 and released to the ASX on 31 October 2016.

8.1.1 General Duties and Obligations in relation to Scheme

Blackgold agrees to propose the Scheme and, subject to the Scheme becoming Effective, to implement the Scheme on, and subject to, the terms and conditions set out in the Scheme Implementation Deed.

Vibrant covenants in favour of Blackgold that in consideration for the transfer to Vibrant of the Scheme Shares held by Scheme Shareholders under the terms of the Scheme, Vibrant will, subject to the Scheme becoming Effective, provide or cause to be provided the Scheme Consideration to Scheme Shareholders (for each Scheme Share held on the Scheme Record Date), in accordance with the terms of the Scheme, the Deed Poll and the Scheme Implementation Deed.

8.1.2 Conditions Precedent

The Scheme is subject to a number of conditions which must be satisfied or waived before the Scheme can be Implemented. The Scheme will **not** be Implemented if all of the conditions are not satisfied or waived.

The conditions are set out in Section 5.5 of this Scheme Booklet.

If any condition that is stated in the Scheme Implementation Deed to be for the benefit of a party has not been satisfied or waived by 5pm Perth time on 31 July 2017 (or such later date as agreed between Blackgold and Vibrant), then that party may require the other party to consult in good faith with a view to extending the date for satisfaction of the relevant condition, or adjourning or changing the date of the application to the Court for an order pursuant to Section 411(4)(b) of the Corporations Act. If Blackgold and Vibrant are unable to reach agreement within 5 Business Days, then the party for whose benefit the condition was for, may terminate the Scheme Implementation Deed. If the Scheme Implementation Deed is terminated, then the Scheme will not become Effective and will not be Implemented.

8.1.3 No Solicitation

During the Exclusivity Period, Blackgold must not, and must ensure that its Representatives and Related Bodies Corporate do not, except with the prior written consent of the other party, directly or indirectly solicit, invite or encourage any Target Competing Proposal or expression of interest or offer which may lead to a

Target Competing Proposal, or initiate discussions with any Third Party which may reasonably be expected to lead to a Target Competing Proposal.

8.1.4 No Talk and No Due Diligence

During the Exclusivity Period, Blackgold must not, and must ensure that its Representatives and Related Bodies Corporate do not, except with the prior written consent of Vibrant:

(a) participate or continue to engage in any discussions or negotiations in relation to a Target Competing Proposal or which may reasonably be expected to lead to a Target Competing Proposal; or

(b) provide any non-public information to a Third Party for the purposes of, or with a view to, enabling that person to make an expression of interest, offer or proposal which may reasonably be expected to lead to a Target Competing Proposal, even if the potential Target Competing Proposal was not directly or indirectly solicited, invited or encouraged by Target, its Representatives or Related Bodies Corporate.

8.1.5 No Commitments in respect of Target Competing Proposals

During the Exclusivity Period, Blackgold must not, and must ensure that its Representatives and Related Bodies Corporate do not, except with the prior written consent of Vibrant, enter into any deed, arrangement or understanding in relation to a Target Competing Proposal requiring Blackgold to abandon, or otherwise fail to proceed with, the transactions the subject of the deed unless the Blackgold Board, acting in good faith and in order to satisfy what the Blackgold Board considers to be its fiduciary or statutory duties, determines that the Target Competing Proposal is a Superior Proposal.

8.1.6 Competing Proposals and Right to Match

During the Exclusivity Period, Blackgold must promptly notify Vibrant:

(i) of any approach or attempt to initiate, resume or continue discussions or negotiations with it or any of its Representatives or Related Bodies Corporate with respect to a Target Competing Proposal; and

(ii) of any request for, or provision of, information relating to Blackgold or to the Blackgold Group or any of their businesses or operations or any request for access to the books or records of Blackgold or the Blackgold Group, other than requests occurring in the ordinary course of business.

A notification must be accompanied by all relevant details of the relevant event, including the identity of the relevant person or persons and the key terms and conditions of any Target Competing Proposal or proposed Target Competing Proposal (to the extent known) and must be provided no later than 2 Business Days from receipt of the approach, request, Target Competing Proposal or proposed Target Competing Proposal.

If Blackgold receives a Target Competing Proposal in respect of which:

(i) it has received a definitive, binding agreement for implementation which it intends to execute; or

(ii) it has not received a definitive, binding agreement for implementation but which is the subject of a bidder's statement filed with ASIC,

and which it determines to be a Superior Proposal ("**Other Proposal**"), and as a result proposes to terminate the Scheme Implementation Deed under clause

13.2(b)(ii), Blackgold must give Vibrant 5 clear Business Days written notice of such proposed termination, and provide to Vibrant all relevant terms of the Other Proposal (including the identity of the relevant person or persons and the key terms and conditions, including the proposed price or implied value, details of any non-cash consideration, timing and break fee (if any)).

During the period of 5 clear Business Days referred to in clause 10.6(a), Vibrant will have the right to offer to amend the terms of the Scheme and the deed or to propose an alternative transaction between the parties (each a "**Counterproposal**") which provides at least an equivalent outcome for the holders of Blackgold Shares than the Other Proposal.

The Blackgold Directors must consider any such Counterproposal and if the Blackgold Directors, acting in good faith, determine that:

(i) the Counterproposal would provide at least an equivalent outcome for the holders of Blackgold Shares than the Other Proposal; and

(ii) the other terms and conditions of the Counterproposal taken as a whole are not less favourable than those in the Other Proposal,

then Blackgold and Vibrant must use their best endeavours to agree the amendments to the deed (including the Scheme) which are reasonably necessary to reflect the Counterproposal and to enter into one or more appropriate amended agreements to give effect to those amendments and to implement the Counterproposal, in each case as soon as reasonably practicable.

8.1.7 Exceptions to Restrictions

The restrictions in clauses 10.2 (**No Solicitation**) and 10.3 (**No talk and no due diligence**) and the obligations in clause 10.4 (**No commitments in respect of Target Competing Proposal**) of the Scheme Implementation Deed do not apply to the extent that they restrict a party from taking, or refusing to take, any action with respect to a bona fide Target Competing Proposal (which was not encouraged, solicited or invited, facilitated or initiated by Target or its Representatives or Related Bodies Corporate in contravention of clause 10.1) provided that the Blackgold Board has determined, in good faith and acting reasonably, that:

(a) such bona fide Target Competing Proposal could reasonably be considered to be a Superior Proposal; and

(b) after receiving legal advice, failing to respond to such bona fide Target Competing Proposal would constitute a breach of the Blackgold's Board's fiduciary or statutory obligations.

8.1.8 Termination by Vibrant

Vibrant may terminate the Scheme Implementation Deed at any time before 8.00 am on the Second Court Date by notice in writing to Blackgold:

(i) in accordance with clause 3.6 of the Scheme Implementation Deed; or

(ii) at any time before 8.00 am on the Second Court Date:

(A) if there is a material breach of any of the Target Warranties, or a Target Prescribed Event occurs, or a Material Adverse Change occurs in respect of Blackgold, provided that in each case Vibrant is only entitled to terminate if it has given notice to Blackgold setting out the relevant circumstances and stating an intention to terminate and the relevant circumstances have continued to exist

5 Business Days (or any shorter period ending at 5.00 pm on the day before the Second Court Date) from the time such notice is received by Blackgold; or

(B) if a majority of the Blackgold Board publicly change their recommendation in relation to the Scheme or publicly recommends a Superior Proposal, whether in accordance with clause 8.3 or otherwise; or

(C) if Blackgold is in material breach of any of clause 3, clause 4.1, clause 5.2, clause 6 or clause 10 before that time, provided that Vibrant is only entitled to terminate if it has given notice to Blackgold setting out the relevant circumstances and stating an intention to terminate and the relevant circumstances have continued to exist 5 Business Days (or any shorter period ending at 5.00 pm on the day before the Second Court Date) from the time such notice is received by Blackgold; or

(D) if Blackgold is in material breach of clause 8.1 or clause 8.2 of the Scheme Implementation Deed.

8.1.9 Termination by Blackgold

Blackgold may terminate the Scheme Implementation Deed at any time before 8.00 am on the Second Court Date by notice in writing to Vibrant:

(a) in accordance with clause 3.6 of the Scheme Implementation Deed; or

(b) at any time before 8.00 am on the Second Court Date:

(i) if there is a material breach of any of the Bidder Warranties as set out in Schedule 2 of the deed, or a Material Adverse Change occurs in respect of Vibrant, provided that in each case Blackgold is only entitled to terminate if it has given notice to Vibrant setting out the relevant circumstances and stating an intention to terminate and the relevant circumstances have continued to exist 5 Business Days (or any shorter period ending at 5.00 pm on the day before the Second Court Date) from the time such notice is received by Vibrant;

(ii) if the Blackgold Board publicly changes or withdraws its recommendation or publicly recommends to Scheme Shareholders any Superior Proposal pursuant to clause 8.3;

(iii) if Vibrant is in material breach of clause 3.2, clause 3.3, clause 3.7, clause 4.2, or clause 5.1, before that time, provided that Blackgold is only entitled to terminate if it has given notice to Vibrant setting out the relevant circumstances and stating an intention to terminate and the relevant circumstances have continued to exist 5 Business Days (or any shorter period ending at 5.00 pm on the day before the Second Court Date) from the time such notice is received by Vibrant;

(iv) if Vibrant is in material breach of clause 9.1 of the Scheme Implementation Deed; or

(v) if Vibrant is insolvent or is unable to pay its debts when they fall due or a liquidator, provisional liquidator, administrator or official manager is appointed to Vibrant or a receiver (or a receiver and manager) is appointed to any property or any business of Vibrant.

8.1.10 Conduct of Business

From the date of the Scheme Implementation Deed until the Implementation Date, Blackgold must not do anything that would constitute a Target Prescribed Event.

8.1.11 Representations and Warranties

Vibrant represents and warrants to Blackgold on the terms set out in Schedule 2 of the Scheme Implementation Deed.

Blackgold represents and warrants to Vibrant on the terms set out in Part A of Schedule 3 of the Scheme Implementation Deed.

8.1.12 Break Fee

Subject to the exceptions referred to below, Blackgold agrees to pay Vibrant a Break Fee under clause 11 of the Scheme Implementation Deed of the greater of 1% of the Scheme Consideration and A$250,000:

(i) if:

(A) Target is in material breach of its obligations under the deed (including a material breach of a representation, warranty or undertaking set out in Schedule 3 or any breach of clause 5.2), and such breach has been notified in accordance with clause 13.1(a)(ii)(A) and not remedied within the 5 Business Day period referred to therein; or

(B) a Target Prescribed Event occurs between the date of the deed and 8.00 am on the Second Court Date and such event has been notified in accordance with clause 13.1(a)(ii)(A) and not remedied within the 5 Business Day period referred to therein; or

(C) subject to clause 11.2(b), at any time before the end of the Scheme Meeting, any of the Blackgold Directors makes a public statement changing or withdrawing their support or recommendation of the Scheme; or

(D) at any time before the end of the Scheme Meeting, a majority of the Blackgold Directors recommend a Target Competing Proposal,

and the deed is terminated in accordance with its terms prior to the Implementation Date; or

(ii) if a Target Competing Proposal is announced, made, or becomes open for acceptance, before the Scheme Meeting (or the termination of the deed, whichever occurs first) and, whether before or after the termination of the deed but in any event before the first anniversary of the date of the deed, any bidder for Blackgold:

(A) acquires a Relevant Interest in more than 20% of all Blackgold Shares and the third party's proposal for Blackgold is (or becomes) free from any defeating conditions; or

(B) acquires the whole or a substantial part or a material part of the business or property of Blackgold or the Blackgold Group; or

(C) acquires control of Blackgold, within the meaning of section 50AA of the Corporations Act; or

(D) otherwise acquires or merges with Blackgold (including by a reverse takeover bid, reverse scheme of arrangement or dual listed companies structure).

Paragraph (i)(C) above will not apply where the relevant Blackgold Director makes a public statement changing or withdrawing his or her support or recommendation of the Scheme as a consequence of any event referred to in clause 8.3(a).

Blackgold must pay Vibrant the Break Fee forthwith following (and, in any event, within 3 Business Days of) receipt by Blackgold from Vibrant of a valid demand for payment made after the occurrence of an event referred to above.

No amount is payable by Blackgold to Bidder under clause 11.2(a) if:

(i) the deed is terminated by Blackgold under clause 13.2(a) (but only where the circumstances giving rise to the termination would not have entitled Vibrant to terminate under clause 13.1); or

(ii) the deed is terminated by Vibrant and, at the time of termination, Blackgold is entitled to terminate the deed under clause 13.2(a) (but only where the circumstances giving rise to the termination would not have entitled Vibrant to terminate under clause 13.1).

No amount is payable by Blackgold to Vibrant under clause 11.2(a) by reason only that the holders of Blackgold Shares fail to pass, by the Requisite Majorities, the resolution to approve the Scheme at the Scheme Meeting in circumstances where the Scheme Meeting occurs and the Blackgold Directors have continued to recommend the Scheme up to and including the date of the Scheme Meeting where the Scheme Shareholders fail to pass the necessary resolutions.

Vibrant is only required to pay a Break Fee to Blackgold in the limited circumstance where one or more Vibrant Shareholder Resolutions is required to be voted on in relation to the implementation of the Scheme, none which has been identified as required as at the date of this Scheme Booklet. Subject to the exception referred to below, Vibrant agrees to pay Blackgold a Break Fee under clause 11.3 of the Scheme Implementation Deed of the greater of 1% of the Scheme Consideration and A$250,000, if all of the following occurs:

(i) a meeting of Vibrant Shareholders occurs in respect of one or more Vibrant Shareholder Resolutions; and

(ii) the Vibrant Directors change their recommendation to Vibrant Shareholders which they made under clause 9.1; and

(iii) the Vibrant Shareholders fail to pass, by the requisite majorities, the Vibrant Shareholder Resolutions; and

(iv) the Scheme Implementation Deed is terminated in accordance with its terms prior to the Implementation Date.

No amount is payable by Vibrant to Blackgold under clause 11.3 if:

(i) the Scheme Implementation Deed is terminated by Vibrant under clause 13.1(a)(i) (but only where the circumstances giving rise to the termination would not have entitled Blackgold to terminate under clause 13.2); or

(ii) the Scheme Implementation Deed is terminated by Blackgold and, at the time of termination, Vibrant is entitled to terminate the deed under clause 13.1(a)(i) (but only where the circumstances giving rise to the termination would not have entitled Blackgold to terminate under clause 13.2).

If a Break Fee is payable by Vibrant in accordance with the above, then Vibrant must pay Blackgold the amount forthwith (and, in any event, within 3 Business Days) after receipt by Vibrant from Blackgold of a valid demand for payment made after the occurrence of the event referred to above.

As stated above, no Vibrant Shareholder Resolutions have been identified as required as at the date of this Scheme Booklet.

8.1.13 Governing Law

The Scheme Implementation Deed is governed by the laws of Western Australia.

8.2 Deed Poll

On or about the date of this Scheme Booklet Vibrant executed the Deed Poll.

Under the Deed Poll Vibrant agrees to pay the Scheme Consideration and perform its obligations under the Scheme Implementation Deed and the Scheme.

A copy of the Deed Poll is attached as **Annexure C** to this Scheme Booklet.

8.3 Scheme Meeting and Approval Requirements

In accordance with an order of the Court on or about the date of this Scheme Booklet, Blackgold has convened the Scheme Meeting.

The Notice of Meeting for the Scheme Meeting is set out in **Annexure D** to this Scheme Booklet.

Instructions on how to attend and vote at the Scheme Meeting, and the Requisite Majorities to pass the Scheme Resolution, are set out in Section 9 of this Scheme Booklet and in the Notice of Scheme Meeting.

8.4 Court Approval of the Scheme

If:

(a) the Scheme is approved by the Requisite Majorities of Blackgold Shareholders at the Scheme Meeting; and

(b) all conditions (other than Court approval) have been satisfied or waived (see Sections 5.5 and 8.1 of this Scheme Booklet),

then Blackgold will apply to the Court for an order to approve the Scheme.

8.5 Effective Date for Scheme

The Scheme will become Effective (and therefore binding) when an office copy of the Court order from the Second Court Hearing approving the Scheme is lodged with ASIC.

Once the Scheme is Effective, Blackgold will notify the ASX.

Blackgold intends to apply to the ASX for Blackgold Shares to be suspended from official quotation on the ASX from close of trading on the Effective Date.

8.6 Scheme Record Date

Those Blackgold Shareholders on the share register of Blackgold on the Scheme Record Date, being 5pm Perth time on the fifth Business Day after the Effective Date, will be "**Scheme Shareholders**" for the purposes of the Scheme and will be entitled to receive the Scheme Consideration in respect of the Blackgold Shares which they hold as at the Scheme Record Date.

8.7 Determination of Persons entitled to Scheme Consideration

8.7.1 Dealings on or prior to the Scheme Record Date

For the purposes of determining Scheme Shareholders, dealings in Blackgold Shares will only be recognised if:

(a) in the case of dealings of the type to be effected using CHESS, the transferee is registered in the share register of Blackgold as the holder of the relevant Blackgold Shares on or before the Scheme Record Date; and

(b) in all other cases, registrable transfer applications or transmission applications in respect of those dealings are received on or before the Scheme Record Date at the place where the share register of Blackgold is kept.

Blackgold will not accept for registration, nor recognise for any purpose, any transfer application or transmission application in respect of Blackgold Shares received after the Scheme Record Date.

8.7.2 Dealings after the Scheme Record Date

For the purpose of determining entitlements to the Scheme Consideration, Blackgold must maintain the share register of Blackgold in its form as at the Scheme Record Date until the Scheme Consideration has been provided to the Scheme Shareholders.

The share register in this form will solely determine entitlements to the Scheme Consideration.

After the Scheme Record Date:

(a) all statements of holding for Blackgold Shares (other than statements of holding in favour of Vibrant or any Vibrant Shareholder) will cease to have effect; and

(b) each entry on the share register (other than entries in respect of Vibrant or any Vibrant Shareholder) will cease to have effect, except as evidence of entitlement to the Scheme Consideration in respect of the Blackgold Shares relating to that entry.

8.8 Implementation of Scheme and Implementation Date for Scheme

If the Scheme becomes Effective, then the Implementation Date of the Scheme is the fifth Business Day after the Scheme Record Date.

Vibrant must, by no later than two Business Days before the Implementation Date, deposit in cleared funds an amount equal to the aggregate amount of the Scheme Consideration payable to each Scheme Shareholder, into a trust account operated by Blackgold or Blackgold's share registry as trustee for the Scheme Shareholders. The trust account will be an Australian dollar denominated trust account and will bear no interest.

On the Implementation Date, subject to the funds having been deposited in the trust account, Blackgold must pay, or procure the payment by Blackgold's share registry, from the trust account of an amount equal to the Scheme Consideration for each Scheme Share transferred to Vibrant on the Implementation Date by the Scheme Shareholder.

All payments to Scheme Shareholders will be made by way of bank to bank electronic transfer on the Implementation Date if (and only if) Blackgold's share registry holds on the Scheme Record Date full and valid details of the Scheme Shareholder's Australian bank account, or if not, then by way of an Australian cheque posted on the Implementation Date to the postal address shown in the Blackgold share register on the Scheme Record Date.

On the Implementation Date, subject to the funds having first been deposited in the trust account and to the obligation to provide the Scheme Consideration to Scheme Shareholders (as referred to above), the Scheme Shares (together with all rights and entitlements) will be transferred to Vibrant, without the need for any further act by a Scheme Shareholder.

8.9 Warranties by Scheme Shareholders

The terms of the Scheme provide that each Scheme Shareholder is taken to have warranted to Blackgold and to Vibrant and appointed and authorised Blackgold as their attorney to warrant to Vibrant that:

(a) all of their Blackgold Shares (including any rights and entitlements attaching to those shares) that are transferred under the Scheme will, at the date of transfer, be fully paid and free from all mortgages, charges, liens, encumbrances, pledges, security interests and interests of third parties of any kind, whether legal or equitable; and

(b) they have full power and capacity to transfer their Blackgold Shares to Vibrant (together with any rights and entitlements attaching to those shares).

8.10 De-listing of Blackgold from the ASX

On a date after the Implementation Date, to be determined by Vibrant, Blackgold will apply for the termination of the official quotation of Blackgold Shares on the ASX and for Blackgold to be removed from the official list of the ASX.

9. Voting by Blackgold Shareholders and How To Vote

9.1 Your Vote Is Important

The Scheme will only become Effective and be Implemented if it is:

(a) approved by Blackgold Shareholders at the Scheme Meeting; and

(b) approved by the Court at the Second Court Hearing.

Approval of the Scheme by Blackgold Shareholders requires the Scheme Resolution to be approved by:

(a) a majority in number (more than 50%) of Blackgold Shareholders present and voting on the Scheme Resolution at the Scheme Meeting (either in person or by proxy);

and

(b) at least 75% of the total number of votes cast on the Scheme Resolution at the Scheme Meeting present and voting at the Scheme Meeting (either in person or by proxy).

The Court has discretion to waive the first of these two requirements if it considers it appropriate to do so.

Vibrant and its associates (as the term "associate" is defined in Sections 10 to 16 inclusive of Corporations Act 2001) will not vote at the Scheme Meeting any Blackgold shares which they own or control.

9.2 Notice of Scheme Meeting

The Notice of Scheme Meeting is contained in **Annexure D** to this Scheme Booklet.

9.3 Date and Time of Scheme Meeting

The Scheme Meeting will be held on 26 June 2017 at 11am Perth time.

9.4 Location of Scheme Meeting

The Scheme Meeting will be held at 38 Station Street, Subiaco, Perth, Western Australia.

9.5 Voting Procedures

You may vote on the Scheme by attending the Scheme Meeting in person or by proxy or in the case of a corporation which is a Blackgold Shareholder, by appointing a corporate representative.

Voting at the Scheme Meeting will be conducted by way of a poll.

(a) Voting in Person

If you are entitled to vote at the Scheme Meeting and you wish to do so in person, then you should attend the Scheme Meeting.

(b) Voting by Proxy

If you are entitled to vote at the Scheme Meeting and you wish to appoint a proxy to vote on your behalf, then you must complete and return the Proxy Form by no later than the date and time set out on that Proxy Form.

(c) Voting by Corporate Representative

If you are entitled to vote at the Scheme Meeting and you are a body corporate, then you may have a corporate representative attend and vote on your behalf, by completing an Appointment of Corporate Representative form.

9.6 Voting Entitlement and Voting Restrictions

Each Blackgold Shareholder who is registered on the Blackgold share register at 5pm Perth time on 24 June 2017 is entitled to attend and vote at the Scheme Meeting, other than Vibrant and its associates. Vibrant and its associates (as the term "associate" is defined in Sections 10 to 16 inclusive of Corporations Act 2001) will **not** vote at the Scheme Meeting any Blackgold shares which they own or control.

In the case of Blackgold Shares held by joint holders, only one of the joint holders is entitled to vote. If more than one Blackgold Shareholder votes, then only the votes of the Blackgold Shareholder whose name appears first in the share register will be counted.

The Directors of Blackgold intend to vote at the Scheme Meeting the Blackgold Shares which they own or control. Each Director of Blackgold intends to vote the Blackgold Shares which they own or control in favour of the Scheme, in the absence of a Superior Proposal.

9.7 Your Choices

As a Blackgold Shareholder you have three choices available to you. These choices are:

(a) Vote at the Scheme Meeting

You can vote at the Scheme Meeting in person or by proxy.

If you vote against the Scheme and the Scheme is approved and becomes Effective, then any Blackgold Shares held by you on the Scheme Record Date will be transferred to Vibrant and Scheme Shareholders will receive the Scheme Consideration, notwithstanding that you voted against the Scheme.

(b) Sell Your Blackgold Shares On Market

You can sell your Blackgold Shares on the ASX at any time before the close of trading on the day that the Scheme becomes Effective.

If the Scheme becomes Effective, then Blackgold Shares will cease trading on the ASX at close of trading on the Effective Date.

(c) Do Nothing

If you do not wish to vote for or against the Scheme, or sell your Blackgold Shares on the ASX, then you may choose to do nothing.

Blackgold Shareholders should note that if they do nothing and the Scheme is approved and becomes Effective, then any Scheme Shares held by Scheme Shareholders on the Scheme Record Date will be transferred to Vibrant and Scheme Shareholders will be provided the Scheme Consideration, notwithstanding that they did not vote for or against the Scheme.

10. Taxation Implications

10.1 General

Set out below is a general description of the Australian tax consequences if the Scheme is approved and Implemented. The general description is relevant only to those Blackgold shareholders who hold their Blackgold shares on "capital" account (and not "revenue" account). The following information is based on Australian law as at the date of this Scheme Booklet. It is a summary only and is general in nature. It is not an authoritative or complete statement of the laws applicable to the particular circumstances of every Blackgold shareholder. Blackgold shareholders should seek their own professional advice in relation to their own particular circumstances.

Blackgold shareholders who hold their Blackgold shares for the purposes of a business of dealing in securities (as trading stock) or for speculation should seek their own professional advice.

Blackgold shareholders who acquired their Blackgold shares pursuant to an employee share plan, option plan, incentive plan or other plan should seek their own professional advice.

Blackgold shareholders who are tax residents of a country other than Australia should consider the tax consequences of the Scheme under the laws of their country of residence.

No ATO class ruling has been sought or issued in relation to the Scheme and its tax implications, so Blackgold shareholders are encouraged to seek their own professional advice.

10.2 Australian Resident Shareholders

Capital Gains Tax

If the Scheme is approved and Implemented, it will result in the disposal by Blackgold shareholders of their Blackgold shares. The change in ownership of the shares will be CGT Event A1 for capital gains tax purposes.

Calculation of capital gain or capital loss

Blackgold shareholders will make a capital gain on the disposal of Blackgold shares if the capital proceeds from the disposal of the shares is more than the cost base of those shares.

Blackgold shareholders will make a capital loss if the capital proceeds from the disposal are less than their reduced cost base for the shares.

Cost base

The cost base of Blackgold shares generally includes the cost of acquisition of the shares and any incidental costs of acquisition and disposal that are not deductible to the shareholder. The cost base of Blackgold shares consists of 5 elements, being: (1) acquisition costs; (2) incidental costs; (3) non-deductible costs of owning the asset; (4) capital expenditure to increase or preserve the value of the asset, or that relates to installing or moving the asset; and (5) capital expenditure to establish or defend title to, or a right over, the asset.

The reduced cost base of Blackgold shares consists of 5 elements, being: (1) acquisition costs; (2) incidental costs; (3) assessable balancing adjustments; (4) capital expenditure to increase or preserve the value of the asset, or that relates to installing or moving the asset; and (5) capital expenditure to establish or defend title to, or a right over, the asset.

Capital Proceeds

The capital proceeds received in respect of the disposal of each Blackgold share will be 4.5 cents per share (Australian cents).

Discount

Individuals, complying superannuation entities and trustees that have held Blackgold shares for more than 12 months may be entitled to discount the amount of the capital gain from the disposal (after application of any capital losses) by 50% in the case of individuals and trusts, or by 33% in the case of complying superannuation entities. For trusts the ultimate availability of the discount may depend on a beneficiary's entitlement to the discount.

Capital gains and capital losses of a taxpayer in a tax year are aggregated to determine whether there is a net capital gain. Any net capital gain is included in the assessable income of the taxpayer and is subject to income tax. A capital loss may not be deducted against other income for income tax purposes, however it may be carried forward to another tax year to offset future capital gains.

10.3 Non-Resident Shareholders

For a Blackgold shareholder who: (1) is not a resident of Australia for Australian tax purposes; and (2) does not hold their Blackgold shares in carrying on a business through a permanent establishment in Australia, the disposal of Blackgold shares will generally only result in Australian capital gains tax implications if both of the following are satisfied:

(a) that Blackgold shareholder together with its associates held 10% or more of the Blackgold shares at the time of disposal or for any continuous 12 month period within 2 years preceding the disposal; and

(b) more than 50% of Blackgold's value is due to direct and indirect interests in Australian real property.

A non-resident Blackgold shareholder who has previously been a resident of Australia and chose to disregard a capital gain or loss on ceasing to be a resident will be subject to Australian capital gains tax consequences on disposal of Blackgold shares as set out above in Section 10.2.

10.4 Goods and Services Tax

Holders of Blackgold shares are not liable to Goods and Services Tax (GST) in relation to the disposal of their Blackgold shares under the Scheme.

11. Additional Information

11.1 Interests of Blackgold Directors

11.1.1 Interests in Blackgold Shares

As at the date of this Scheme Booklet, the Blackgold Directors had the following Relevant Interests in Blackgold Shares:

	Blackgold Director:	Number:
(1)	Dr Chi Ho (James) Tong	51,050,000
(2)	Mr Yuguo Peng	544,500,000
(3)	Mr Jun Ou	333,000
(4)	Ms Wei-Her (Sophia) Huang	Nil
(5)	Mr Zhonghan(John) Wu	Nil
(6)	Professor Guangfu Yang	Nil
	Total:	595,883,000

There are no Blackgold options, no preference shares, no performance shares and no performance rights on issue.

11.1.2 Dealings in Blackgold Shares

No Blackgold Director acquired, or disposed, of any Relevant Interest in any Blackgold Shares in the four month period ending on the date immediately before the date of this Scheme Booklet.

11.2 Blackgold Share Plan or Option Plan

Blackgold has no share plan, option plan or incentive plan on issue or in operation.

11.3 Interests and Dealings in Vibrant Shares or Options

11.3.1 Interests in Vibrant Shares or Options

As at the date of this Scheme Booklet, no Blackgold Director had a Relevant Interest in Vibrant Shares, Vibrant options or any other securities issued by Vibrant.

11.3.2 Dealings in Vibrant Shares or Options

No Blackgold Director acquired, or disposed, of any Relevant Interest in any Vibrant Shares, options or other securities in the four month period ending on the date immediately before the date of this Scheme Booklet.

11.4 Benefits and Agreements

Mr Peng is Blackgold's Chief Executive Officer and a Blackgold director.

Blackgold and Mr Peng have entered into an Employment Agreement dated 1 September 2015. The material terms of that agreement are as follows.

Under the agreement Mr Peng is employed by Blackgold as the Chief Executive Officer of Blackgold from the commencement date of 1 September 2015 until the termination date of 31 August 2020 unless the agreement is lawfully terminated earlier in time. Mr Peng as executive is employed on a full time basis. The executive is responsible to, and must report to, the Blackgold Board.

The remuneration is a base salary of A$250,000 per annum and paid monthly. The company must pay or reimburse the executive for all expenses reasonably incurred by the executive for the purpose or in the course of his performance of his duties and responsibilities.

The agreement may be terminated by Blackgold by giving 3 months written notice. The agreement may also be terminated by Blackgold if Mr Peng becomes bankrupt or insolvent, is guilty of Gross Misconduct (as defined in the agreement), is convicted of a criminal offence (except an offence which does not prejudicially affect the company or the proper performance of duties), become physically or mentally incapacitated; refusing or neglecting to comply with any lawful reasonable direction or order given by the company, committing any breach of the agreement which is not remedied within 10 business days after notice, or where the executive is removed as a Director of the company or resigns, retires or fails to be re-elected as a Director of the company.

The agreement may be terminated by Mr Peng if the company commits a breach of the agreement which is not remedied within 10 business days after notice, or by giving 3 months written notice.

The agreement contains restraints on post termination activities. After termination the executive must not, in the area of Chongqing (or if a Court considers this area unreasonable, then Fengjie County) for a period of 12 months (or if a Court considers this unreasonable, then 6 months, otherwise 3 months), engage in any activity that is the same or similar to the business carried on by Blackgold. There are also restrictions on the executive soliciting or approaching clients of Blackgold as well as inducing any employee of Blackgold to leave their employment.

The agreement is governed by the laws of Australia.

In addition to the above, Mr Peng receives A$50,000 per annum as director fees and is entitled to be reimbursed reasonable expenses which he incurs in the performance of his duties as a Blackgold director.

Apart from a Blackgold officer (including a Blackgold Director) participating in the Scheme as a Scheme Shareholder along with all other Scheme Shareholders, no benefits will be provided to any Blackgold officer (including any Blackgold Director) in connection with the Scheme, including if the Blackgold Board is reconstituted as a result of the Scheme.

11.5 Status of Conditions Precedent

The Conditions Precedent to the Implementation of the Scheme and their status as at the date of this Scheme Booklet is set out in Section 5.5 of this Scheme Booklet.

11.6 ASIC Relief or Declarations

No ASIC relief or declarations are considered necessary in order to implement the Scheme.

11.7 ASX Waivers

No ASX waivers are considered necessary in order to implement the Scheme.

11.8 Experts, Advisers, Service Providers and Consents To Be Named in Scheme Booklet

Mills Oakley has acted as legal advisers to Blackgold on Australian law in relation to the Scheme and has received (or is entitled to receive) a total of A$240,000 (plus GST) for the provision of legal services to Blackgold in relation to the Scheme, up to the date of this Scheme Booklet. Mills Oakley is entitled to receive fees at its normal hourly rates for the provision of legal services to Blackgold in relation to the Scheme, after the date of this Scheme Booklet.

TSMP Law Corporation has acted as legal advisers to Vibrant on Singapore law.

Corrs Chambers Westgarth has acted as legal advisers to Vibrant on Australian law.

Grandall Law Firm has acted as legal advisers to Vibrant on the law of People's Republic of China.

The following people have given, and have not withdrawn before the registration of this Scheme Booklet with ASIC, their written consent to be named in this Scheme Booklet in the form and context in which they are named:

(a) BDO Corporate Finance (WA) Pty Ltd; and

(b) Al Maynard & Associates Pty Ltd; and

(c) Mills Oakley as Australian legal advisers to Blackgold on Australian law; and

(d) TSMP Law Corporation as legal advisers to Vibrant on Singapore law, Corrs Chambers Westgarth as legal advisers to Vibrant on Australian law and Grandall Law Firm as legal advisers to Vibrant on the law of People's Republic of China; and

(e) Link Market Services Limited as share registry for Blackgold; and

(f) Behre Dolbear Asia, Inc.

BDO Corporate Finance (WA) Pty Ltd has given, and has not withdrawn before the registration of this Scheme Booklet with ASIC, its written consent to the statements in this Scheme Booklet which are attributed to it, or are stated in this Scheme Booklet to be based on statements made by it, in the form and context in which those statements appear in this Scheme Booklet.

Behre Dolbear Asia, Inc. has given, and has not withdrawn before the registration of this Scheme Booklet with ASIC, its written consent to statements in this Scheme Booklet which refer to Behre Dolbear Asia, Inc., or which attribute statements to Behre Dolbear Asia, Inc. in the form and context in which those statements appear in this Scheme Booklet, or which refer to its coal resource and reserve update report entitled "Independent Qualified Persons Report on Four Coal Mining Properties" and dated 23 October 2015, in the form and context in which the report is referred to.

11.9 No Unacceptable Circumstances

The Blackgold Directors believe that the Scheme does not involve any circumstances in relation to the affairs of Blackgold that could reasonably be characterised as constituting "*unacceptable circumstances*" for the purposes of Section 657A of the Corporations Act.

11.10 Foreign Jurisdictions

The distribution of this Scheme Booklet outside of Australia may be restricted by law. People who come into possession of it outside of Australia should seek advice on and observe any such restrictions. Any failure to comply with such restrictions may contravene applicable securities laws.

No action has been taken to lodge, register or qualify this Scheme Booklet in any jurisdiction outside of Australia.

11.11 Blackgold Shareholders who are nominees, trustees or custodians

Blackgold shareholders who are nominees, trustees or custodians are encouraged to seek independent advice as to how they should proceed.

11.12 Supplementary Disclosure

Blackgold will issue a supplementary document to this Scheme Booklet if it becomes aware of any of the following events between the date of lodgement of this Scheme Booklet for registration by ASIC and the Effective Date:

(a) a material statement in this Scheme Booklet is false or misleading in a material respect; or

(b) a material omission from this Scheme Booklet; or

(c) a significant change affecting a matter referred to in the Scheme Booklet; or

(d) a significant new matter has arisen and it would have been required to be included in this Scheme Booklet if it had arisen before the date of lodgement of this Scheme Booklet for registration by ASIC.

Blackgold will also issue a supplementary document to this Scheme Booklet if Blackgold proposes to amend the terms of the Scheme.

If a supplementary document to this Scheme Booklet is required, including if Blackgold proposes to amend the terms of the Scheme, then Blackgold will provide the information to ASIC for review, as well as provide it to the Court for approval.

Blackgold will then publish and circulate the supplementary document in accordance with the directions given by the Court.

12. Glossary and Interpretation

12.1 Glossary

In this Scheme Booklet:

A$	Australian dollars.
ASIC	Australian Securities and Investments Commission.
ASX	ASX Limited ABN 98 008 624 691 or the securities market which it operates.
Bidder	Vibrant.
Bidder Shareholder Resolutions	has the meaning given to “Bidder Shareholder Resolutions” in the SID.
Bidder Warranties	has the meaning given to “Bidder Warranties” in the SID.
Blackgold	Blackgold International Holdings Limited (ACN 145 095 478) of Unit 5, Ground Floor, 1 Centro Avenue, Subiaco, Western Australia, 6005, Australia.
Blackgold Board	the Board of Directors of Blackgold.
Blackgold Director	a director of Blackgold.
Blackgold Group	Blackgold and its subsidiaries.
Blackgold Shareholder	a registered holder of a Blackgold Share.
Blackgold Share	a share in the share capital of Blackgold.
Business Day	a day other than a Saturday, Sunday or public holiday in Western Australia.
Conditions Precedent	in relation to the Scheme, the conditions set out in Section 5.5 of the Scheme Booklet.
Corporations Act	Corporations Act 2001 (Cth).
Corporations Regulations	Corporations Regulations 2001 (Cth).
Court	Federal Court of Australia (Western Australia registry) or such other court of competent jurisdiction under the Corporations Act and agreed in writing by Blackgold and Vibrant.
Deed Poll	the deed poll executed by Vibrant on or about the date of this Scheme Booklet, pursuant to which Vibrant acknowledges and agrees its obligations in relation to the Scheme, being a deed in the form set out in **Annexure C** to this Scheme Booklet.

Effective	in relation to the Scheme, when the Scheme becomes binding under law.
Effective Date	the date on which the Scheme becomes binding under law.
Exclusivity Period	has the meaning given to “Exclusivity Period” in the SID.
Implemented	in relation to the Scheme, when the Scheme Consideration is provided from Vibrant to Scheme Shareholders and the Scheme Shares are transferred from Scheme Shareholders to Vibrant.
Implementation Date	the fifth Business Day after the Scheme Record Date.
Independent Expert	BDO Corporate Finance (WA) Pty Ltd.
Independent Expert’s Report	the report by the Independent Expert in relation to the Scheme, being the report set out in **Annexure A** to this Scheme Booklet.
Insolvent	a person is Insolvent if: (a) it is insolvent as defined in the Corporations Act; or (b) it is in liquidation, in provisional liquidation, under administration or wound up or has a controller appointed to any part of its property; or (c) it is otherwise unable to pay its debts when they fall due.
Listing Rules	the listing rules of the ASX.
Material Adverse Change	has the meaning given to “Material Adverse Change” in the SID.
Material Adverse Matter	has the meaning given to “Material Adverse Matter” in the SID.
PRC	People’s Republic of China.
Regulatory Authority	has the meaning given to “Regulatory Authority” in the SID.
Representative	has the meaning given to “Representative” in the SID.
Related Body Corporate	has the meaning given to the term “related body corporate” in section 9 of the Corporations Act.
Relevant Interest	has the meaning given to the term “relevant interest” in Sections 608 and 609 of the Corporations Act.
Requisite Majorities	the majorities referred to in Section 9.1 of the Scheme Booklet.
S$	Singapore dollars.
Scheme	the scheme of arrangement between Blackgold and Scheme Shareholders pursuant to which all Scheme Shares will be

	transferred to Vibrant in accordance with Part 5.1 of the Corporations Act, being the scheme in the form of (or substantially in the form of) **Annexure B** to this Scheme Booklet, together with any amendment or modification made to the scheme of arrangement pursuant to Section 411(6) of the Corporations Act.
Scheme Booklet	this document, including each annexure to this document.
Scheme Consideration	4.5 cents per Scheme Share (Australian cents).
Scheme Implementation Deed or SID	the Scheme Implementation Deed relating to the Scheme which is executed by Blackgold and Vibrant and is dated 28 October 2016.
Scheme Meeting	the meeting of Blackgold Shareholders ordered by the Court to be convened under Section 411(1) of the Corporations Act.
Scheme Record Date	7pm on the fifth Business Day after the Effective Date, or such other date as Blackgold and Vibrant agree.
Scheme Share	a Blackgold Share held by a Scheme Shareholder.
Scheme Shareholder	each person who is a Blackgold Shareholder (**other than** Vibrant or a Related Body Corporate of Vibrant) as at the Scheme Record Date.
Second Court Date	the first day on which an application is made to the Court for an order under Section 411(4)(b) of the Corporations Act approving the Scheme is heard, or if the application is adjourned for any reason, then the first day on which the adjourned application is heard.
Superior Proposal	a Target Competing Proposal which: (1) in the determination of the Blackgold Board acting in good faith, is reasonably capable of being completed without undue delay, taking in account both the nature and all terms and conditions of the Target Competing Proposal and the person or persons making it; and (2) in the determination of the Blackgold Board acting in good faith, after receiving the advice of its external legal and financial advisers, would, if completed substantially in accordance with its terms, result in a transaction more favourable to the Scheme Shareholders.
Target	Blackgold.
Target Competing Proposal	a transaction or arrangement pursuant to which (other than as contemplated pursuant to the SID) a third party will, if the proposed transaction or arrangement is entered into or completed substantially in accordance with its terms: (a) directly or indirectly acquire, have a right to acquire or otherwise acquire an economic interest in, all or a majority of the business of the Blackgold Group;

(b) acquire a Relevant Interest in any Blackgold Shares, as a result of which the third party will have a Relevant Interest of 20% or more of the Target Shares;

(c) otherwise acquire control of Blackgold or the Blackgold Group, within the meaning of Section 50AA of the Corporations Act; or

(d) otherwise directly or indirectly acquire, merge with, or acquire a significant shareholding or economic interest in Blackgold or its businesses, whether by way of takeover offer, scheme of arrangement, shareholder approved transaction, capital reduction, share buy-back sale or purchase of assets, joint venture, reverse takeover, dual-list company structure, recapitalisation, establishment of a new holding company for the Blackgold Group or other synthetic merger or any other transaction or arrangement.

Target Prescribed Event	has the meaning given to “Target Prescribed Event” in the SID.
Target Shares	shares in the share capital of Blackgold.
Target Warranties	has the meaning given to “Target Warranties” in the SID.
Technical Assessment and Valuation Expert	Al Maynard & Associates Pty Ltd.
Technical Assessment and Valuation Report	the report by the Technical Assessment and Valuation Expert addressed to the Independent Expert and set out in Appendix 6 to the Independent Expert’s Report.
Third Party Consents	has the meaning given to “Third Party Consents” in the SID.
Vibrant	Vibrant Group Limited, company number 198600061G of 51 Penjuru Road, #04-00, Freight Links Express Logisticentre, Singapore, 609143.
Vibrant Group	Vibrant Group Limited and its subsidiaries.
Vibrant Information	the information set out in Section 7 of this Scheme Booklet.
Vibrant Shareholder	Vibrant and each Related Body Corporate of Vibrant who is the registered holder of Blackgold Shares.
Vibrant Shareholder Resolutions	has the meaning given to “Bidder Shareholder Resolutions” in the SID.
Voting Power	the meaning given to “voting power” in Section 610 of the Corporations Act.
VWAP	volume-weighted average price.

12.2 Interpretation

In this Scheme Booklet:

(a) words and phrases have the same meaning given to them in the Corporations Act;

(b) words of gender include all genders;

(c) words importing the singular include the plural, and vice versa;

(d) a reference to a person includes any company, partnership, joint venture, association, corporation or other body corporate;

(e) a reference to legislation includes all delegated legislation made under it and any amendment, consolidation, replacement or re-enactments;

(f) headings are for convenience only and do not affect the interpretation of this document;

(g) a reference to time means Perth time; and

(h) a reference to “includes” or “including” does not limit the meaning of the words to which the example relates.

Annexure A – The Independent Expert's Report

BLACKGOLD INTERNATIONAL HOLDINGS LIMITED
Independent Expert's Report

11 May 2017

BDO

Financial Services Guide

11 May 2017

BDO Corporate Finance (WA) Pty Ltd ABN 27 124 031 045 (‘**we**’ or ‘**us**’ or ‘**ours**’ as appropriate) has been engaged by Blackgold International Holdings Limited (‘**Blackgold**’) to provide an independent expert’s report on the scheme of arrangement, whereby Vibrant Group Limited (‘**Vibrant**’) proposes to acquire all of the shares in Blackgold in return for providing cash consideration of $0.045 per Blackgold share not already owned by Vibrant (‘**Scheme**’). You will be provided with a copy of our report as a retail client because you are a shareholder of Blackgold.

Financial Services Guide
In the above circumstances we are required to issue to you, as a retail client, a Financial Services Guide (‘**FSG**’). This FSG is designed to help retail clients make a decision as to their use of the general financial product advice and to ensure that we comply with our obligations as financial services licensees.

This FSG includes information about:

- Who we are and how we can be contacted;
- The services we are authorised to provide under our Australian Financial Services Licence, Licence No. 316158;
- Remuneration that we and/or our staff and any associates receive in connection with the general financial product advice;
- Any relevant associations or relationships we have; and
- Our internal and external complaints handling procedures and how you may access them.

Information about us
BDO Corporate Finance (WA) Pty Ltd is a member firm of the BDO network in Australia, a national association of separate entities (each of which has appointed BDO (Australia) Limited ACN 050 110 275 to represent it in BDO International). The financial product advice in our report is provided by BDO Corporate Finance (WA) Pty Ltd and not by BDO or its related entities. BDO and its related entities provide services primarily in the areas of audit, tax, consulting and financial advisory services.

We do not have any formal associations or relationships with any entities that are issuers of financial products. However, you should note that we and BDO (and its related entities) might from time to time provide professional services to financial product issuers in the ordinary course of business.

Financial services we are licensed to provide
We hold an Australian Financial Services Licence that authorises us to provide general financial product advice for securities to retail and wholesale clients.

When we provide the authorised financial services we are engaged to provide expert reports in connection with the financial product of another person. Our reports indicate who has engaged us and the nature of the report we have been engaged to provide. When we provide the authorised services we are not acting for you.

General Financial Product Advice
We only provide general financial product advice, not personal financial product advice. Our report does not take into account your personal objectives, financial situation or needs. You should consider the appropriateness of this general advice having regard to your own objectives, financial situation and needs before you act on the advice.

Fees, commissions and other benefits that we may receive
We charge fees for providing reports, including this report. These fees are negotiated and agreed with the person who engages us to provide the report. Fees are agreed on an hourly basis or as a fixed amount depending on the terms of the agreement. The fee payable to BDO Corporate Finance (WA) Pty Ltd for this engagement is approximately $145,000.

Except for the fees referred to above, neither BDO, nor any of its directors, employees or related entities, receive any pecuniary benefit or other benefit, directly or indirectly, for or in connection with the provision of the report.

Remuneration or other benefits received by our employees
All our employees receive a salary. Our employees are eligible for bonuses based on overall productivity but not directly in connection with any engagement for the provision of a report. We have received a fee from Blackgold for our professional services in providing this report. That fee is not linked in any way with our opinion as expressed in this report.

Referrals
We do not pay commissions or provide any other benefits to any person for referring customers to us in connection with the reports that we are licensed to provide.

Complaints resolution
Internal complaints resolution process
As the holder of an Australian Financial Services Licence, we are required to have a system for handling complaints from persons to whom we provide financial product advice. All complaints must be in writing addressed to The Complaints Officer, BDO Corporate Finance (WA) Pty Ltd, PO Box 700 West Perth WA 6872.

When we receive a written complaint we will record the complaint, acknowledge receipt of the complaint within 15 days and investigate the issues raised. As soon as practical, and not more than **45 days** after receiving the written complaint, we will advise the complainant in writing of our determination.

Referral to External Dispute Resolution Scheme
A complainant not satisfied with the outcome of the above process, or our determination, has the right to refer the matter to the Financial Ombudsman Service (‘**FOS**’). FOS is an independent organisation that has been established to provide free advice and assistance to consumers to help in resolving complaints relating to the financial service industry. FOS will be able to advise you as to whether or not they can be of assistance in this matter. Our FOS Membership Number is 12561. Further details about FOS are available at the FOS website www.fos.org.au or by contacting them directly via the details set out below.

Financial Ombudsman Service
GPO Box 3
Melbourne VIC 3001
Toll free: 1300 78 08 08
Facsimile: (03) 9613 6399
Email: info@fos.org.au

Contact details
You may contact us using the details set out on page 1 of the accompanying report.

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Tel: +61 8 6382 4600
Fax: +61 8 6382 4601
www.bdo.com.au

38 Station Street
Subiaco, WA 6008
PO Box 700 West Perth WA 6872
Australia

11 May 2017

The Directors
Blackgold International Holdings Limited
12th Floor, No 18 Mianhua Street
Yuzhong District
Chongqing 400011, PRC

Dear Directors

INDEPENDENT EXPERT'S REPORT

1. Introduction

On 31 October 2016, Blackgold International Holdings Limited ('**Blackgold**' or '**the Company**') announced a Scheme of Arrangement with Vibrant Group Limited ('**Vibrant**') under which Vibrant proposes to acquire all of the shares in Blackgold (which it does not already own), for cash consideration of $0.045 per share ('**Cash Consideration**') ('**the Scheme**').

All currencies are expressed in Australian Dollars unless otherwise specified.

2. Summary and Opinion

2.1 Purpose of the report

The directors of Blackgold have requested that BDO Corporate Finance (WA) Pty Ltd ('**BDO**') prepare an independent expert's report ('**our Report**') to express an opinion as to whether or not the Scheme is in the best interests of shareholders of Blackgold, who are not associated with Vibrant ('**Shareholders**').

Our Report is prepared pursuant to section 411 of the Corporations Act 2001 Cth ('**Corporations Act**' or '**the Act**') and is to be included in the Scheme Booklet in order to assist the Shareholders in their decision whether to approve the Scheme.

2.2 Approach

Our Report has been prepared having regard to Australian Securities and Investments Commission ('**ASIC**') Regulatory Guide 60 'Schemes of Arrangements' ('**RG 60**'), Regulatory Guide 111 'Content of Expert's Reports' ('**RG 111**') and Regulatory Guide 112 'Independence of Experts' ('**RG 112**').

In arriving at our opinion, we have assessed the terms of the Scheme as outlined in the body of this report. We have considered:

- How the value of a Blackgold share prior to the Scheme compares to the value of the Cash Consideration of $0.045 being offered by Vibrant;

- The likelihood of a superior alternative offer being available to Blackgold;
- Other factors which we consider to be relevant to the Shareholders in their assessment of the Scheme; and
- The position of Shareholders should the Scheme not proceed.

2.3 Opinion

We have considered the terms of the Scheme as outlined in the body of this report and have concluded that, in the absence of a superior offer, the Scheme is not fair but reasonable to Shareholders. Therefore, we consider the Scheme to be in the best interest of Shareholders.

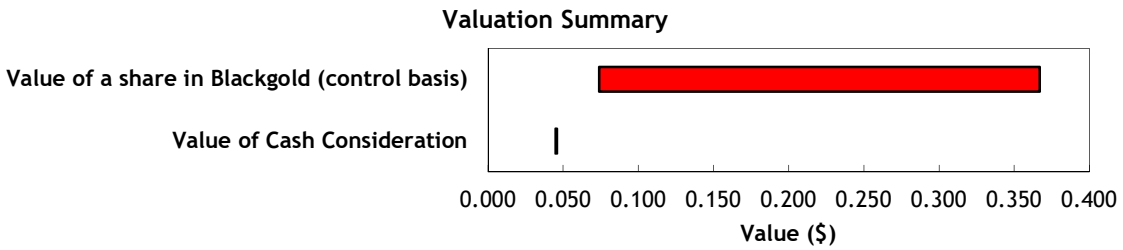
2.4 Fairness

In section 16 we determined that the Cash Consideration compares to the value of a share in Blackgold as detailed below.

	Ref	Low $	Preferred $	High $
Value of a share in Blackgold	14	0.074	0.224	0.367
Value of Cash Consideration	15	0.045	0.045	0.045

Source: BDO analysis

The above valuation ranges are graphically presented below:



The above pricing indicates that, in the absence of any other relevant information, the Scheme is not fair for Shareholders.

2.5 Reasonableness

We have considered the analysis in section 17 of this report, in terms of both

- advantages and disadvantages of the Scheme; and
- other considerations, including the position of Shareholders if the Scheme does not proceed and the consequences of not approving the Scheme.

In our opinion, the position of Shareholders if the Scheme is approved is more advantageous than the position if the Scheme is not approved. Accordingly, in the absence of any other relevant information, we believe that the Scheme is reasonable for Shareholders.

The respective advantages and disadvantages considered are summarised below:

ADVANTAGES AND DISADVANTAGES			
Section	**Advantages**	**Section**	**Disadvantages**
17.3.1	Shareholders obtain cash under the Scheme	17.4.1	The Scheme is not fair
17.3.2	Shareholders have the opportunity to realise their investment with certainty at a premium to the Company's quoted market price	17.4.2	Shareholders will be unable to participate in the potential upside of Blackgold's operations
17.3.3	The Scheme Consideration is greater than the value of a Blackgold share in certain scenarios	17.4.3	Shareholders will forego the opportunity to receive future dividends
17.3.4	The Scheme provides Shareholders with an opportunity to reduce their exposure to the risks of the Chinese coal industry	17.4.4	Shareholders may face potential tax implications
17.3.5	Shareholders can realise their investment without incurring stamp duty or brokerage costs		

Other key matters we have considered include:

Section	Description
17.1	Alternate Proposal
17.2	If the Scheme is not approved Shareholders will continue to hold an illiquid share
17.2	If the Scheme is not approved there may be a decline in the share price
17.2	Conditions relating to conversion of the Convertible Bond

3. Scope of the Report

3.1 Purpose of the Report

The Scheme is to be implemented pursuant to section 411 of the Corporations Act. Part 3 of Schedule 8 to the Corporations Act Regulations 2001 (Cth) ('**Regulations**') prescribes the information to be sent to shareholders in relation to schemes of arrangement pursuant to section 411 of the Act ('**Section 411**').

Schedule 8 of the Regulations requires an independent expert's report if:

- The corporation that is the other party to the scheme has a common director or directors with the company which is the subject of the scheme; or
- The corporation that is the other party is entitled to more than 30% of the voting shares in the subject company.

The expert must be independent and must state whether or not, in his or her opinion, the proposed scheme is in the best interest of the members of the company the subject of the scheme and setting out his or her reasons for that opinion.

Blackgold and Vibrant do not have any common directors, nor does Vibrant hold more than 30% of the voting shares of Blackgold. Accordingly, there is no requirement for this report pursuant to Section 411.

Notwithstanding the fact that there is no legal requirement to engage an independent expert to report on the Scheme, the directors of Blackgold have requested that BDO prepare this report as if it were an independent expert's report pursuant to section 411, and to provide an opinion as to whether the directors of Blackgold are justified in recommending the Scheme in the absence of a superior proposal.

We also note that the Scheme Implementation Deed dated 28 October 2016 ('**Scheme Implementation Deed**') contains a precondition that an independent expert's report be commissioned and that the expert concludes that the Scheme is in the best interest of Shareholders.

3.2 Regulatory guidance

Neither the Act nor the Regulations defines the term 'in the best interests of'. In determining whether the Scheme is in the best interests of Shareholders, we have had regard to the views expressed by ASIC in RG 111. This regulatory guide provides guidance as to what matters an independent expert should consider to assist security holders to make informed decisions about transactions.

A key matter under RG 111 that an expert needs to consider when determining the appropriate form of analysis is whether or not the effect of the transaction is comparable to a takeover bid and is therefore representative of a change of 'control' transaction.

In the circumstance of a scheme that achieves the same outcome as a takeover bid, RG 111 suggests that the form of the analysis undertaken by the independent expert should be substantially the same as for a takeover. Independent expert reports required under the Act in the circumstance of a takeover are required to provide an opinion as to whether or not the takeover bid is 'fair and reasonable'. While there is no definition of 'fair and reasonable', RG 111 provides some guidance as to how the terms should be interpreted in a range of circumstances.

RG 111 suggests that an opinion as to whether transactions are fair and reasonable should focus on the purpose and outcome of the transaction, that is, the substance of the transaction rather than the legal mechanism to effect the transaction.

Schemes of arrangement pursuant to Section 411 can encompass a wide range of transactions. Accordingly, 'in the best interests' must be capable of a broad interpretation to meet the particular circumstances of each transaction. This involves a judgment on the part of the expert as to the overall commercial effect of the transaction, the circumstances that have led to the transaction and the alternatives available. The expert must weigh up the advantages and disadvantages of the proposed transaction and form an overall view as to whether shareholders are likely to be better off if the proposed transaction is implemented than if it is not. This assessment is the same as that required for a 'fair and reasonable' assessment in the case of a takeover. If the expert would conclude that a proposal was 'fair and reasonable' if it was in the form of a takeover bid, the expert will also be able to conclude that the scheme is in the best interests of shareholders. An opinion of 'in the best interests' does not imply the best possible outcome for shareholders.

In determining whether the advantages of the Scheme outweigh the disadvantages, we have had regard to the views expressed by ASIC in RG 111. This Regulatory Guide suggests that an opinion as to whether the advantages of a transaction outweigh the disadvantages should focus on the purpose and outcome of the transaction, that is, the substance of the transaction rather than the legal mechanism to affect it.

RG 111 suggests that an expert should assess whether a premium for control will be provided to the vendor of any shares. The greater any premium for control then the greater the advantages of undertaking the transaction must be to non-associated shareholders.

RG 111 sets out that the expert should inquire whether further transactions are planned between the entity, the vendor or their associates and if any are contemplated determine if these are at arm's length. RG 111 also suggests that an expert should consider whether the transaction will deter the making of a takeover bid.

3.3 Adopted basis of evaluation

RG 111 states that a transaction is fair if the value of the offer price or consideration is greater than the value of the securities subject of the offer. This comparison should be made assuming a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length. Further to this, RG 111 states that a transaction is reasonable if it is fair. It might also be reasonable if despite being 'not fair' the expert believes that there are sufficient reasons for security holders to accept the offer in the absence of any higher bid.

Having regard to the above, BDO has completed this comparison in three parts:

- A comparison between the value of a Blackgold share including a premium for control and the value of the Cash Consideration (fairness – see Section 16 'Is the Scheme Fair?');
- An investigation into other significant factors to which Shareholders might give consideration, prior to approving the Scheme, after reference to the value derived above (reasonableness – see Section 17 'Is the Scheme Reasonable?'); and
- A consideration of whether the Scheme is in the best interests of Shareholders.

RG 111 states that if a transaction is fair and reasonable then the expert can conclude that the transaction is in the best interests of shareholders; if a transaction is not fair but reasonable an expert can still conclude that the transaction is in the best interests of shareholders; if a transaction is neither fair nor reasonable then the expert would conclude that the transaction is not in the best interests of shareholders.

RG 111 suggests that the main purpose of an independent expert's report is to adequately deal with the concerns that could reasonably be anticipated of those persons affected by the transaction.

Having regard to RG 111, we have completed our Report as follows:

- An investigation into the advantages and disadvantages of the Scheme (Sections 17.3 and 17.4);
- An analysis of any premium for control received by Blackgold (Section 14.2); and
- An analysis of any other issues that could be reasonably anticipated to concern Shareholders as a result of the Scheme (Section 17.1 and 17.2).

This assignment is a Valuation Engagement as defined by Accounting Professional & Ethical Standards Board professional standard APES 225 'Valuation Services' ('**APES 225**').

A Valuation Engagement is defined by APES 225 as follows:

'an Engagement or Assignment to perform a Valuation and provide a Valuation Report where the Valuer is free to employ the Valuation Approaches, Valuation Methods, and Valuation Procedures that a reasonable and informed third party would perform taking into consideration all the specific facts and circumstances of the Engagement or Assignment available to the Valuer at that time.'

This Valuation Engagement has been undertaken in accordance with the requirements set out in APES 225.

4. Outline of the Scheme

On 31 October 2016, Blackgold announced the Scheme, under which Vibrant proposes to acquire all of the shares in Blackgold (which it does not already own), for cash consideration of $0.045 per share. If the Scheme is approved, Vibrant will acquire 836,352,519 shares for total cash consideration of $37,635,863.

As at the date of this report, Blackgold has 888,003,622 ordinary shares on issue, of which Vibrant owns or controls a total of 51,651,103 ordinary shares, representing 5.8% of the Company's issued capital.

The key conditions which must be satisfied or waived prior to the implementation of the Scheme are set out below:

- The independent expert concludes that the Scheme is in the best interests of Shareholders;
- The Scheme is approved by Shareholders by the majorities required under section 411(4)(a) of the Act; and
- The Court approves the Scheme in accordance with section 411(4)(b) of the Act.

We note that during the exclusivity period, Blackgold must notify Vibrant of any competing proposals. If the Company enters into a binding agreement which it considers to be a superior proposal to the Scheme, Blackgold may terminate the Scheme by giving notice of five clear business days to Vibrant. During this five day notice period, Vibrant may submit a counterproposal which provides at least an equivalent outcome for Blackgold Shareholders.

5. Profile of Blackgold

5.1 History and overview

Blackgold was incorporated as a public company limited by shares on 8 July 2010 and was then listed on the Australian Securities Exchange (**'ASX'**) on 22 February 2011. The Company is a producer of thermal coal which is sold for industrial power generation to power plant customers in Shanghai. The Company currently owns four underground thermal coal mines. Blackgold's main activities include coal development, mining, transport and trade in Chongqing, China.

5.2 Operations

Set out below is a brief description of each of Blackgold's operating segments. We note that for financial reporting purposes, the Company treats the mining fees as a separate operating segment, however for valuation purposes the mining fees have been included in the discounted cash flow of the Caotang mine as detailed in section 10.1.

5.2.1 Coal Mining Business

Blackgold's coal mining operations cover the sale of extracted coal from its own two currently operating mines. For reporting purposes, each mine is classified as a separate Cash Generating Unit **('CGU')** and are all included in the coal mining segment. As outlined above, we have also included the mining fees as a part of the mining business when assessing the value of the mines (**'Coal Mining Business'**).

Set out below is a brief description of each of the Company's mines.

Heiwan

Chongqing Guoping Heiwan Coal Mine Resources Development Co Ltd owns and operates the Heiwan Mine (**'Heiwan'**). Heiwan has been in production since 1996. The mine is located 27 kilometres **('km')** northeast of Fengjie, approximately 42km by road from the town centre and approximately 35km from the port site on the Yangtze River. The mining permit covers a total area of 3.34 km^2.

Caotang

Chongqing Caotang Coal Mine Resources Development Co Ltd owns and operates the Caotang Mine, which has been in production since 2005 **('Caotang')**. Caotang has a mining area of approximately 9.1km^2 and is located 14km north east of Fengjie County town, approximately 33km by road from the town centre and approximately 25km from the port on the Yangtze River.

We note that despite the mining fees being presented as a separate operating segment for reporting purposes, the fees relate to the share of profits from sub-contracted mine operators (business partners) operating at Caotang. The revenue arising from the sub-contracting mining is recognised at the contractual rates as the coal is excavated by the subcontractor. The risks and rewards of ownership of the production rights are passed to the sub-contractor upon signing of the sub-contractor agreement.

Changhong

Qijiang Changhong Coal Industry Co Ltd was acquired by Blackgold on 23 September 2011 and operates the Changhong Coal Mine **('Changhong')**. Changhong is located 108km south of downtown Chongqing and borders the Xishui County of Guizhou and Qijiang District of Chongqing. Changhong is approximately 62km

southeast of Qijiang town centre. It is 18km from the nearest train station and has a mining area of 0.77km^2.

Baolong

Chongqing Baolong Mining Company Ltd **('Baolong')** was acquired by Blackgold on 23 March 2011 and operates the Baolong Coal Mine. The Baolong Mine is located in the southeast of Wushan County, 17km from Baolong Town. The mining permit covers a total area of 2.87km^2. The trucking distance from the mine site to the local Baolong dock site at Putaoba is 25km. Baolong also owns an exploration licence, which covers 23.12km^2.

Further information on each of the four mines can be found in the Technical Assessment and Valuation Report prepared by Al Maynard & Associates Pty Ltd ('**AM&A**') included under Appendix 6.

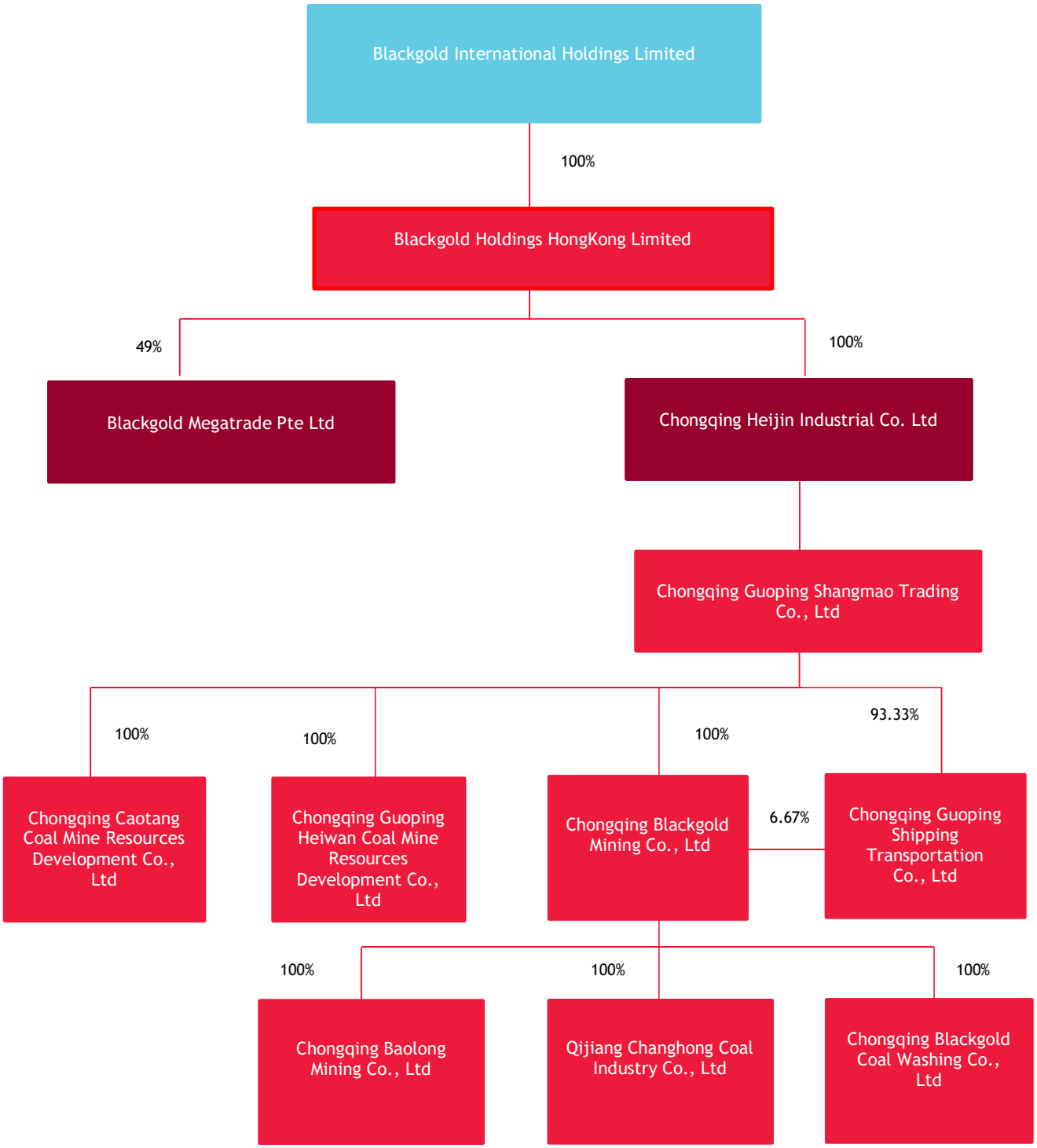
5.2.2 Shipping Business

In April 2012, Blackgold acquired all of the issued capital of Chongqing Guoping Shipping Transportation Co.,Ltd **('GPST'** or the **'Shipping Business')** from Guoping Industrial Group Ltd for consideration of RMB 155 million Chinese Renminbi ('**RMB**') (less consideration reduction). The Shipping Business generates revenue from the transport of materials such as stones, ore, cement, coal and other minerals. Revenue is recognised on a time proportion basis by reference to the percentage of journey completed at the end of each reporting period. The customers of the business are typically repeat customers, who are external parties to the Company. The Shipping Business holds co-operative agreements regarding shipping volumes with its larger customers, with pricing negotiated on each transaction. Currently the Shipping Business has eight barges under its fleet and has a maximum transport capacity of 43,000 tonnes. The Shipping Business operates its barges along the Yangtze River.

5.2.3 Coal Trading Business

The companies that make up the trading segment include the two subsidiaries, Chongqing Guoping Shangmao Trading Co., Ltd ('**Shangmao**') and Chongqing Heijin Industrial Co Ltd **('Heijin')** with the majority of revenue coming from Heijin ('**Coal Trading Business**'). The Coal Trading Business specialises in the purchase and resale of coal, where coal is primarily purchased from third party suppliers. The Company has no long term contracted buyers and each transaction is negotiated separately, depending on purchase and sales demand.

5.3 Corporate Structure



The table below outlines the subsidiaries of Blackgold.

Entities	Country of Incorporation	Principal Place of Business	Principal Activities	Ownership Interest	
				2016	2015
Blackgold Holdings HongKong Ltd	Hong Kong SAR	Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong	Investment holding	100%	100%
Chongqing Heijin Industrial Co. Ltd	People's Republic of China ('**PRC**')	No. 40, Level 5, Yongan Street, Yongan Town, Fengjie County, Chongqing Province, PRC	Investment holding and trading of coal	100%	100%
Chongqing Guoping Shangmao Trading Co., Ltd	PRC	No. 40, Yongan Street, Yongan Town, Fengjie County, Chongqing Province, PRC	General traders mainly trading of coal	100%	100%
Chongqing Baolong Mining Co., Ltd	PRC	Guangdong Middle Road, Wuxia Town, Wushan County, Chongqing Province, PRC	Mining operations	100%	100%
Qijiang Changhong Coal Industry Co., Ltd	PRC	Wanlong Village, Shihao Town, Qijiang County, Chongqing Province, PRC	Mining operations	100%	100%
Chongqing Blackgold Coal Washing Co., Ltd	PRC	No. 40, Yongan Street, Yufu Sub-district, Fengjie County, Chongqing Province, PRC	Washing and selection of coal, the storage and loading of coal, the sale of construction materials and steel materials and the manufacture of machineries business.	100%	100%
Chongqing Guoping Heiwan Coal Mine Resources Development Co., Ltd	PRC	Fourteenth Community, Xinfang Village, Caotang Town, Fengjie County, Chongqing Province, PRC	Mining operations	100%	100%

Entities	Country of Incorporation	Principal Place of Business	Principal Activities	Ownership Interest	
				2016	2015
Chongqing Caotang Coal Mine Resources Development Co., Ltd	PRC	Third Community, Baishui Village Fenhe Town, Fengjie County, Chongqing Province, PRC	Mining operations	100%	100%
Chongqing Guoping Shipping Transportation Co., Ltd	PRC	No. 24, Fengcheng, Changshou County, Chongqing Province, PRC	Shipping transportation and agency	100%	100%
Chongqing Blackgold Mining Co., Ltd	PRC	No. 40, Yongan Street, Yongan Town, Fengjie County, Chongqing Province, PRC	Investment holding	100%	100%
Blackgold Megatrade Pte Ltd	Singapore	51 Penjuru Road, #04-00, Freight Links Express Logisticentre, Singapore 609143	Commodity logistics services (currently dormant)	49%	49%

Source: Information provided by Blackgold management

Directors and Key Management Personnel

Set out below are the directors and key management of Blackgold:

Board of Directors

- Yuguo Peng, Executive Director & Chief Executive Officer (‘**CEO**’)
- Dr Chi Ho (James) Tong, Non-Executive Chairman
- Jun Ou, Executive Director,
- Zhonghan (John)Wu, Non-Executive Director
- Wei-Her (Sophia), Huang, Non-Executive Director
- Prof Guangfu Yang, Non-Executive Director

Management

- It Phong,Tin, Chief Financial Officer
- Yijiang Peng, Deputy General Manager (Enterprise Management)
- Wenming Yao, Chief Geologist

5.4 Significant Corporate Events

On 1 March 2011, the Company announced it had entered into a Heads of Agreement to acquire a 100% interest in Chongqing Yihua Mining Company Ltd which was the previous owner of the Baolong mine. The consideration paid for the acquisition was RMB80 million.

On 23 September 2011, the Company announced it had entered into a share transfer agreement to acquire a 100% interest in Qijiang Changhong Coal Industry Co Ltd for consideration of RMB98 million.

On 15 February 2012, Blackgold announced it had entered into a share sale agreement to acquire the Shipping Business for consideration of RMB155 million in cash.

On 7 February 2014, the Company announced the signing of an arms-length, indicative, non-binding term sheet with a China-based investor for a convertible bond issue to raise up to $12 million US Dollars ('**US$**'). The proceeds were to be used for funding mine acquisitions, capital expenditure and working capital.

On 19 November 2014, the Company announced it had entered into a binding term sheet with Vibrant for a 25 million Singapore Dollars ('**S$**') convertible bond issue ('**Convertible Bond**') under which:

- Blackgold issued convertible bonds to Vibrant's wholly owned subsidiary, LionHeart Holding Group Corp ('**LionHeart**'), with a total face value of S$25 million; and
- Blackgold granted LionHeart the right to nominate a Singapore Exchange ('**SGX**') mainboard listed entity to purchase the Company's Hong Kong subsidiary under a transaction that would result in Blackgold's assets being listed on SGX mainboard and Blackgold's shareholders holding shares traded on the SGX.

The Convertible Bond is:

- Unsecured and bears interest at 7.5% per annum; and
- Convertible at $0.10 per share if a sale and purchase agreement is not entered into between Blackgold and an SGX listed within four months or a reverse takeover is not executed within 18 months.

Proceeds raised under the bond issue were to be used for acquisitions and to supplement existing working capital. At the time of issuing the Convertible Bond, both parties expressed their expectation for a reverse takeover of Blackgold to occur by no later than 18 May 2016.

On 31 March 2015, Blackgold entered into a conditional Sale and Purchase Agreement ('**SPA**') with Matex International Limited ('**Matex**'). Matex agreed to purchase Blackgold for a proposed transaction price of up to S$475 million, subject to adjustments. Execution of the SPA was following Blackgold and Matex entering a Heads of Agreement ('**HOA**') on 31 December 2014.

Blackgold continued to update the market through its quarterly activities report which outlined that Matex was continuing with its due diligence in relation to the acquisition. However, on 1 April 2016, the Company announced that the parties to the SPA did not extend the long-stop date beyond 31 March 2016 and therefore the SPA lapsed.

On 19 May 2016, the Company announced that it had extended the completion end date of the Convertible Bond to 18 May 2017.

On 13 February 2017, Blackgold announced that the completion end date had been extended by at least three months to 18 August 2017.

5.5 Historical Statement of Financial Position

Statement of Financial Position	Audited as at 31-Oct-16 $'000	Audited as at 31-Oct-15 $'000	Audited as at 31-Oct-14 $'000
CURRENT ASSETS			
Cash and cash equivalents	13,315	18,319	15,103
Held to maturity investments	-	7,389	17,553
Trade & other receivables	109,179	225,824	86,730
Amounts owing from related party	70	-	-
Inventories	6,625	1,894	1,259
TOTAL CURRENT ASSETS	129,189	253,426	120,645
NON-CURRENT ASSETS			
Investment accounted for using equity method	375	431	392
Other financial assets	3,884	4,434	3,706
Property, plant and equipment	69,710	105,145	92,683
Land use rights	83	98	86
Mine development	148,554	201,567	153,730
Intangible assets – goodwill	2,181	2,489	2,081
Intangible asset - other	1,307	2,235	2,489
TOTAL NON-CURRENT ASSETS	226,094	316,399	255,167
TOTAL ASSETS	355,283	569,825	375,812
CURRENT LIABILITIES			
Trade and other payables	24,574	150,963	98,116
Amount owing to a related party	622	641	8,071
Amount owing to an associate	264	93	227
Borrowings	102,359	112,714	59,563
Financial liabilities	21,096	19,944	-
Deferred consideration	-	-	433
Provision for taxation	3,738	4,053	3,553
TOTAL CURRENT LIABILITIES	152,653	288,408	169,963
NON-CURRENT LIABILITIES			
Borrowings	-	5,329	-
Provision for restoration	2,036	1,775	1,392
Deferred tax liabilities	1,980	2,588	2,438
TOTAL NON-CURRENT LIABILITIES	4,016	9,692	3,830
TOTAL LIABILITIES	156,669	298,100	173,793
NET ASSETS	198,614	271,725	202,019
EQUITY			
Share capital	65,363	65,363	65,363

Statement of Financial Position	Audited as at 31-Oct-16 $'000	Audited as at 31-Oct-15 $'000	Audited as at 31-Oct-14 $'000
Retained earnings	127,656	169,852	136,250
Merger deficit reserve	(28,186)	(28,186)	(28,186)
Statutory reserve	4,368	3,841	3,332
Foreign currency translation reserve	29,413	60,766	25,171
Options reserve	-	89	89
TOTAL EQUITY	198,614	271,725	202,019

Source: Blackgold's audited financial statements for the years ended 31 October 2016, 31 October 2015 and 31 October 2014

We note the following in relation to Blackgold's historical financial position.

- Cash and cash equivalents is predominantly made up of cash held in Chinese Renminbi. Cash and cash equivalents increased from $15.1 million at 31 October 2014 to $18.32 million at 31 October 2015 as a result of a drawdown of borrowings of $112.8 million, which was partially offset by repayment of borrowings of $68.1 million as well as net cash outflows from operating activities of $59.8 million. Cash then decreased to $13.3 million at 31 October 2016 as a result of the repayment of short term borrowings of $104.6 million, this was partially offset by net cash inflows of $5.9 million from operating activities.
- The held to maturity investments of $7.3 million as at 31 October 2015 relate to fixed deposits held with a licensed bank. These amounts are pledged to the licensed bank as security for banking facilities granted to Blackgold.
- Trade and other receivables of $109.2 million at 31 October 2016 include amounts due from customers for goods sold and services performed in the ordinary course of business. The balance mainly comprises Chinese Renminbi denominated trade receivables.
- Other financial assets of $3.9 million at 31 October 2016 relate to Blackgold's subsidiary Heijin's partnership with China Minsheng Banking Corp Ltd to incorporate Guizhou China Energy Investment Management Centre ('**Guizhou China Energy**'). Heijin's investment incorporates approximately 0.29% interest in Guizhou China Energy. The investment is accounted for as an available-for-sale financial asset, however due to the lack of marketability of the shares the Company deemed it too difficult to fair value the shares, therefore the investment was stated at cost.
- Property, plant and equipment of $69.7 million at 31 October 2016 mainly comprises plant and machinery of $49.4 million as well as vessels of $16.6 million which are used in the Shipping Business. The decline between 31 October 2015 and 31 October 2016 mainly relates to foreign exchange differences, depreciation expenses and impairment losses. The net impairment loss on property, plant and equipment for the year ended 31 October 2016 was $14.5 million. The impairment losses on property, plant and equipment (net of foreign exchange differences) for the year ended 31 October 2014 was $6.5 million. This was later reversed by net reversals of prior period impairment of $3.3 million for the year ended 31 October 2015. Impairments to property, plant and equipment were on the basis of a decline in global coal prices causing the coal producing assets to be impaired. The reversal of impairment charges was based on the

findings of an independent valuation report commissioned by the Company which estimated the value in use of Blackgold's coal producing assets.

- Mine development assets increased from $153.7 million at 31 October 2014 to $201.6 million at 31 October 2015 as the Company continued to invest in mine development expenditure. At 31 October 2016 this balance had decreased to $148.6 million mainly as a result of amortisation over the period and impairment losses recognised. Of this $148.6 million at 31 October 2016, the mine infrastructure comprises $101.2 million with $39.4 million relating to mining rights. Mine development assets were impaired by $34.7 million during the year ended 31 October 2016, with the basis for the impairment per the Company's audited financial statements being a decline in global coal prices. We note that coal prices have increased during the year however there has been a declining trend in previous years. The Company recorded an impairment reversal of $14.0 million at 31 October 2015 as a result of the independent valuation report commissioned by the Company.
- The goodwill included under intangible assets arose from the acquisition of the Shipping Business in 2012.
- The other intangible assets relates to the Shipping Business' customer base and its Waterway Transportation Permit which allows the Shipping Business to transport materials to its customers.
- Trade and other payables represents the liabilities for goods and services received by the entity that remain unpaid at the end of the reporting period and are primarily denominated in Chinese Renminbi. The Company's normal credit terms range between 30 and 90 days.
- The Company's borrowings at 31 October 2016 of $102.4 million comprises of secured borrowings obtained from China Minsheng Banking Corp and Hua Xia Banking Corp, both of which are licensed banks in China. At 31 October 2016, these loans have been classified as current and are therefore payable within the next 12 months. The effective interest rate of the Company at 31 October 2016 for the above borrowings is 5.28%. The borrowings are secured against the Company's vessels, mining rights and the equity interest in some of Blackgold's subsidiaries. Blackgold's borrowings are also subject to banking covenants, which are being met at 31 October 2016.
- The financial liabilities of $21.1 million at 31 October 2016 represent convertible bonds issued by Blackgold on 18 November 2014. The face value of the convertible bonds was $20.4 million at 31 October 2016 which were issued pursuant to the Company entering into a binding term sheet agreement with Vibrant and Blackgold Holdings Hong Kong Limited ('**BHHK**') which allowed LionHeart, a subsidiary of Vibrant, the right to nominate a Singapore Exchange listed entity to acquire the issued capital of BHHK via a reverse takeover. Subsequent to 31 October 2016, the term of the convertible bonds were extended from 18 May 2017 to 18 August 2017.
- The merger deficit reserve of $28.2 million relates to the difference between the purchase consideration paid and the issued capital of the subsidiaries acquired as part of the group restructuring during 2009 and 2010.

5.6 Historical Statement of Profit or Loss and Other Comprehensive Income

Statement of Profit or Loss and Other Comprehensive Income	Audited for the year ended 31-Oct-16 $'000	Audited for the year ended 31-Oct-15 $'000	Audited for the year ended 31-Oct-14 $'000
Revenue	350,288	419,401	336,082
Cost of sales	(325,255)	(387,053)	(293,205)
Gross profit	25,033	32,348	42,877
Other income	7,433	12,371	6,826
Reversal of restoration provision	-	-	931
	32,466	44,719	50,634
Changes in fair value of financial liabilities	989	2,659	-
Distribution and marketing	(1,454)	(2,779)	(4,449)
Administrative expenses	(5,771)	(8,378)	(8,135)
Other expenses	(8,373)	(4,762)	(1,925)
Finance costs	(9,751)	(11,166)	(7,885)
Impairment of non-current assets	(49,209)	(4,126)	(21,455)
Reversal of impairment of non-current assets	-	18,881	-
Share of P&L in associate using equity method	(57)	39	(18)
Profit before income tax expense	**(41,160)**	**35,087**	**6,767**
Income tax expense	(598)	(976)	(1,800)
Profit after taxation	**(41,758)**	**34,111**	**4,967**
Other Comprehensive Income/(expenses)			
Net of Tax: Foreign Currency Translation Exchange Differences	(31,353)	35,595	12,734

Source: Blackgold's audited financial statements for the years ended 31 October 2016, 31 October 2015 and 31 October 2014

We note the following in relation to Blackgold's historical statement of profit or loss and other comprehensive income:

- Profit after tax for the year ended 31 October 2015 amounted to $34.1 million, which was an increase on the previous financial year of $4.96 million. The majority of this was a result of a net impairment reversal of the mine development and property plant and equipment of $18.9 million. The Company's loss after tax for the year ended 31 October 2016 was $41.8 million, which was mainly due to an impairment of non-current assets of $49.2 million. We also note that for the year ended 31 October 2014 there was an impairment write down of $21.5 million. Excluding the impairment for the year ended 31 October 2014 and the subsequent reversal for the year ended 31 October 2015, the profit figures between periods would be broadly comparable.
- For reporting purposes, the Company has identified four operating segments, being coal mining, coal trading, mining fees and shipping. Below is the breakdown of the total revenue and reportable profits before tax per operating segments for the years ended 31 October 2014, 31 October 2015 and 31 October 2016.

Year ended 31 October 2016	Coal Mining	Coal Trading	Mining Fees	Shipping	Others
Revenue from external customers	5,917	313,439	22,223	8,709	-
Inter-segment revenue	6,104	-	-	-	179
Reportable Segment Revenue	12,021	313,439	22,223	8,709	179
Reportable segment profit/(loss) before taxation	**(47,004)**	**365**	**16,283**	**1,395**	**(135)**
Year ended 31 October 2015	Coal Mining	Coal Trading	Mining Fees	Shipping	Others
Revenue from external customers	1,699	378,900	28,084	10,717	1
Inter-segment revenue	19,645	1,114	-	-	409
Reportable Segment Revenue	21,344	380,014	28,084	10,717	410
Reportable segment profit/(loss) before taxation	**11,205**	**(740)**	**21,748**	**2,821**	**82**
Year ended 31 October 2014	Coal Mining	Coal Trading	Mining Fees	Shipping	Others
Revenue from external customers	6,205	291,686	23,923	14,181	87
Inter-segment revenue	20,766	323	-	1,622	276
Reportable Segment Revenue	26,971	292,009	23,923	15,803	363
Reportable segment profit/(loss) before taxation	**(17,749)**	**2,175**	**19,510**	**4,996**	**(45)**

- Revenue has decreased $336.1 million for the year ended 31 October 2014 to $419.4 million for the year ended 31 October 2015, mainly on the back of an increase in revenue from coal trading from $291.7 million to $378.9 million over the respective periods. Revenue decreased from $419.4 million for the year ended 31 October 2015 to $350.3 million for the year ended 31 October 2016, principally because of a decrease in Coal Trading from $378.9 million to $313.4 million over the respective periods.
- We note from the above that coal trading, being the purchase and resale of coal is Blackgold's most significant revenue generator. This operating segment operates on a high volume, low margin basis with profits highly dependent on market performance of coal over the period.
- As discussed in our analysis of the Company's statement of financial position, the impairment expenses predominantly relate to the impairment of mine development assets and property, plant and equipment. These assets were impaired as a result of declining coal prices.
- The Company recorded a reversal of the impairment of $18.9 million for the year ended 31 October 2015 on the basis of an independent valuation report commissioned by the Company.

5.7 Capital Structure

The share structure of Blackgold as at 21 December 2016 is outlined below:

	Number
Total ordinary shares on issue	888,003,622
Top 20 shareholders	859,002,803
Top 20 shareholders - % of shares on issue	96.73%

Source: Blackgold share register

The ordinary shares held by the most significant shareholders as at 21 December 2016 are detailed below:

Name	Number of Ordinary Shares Held	Percentage of Issued Shares (%)
Lucky Magic Enterprises Limited	544,500,000	61.32%
BNP Paribas Noms Pty Ltd	55,838,348	6.29%
HSBC Custody Nominees (Australia) Limited	54,133,147	6.10%
Singapore Enterprises Pte Ltd (including custodian shares)	51,651,103	5.82%
Subtotal	706,122,598	79.52%
Others	181,881,024	20.48%
Total ordinary shares on Issue	**888,003,622**	**100.00%**

Source: Blackgold share register

The range of shares held in Blackgold as at 21 December 2016 is as follows:

Range of Shares Held	Number of Ordinary Shareholders	Number of Ordinary Shares	Percentage of Issued Shares (%)
1 - 1,000	15	255	0.00%
1,001 - 5,000	43	137,478	0.02%
5,001 - 10,000	255	2,293,750	0.26%
10,001 - 100,000	148	5,354,595	0.60%
100,001 - and over	73	880,217,544	99.12%
TOTAL	**534**	**888,003,622**	**100.00%**

Source: Blackgold share register

6. Profile of Vibrant

Vibrant (formerly known as Freight Links Express Holdings Limited) was incorporated in 1986 and is a logistics, real estate and financial services group headquartered in Singapore. The company was listed onto the Singapore Stock Exchange in 1995. Vibrant offers integrated logistics services including international freight forwarding, chemical storage and logistics, warehousing and distribution and record management. Vibrant is also engaged in real estate business in property management, development and investment. Its financial services include fund management, financial leasing services and asset and trust management.

The net assets of Vibrant as at 31 January 2017 was S$442 million which includes S$52 million in cash and cash equivalents.

As at the date of the announcement of the Scheme, Vibrant holds a relevant interest of 5.8% of the shares in Blackgold. Vibrant's Blackgold shares are held in its wholly owned subsidiary Singapore Enterprises Pte Ltd.

7. Economic analysis

7.1 China

The Chinese economy has grown at just shy of 7% throughout the first half of 2016, which contributed to around 25% of global growth. Investment in fixed assets increased by 8%, retail sales of consumer goods by 10% and the profitability of industrial enterprises increased to 8.5%. It is expected that the Chinese economy will meet its growth target for 2016 of between 6% and 7%.

Over the first eight months of 2016, China's consumer price index has increased by 2% year-on-year, and the year-on-year decline of the producer price index continued to moderate.

Growth within the Chinese economy has improved steadily throughout the year. During the first half of 2016, final consumption expenditure contributed to over 70% of gross domestic product growth. The tertiary industry accounted for around 55% of gross domestic product, while energy consumption per unit of gross domestic product declined by approximately 5%.

The Chinese government's focus remains on maintaining stable fiscal policy, along with implementing prudent monetary policy. This should create an enabling monetary and financial environment for structural reforms while managing aggregate demand. Through the use of various instruments Chinese policy makers will look to keep banking liquidity at a satisfactory level in order to guide the credit and total social financing growth at a steady rate.

China will carry out reforms of all types in order to enhance the quality and efficiency of economic growth. The interest rate liberalisation and the reform of the RMB exchange rate regime will be further promoted. The focus is to promote supply-side structural reforms aimed at reducing excess capacity in coal, steel, and other industries, lowering corporate leverage and dealing with piling debt by way of market based approaches. This should allow for reduced vulnerabilities and mitigate risks, with the aim that the medium to long-term growth potential will be lifted.

7.2 Australia

The Australian economy is continuing its transition following the mining investment boom, with some slowing in the year-ended growth rate likely, before it picks up again. Further increases in exports of resources are expected as completed projects come on line. The outlook for business investment remains subdued, although measures of business sentiment remain above average. The large decline in mining investment is being offset by growth in other areas including residential construction, public demand and exports. Although household consumption has been growing, this growth appears to have slowed in recent times. Measures of household and business sentiment remain above average.

Labour market indicators continue to be somewhat mixed. The unemployment rate declined in 2016, although some measures of labour underutilisation have remained stagnant. There continues to be considerable variation in employment outcomes across the country. Part-time employment has been growing strongly, but employment growth overall has slowed. The forward-looking indicators point to continued expansion in employment in the near term.

The inflation rate remains low in Australia and this is expected to remain the case for some time given very subdued growth in labour costs and very low cost pressures elsewhere in the world.

Commodity prices

Commodity prices have risen over recent months, following significant declines over the past few years. The higher commodity prices have supported a rise in Australia's terms of trade, although they remain much lower than they have been in recent years.

Prices tend to rely on demand, in particular from the Chinese industrial sector, along with the response to changes in supply. Due to low oil prices, producers of bulk commodities have in general been reducing their cost of production, as oil is an important input for the transportation of these commodities. However, the ability for these producers to keep on reducing their costs is unlikely and may lead to firms exiting the market.

Financial markets

Financial markets have continued to function effectively. Funding costs for high-quality borrowers remain low and monetary policy around the globe remains accommodative. Government bond yields have begun to rise, however they are coming off a very low base.

Interest rates

Low interest rates are supporting domestic demand. Supervisory measures have strengthened lending standards in the housing market although growth in lending for housing has slowed over the past year. Turnover in the housing market has also declined and the rate of increase in housing prices is lower than it was a year ago. Some markets have strengthened recently but an influx of apartments onto the property market is expected over the next couple of years, particularly in the eastern capital cities. Growth in rents is the slowest for some decades. The cash rate remains unchanged at 1.50%.

Australian dollar

The Australian dollar has appreciated recently, despite its noticeable declines against the US dollar over the past year and could do even further as a result of the US election. This in part reflects rises in commodity prices, along with monetary developments globally having a positive impact. Due to current economic circumstances, a strengthening exchange rate could complicate the adjusting economy.

Source: www.rba.gov.au Statement by Philip Lowe, Governor: Monetary Policy Decision 6 December 2016 and 1 November 2016

8. Industry analysis

8.1 Coal Industry Overview

Coal deposits are found below the earth's surface with the quality of a coal deposit determined by the length of time in formation, commonly known as its 'organic maturity', in addition to the temperature and pressure at which the deposit is formed. The rank of coal refers to the physical and chemical properties that coals of different maturities possess. Lower rank coals such as Lignite generally possess a much lower organic maturity, have a soft texture, a dull earthly appearance and are characterized by high moisture levels and low energy (carbon) content. Higher ranked coals such as Anthracite, which is the highest ranking coal, are harder, stronger, contain less moisture, and produce more energy.

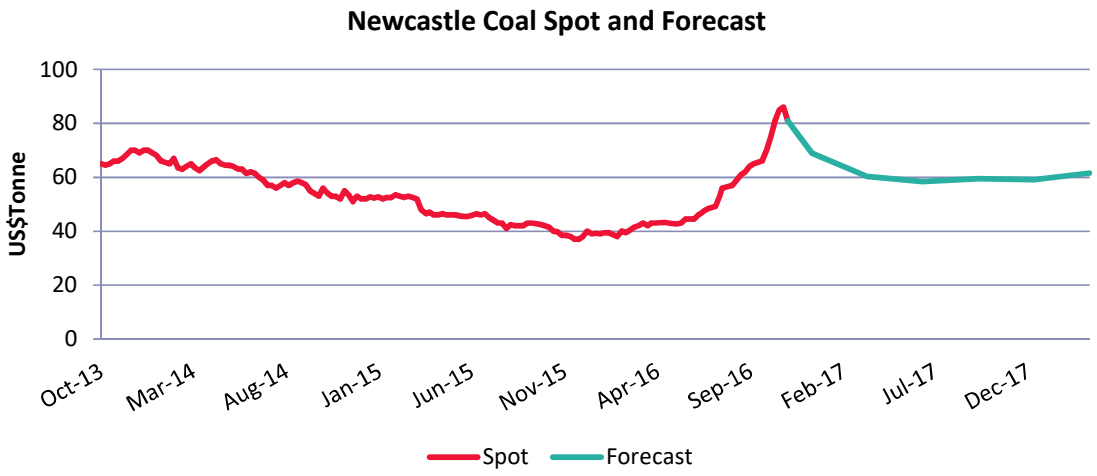
There are two methods generally used to mine coal, being opencast mining and underground mining, with the choice of extraction largely determined by the geology of the coal deposit.

The two major coal types are coking coal and thermal coal. Coking coal is used for the production of metallurgical coke, which is used as a reductant in the production of both iron and steel. It is primarily used because of its high carbon content and coking characteristics, however it is also used for the smelting and casting of base metals. Of the different types of coking coal, hard coal is the most valuable as it produces the highest quality coke. Semi soft coking coal and Pulverised Coal Injection are used more in blending with hard coking coal to be used as an auxiliary fuel source to increase the effectiveness of blast furnaces.

Thermal coal, also referred to as steaming coal generally contains less carbon than coking coal and consequently cannot be used in the production of steel. It is therefore primarily used as an energy source for coal fired power plants. The major producers of thermal coal are China, USA and India, with the largest importers being China, Japan and South Korea.

8.2 Coal Price Trends

Historical coal prices and forecast prices to 2017 are illustrated in the chart below.



Source: Bloomberg

The coal mining industry has faced challenges due to global trends in coal demand and production hurdles over the past three years, as depicted in the pricing chart above. Coal prices experienced a downward trend over the period from 2013 to 2015 as a result of global production and supply consistently exceeding global demand.

For the majority of the past decade, coal prices have been supported by increasing demand for energy and steel inputs from developing economies. These higher prices drove the development of new coal production throughout the world. The consequent increase in global capacity has since overtaken global demand, particularly throughout the steaming coal markets. A major contributor to this is thermal coal being substituted for natural gas throughout the United States.

However, more recently, coal prices have increased throughout 2016, from a low of US$38 per tonne on 15 February to a high of US$86 per tonne on 14 November. The increase in coal prices is attributable to China cutting back its domestic coal production, which has reduced global supply.

Coal prices are projected to initially decline, followed by a flattening out and a steady incline from June 2017 to the first quarter of 2018.

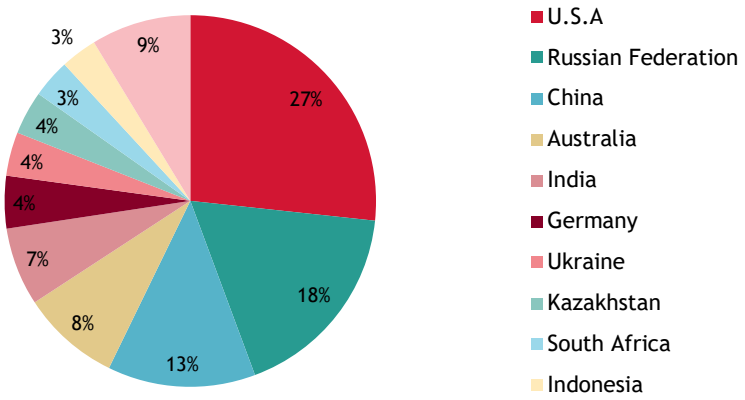
Industry performance is expected to improve over the next few years due to an increase in production levels, increased global demand and steadier coal prices. Improving economic conditions and growing demand for coal from emerging economies such as India should help supplement a mild recovery. This may be partially offset by the clean-air push throughout China which is likely to result in natural gas demand over the next five years, in turn, resulting in reduced coal demand. The regulation risks facing Chinese coal producers may impact global production going forward.

Source: IBIS World

8.3 Coal Reserves by Country

As depicted in the graph below, the United States account for 27% of global coal reserves as at December 2015. This is followed by Russia (18%) and China (13%).

Global Coal Reserves by Country 2015



Source: Bloomberg

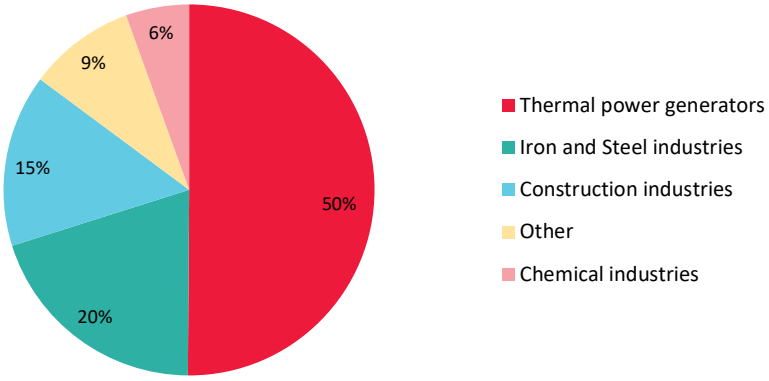
Although some of these countries have significant levels of reserves, accessing these resources and gaining the capital to establish large-scale mining operations can be difficult with associated high costs. Coal is being viewed as out dated in some circumstances and an inefficient way to produce power due to the environmental effects associated with the burning of coal. As a result, China is the world's largest coal producer and user, yet they only account for 13% of global coal reserves behind the United States and Russia.

8.4 Chinese Coal Industry

Companies within the thermal power generation industry form the majority of the market of the coal mining industry throughout China. The rapid economic development throughout China over recent times has led to increased demand for electricity, thus creating greater demand for steaming coal.

The chart below illustrates that approximately half of the coal market in China comes from thermal power generators, with 20% attributable to iron and steel industries.

Major Market Segmentation



Source: IBIS World

Regulations and Policies

The National Development and Reform Commission (‘**NDRC**’) regulate the industry with coal mining companies having to comply with the coal law and the mineral resources law. Industry regulations are tightening, with strict requirements being introduced on waste recycling, safety procedures, environmental protection and energy efficiency.

Hundreds of Chinese coal companies have recently been forced to shut down by China’s state planner for violating environmental and safety regulations. The NDRC inspected more than 4,600 coal mines and as a result have withdrawn safety certificates from 28 coal mines and forced another 286 coal mines to halt production. Along with these safety breaches there were violations of energy consumption and quality standards. This has prompted the Chinese Government to monitor ageing mills and mines to ensure compliance with new pollution and safety standards. China’s coal and steel industries are considered two of the biggest sources of pollution in the country, with the government targeting coal output cuts of 500 million tonnes in the next three to five years.

In April 2016, China placed restrictions on the number of annual working days at its coal mines due to the drive towards cleaner air. This restriction meant that coal mines are only able to produce 274 days of the year, rather than the previous number of 330 days per year. As a result coal supply has reduced and in turn has seen a rise in global coal prices of late, also leading to an increase in industry revenue. China’s aim to reduce the emissions intensity of its electricity generators will continue to limit global coal supply.

The NDRC provided an update in December 2016, with a focus of removing over capacity of coal producers by prudently winding up enterprises in an organised way based on its classifications. There has also been a push to develop alternative energy sources including hydropower, wind and photovoltaic power and solar thermal energy. Specific to the coal industry, the NDRC aims to restrict coal resource development in the east of the China, limit it in the central and north-eastern regions and optimise it in the west. Blackgold’s mines are located in the Chongqing area which is in the south west of China.

Another focus of the NDRC is to achieve clean and efficient coal utilisation through implementing the upgrading action plan for energy conservation and emissions reduction in coal based power generation. There has also been a continuing push to improve mine safety to prevent and control mine accidents.

The NDRC has also released a statement reversing its initial decision to restrict the number of operating days from 330 days to 274 days for those producers with "advanced capacity" that comply with work safety standards and relevant laws.

Industry Revenue

The industry has undergone substantial change over the past five years. Restructuring has resulted in many mergers, acquisitions and exits from the market, along with the Government offering smaller companies incentives to exit the industry due to environmental and safety concerns. As a result, the number of companies within the coal industry has fallen by an average of 5% per year in the five years to 2016.

Over the next five years, it is forecast that industry revenue will decrease at an annualised rate of around 7%. IBIS World expects that the amount of inexpensive imported coal in the market will grow in order to meet domestic demand, resulting in suppressed future rises in domestic coal prices.

Recent Events

On 31 October 2016, a gas explosion at a privately owned coal mine in Chongqing killed 33 workers. As a result all coal mines within the city were suspended pending fresh safety inspections. These incidents are often caused when a flame or electrical spark ignites a gas leak from the coal seam. This accident is likely to bring increased attention and scrutiny to the operations of Chinese based coal producers, which coupled with the more stringent environmental and safety restrictions, presents itself as a key risk to the sustainability of the industry.

By the end of 2016, the Chinese city group review had resulted in the closure of 344 coal mines. These mine closures enabled the achievement of its production capacity target of 23 million tonnes per year, with production totalling 20.84 million tons in 2016. More specifically, the Chongqing City region was subject to 163 coal mine closures in 2016.

Source: Bloomberg Intelligence, IBIS World and sxcoal.com (translated)

9. Valuation approach adopted

There are a number of methodologies which can be used to value a business or the shares in a company. The principal methodologies which can be used are as follows:

- capitalisation of future maintainable earnings ('**FME**')
- discounted cash flow ('**DCF**')
- quoted market price ('**QMP**')
- net asset value ('**NAV**')

A summary of each of these methodologies is outlined in Appendix 2.

Different methodologies are appropriate in valuing particular companies, based on the individual circumstances of that company and available information.

It is possible for a combination of different methodologies to be used together to determine an overall value where separate assets and liabilities are valued using different methodologies. When such a combination of methodologies is used, it is referred to as a 'sum-of-parts' ('**Sum-of-Parts**') valuation.

The approach using the Sum-of-Parts involves separately valuing each component of the company, whether it be businesses or assets and liabilities. The value of each part may be determined using different methods as described above.

We have used a Sum-of-Parts approach to valuing a share in Blackgold which incorporates the value of each of the following segments:

- Mining Business (including mining fees and resources not included in the models);
- Shipping Business; and
- Coal Trading Business.

We have cross checked the total value of Blackgold derived from the Sum-of-parts method with the QMP methodology.

9.1 Valuation approach for the Coal Mining Business

In our assessment of the value of the Coal Mining Business we have chosen to employ the Sum-of-Parts methodology, with each part being valued on the following basis:

- We have used the DCF methodology to value each of the following mines:
  - Caotang;
  - Heiwan;
  - Baolong; and
  - Changhong.
- We do not consider the FME valuation methodology to be appropriate because the mines have a finite life and do not have a track record of profits.
- In performing our valuation of the mineral assets at each of the above projects, we have relied on the Technical assessment and valuation report prepared by AM&A.
- AM&A's Technical Assessment and Valuation Report is prepared in accordance with the 'Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets 2015' ('**the Valmin Code 2015**') and is shown in Appendix 6.
- AM&A has valued the resources not included in the DCF models for each of the operating mines using the yardstick method. We have also considered the trading resource multiples of ASX listed coal exploration companies as a cross check to the AM&A valuation.

9.2 Valuation approach for the Shipping Business

In our assessment of the value of the Shipping Business we have chosen to employ the FME methodology for the following reasons:

- An FME valuation is appropriate for a business with a track record of profitability. The Shipping Business has a normalised record of profitability and therefore we consider this to be our primary

method. We have conducted our FME valuation based on an earnings before interest, taxes, depreciation and amortisation ('**EBITDA**') basis. We have conducted our FME valuation on an EBITDA basis because the comparable companies which we have considered are capital intensive, therefore depreciation and amortisation is a significant expense. We do not consider the individual depreciation and amortisation policies of the comparable companies to be relevant to our assessment of the value of the Shipping Business and have therefore removed this from the valuation and assessed FME on an EBITDA basis as opposed to an earnings before interest and tax ('**EBIT**') basis, on which FME valuations are commonly conducted. We have been provided with the forecast financial performance of the Shipping Business, which we have incorporated into our assessment of the future maintainable earnings of the business.

- We have not used the DCF valuation methodology because based on ASIC's guidance in RG 111 and Regulatory Guide 170: Prospective Financial Information ('**RG 170**') we do not consider there to be reasonable grounds for the long term forecasts of the Shipping Business. Additionally, the DCF methodology is most suitably applied to a business experiencing growth. For these reasons, we have not relied on the DCF valuation.
- The NAV approach is not an appropriate methodology to value an operating business as it does not capture the future earnings potential of that business. Therefore, we have not used the NAV approach to value the Shipping Business.

9.3 Valuation approach for the Coal Trading Business

In our assessment of the value of the Coal Trading Business we have chosen to employ the FME methodology for the following reasons:

- An FME valuation is appropriate for a business with a track record of profitability. The Coal Trading Business has a normalised record of profitability and therefore we consider this to be the most appropriate method. We have conducted our FME valuation based on an EBITDA basis as the Coal Trading Business is not a capital intensive business when compared to the coal trading companies that form the basis of our multiple. These identified comparable companies are more diversified and are more capital intensive, which means that depreciation and amortisation is a more significant expense. Therefore, we have removed the effect of this difference in businesses by assessing our FME valuation on an EBITDA basis, as opposed to an EBIT basis, on which FME valuations are commonly conducted.
- We have not been provided with the forecast cash flows of the Trading Business, therefore the DCF methodology was not used. Moreover, we understand that there are no reasonable grounds to prepare a long term forecast for the Coal Trading Business.
- The Coal Trading Business is not an asset intensive business, the value lies in the relationships that Blackgold has with its suppliers and customers. This would not be captured by the NAV approach, therefore this approach would undervalue the business and is therefore not appropriate.

9.4 Valuation of other assets and liabilities

We have valued the other assets and liabilities not used in the operations of the Shipping Business, Coal Trading Business and the Coal Mining Business using the NAV approach.

10. Valuation of the Coal Mining Business

The management of Blackgold has prepared a detailed cash flow model for each of the Caotang ('**Caotang Model**'), Heiwan ('**Heiwan Model**'), Baolong ('**Baolong Model**') and Changhong ('**Changhong Model**')

projects (collectively '**the Models**'). We have reviewed the Models and the material assumptions that underpin them. The Models have been prepared using annual post-tax nominal cash flows.

BDO has made certain adjustments to the Models where it was considered appropriate to arrive at an adjusted model for the Caotang Model ('**Adjusted Caotang Model**'), the Heiwan Model ('**Adjusted Heiwan Model**'), the Baolong Model ('**Adjusted Baolong Model**') and the Changhong Model ('**Adjusted Changhong Model**') (collectively '**the Adjusted Models**'). In particular, we have adjusted the following:

- discount rates;
- inflation rates;
- forecast pricing;
- depreciation; and
- foreign exchange.

The Adjusted Model includes recommendations made by AM&A. AM&A provided independent expert advice on the reasonableness of the following assumptions and inputs within the model;

- tonnes of ore mined;
- coal quality;
- waste material handled;
- mine life;
- annual production;
- operating costs including mining, haulage, transport, barging, subcontractor production costs, general administration, distribution and marketing and contingencies;
- royalties and levies; and
- capital expenditure requirements;

BDO has undertaken an analysis of the Models which has involved:

- analysing the Models to confirm their integrity and mathematical accuracy;
- reviewing the reasonableness of the key assumptions underpinning the Models;
- calculating appropriate discount rates; and
- preparing our own Adjusted Models.

We have not undertaken a review of the cash flow forecasts in accordance with Australian Auditing Standard AUS 804 'The Audit of Prospective Financial Information' and do not express an opinion on the reasonableness of the assumptions or their achievability. However, nothing has come to our attention as a result of our procedures to suggest that the assumptions on which the Models has been based have not been prepared on a reasonable basis.

The cash flows contained in the Adjusted Models have been evaluated through analysis, enquiry and review for the purposes of forming an opinion as to the value of the Mining Business. Whilst we do not warrant that our enquiries have identified all of the matters that an audit, or due diligence and/or tax investigation might disclose, we believe that the information is reasonable for us to form an opinion as to

the value of the Mining Business and that there are reasonable grounds for the assumptions made in the Adjusted Models.

Limitations

Since forecasts relate to the future, they may be affected by unforeseen events and they depend, in part, on the effectiveness of management's actions in implementing the plans on which the forecasts are based. Accordingly, actual results may vary materially from the forecasts, as it is often the case that some events and circumstances frequently do not occur as expected, or are not anticipated, and those differences may be material.

Assumptions

The key assumptions which are specific to each project are detailed in the valuation of each mine in sections 10.1 to 10.5. Set out below are the key assumptions which are common across each of the Adjusted Models.

Inflation rate

AMA have advised that an inflation rate of between 3% and 5% should be applied to operating costs and administration expenses. Therefore we have assumed an inflation rate of 4% in our base case. We note that we have considered the consensus forecast inflation rate for China of approximately 2%, sourced from Bloomberg. However, given that AMA has provided guidance specific to each of the Caotang, Heiwan, Baolong and Changhong operating mines, we consider AMA's assessment to be more relevant than the general Chinese inflation data extracted from Bloomberg.

Taxes

Taxes have been applied to the Adjusted Models at a rate of 25%, which is the standard corporate income tax rate in China. However, Blackgold management have advised that in FY17 and FY18, Caotang, Heiwan and Changhong mines have a Government concession which allow Caotang and Heiwan to be taxed at 2.5% of self-production sales, and Changhong mine to be taxed at 3.75% of self-production sales. These concessions are obtained through an annual application and approval from tax authorities. There is no certainty that these concessions will be received in the future therefore they have only been provided for in FY17 and FY18.

Foreign Exchange rate

The cash flows in the Adjusted Models are presented in Chinese Renminbi, therefore we have converted the NPV of the each of the projects using an exchange rate of 1RMB: 0.1942AUD at 31 October 2016, being our valuation date. We have considered this in light of the current exchange rate and note that adopting a more recent exchange rate would not have a material impact on our valuation.

Depreciation and Amortisation

We have not adjusted the depreciation and amortisation rates on existing property, plant and equipment and mine development. We have adjusted the depreciation rate of costs capitalised over the forecast period for each mine to be depreciated on a depletion method over the remaining life of mine.

We note that although depreciation and amortisation are non-cash items, there is a tax effect on cash flows which will affect the DCF value of each of the projects.

Sensitivities

We have sensitised the key assumptions underpinning each of the Adjusted Models including forecast pricing, operating costs, capital expenditure and discount rates.

Environmental issues

As detailed in the Independent Technical Assessment and Valuation Report contained in Appendix 6, AM&A have declared that there are no identified material environmental liabilities and that any restoration and rehabilitation costs have been adequately provided for in the Company's financial statements.

10.1 Value of Caotang

10.1.1. Assumptions

The key assumptions which are specific to the Adjusted Caotang Model are detailed below.

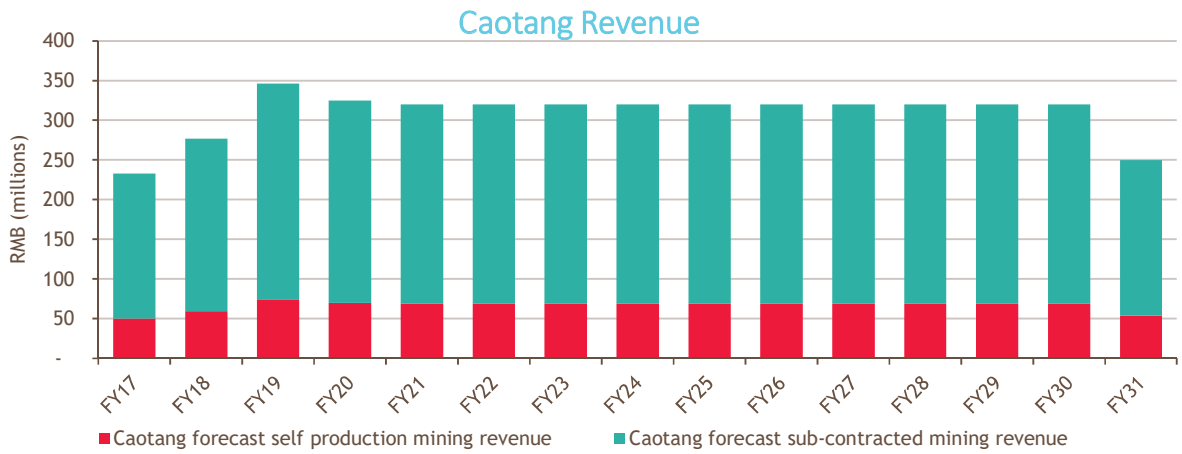
Life of Mine

The Adjusted Caotang Model includes forecast annual cash flows relating to reserves through to 2031, with production forecast to continue to 2031. AM&A have confirmed the life of mine estimate is achievable.

Mining Fees

Mining fees relate to the Company's share of profits from sub-contracted mine operators operating at the Caotang mine.

The Adjusted Caotang Model assumes that 15% of the total production at Caotang is produced by Blackgold, with 85% of production being sub-contractor output. The chart below illustrates the mining fees generated from the Caotang Mine as a proportion of total operating revenues.



Source: Adjusted Caotang Model

Forecast Pricing

Management advise that the Mining Business decides on its pricing for coal on a monthly basis. The price setting is based on current coal market conditions although not set directly against a specific index.

Therefore, we have estimated the forecast prices based on an extrapolation of Blackgold's historical prices and pricing indices in the market. We analysed the historical prices of Australia Newcastle Port Thermal Coal 5,500 kcal/kg FOB ('**Newcastle Pricing**') spot prices and plotted them against the historical prices set by Blackgold. We observe that the general trend of historical prices set by Blackgold on the coal produced from Caotang is positively correlated with the historical Newcastle Pricing. Management advise that the China Qinhuangdao Thermal Coal 5,500 kcal/kg FOB Spot Price ('**Qinhuangdao Pricing**') is also one of the metrics used in the Company's price decisions, therefore historical prices exhibit a strong correlation with the Qinhuangdao Pricing. However, there is no publicly available forecasts of Qinhuangdao Pricing, therefore we have based our forecast pricing used in the Adjusted Caotang Model on movements in the forecast Newcastle Pricing.

We have used the actual prices received by Blackgold for coal produced from Caotang during October 2016 and extrapolated them over the life of mine, making adjustments for absolute movements in the forecast Newcastle Pricing. The pricing forecasts for self-produced coal, which we have used in the Adjusted Caotang Model are set out below:

Caotang coal pricing	FY17	FY18	FY19	FY20	FY21 - FY31
Forecast price (Rmb/T)	334	331	331	311	306

Source: Adjusted Caotang Model

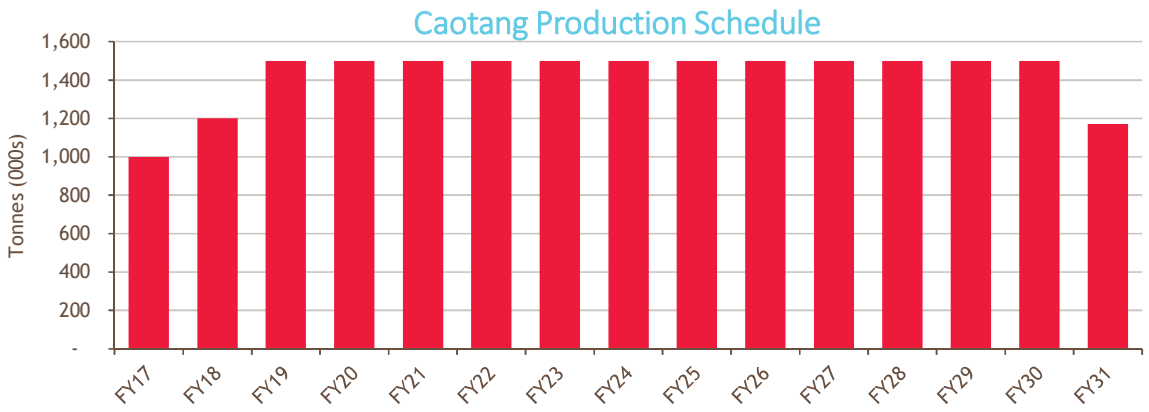
After making the above adjustments to the forecast prices received for self-produced coal at Caotang, we have adjusted the forecast per tonne price of subcontracted revenue on the basis that the contribution of mining fees to total revenue remains the same as the forecast contribution included in the Caotang Model (pre-adjustment). The pricing per tonne received on sub-contracted production in the form of mining fees are set out below:

Caotang mining fees	FY17	FY18	FY19	FY20	FY21 - FY31
Forecast price (Rmb/T)	215	213	213	200	197

Source: Adjusted Caotang Model

Mining Physicals

The charts below illustrate the technical mining assumptions used in the Adjusted Caotang Model, which have been verified by AM&A.



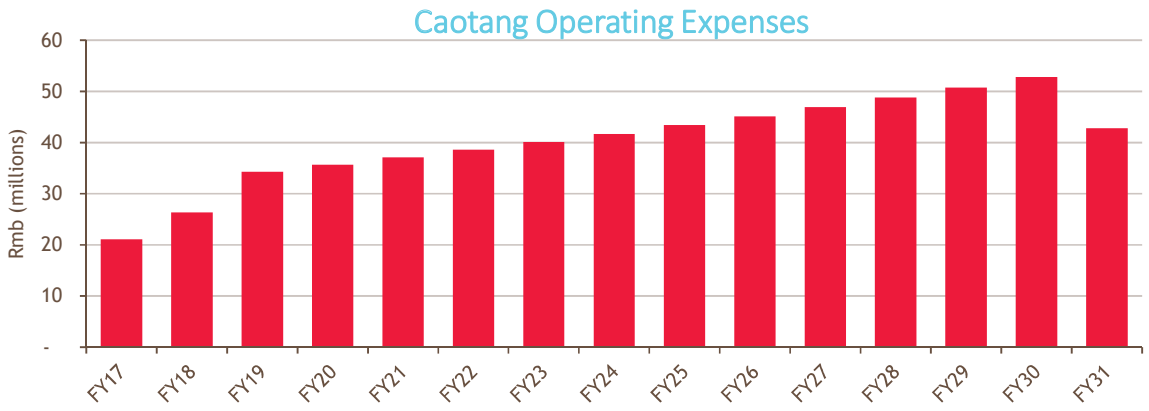
Source: Adjusted Caotang Model

AM&A have considered the production restrictions currently imposed on coal producers by the Chinese Government and consider the forecast level of production to be achievable based on current conditions.

Operating Costs

We have been provided with a per tonne cost of raw materials, salaries, electricity and water, labour protection fee, labour insurance, repair costs, miscellaneous expenses, distribution and marketing expenses. AM&A have confirmed the reasonableness of these forecast operating costs based on the site visit conducted and their analysis of historical costs. Further information on the operating costs of Caotang can be found in the Independent Technical Assessment Report in Appendix 6.

The graph below shows the forecast operating costs per annum for the life of mine, which have been verified by AM&A.

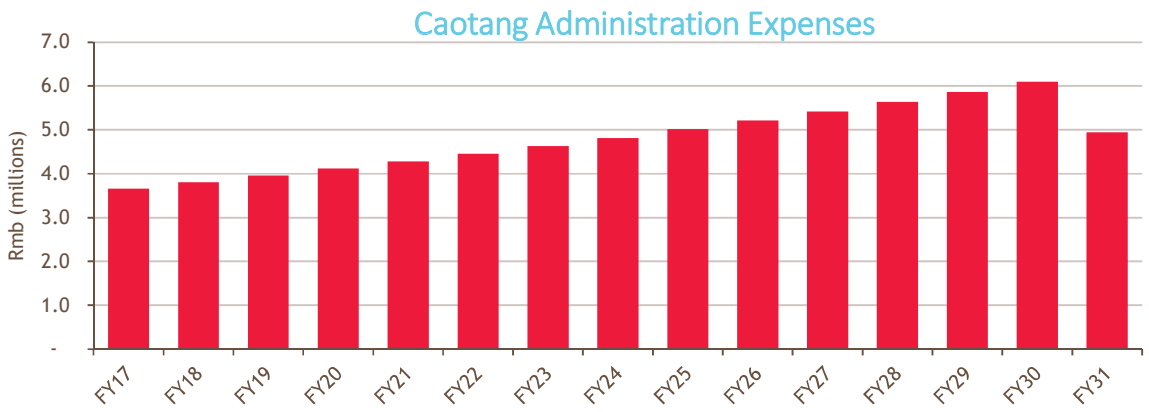


Source: Adjusted Caotang Model

Administration Expenses

Administration expenses mainly include staff salaries and related benefits, insurance, labour protection fees, entertainment, travel, communications and audit fees.

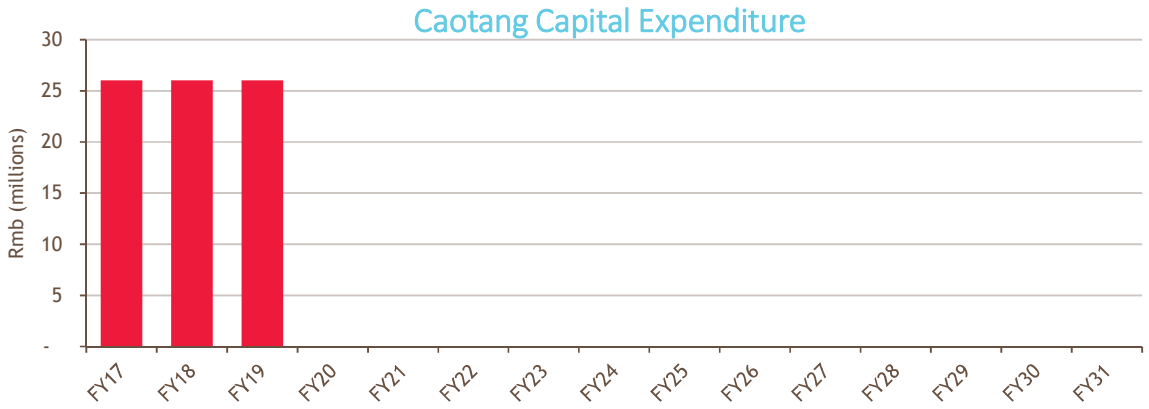
The graph below shows the forecast administration expenses per annum for the life of mine, which have been verified by AM&A.



Source: Adjusted Caotang Model

Capital Expenditure

The graph below shows the forecast capital costs per annum for the life of mine. These amounts have been confirmed by AM&A who consider the plant equipment selection and sizing to be appropriate to sustain the forecast level of production.



Source: Adjusted Caotang Model

Discount Rate

In selecting our range of discount rates we considered the following:

- the assumed capital structure of each of the operating mines;
- the Company's effective corporate tax rate;
- the risks that a coal producer in China is exposed to;
- market risk of an ASX listed coal producer;

We consider the coal industry in China to be a medium risk industry based on the fact that China is the key participant in the global coal market. However, there is currently significant uncertainty around the production restrictions and more stringent safety regulations that are being imposed by the Chinese Government.

We reviewed the weighted average cost of capital of coal producing companies listed on the ASX. A detailed description of these companies is attached as Appendix 5.

We considered the similarities of comparable companies used to estimate an approximate risk premium to be applied to the Company's projects. In particular we considered:

- the debt to equity ratios of the companies;
- the size of the operations;
- the location of the operations; and
- the diversity of operations.

The post-tax nominal discount rate applied to the Adjusted Caotang Model is 15%. A detailed consideration of how we arrived at the adopted discount range is shown in Appendix 5.

10.1.2. Sensitivity analysis

We have analysed the key assumptions to the Adjusted Caotang Model and have prepared sensitivities on the net present value ('**NPV**') of the project. These sensitivities have been prepared to assist Shareholders in considering the potential impact on the value of Caotang if our base case assumptions change.

	Sensitivity analysis				
Caotang	NPV ($m)	NPV ($m)	NPV ($m)	NPV ($m)	NPV ($m)
Flex	Coal Price	Production mined	Production rate	Operating costs	Capital costs
-10%	209.78	213.34	218.37	240.14	238.48
-8%	215.53	218.17	222.36	239.60	238.27
-6%	220.80	222.99	226.17	239.06	238.06
-4%	226.47	227.81	229.98	238.52	237.86
-2%	232.25	232.62	233.78	237.98	237.65
0%	237.44	237.44	237.44	237.44	237.44
2%	243.13	242.26	241.06	236.90	237.24
4%	248.82	247.07	244.67	236.37	237.03
6%	254.24	251.87	248.24	235.83	236.82
8%	259.93	256.67	251.63	235.29	236.61
10%	265.39	261.47	255.02	234.75	236.41

Source: BDO analysis

Caotang	Discount rate sensitivity analysis						
Discount rate (%)	12%	13%	14%	15%	16%	17%	18%
NPV ($m)	276.11	262.15	249.30	237.44	226.48	216.33	206.92

Source: BDO analysis

Caotang	Inflation rate sensitivity analysis						
Inflation rate (%)	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%
NPV ($m)	240.54	239.55	238.51	237.44	236.33	235.17	233.98

Source: BDO analysis

We note the following from the sensitivities included in the table above:

- Given the life of mine extends to 2031, the value of Caotang is most sensitive to changes in the coal price with a 10% increase in pricing causing an increase in the NPV to $265 million and a 10% decrease in pricing causing a decrease in the NPV to $210 million; and
- Similarly, given the long life of mine, the NPV is highly sensitive to changes in the discount rate.

10.1.3. Scenario analysis

AM&A have considered the historical costs and production of Caotang and have concluded that based on current information the technical assumptions underpinning the Adjusted Caotang Model are reasonable, therefore there is nothing that would suggest that the Company is not able to achieve the forecast cash flows.

However, as evidenced from our industry analysis in section 8, there is significant uncertainty around the future viability of Chinese coal producers as a result of the Government imposed production restrictions, more stringent safety requirements and the mine closures currently occurring around China and specifically in the Chongqing area. We do not have a reasonable basis for quantifying this risk through risk adjusting the cash flows. We also do not consider it appropriate to reflect this risk in our discount rate, as it is not reliably quantifiable through the use of a specific risk adjustment to our discount rate (i.e an alpha).

Also, we note that despite AM&A's conclusion, the Directors have confirmed that the forecast production levels represent a "desirable" scenario for Blackgold and have expressed significant doubt relating to the Company's ability to achieve the forecast levels of production contained in the Models. From our inquiries of the Directors, they have also highlighted the significant industry risks facing Blackgold and the fact that prior year forecasts have not been achieved. Based on these Director responses, we consider it appropriate to include a scenario analysis in forming a range of values for Caotang.

We have considered scenarios in which the mine produces at its current production level over the life of mine and also under the assumption that the next mining licence is not renewed.

Caotang producing at its current level of production

This scenario reflects the situation where the forecast ramp up in production is not achievable and the current level of production is maintained over the life of mine. Under this scenario, we have assumed that

the average annual production levels for the years ended 31 October 2015 and 31 October 2016 (we note that production was lower in 2016 than in 2015) are achieved over the life of mine until the current level of reserves are depleted. This therefore has the effect of increasing the life of mine from 2031 to 2042. As a result of the discounting of cash flows over a longer period, this results in a decrease in the value of Caotang as set out below.

Under the assumption that the average production from 2015 and 2016 is achievable over the life of mine (extended to 2042), the value of Caotang would be approximately $148 million.

Caotang mining licence is not renewed beyond 2019

AM&A also note that the mining licence for Caotang was due for renewal on 27 December 2016. Management advise that the Caotang licence was granted on 14 March 2017 for a licence period from 28 December 2016 to 27 December 2019. The mining licence lasts for a period of three years, with applications only able to be submitted two months prior to the expiry date. Despite AM&A's advice, we still consider this a material risk to the Company over the life of mine, therefore we have also considered the scenario under which the next mining licence application is not approved. This results in mining at Caotang ceasing in December 2019.

Under this scenario, the value of Caotang would be approximately $96 million.

10.1.4. Conclusion of DCF Value of Caotang

On the basis of the assumptions set out above, we conclude that the value of Caotang to Blackgold is between $148 million and $237 million with a preferred value of $192.5 million. The low end of our assessed range is based on the rounded value of Caotang under the scenario where Caotang achieves production in line with average production in 2015 and 2016. Our assessed high value is based on the base case DCF value using AM&A's technical assumptions as we consider these assumptions to represent a best case scenario for Blackgold. Given the level of uncertainty which is reflected in the wide gap between our low and high values, we have assessed our preferred value to be a midpoint between our assessed low and high values.

We consider this the most likely range of scenarios and have therefore adopted this as our valuation range when assessing fairness. However, as noted above there are other scenarios which may eventuate, therefore we have considered these other scenarios in our assessment of whether the Scheme is reasonable in section 17.

10.2 Value of Heiwan

10.2.1. Assumptions

The key assumptions which are specific to the Adjusted Heiwan Model are detailed below.

Life of Mine

The Adjusted Heiwan Model includes forecast annual cash flows through to 2023. AM&A have confirmed that forecast production levels can be achieved through to 2023.

Forecast Pricing

As detailed in section 10.1, management advise that the Mining Business sets its pricing on a monthly basis.

We have used the actual prices received by Blackgold for coal produced from Heiwan during October 2016 and extrapolated them over the life of mine, making adjustments for absolute movements in the forecast Newcastle Pricing.

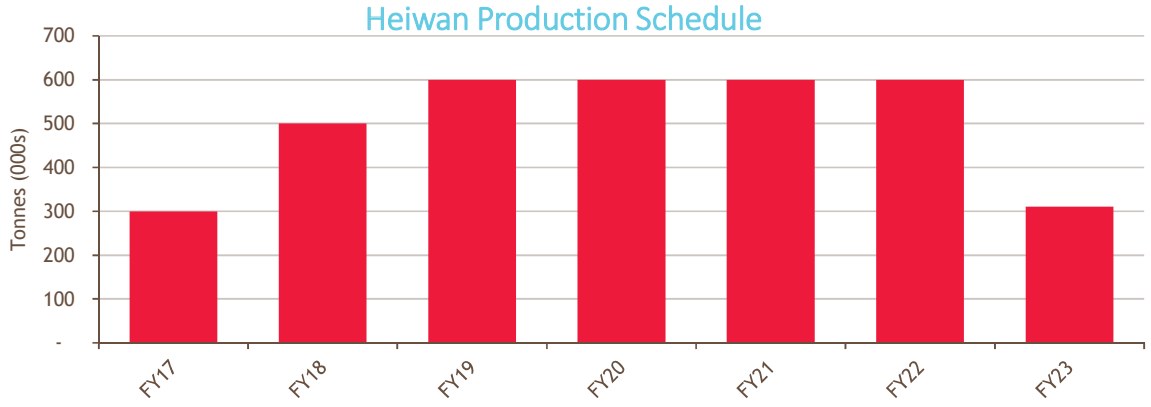
The pricing forecasts which we have used in the Adjusted Heiwan Model are set out below:

Heiwan coal pricing	FY17	FY18	FY19	FY20	FY21 - FY23
Forecast price (Rmb/T)	345	342	343	322	316

Source: Adjusted Heiwan Model

Mining Physicals

The charts below illustrate the technical mining assumptions used in the Adjusted Heiwan Model, which have been verified by AM&A.



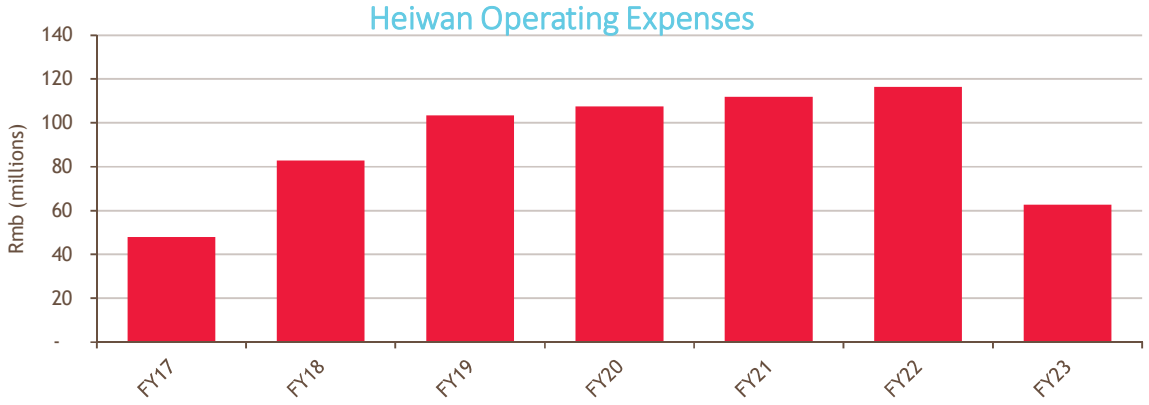
Source: Adjusted Heiwan Model

AM&A have considered the production restrictions currently imposed on coal producers by the Chinese Government and consider the forecast level of production to be achievable based on current conditions.

Operating Costs

We have been provided with a per tonne cost of raw materials, salaries, electricity and water, labour protection fee, labour insurance, repair costs, miscellaneous expenses, distribution and marketing expenses. AM&A have confirmed the reasonableness of these forecast operating costs based on the site visit conducted and their analysis of historical costs. Further information on the operating costs of Heiwan can be found in the Independent Technical Assessment Report in Appendix 6.

The graph below shows the forecast operating costs per annum for the life of mine, which have been verified by AM&A.

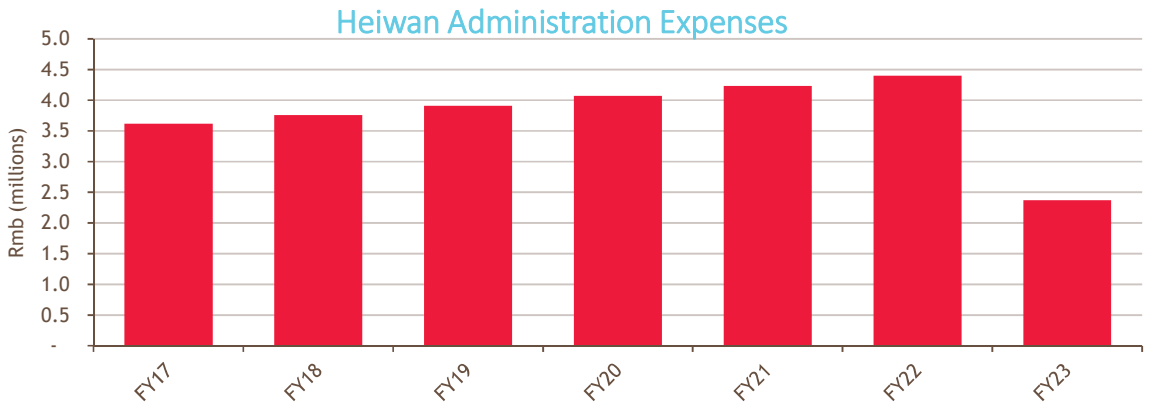


Source: Adjusted Heiwan Model

Administration Expenses

Administration expenses mainly include staff salaries and related benefits, insurance, labour protection fees, entertainment, travel, communications and audit fees.

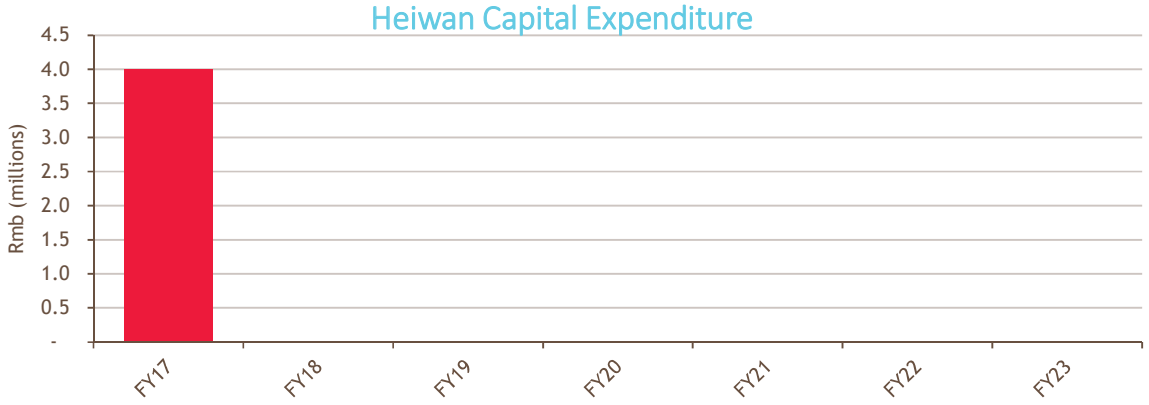
The graph below shows the forecast administration expenses per annum for the life of mine, which have been verified by AM&A.



Source: Adjusted Heiwan Model

Capital Expenditure

The graph below shows the forecast capital costs per annum for the life of mine. These amounts have been confirmed by AM&A who consider the plant equipment selection and sizing to be appropriate to sustain the forecast level of production.



Source: Adjusted Heiwan Model

Discount Rate

In selecting our range of discount rates we considered the following:

- the assumed capital structure of Heiwan;
- the Company's effective corporate tax rate;
- the risks that a coal producer in China is exposed to;
- market risk of an ASX listed coal producer;

We consider the coal industry in China to be a medium risk industry based on the fact that China is the key participant in the global coal market. However, there is currently significant uncertainty around the production restrictions and more stringent safety regulations that are being imposed by the Chinese Government.

We reviewed the weighted average cost of capital of coal producing companies listed on the ASX. A detailed description of these companies is attached as Appendix 5.

We considered the similarities of comparable companies used to estimate an approximate risk premium to be applied to the Company's projects. In particular we considered:

- the debt to equity ratios of the companies;
- the size of the operations;
- the location of the operations; and
- the diversity of operations.

The post-tax nominal discount rate applied to the Adjusted Heiwan Model is 15%. A detailed consideration of how we arrived at the adopted discount range is shown in Appendix 5.

10.2.2. Sensitivity analysis

We have analysed the key assumptions to the Adjusted Heiwan Model and have prepared sensitivities on the NPV of the project. These sensitivities have been prepared to assist Shareholders in considering the potential impact on the value of Heiwan if our base case assumptions change.

Heiwan	NPV ($m)	NPV ($m)	Sensitivity analysis NPV ($m)	NPV ($m)	NPV ($m)
Flex	Coal Price	Production mined	Production rate	Operating costs	Capital costs
-10%	36.37	42.47	43.82	50.91	46.71
-8%	38.37	43.30	44.45	50.06	46.70
-6%	40.47	44.14	45.02	49.21	46.69
-4%	42.57	44.98	45.56	48.36	46.68
-2%	44.62	45.82	46.11	47.50	46.67
0%	46.65	46.65	46.65	46.65	46.65
2%	48.80	47.49	47.20	45.80	46.64
4%	50.90	48.33	47.74	44.95	46.63
6%	52.90	49.17	48.28	44.10	46.62
8%	55.09	50.00	48.82	43.25	46.61
10%	57.15	50.82	49.33	42.40	46.59

Source: BDO analysis

Heiwan	Discount rate sensitivity analysis						
Discount rate (%)	12%	13%	14%	15%	16%	17%	18%
NPV ($m)	50.95	49.45	48.02	46.65	45.35	44.10	42.90

Source: BDO analysis

Heiwan	Inflation rate sensitivity analysis						
Inflation rate (%)	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%
NPV ($m)	49.74	48.73	47.70	46.65	45.59	44.51	43.41

Source: BDO analysis

We note the following from the sensitivities included in the table above:

- The value of Heiwan is extremely sensitive to changes in the coal price with a 10% increase in pricing causing an increase in the NPV to $57 million and a 10% decrease in pricing causing a decrease in the NPV to $36 million.

10.2.3. Scenario analysis

AM&A have considered the historical costs and production of Heiwan and have concluded that based on current information the technical assumptions underpinning the Model are reasonable, therefore there is nothing that would suggest that the Company is not able to achieve the forecast cash flows.

However, as evidenced from our industry analysis in section 8, there is significant uncertainty around the future viability of Chinese coal producers as a result of the Government imposed production restrictions, more stringent safety requirements and the mine closures currently occurring. As detailed in section 10.1.3, we do not have a reasonable basis for quantifying the risk adjustment to be made to the cash flows or for reflecting it as an alpha in our discount rate.

Also, we note that despite AM&A's advice, the Directors have confirmed that the forecast production levels represent a "desirable" scenario for Blackgold and have expressed significant doubt relating to the Company's ability to achieve the forecast levels of production contained in the Models. From our inquiries of the Directors, they have also highlighted the significant industry risks facing Blackgold and the fact that prior year forecasts have not been achieved. Based on these Director responses, we consider it appropriate to include a scenario analysis in forming a range of values for Heiwan.

We have considered scenarios in which the mine produces at its current production level over the life of mine and also under the assumption that the next mining licence is not renewed.

Heiwan producing at its current level of production

This scenario reflects the situation where the forecast ramp up in production is not achievable and the current level of production is maintained over the life of mine. Under this scenario, we have assumed that the average annual production for the years ended 31 October 2015 and 31 October 2016 (we note that production was lower in 2016 than in 2015) are achieved over the life of mine until the current level of reserves are depleted. This therefore has the effect of increasing the life of mine from 2023 to 2046, with the annual production set at approximately 119,314 tonnes. We note that based on our current assumptions, any production post 2040 is not economically viable, therefore we have ceased production at 2040. As a result of the discounting of cash flows over a longer period, this results in a decrease in the value of Heiwan as set out below.

Under the assumption that the average production from 2015 and 2016 of 119,314 tonnes is achievable over the life of mine (extended to 2040), the value of Heiwan would be approximately $11.92 million.

Heiwan mining licence is not renewed beyond December 2017

AM&A also note that the mining licence for Heiwan is due for renewal on 30 December 2017 and that it does not anticipate any problems with its renewal. Despite AM&A's advice, we still consider this a material risk to the Company over the life of mine, therefore we have also considered the scenario under which the next mining licence application is not approved. This results in mining at Heiwan ceasing in December 2017.

Under this scenario, the value of Heiwan would be approximately $8.37 million.

10.2.4. Conclusion of DCF Value of Heiwan

On the basis of the assumptions set out above, we conclude that the value of Heiwan to Blackgold is between $12 million and $47 million with a preferred value of $29.5 million. The low end of our assessed range is based on the rounded value of Heiwan under the scenario where Heiwan achieves production in line with average production levels in 2015 and 2016. Our assessed high value is based on the base case DCF value using AM&A's technical assumptions as we consider these assumptions to represent the best case for Blackgold. Given the level of uncertainty which is reflected in the wide gap between our low and

high values, we have assessed our preferred value to be a midpoint between our assessed low and high values.

We consider this the most realistic scenario and have therefore adopted this as our valuation range when assessing fairness.

10.3 Value of Baolong

10.3.1. Assumptions

The key assumptions which are specific to the Adjusted Baolong Model are detailed below.

Life of Mine

The Baolong Model includes forecast annual cash flows through to 2048. AM&A have confirmed that forecast production levels can be achieved through to 2048 (based on production commencing on 1 November 2016). Given that we have included an adjustment to reflect a one year delay, this implies that Baolong could be mined through to 2049. However, based on the current assumptions on which the Adjusted Baolong Model is based, the mining of Baolong is forecast to become uneconomic by 2034.

We also note that we have adjusted the Baolong Model to account for a one year delay in the mine commencing production as we consider this the most likely scenario based on the Company's previous track record of experiencing delays in bringing Baolong into production. As at the date of our report, Baolong has not commenced production.

Forecast Pricing

Given that Baolong is still in the development phase, there are no historical prices on which to base our forecast pricing. Management advise that the quality of coal to be produced at Baolong is similar to that produced at Heiwan, which has been confirmed by AM&A. As such, we have adopted the forecast pricing used in the Adjusted Heiwan Model as an input to the Adjusted Baolong Model.

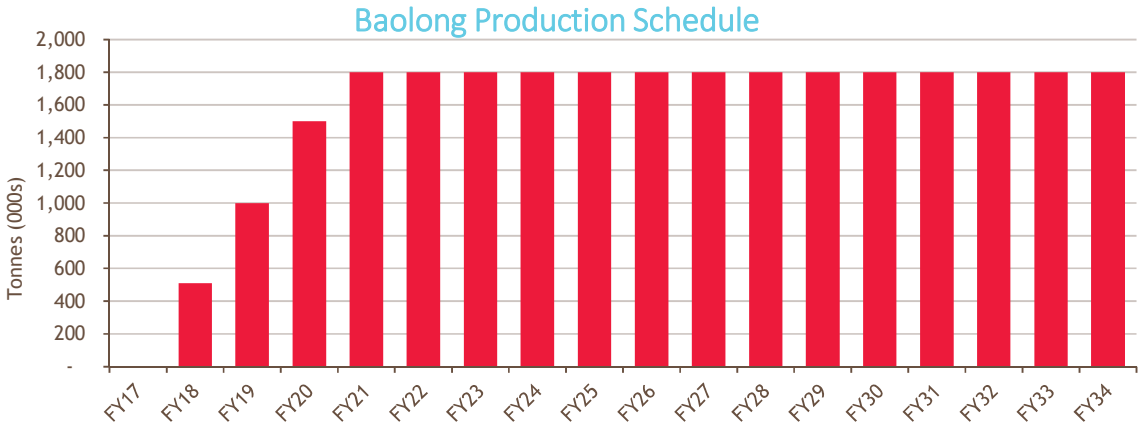
The pricing forecasts which we have used in the Adjusted Baolong Model are set out below:

Baolong coal pricing	FY18	FY19	FY20	FY21	FY22 - FY49
Forecast price (Rmb/T)	345	342	343	322	316

Source: Adjusted Baolong Model

Mining Physicals

The charts below illustrate the technical mining assumptions used in the Adjusted Baolong Model, which have been verified by AM&A.



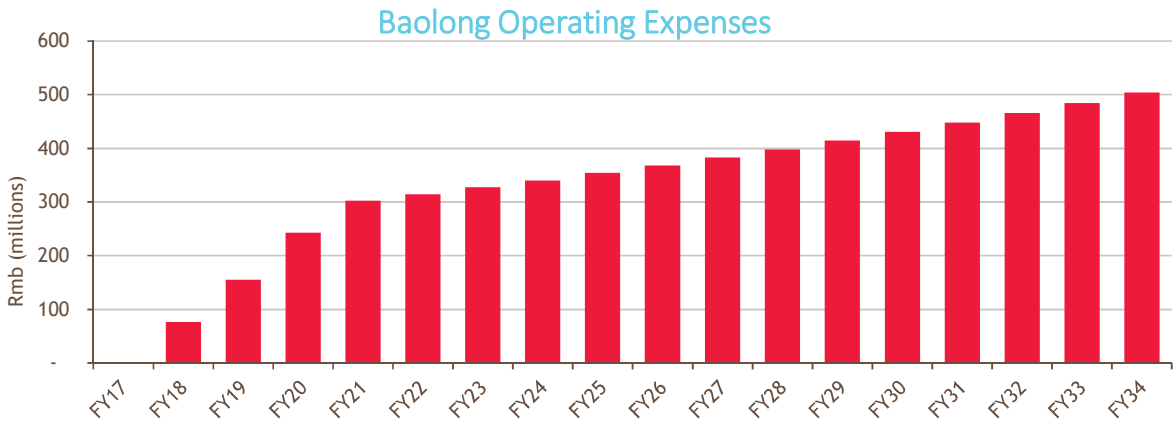
Source: Adjusted Baolong Model

AM&A have considered the production restrictions currently imposed on coal producers by the Chinese Government and consider the forecast level of production to be achievable based on current conditions. However, we note that the Directors consider the production forecasts to represent a best case scenario for Blackgold as there are significant industry and project specific risks that may affect the achievement of the above production schedule. This is covered further in our scenario analysis in section 10.3.3.

Operating Costs

We have been provided with a per tonne cost of raw materials, salaries, electricity and water, labour protection fee, labour insurance, repair costs, miscellaneous expenses, distribution and marketing expenses. AM&A have confirmed the reasonableness of these forecast operating costs based on the site visit conducted and their analysis of historical costs. Further information on the operating costs of Baolong can be found in the Independent Technical Assessment Report in Appendix 6.

The graph below shows the forecast operating costs per annum for the life of mine, which have been verified by AM&A.

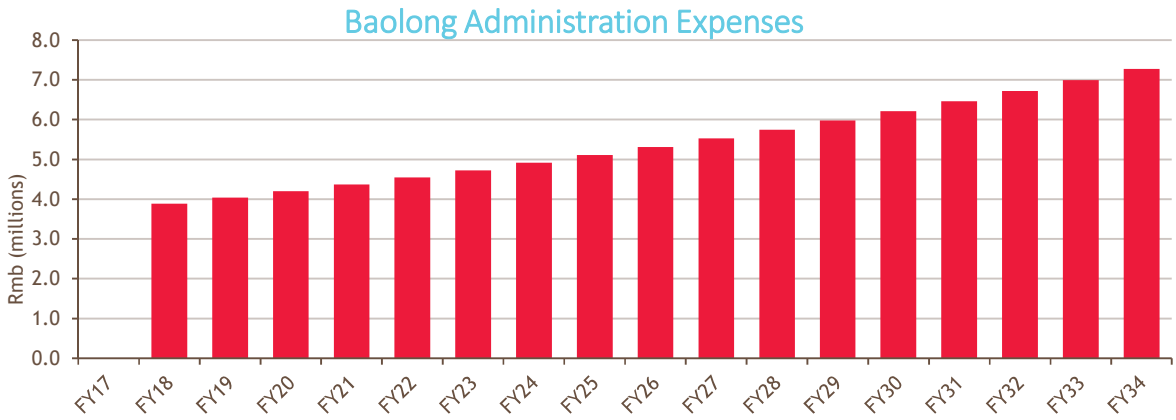


Source: Adjusted Baolong Model

Administration Expenses

Administration expenses mainly include staff salaries and related benefits, insurance, labour protection fees, entertainment, travel, communications and audit fees.

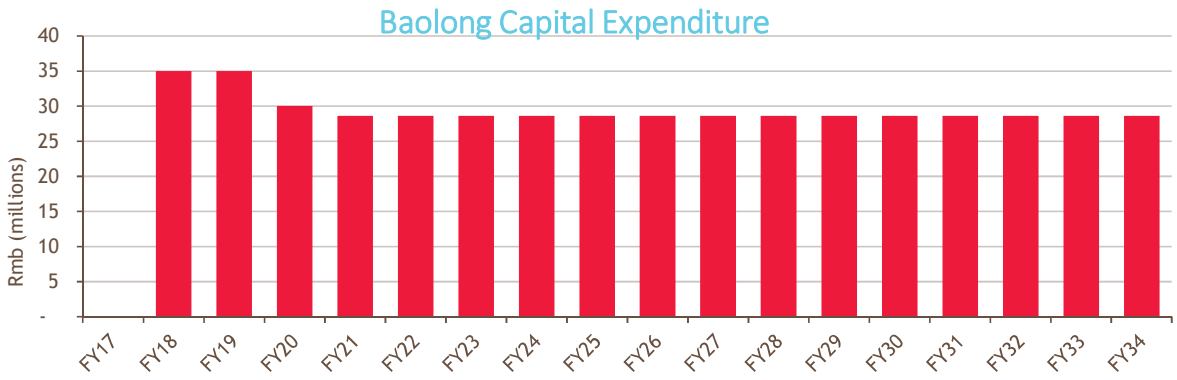
The graph below shows the forecast administration expenses per annum for the life of mine, which have been verified by AM&A.



Source: Adjusted Baolong Model

Capital Expenditure

The Adjusted Baolong Model provides for total capital expenditure of approximately RMB 671.74 million ($130.5 million converted at an exchange rate of 1RMB: 0.1942AUD) over the period from 2018 to 2034, which is to be used to prepare for and sustain production. AM&A have confirmed the reasonableness of the capital expenditure assumptions used for Baolong and consider the plant and equipment sufficient to develop Baolong to production and sufficient to sustain the forecast level of production over the life of mine. The graph below shows the forecast capital costs per annum for the life of mine.



Source: Adjusted Baolong Model

Discount Rate

In selecting our range of discount rates we considered the following:

- how the capital expenditure required on Baolong will be funded;
- the Company's effective corporate tax rate;
- the risks that a coal producer in China is exposed to;
- additional risk involved with a mine being pre-production;
- market risk of an ASX listed coal producer and companies in the development stage;

We consider the coal industry in China to be a medium risk industry based on the fact that China is the key participant in the global coal market. However, there is currently significant uncertainty around the production restrictions and more stringent safety regulations that are being imposed by the Chinese Government.

We reviewed the weighted average cost of capital of coal producing companies and pre-production development companies listed on the ASX. A detailed description of these companies is attached as Appendix 5.

We considered the similarities of comparable companies used to estimate an approximate risk premium to be applied to the Company's projects. In particular we considered:

- the debt to equity ratios of the companies;
- the size of the operations;
- the location of the operations; and
- the diversity of operations.

The post-tax nominal discount rate applied to the Adjusted Baolong Model is 17%. A detailed consideration of how we arrived at the adopted discount range is shown in Appendix 5.

10.3.2. Sensitivity analysis

We have analysed the key assumptions to the Adjusted Baolong Model and have prepared sensitivities on the NPV of the project. These sensitivities have been prepared to assist Shareholders in considering the potential impact on the value of Baolong if our base case assumptions change.

	Sensitivity analysis				
Baolong	NPV ($m)	NPV ($m)	NPV ($m)	NPV ($m)	NPV ($m)
Flex	Coal Price	Production mined	Production rate	Operating costs	Capital costs
-10%	64.01	81.83	81.32	109.45	96.47
-8%	69.60	84.23	83.82	106.26	95.95
-6%	75.53	86.63	86.33	103.12	95.42
-4%	81.90	89.03	88.83	99.99	94.89
-2%	87.82	91.43	91.33	96.89	94.36
0%	93.83	93.83	93.83	93.83	93.83
2%	100.43	96.23	96.33	90.77	93.30
4%	106.62	98.63	98.83	87.78	92.77
6%	112.59	101.03	101.33	84.79	92.24
8%	119.47	103.43	103.83	81.85	91.71
10%	125.63	105.83	106.34	78.93	91.18

Source: BDO analysis

Baolong	Discount rate sensitivity analysis						
Discount rate (%)	14%	15%	16%	17%	18%	19%	20%
NPV ($m)	110.86	104.74	99.07	93.83	88.97	84.45	80.25

Source: BDO analysis

Baolong	Inflation rate sensitivity analysis						
Inflation rate (%)	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%
NPV ($m)	118.82	109.91	101.58	93.83	86.59	79.89	73.71

Source: BDO analysis

We note the following from the sensitivities included in the table above:

- The value of Baolong is extremely sensitive to changes in the coal price with a 10% increase in pricing causing an increase in the NPV to $126 million and a 10% decrease in pricing causing a decrease in the NPV to $64 million; and
- Similarly, given the long life of mine, the NPV is highly sensitive to changes in the discount rate.

10.3.3. Scenario analysis

As detailed in section 10.1.3, we consider it appropriate to conduct a scenario analysis under which the current mining licence is not renewed beyond its current expiry date of September 2017.

Given that Baolong is yet to commence production we do not have any historical production figures on which to adjust the forecast ramp up in production. We have reflected the additional risk involved with developing a mine not yet in production through the use of a higher discount rate for Baolong (17%), when compared to other producing mines which we have assessed to have a discount rate of 15%. Further information on these discount rates can be found Appendix 5.

Also, we note that despite AM&A's view, the Directors have confirmed that the forecast production levels represent a "desirable" scenario for Blackgold and have expressed significant doubt relating to the Company's ability to achieve the forecast levels of production contained in the Models. Also, given that the mining licence for Baolong has an expiry date of September 2017 and that it has yet to commence production, there is a significant risk that Baolong may not reach production. Under this scenario, if the reserves and resource are not able to be mined then the value of Baolong to Blackgold would be nil.

10.3.4. Conclusion of DCF Value of Baolong

On the basis of the assumptions set out above, we conclude that the value of Baolong to Blackgold is between nil and $94 million, with a preferred value of $47 million. The low end of our valuation range is based on the value of Baolong under the assumption that Baolong does not reach production. Whilst we do not consider this to be the most likely scenario, it is a realistic outcome given that the current Baolong mining licence expires in September 2017 and that Baolong has been subject to delays and is yet to begin production. We have selected this is as the low end of our assessed range because we consider that there is a material risk that the base case valuation may not be realised. Our assessed high value is based on the rounded base case DCF value which incorporates AM&A's technical assumptions and a production delay (production assumed to commence on 1 November 2017), as we consider these assumptions to represent the best case for Blackgold. Our inquiries of the Directors of Blackgold confirm that the forecasts made represent an optimal scenario for Blackgold and that the Company has a history of not achieving its forecasts.

We note that whilst we have used AM&A's technical assumptions, we have delayed production by one year as a result of previous delays experienced in relation to Baolong. This assumption is supported by the fact that at the date of our report Baolong has not commenced production despite the Company forecasting for it to come on line for a number of years. Given the level of uncertainty which is reflected in the wide gap between our low and high values, we have assessed our preferred value to be a midpoint between our assessed low and high values.

10.4 Value of Changhong

10.4.1. Assumptions

The key assumptions which are specific to the Adjusted Changhong Model are detailed below.

Life of Mine

The Changhong Model includes forecast cash flows through to 2039. However, based on the current assumptions on which the Adjusted Changhong Model is based, the mining of Changhong is forecast to

become uneconomic by 2034. The Adjusted Changhong Model therefore includes forecast annual cash flows through to 2034. AM&A have confirmed that the forecast production levels can be sustained.

Forecast Pricing

As detailed in section 10.1, management advise that the Mining Business sets its pricing on a monthly basis.

Given that Changhong has been in care and maintenance since 2014, we have used the actual prices received by Blackgold for coal produced at Changhong when the mine was last in production as our base compared to the Newcastle Pricing at that time. This approach ensures that the adjustment to the forecast Newcastle Pricing removes the effect of a change in market conditions since 2014. We have then extrapolated historical pricing over the life of mine, making adjustments for relative movements in the forecast Newcastle Pricing.

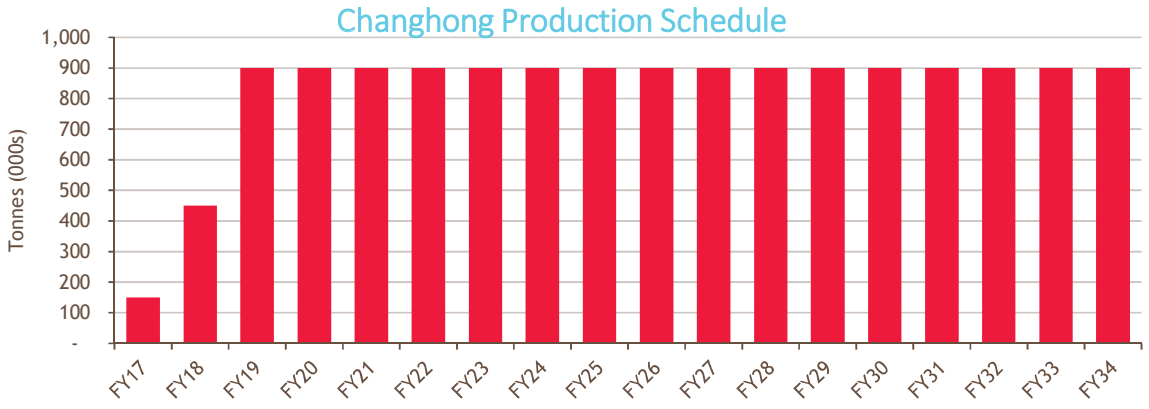
The pricing forecasts which we have used in the Adjusted Changhong Model are set out below:

Changhong coal pricing	FY17	FY18	FY19	FY20	FY21 - FY34
Forecast price (Rmb/T)	383	380	380	357	351

Source: Adjusted Changhong Model

Mining Physicals

The charts below illustrate the technical mining assumptions used in the Adjusted Changhong Model, which have been verified by AM&A.



Source: Adjusted Changhong Model

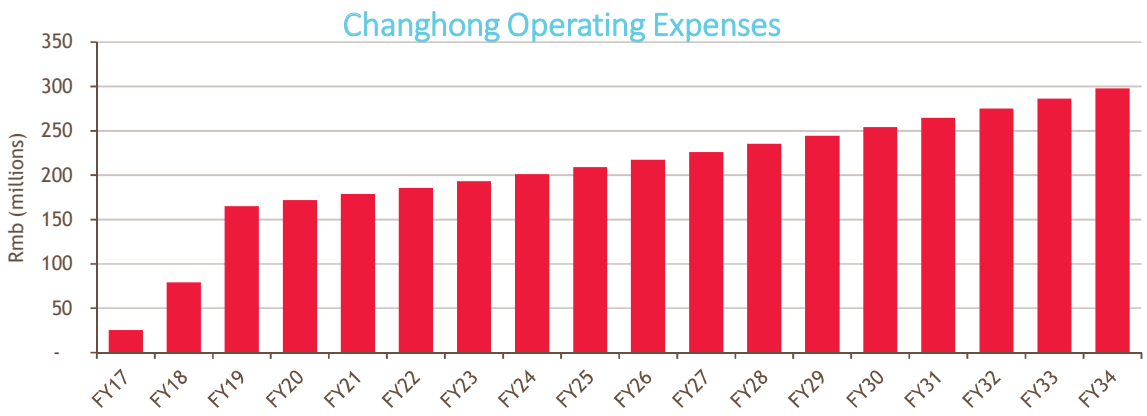
AM&A have considered the production restrictions currently imposed on coal producers by the Chinese Government and consider the forecast level of production to be achievable based on current conditions.

Operating Costs

We have been provided with a per tonne cost of raw materials, salaries, electricity and water, labour protection fee, labour insurance, repair costs, miscellaneous expenses, distribution and marketing expenses. AM&A have confirmed the reasonableness of these forecast operating costs based on the site

visit conducted and their analysis of historical costs. Further information on the operating costs of Changhong can be found in the Independent Technical Assessment Report in Appendix 6.

The graph below shows the forecast operating costs per annum for the life of mine, which have been verified by AM&A.

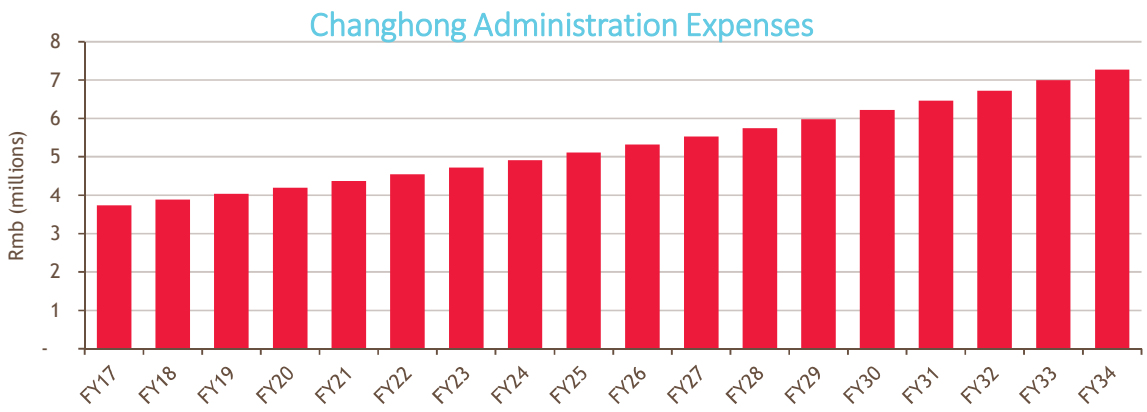


Source: Adjusted Changhong Model

Administration Expenses

Administration expenses mainly include staff salaries and related benefits, insurance, labour protection fees, entertainment, travel, communications and audit fees.

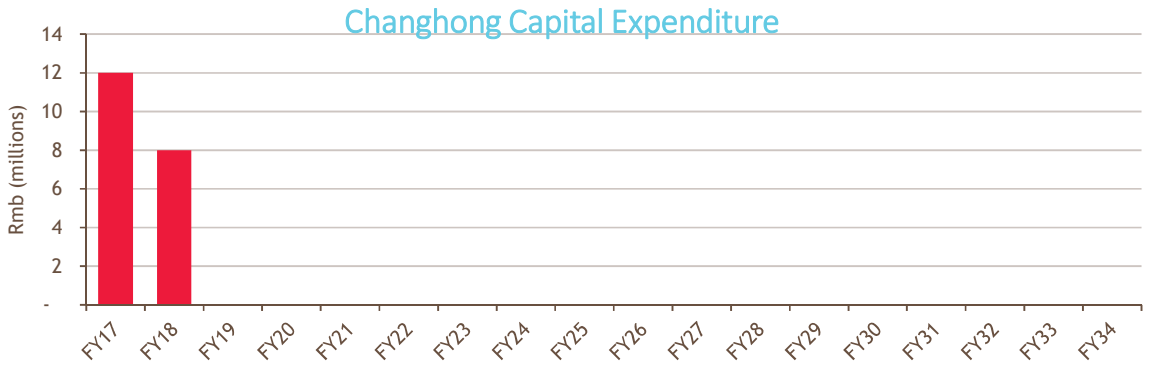
The graph below shows the forecast administration expenses per annum for the life of mine, which have been verified by AM&A.



Source: Adjusted Changhong Model

Capital Expenditure

The Adjusted Changhong Model provides for capital expenditure of approximately RMB 20.0 million ($3.9 million converted at an exchange rate of 1RMB: 0.1942AUD) over 2017 and 2018, which is to be used to bring the mine back into production and sustain it over the life of mine. AM&A have confirmed the reasonableness of the capital expenditure assumptions used for Changhong and consider the plant and equipment sufficient to sustain the forecast level of production.



Source: Adjusted Changhong Model

Discount Rate

In selecting our range of discount rates we considered the following:

- The assumed capital structure of Changhong;
- The Company's effective corporate tax rate;
- The risks that a coal producer in China is exposed to;
- Market risk of an ASX listed coal producer;

We consider the coal industry in China to be a medium risk industry based on the fact that China is the key participant in the global coal market. However, there is currently significant uncertainty around the production restrictions and more stringent safety regulations that are being imposed by the Chinese Government.

We reviewed the weighted average cost of capital of coal producing companies listed on the ASX. A detailed description of these companies is attached as Appendix 5.

We considered the similarities of comparable companies used to estimate an approximate risk premium to be applied to the Company's projects. In particular we considered:

- The debt to equity ratios of the companies;
- The size of the operations;
- The location of the operations; and
- The diversity of operations.

The post-tax nominal discount rate applied to the Adjusted Changhong Model is 15%. A detailed consideration of how we arrived at the adopted discount range is shown in Appendix 5.

10.4.2. Sensitivity analysis

We have analysed the key assumptions to the Adjusted Changhong Model and have prepared sensitivities on the NPV of the project. These sensitivities have been prepared to assist Shareholders in considering the potential impact on the value of Changhong if our base case assumptions change.

	Sensitivity analysis				
Changhong	NPV ($m)	NPV ($m)	NPV ($m)	NPV ($m)	NPV ($m)
Flex	Coal Price	Production mined	Production rate	Operating costs	Capital costs
-10%	59.56	74.30	73.53	97.79	82.84
-8%	64.03	75.95	75.33	94.67	82.78
-6%	68.65	77.60	77.14	91.61	82.72
-4%	73.28	79.25	78.94	88.54	82.66
-2%	77.92	80.90	80.74	85.55	82.60
0%	82.54	82.54	82.54	82.54	82.54
2%	87.27	84.19	84.35	79.62	82.48
4%	91.94	85.84	86.15	76.68	82.42
6%	96.79	87.49	87.96	73.83	82.36
8%	101.63	89.14	89.76	70.96	82.30
10%	106.42	90.79	91.57	68.17	82.24

Source: BDO analysis

Changhong	Discount rate sensitivity analysis						
Discount rate (%)	12%	13%	14%	15%	16%	17%	18%
NPV ($m)	96.04	91.19	86.70	82.54	78.68	75.09	71.74

Source: BDO analysis

Changhong	Inflation rate sensitivity analysis						
Inflation rate (%)	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%
NPV ($m)	104.59	97.44	89.86	82.54	75.73	69.39	63.56

Source: BDO analysis

We note the following from the sensitivities included in the table above:

- The value of Changhong is extremely sensitive to changes in the coal price with a 10% increase in pricing causing an increase in the NPV to $106 million and a 10% decrease in pricing causing a decrease in the NPV to $60 million; and
- Similarly, given the long life of mine, the NPV is highly sensitive to changes in the discount rate.

10.4.3. Scenario analysis

As detailed in section 10.1.3, we consider it appropriate to conduct a scenario analysis under which the current mining licence is not renewed beyond its current expiry date of January 2018.

Given that Changhong has not been in production since 2014, we do not have any recent production data on which to adjust the ramp up in production over the forecast period.

Under the assumption that the current mining licence is not renewed and production ceases in January 2018, the value of Changhong to Blackgold is approximately $13.41 million.

We have also considered the scenario in which production at Changhong is delayed by one year. Under this scenario, the value of Changhong to Blackgold would be approximately $66.52 million.

10.4.4. Conclusion of DCF Value of Changhong

On the basis of the assumptions set out above, we conclude that the value of Changhong to Blackgold is between $13.4 million and $82.5 million, with a preferred value of $47.95 million. The low end of our valuation range is based on the value of Changhong under the assumption that the mining licence is not renewed beyond January 2018. Given that Changhong has not been in production since 2014, we consider that there is a material risk that the base case valuation may not be realised. Our assessed high value is based on the base case DCF value using AM&A's technical assumptions as we consider these assumptions to represent the best case for Blackgold. Given the level of uncertainty which is reflected in the wide gap between our low and high values, we have assessed our preferred value to be a midpoint between our assessed low and high values.

10.5 Value of other resources not included in the DCF models

We instructed AM&A to provide an independent market valuation of the resources not included in the Adjusted Models. This is required pursuant to the guidance contained in RG 111 and RG 170, which requires the expert to demonstrate that it has reasonable grounds for the reliance on forward looking information. As such the Adjusted Models do not include the resources valued below as it is too early stage to be able to forecast production with reasonable grounds.

AM&A considered a number of different valuation methods when valuing the residual resource of Blackgold and have concluded that the yardstick method is the only appropriate method. Additional detail on the methodologies adopted can be found in AM&A's report under Appendix 6.

Given that AM&A have not used a secondary methodology, we have considered trading resource multiples of ASX listed comparable companies as a cross check to the values derived by the yardstick method.

The range of values for each of Blackgold's exploration assets as calculated by AM&A are set out below:

Mineral Asset	Low Value $m	Preferred Value $m	High Value $m
Baolong	4.3	9.5	15.7
Changhong	1.4	3.2	5.3
Total	**5.7**	**12.7**	**21.0**

Source: Independent Technical Valuation prepared by AM&A

The table above indicates a range of values between $5.7 million and $21.0 million, with a preferred value of $12.7 million. However, as detailed in section 10.3, we consider there to be a significant risk that Baolong may not be able to be mined. Under this scenario, the value of reserves (as captured by the DCF valuation) would be nil. Similarly, if the reserves cannot be mined then the resources not captured by the DCF also cannot be mined, therefore the value of these resources would also be nil. Therefore, we have adjusted the values ascribed by AM&A to arrive at a valuation range as set out below.

Mineral Asset	Low Value $m	Preferred Value $m	High Value $m
Baolong	-	9.5	15.7
Changhong	1.4	3.2	5.3
Total	**1.4**	**12.7**	**21.0**

Source: Independent Technical Valuation prepared by AM&A and BDO analysis

We note that despite adjusting the low end of the Baolong resource valuation to nil, we have still relied upon AM&A's preferred value in forming our valuation range.

We have used the resource multiple methodology as a cross check to the above values, which involves the analysis of the current trading multiples of ASX listed coal exploration companies. We acknowledge that these companies have resources at different stages to Blackgold's resource and may include other assets and liabilities, thus distorting the multiples, however we have tailored our comparable company analysis to those companies holding primarily coal assets. In arriving at an appropriate range for the resource multiple, we have placed greater reliance on those companies with resources at a similar stage to Blackgold's resource.

The trading multiples of ASX listed coal exploration companies are set out below.

Company name	Enterprise Value at 31-Oct-16 ($m)	Inferred resources (Mt)	Indicated resources (Mt)	Measured resources (Mt)	Mineral resources (Mt)	Proved reserves (Mt)	Probable reserves (Mt)	Mineral reserves (Mt)	Resource Multiple
Acacia Coal Limited	4.24	43.00	9.30	7.50	59.80	-	-	-	0.07
Coalbank Limited	7.60	1,292.00	-	-	1,292.00	-	-	-	0.01
East Energy Resources Limited	28.88	2,817.00	627.50	-	3,444.50	-	-	-	0.01
Ikwezi Mining Limited	6.56	208.00	36.00	50.00	294.00	10.28	5.76	16.04	0.02
Kaili Resources Limited	2.26	38.00	-	-	38.00	-	-	-	0.06
Malabar Coal Limited	50.92	231.50	394.40	-	625.90	-	91.00	91.00	0.08
Moreton Resources Ltd	5.54	421.73	494.72	116.45	1,032.90	-	-	-	0.01
Pan Asia Corporation Limited	8.07	88.44	35.42	53.41	177.27	-	-	-	0.05
Paringa Resources Limited	66.21	0.70	163.60	60.50	224.80	22.49	63.84	86.33	0.29
Rey Resources Limited	14.78	167.10	78.50	60.20	305.80	20.44	5.83	26.27	0.05
								Minimum	**0.01**
								Maximum	**0.29**
								Average	**0.06**
								Median	**0.05**
								Maximum (excluding reserves)	**0.07**
								Average (excluding reserves)	**0.03**

Source: CapitalIQ and BDO analysis

Based on the above analysis we consider a resource multiple in the range of $0.03/t to $0.07/t to be reasonable. The low end of the assessed range is based on the average resource multiple observed in the market for those companies without reserves, with the high end based on the maximum multiple excluding those companies with reserves.

Our valuation using the above determined resource multiples is set out below.

Mineral Asset	Low	Midpoint	High
Baolong			
Resource (Mt)	29.3	29.3	29.3
Resource multiple ($)	0.030	0.045	0.070
Value of Baolong resource ($m)	0.88	1.32	2.05
Changhong			
Resource (Mt)	9.7	9.7	9.7
Resource multiple ($)	0.030	0.045	0.070
Value of Baolong resource ($m)	0.29	0.44	0.68
Total value of resource ($m)	**1.17**	**1.76**	**2.73**

Source: AM&A's Independent Technical Assessment and Valuation Report and BDO analysis

We note that the actual multiple likely to be paid by the market and therefore be applicable to Blackgold would be higher than the above multiples for the following reasons:

- Blackgold's inferred resource are located in surrounding areas to operating coal mines, therefore the market is likely to assign a greater value to these resources;
- Blackgold's resource (if mined) will have access to port;
- Given that Blackgold is currently producing, it has a customer base that it may be able to supply
- Blackgold has the mine infrastructure in place, therefore if the resource is converted to reserves it may be more easily mined when compared to the comparable companies; and
- Blackgold's historical conversion rates of its resource to reserves are historically high, as detailed in AM&A's Technical Assessment and Valuation Report, which is contained in Appendix 6.

Although we acknowledge the above differences between Blackgold's inferred resource and the resources of the above comparable companies, we do not have reasonable grounds (due to the lack of an appropriate dataset being available) to quantify the premium likely to be paid by the market for Blackgold's resource. We consider the magnitude of the premium to be such that it would support the low end of the valuation range prepared by AM&A.

10.6 Total assessed value of the Mining Business

Based on our analysis above, the value of the Mining Business is between $174.8 million and $481.5 million with a preferred value of $329.65 million as set out in the table below.

Value of the Mining Business	Ref	Low $'000	Preferred $'000	High $'000
Value of Caotang (per the DCF)	10.1	148,000	192,500	237,000
Value of Heiwan (per the DCF)	10.2	12,000	29,500	47,000
Value of Baolong (per the DCF)	10.3	-	47,000	94,000
Value of Baolong resource not included in the DCF	10.5	-	9,500	15,700
Value of Changhong (per the DCF)	10.4	13,400	47,950	82,500
Value of Changhong resource not included in the DCF	10.5	1,400	3,200	5,300
Value of the Mining Business		**174,800**	**329,650**	**481,500**

11. Valuation of the Shipping Business

11.1 Historical financial information

In order to value the Shipping Business on an FME basis we have extracted the financial information of the Shipping Business from the audited consolidated historical financial information presented in section 5 of our report. The audit of Blackgold encompassed the audit of the Shipping Business, however because there was not a separate audit opinion provided on the financial information of the Shipping Business alone, we have presented them as "unaudited".

The historical financial information of the Shipping Business is set out below.

11.1.1. Historical Statement of Profit or Loss and Other Comprehensive Income

Set out below is the historical statement of profit or loss and other comprehensive income:

Shipping Business	Unaudited for the year ended	Unaudited for the year ended	Unaudited for the year ended	Unaudited for the year ended
Historical Statement of Profit or Loss and Other Comprehensive Income	31-Oct-16	31-Oct-15	31-Oct-14	31-Oct-13
	$'000	$'000	$'000	$'000
Revenue	8,709	10,717	15,803	19,560
Cost of sales	(5,745)	(6,506)	(9,856)	(11,651)
Sales tax	(36)	(49)	(47)	(35)
Gross profit	2,928	4,162	5,900	7,874
Gross profit margin (%)	*33.6%*	*38.8%*	*37.3%*	*40.3%*
Other income	17	338	698	275
	2,945	4,500	6,598	8,149
Administrative expense	(334)	(423)	(386)	(344)
Other expenses	-	(1)	(55)	(1)
Finance costs	-	(1)	(2)	(2)
Profit before tax	**2,611**	**4,075**	**6,155**	**7,802**
Income tax expense	(391)	(649)	(910)	(1,197)
Profit after tax	**2,220**	**3,426**	**5,245**	**6,605**
Net profit margin (%)	*25.5%*	*32.0%*	*33.2%*	*33.8%*

Source: Extracted from the audited consolidated financial statements of Blackgold for the years ended 31 October 2013, 2014, 2015 and 2016

We have not undertaken a review of the Shipping Business' unaudited accounts in accordance with Australian Auditing and Assurance Standard 2405 'Review of Historical Financial Information' and do not express an opinion on this financial information. However nothing has come to our attention as a result of our procedures that would suggest the financial information within the accounts has not been prepared on a reasonable basis.

We note the following in relation to the historical performance of the Shipping Business over the years ended 31 October 2013, 31 October 2014, 31 October 2015 and 31 October 2016 ('**Analysis Period**'):

- The Shipping Business was acquired in February 2012 and has experienced contracting revenue since its acquisition. The higher revenue for the years ended 31 October 2013 and 2014 relative to the subsequent periods can be attributable to higher demand for shipping services during these periods, where the business leased four vessels from external parties to satisfy this demand. These rental costs were included in cost of sales for the respective periods. Also, during the year ended 31 October 2014, the Company disposed of one of its vessels which reduced its fleet to eight vessels. The Shipping Business has not replaced this vessel or disposed of any vessels since 2014. The declining revenues over the Analysis Period can be partially attributed to this declining demand but also to the decline in shipping rates.
- Along with the declining revenue over the Analysis Period, the Shipping Business has experienced reducing gross margins, from an average of 39% over the three years ended 31 October 2015 to approximately 34% for the year ended 31 October 2016. Management has not identified any structural changes to the business other than a change in the destination of the goods being transported. Since the 2013 financial year, the Shipping Business has been delivering to the port, rather than arranging transportation to in-land destinations. This change in operations resulted in the elimination of approximately $0.2 million of transportation expenses for the periods subsequent to the year ended 31 October 2013. Similarly, this structural change has also resulted in a decline in loading charges from approximately 3% of revenue for the year ended 31 October 2013 to an average of 1% of revenue following this change.
- The decrease in gross margin for the year ended 31 October 2016 is mainly attributable to the increase in direct costs of shipping. This is evidenced by an increase in diesel costs as a percentage of revenue from approximately 36% for the year ended 31 October 2015 to approximately 43% for the year ended 31 October 2016. The price of diesel is a significant cost driver of the Shipping Business, therefore declining oil prices from June 2014 to January 2015 and from April 2015 to September 2015 had a significant positive impact on the business' cost of sales. The improvement in gross margins was modest across this period of falling oil prices because typically there was a positive correlation between bunker oil rates and shipping rates, meaning that the prices received for shipping were also falling approximately in line with the reducing costs. During the year ended 31 October 2016, oil prices begun to recover, however the Shipping Business was not able to fully pass these increased costs onto its customers, hence the erosion of part of its gross margin on comparison with prior periods.
- Historically, other income primarily related to Government subsidies, however management advise that these are unlikely to be significant going forward.
- Administrative expenses have remained somewhat consistent across the Analysis Period as these costs are largely fixed in the short to medium term. The most significant item contributing to this expense is staff salaries, which has declined for the year ended 31 October 2016 when compared to prior periods. The declining revenue, with stable administrative expenses partly explains the declining net profit margin across the Analysis Period.

11.1.2. FME valuation of the Shipping Business

When performing an FME valuation we must determine what the future maintainable earnings of the business are and then determine an appropriate capitalisation multiple to apply to these earnings.

In assessing future maintainable earnings, the figure selected should represent what is currently sustainable. Any anticipated growth in earnings is accounted for via the capitalisation rate.

In addition to the historical financial accounts we have been provided with management's forecast financial performance through to the year ending 31 October 2021. We have not relied on the forecast as we do not have reasonable grounds, in accordance with the requirements of RG 170, to include the forward-looking information. However, we have reviewed the forecast to ensure that there are no forecast changes to the Shipping Business and note that the short term forecast earnings do not differ materially from the unaudited full year results.

Our unadjusted EBITDA is derived by making the following adjustments to the profit after tax as presented in section 11.1.1. These adjustments are outlined below.

Shipping Business	Unaudited for the year ended 31-Oct-16 $'000	Unaudited for the year ended 31-Oct-15 $'000	Unaudited for the year ended 31-Oct-14 $'000	Unaudited for the year ended 31-Oct-13 $'000
Profit after tax	2,220	3,426	5,245	6,605
Add: Income tax expense	391	649	910	1,197
Profit before tax	2,611	4,075	6,155	7,802
Add: Interest	-	(1)	(2)	(2)
Add: Depreciation	884	912	772	714
Unadjusted EBITDA	**3,495**	**4,986**	**6,925**	**8,514**

We have made the necessary inquiries of management regarding the forecast financial information and the assumptions underpinning those forecasts and have used the forecast financial information to provide support for our assessed maintainable level of earnings.

Typically with a future maintainable earnings valuation, historical earnings will be normalised for the following:

- Non-recurring or one-off items such as profit on sale of assets;
- Non-operating revenues and expenses;
- Unrecorded items; and
- Abnormal or non-commercial transactions.

However, we consider the Shipping Business to have undergone significant and unquantifiable changes over the Analysis Period. Based on our inquiries of management and our analysis outlined in section 11.1.1, we consider the non-recurring historical items to be unquantifiable and inseparable for the following reasons:

- The Shipping Business experienced increased demand over the years ended 31 October 2013 and 2014, which resulted in the leasing of four vessels and incurrence of hire fees. Whilst the hire fees can be normalised, we have not been provided with the breakdown of revenue by vessel and therefore are unable to normalise the relevant revenue items; and
- Transportation costs and loading charges were reduced subsequent to the year ended 31 October 2013, however the associated revenue normalisation for the year ended 31 October 2013 is not quantifiable.

The decrease in demand for the Shipping Business' services as highlighted through declining revenues represents an inherent change to the business. Therefore, we consider it more appropriate to rely on the unaudited results for the year ended 31 October 2016 and the forecast prepared by management for the year ending 31 October 2017, as these are more representative of the future performance of the Shipping Business.

The EBITDA of the Shipping Business over the Analysis Period are set out below.

Shipping Business	Financial year ended 31-Oct-16 $'000	Financial year ended 31-Oct-15 $'000	Financial year ended 31-Oct-14 $'000	Financial year ended 31-Oct-13 $'000
EBITDA	3,495	4,986	6,925	8,514

Based on the above, we consider the Shipping Business' future maintainable earnings to be in the range of approximately $3.5 million to $4.3 million per annum. As detailed above, we do not consider the earnings of the Shipping Business across the years ended 31 October 2013, 31 October 2014 and 31 October 2015 to be reflective of the expected future performance of the Shipping Business particularly with changes to the level of vessels in use. In arriving at the top end of our assessed FME range we have allowed for some upside on the most recent year end results by considering the weighted average earnings over the past three years, with weightings assigned based on our assessment of the relevance of each period. We also note that the short term forecast prepared by management supports our assessed level of maintainable earnings, however we have not included the forecast in the above assessment of future maintainable earnings as under RG 170 we do not have reasonable grounds to rely on the prospective financial information.

We have chosen not to include the forecast financial information of the Shipping Business as we have not been provided with sufficient evidence supporting the underlying assumptions behind the forecast. This forecast performance of the Shipping Business supports our assessed level of future maintainable earnings as it confirms that management do not foresee any immediate changes to the business or its performance, therefore validating our reliance on the most recent financial performance when assessing a level of future maintainable earnings.

Calculation and Application of an Earnings Multiple

The standard FME methodology guides us to derive our capitalisation multiple from the multiples which apply to comparable companies. However in practice it is accepted that because there is no identical company from which to derive the capitalisation multiple, it will comprise a multiple derived from the most comparable companies for which information is publicly available, adjusted to take account of the various ways in which the most comparable companies are different to the company being valued.

We selected a group of public listed companies considered to be comparable due to activity or exposure to a similar end user market and risks to the Shipping Business to determine an appropriate earnings multiple. The EBITDA multiples included in the tables below have been calculated using the twelve month trailing EBITDA from the comparable company's most recent reporting date prior to 31 October 2016. The enterprise value of the comparable companies used in the calculation of an EBITDA multiple was based on the market capitalisation of the comparable companies at 31 October 2016, being the valuation date. We have then adjusted the market capitalisation for the company's net debt position at the most recent

reporting date. In determining an appropriate earnings multiple to apply to the Shipping Business, the following factors were considered:

- economic factors (e.g. economic growth, inflation, interest rates) affecting the market in which the Shipping Business operates;
- strategic attractions of the Shipping Business – its particular strengths and weaknesses, market position, strength of competition and barriers to entry;
- nature and size of the Shipping Business;
- exchange on which the Shipping Business is listed;
- industry cycle considerations;
- relationship with and dependence on key clients;
- stability and quality of earnings;
- the asset backing of the underlying business;
- dependence on suppliers, customers and key personnel;
- the future prospects for the operations of Shipping Business; and
- share market conditions.

We have reviewed the resultant multiples (observable for publicly listed companies) and adjusted these for:

- variations in the factors above between the Shipping Business and the comparable companies; and
- a control premium.

We have considered the EBITDA trading multiples of companies with similar shipping operations based in China, however given that these companies are listed on the Stock Exchange of Hong Kong (‘**SEHK**’), Shanghai Stock Exchange (‘**SHSE**’), Shenzhen Stock Exchange (‘**SZSE**’) and Taiwan Stock Exchange (‘**TWSE**’) the companies are subject to different market factors to those experienced by Blackgold and therefore the Shipping Business. The trading multiples of these comparable companies with China based operations are set out below.

Company Name	Exchange	Enterprise value as at 31-Oct-16 ($m)	Trailing revenue for the year 31-Oct-16 ($m)	Trailing EBITDA for the year 31-Oct-16 ($m)	Historical EBITDA multiple
COSCO SHIPPING Energy Transportation Co., Ltd	SEHK	8,105.5	1,946.6	708.0	11.4
Changjiang Shipping Group Phoenix Co. Ltd	SZSE	1,398.7	101.1	6.2	224.2
Pacific Basin Shipping Ltd	SEHK	1,422.8	1,495.5	50.1	28.4
Ningbo Marine Company Limited	SHSE	1,571.9	210.7	87.8	17.9
China Shipping Haisheng Co., Ltd	SHSE	2,272.8	178.0	20.0	113.5
Tianjin Tianhai Investment Co., Ltd	SHSE	3,430.4	351.1	14.6	234.3
Sinotrans Shipping Ltd	SEHK	172.1	1,208.7	62.0	2.8
COSCO Shipping Company Limited	SHSE	3,332.0	1,017.3	125.2	26.6
Tianjin Port Company Limited	SHSE	3,866.9	2,164.9	590.5	6.5
Jinzhou Port Co.,Ltd	SHSE	2,358.4	351.6	99.5	23.7
Zhuhai Port Co.,Ltd	SZSE	1,289.6	347.0	49.1	26.3

Company Name	Exchange	Enterprise value as at 31-Oct-16 ($m)	Trailing revenue for the year 31-Oct-16 ($m)	Trailing EBITDA for the year 31-Oct-16 ($m)	Historical EBITDA multiple
Zhongchang Big Data Corporation Limited	SHSE	1,519.5	179.2	30.2	50.3
SITC International Holdings Co., Ltd	SEHK	2,227.7	1,658.8	218.5	10.2
Chinese Maritime Transport Ltd	TWSE	369.1	138.0	53.6	6.9

Table 1- China based operations

Source: CapitalIQ and BDO analysis

We also analysed the trading multiples observed for ASX listed companies with marine transport and resource operations, which show significantly lower multiples as presented below.

Company Name	Exchange	Enterprise value as at 31-Oct-16 ($m)	Trailing revenue for the year 31-Oct-16 ($m)	Trailing EBITDA for the year 31-Oct-16 ($m)	Historical EBITDA multiple
Blackgold	ASX	158.8	402.0	35.8	4.4
CI Resources Limited	ASX	194.4	189.0	51.7	3.8
Steamships Trading Company Limited	ASX	954.2	318.6	96.9	9.8
MMA Offshore Limited	ASX	455.9	481.1	74.6	6.1
Mean					**6.0**
Median					**5.3**

Table 2- ASX listed shipping and logistics companies

Source: CapitalIQ and BDO analysis

We note that the above companies do not have directly comparable operations to that of the Shipping Business, however it highlights the different magnitude of earnings multiples observed on SEHK, SHSE, and SZSE when compared with ASX. Given that the companies presented in Table 2 are larger, do not operate in China and have significantly more diversified operations, we have also considered trading EBITDA multiples of companies with international shipping and logistics operations listed on international exchanges such as the Korea Exchange (‘**KRX**’), Tokyo Stock Exchange (‘**TSE**’), New York Stock Exchange (‘**NYSE**’), Bombay Stock Exchange (‘**BSE**’) and Toronto Stock Exchange (‘**TSX**’) as set out in Table 3 below.

Company Name	Exchange	Enterprise value as at 31-Oct-16 ($m)	Trailing revenue for the year 31-Oct-16 ($m)	Trailing EBITDA for the year 31-Oct-16 ($m)	Historical EBITDA multiple
Intergis Co., Ltd	KRX	278.1	616.0	23.6	11.8
Wisdom Marine Lines Co., Limited	TWSE	3,022.7	446.6	228.3	13.2
Mitsui OSK Lines Ltd	TSE	14,574.5	19,595.2	1,031.8	14.1

Company Name	Exchange	Enterprise value as at 31-Oct-16 ($m)	Trailing revenue for the year 31-Oct-16 ($m)	Trailing EBITDA for the year 31-Oct-16 ($m)	Historical EBITDA multiple
Kirby Corporation	NYSE	5,113.8	2,373.4	620.8	8.2
Matson, Inc	NYSE	3,294.1	2,501.1	370.0	8.9
Wan Hai Lines Ltd	TWSE	1,786.8	2,389.8	228.4	7.8
Korea Line Corporation	KRX	1,600.3	579.9	152.0	10.5
Navios Maritime Partners L.P	NYSE	813.1	253.3	148.5	5.5
Mercator Limited	BSE	812.7	511.2	99.1	8.2
Algoma Central Corp	TSX	554.8	369.0	58.1	9.6
Heung-A Shipping Co., Ltd	KRX	445.1	982.8	40.8	10.9
Shreyas Shipping & Logistics Limited	BSE	146.6	129.7	12.1	12.1
Shahi Shipping Limited	BSE	5.3	3.3	0.3	18.7
Mean					**10.7**
Median					**10.1**

Table 3- International shipping and logistics companies

Source: CapitalIQ and BDO analysis

We have based our assessment of an appropriate earnings multiple on the results contained in Table 1, Table 2 and Table 3. Although, the companies presented in Table 1 have the most comparable operations to that of the Shipping Business, the range of multiples is too wide for us to rely on these results alone. Table 2 presents the multiples observed for marine transportation and resource companies on the ASX, which shows a lower and more consistent earnings multiple although not directly comparable. We have also considered the multiples presented in Table 3 as they represent companies with similar operations but in different geographic locations.

Given that the Shipping Business is a subsidiary of Blackgold, which is listed on the ASX, we consider the multiples in Table 2 to most accurately reflect the magnitude of trading multiple for the Shipping Business, if it were to be listed. We have adopted the average EBITDA multiple of the four ASX listed comparable companies as the low end of our adopted range. In assessing the top end of our assessed range of multiples, we gave consideration to the comparable companies outlined in Table 3.

Based on the above analysis, we have selected a listed comparable earnings multiple of between 6.0 and 7.0.

A description of the comparable companies used in our analysis is set out in Appendix 3.

The main factors which we consider must be applied to adjust the multiple derived from the comparable listed multiple to determine a multiple for the Shipping Business are set out in the paragraphs below.

Control Premium

It should be noted that observed market prices for publicly listed companies relate to marketable parcels of shares, actively traded in a free and open market but which are minority interests. Generally, the value attributable to a 100% shareholding in a company, which provides the acquirer with the ability to exert full control of all the operational and financial aspects, is higher than a marketable parcel of shares.

To acquire a 100% shareholding and the benefits that come with this, the acquirer will have to pay a "premium for control". The premium for control reflects the additional value that attaches to a controlling interest compared to the value of a minority interest as demonstrated in normal share market trading. The advantages of holding a controlling interest in a business include the following:

- control over decision making and strategic direction;
- access to underlying cash flows;
- control over dividend policies; and
- access to potential tax losses.

A market based multiple is calculated using the market capitalisation which is based on the company's share price. A share price is reflective of a minority interest in a company. Therefore, we must add a premium for control to any FME valuation that is calculated using a market based multiple.

We have reviewed the control premiums paid by acquirers of companies listed on the ASX over the past eight years. We have summarised our findings below:

Year	Number of Transactions	Average Deal Value ($m)	Average Control Premium (%)
2016	16	996.82	41.62
2015	36	966.08	41.70
2014	42	518.19	34.56
2013	38	206.79	51.55
2012	49	345.13	46.38
2011	61	551.76	53.88
2010	64	841.15	42.12
2009	61	456.18	49.48
	Mean	**610.26**	**45.16**
	Median	**534.97**	**44.25**

Source: Bloomberg

In arriving at an appropriate control premium to apply we note that observed control premiums can vary due to the:

- Nature and magnitude of non-operating assets;
- Nature and magnitude of discretionary expenses;
- Perceived quality of existing management;
- Nature and magnitude of business opportunities not currently being exploited;
- Ability to integrate the acquiree into the acquirer's business;
- Level of pre-announcement speculation of the transaction; and
- Level of liquidity in the trade of the acquiree's securities.

The data in the table above suggests that the average control premium in each year from 2009 to 2016 is exhibiting a slight downward trend. The average control premium paid by acquirers in 2014 is lower on account of just eight transactions having a control premium over 50%, of which only one of these was over 100%. The highest average control premium was observed in 2011 with eight transactions having premiums

over 100%, of that two exceeded 200%. There has been a decrease in the number of control transactions in which two transactions had control premiums over 100%, with one being 240%. The reduction in the number of transactions may be a result of uncertainty around financial markets and economic conditions.

The table above indicates that the median annual control premium paid by acquirers on the ASX since 2009 is approximately 44%. When assessing the control premium that an acquirer would likely pay for the acquisition of a controlling stake in Blackgold we have given consideration to Company specific factors, in particular, the fact that there has been a very low level of liquidity of the Company's stock traded over the past year, meaning acquirers are less likely to pay a premium for control to acquire an illiquid stock.

Based on the above analysis we consider an appropriate control premium to apply in our valuation of Blackgold shares is between 30% and 40%.

Smaller size and lack of diversification

A significant difference exists between the Shipping Business and the most comparable publicly listed companies in terms of size, scale and diversification. As detailed in Appendix 3, most of the comparable companies identified are significantly larger and have more diversified operations. For example, the average market capitalisation of the comparable China based companies is $2.56 billion when compared with the Shipping Business which only represents a portion of the value of Blackgold which has a pre-Transaction market capitalisation of $18.65 million. Similarly, the average revenue for the comparable China based listed companies is $796 million compared with revenue of the Shipping Business for the year ended 31 October 2015 of $5.6 million. We also note that most of the comparable companies also provide other transportation and logistics services, compared with the Shipping Business which operates eight vessels and only deals in transporting goods to port.

Based on the above, we consider it appropriate to apply a further discount due to the smaller size of the Shipping Business and its lack of diversification compared with the comparable companies.

Multiple Adopted

In consideration of all the above factors we consider that an appropriate earnings multiple to apply to the earnings of the Shipping Business is in the range from 3.1 to 3.9. This is derived as set out in the table below.

	Low	High
Comparable company EBITDA multiple selected	6.0	7.0
Premium for control	*30%*	*40%*
Comparable company EBITDA multiple selected (controlling interest basis)	**7.8**	**9.8**
Discounts for the above factors	*60%*	*60%*
Adjusted EBITDA multiple	**3.1**	**3.9**

Summary of Future Maintainable Earnings Value

We consider that an appropriate multiple to apply to the earnings of the Shipping Business is between 3.1 and 3.9. The application of this multiple results in the values shown below:

	Low Value $'000	High Value $'000
Future Maintainable EBITDA	3,500	4,300
EBITDA Multiple	3.1	3.9
Enterprise Value of the Shipping Business	**10,850**	**16,770**

Source: BDO analysis

Our assessed enterprise value of the Shipping Business is between $10.85 million and $16.77 million with a midpoint value of $13.81 million.

12. Valuation of the Coal Trading Business

12.1 Historical financial information

In order to value the Coal Trading Business on an FME basis we have extracted the financial information of the Coal Trading Business from the audited consolidated historical financial information presented in section 5 of our report. The audit of Blackgold included the audit of the Coal Trading Business, however because there was not a separate audit opinion provided on the financial information of the Coal Trading Business for the four years ended 31 October 2016 we have presented them as "unaudited".

The historical financial information of the Coal Trading Business is set out below.

12.1.1. Historical Statement of Profit or Loss and Other Comprehensive Income

Set out below is the historical statement of profit or loss and other comprehensive income:

Coal Trading Business Historical Statement of Profit or Loss and Other Comprehensive Income	Unaudited for the year ended 31-Oct-16 $'000	Unaudited for the year ended 31-Oct-15 $'000	Unaudited for the year ended 31-Oct-14 $'000	Unaudited for the year ended 31-Oct-13 $'000
Revenue	313,439	380,014	292,008	200,167
Cost of Sales	(310,309)	(377,094)	(282,157)	(187,939)
Sales Tax	(406)	(164)	(160)	(430)
Gross Profit	2,725	2,755	9,691	11,798
GP%	*0.87%*	*0.72%*	*3.32%*	*5.89%*
Other Income	5,640	4,480	5,268	5,645
Distribution and marketing expenses	(226)	(609)	(4,090)	(6,288)
Administrative expenses	(1,496)	(2,685)	(2,144)	(2,405)
Other expenses	-	-	(125)	(609)
Finance costs	(6,277)	(4,681)	(6,424)	(6,082)
Net profit before tax	**365**	**(740)**	**2,175**	**2,058**
NPBT%	*0.12%*	*(0.19%)*	*0.74%*	*1.03%*

Source: Extracted from the audited consolidated financial statements of Blackgold for the years ended 31 October 2013, 2014, 2015 and 2016

We have not undertaken a review of the Coal Trading Business' unaudited accounts in accordance with Australian Auditing and Assurance Standard 2405 'Review of Historical Financial Information' and do not express an opinion on this financial information. However nothing has come to our attention as a result of our procedures that would suggest the financial information within the unaudited accounts has not been prepared on a reasonable basis.

We note the following in relation to the historical performance of the Coal Trading Business over the Analysis Period:

- The Coal Trading Business is an intermediary trader between suppliers and customers, and therefore takes a margin on the transactions. In China, it is common practice to use intermediaries when buying and selling commodities as suppliers and customers do not typically liaise directly. The business trades coal with third parties. The Coal Trading Business does not sell

any of the coal produced from any of Blackgold's producing mines. The suppliers are usually sourced from the same group that the business has transacted with previously as the business needs to ensure the quality of coal is reliable.

- Over the three years ended 31 October 2015, revenue of the Coal Trading Business increased (year on year) for the following reasons:
    - The Coal Trading Business operates in RMB but the financial statements are presented in Australian Dollars. The RMB appreciated against the AUD at a rate of approximately 12% per annum over the three years ended 31 October 2015.
    - The Coal Trading Business experienced increased demand over the period from FY13 to FY15 given the steady increase in production and subsequent supply of coal from 2012 through 2015. Management advise that the increased demand over the period was a result of increased experience in the sales team and an expansion of its customer base.
- The revenue of the Coal Trading Business decreased over FY16, from the previous year, as management initiated a scale back of operations.
- The gross margin of the Coal Trading Business has broadly declined from FY13 to FY15 due to the Coal Trading Business ceasing to arrange delivery services for the customer, on which the business made a margin. In FY13 the Coal Trading Business was still arranging delivery to the destination port of a customer. In FY14 it transitioned away from arranging delivery and customers were then required to organise transport for the coal themselves and by FY15 the business was no longer providing any form of delivery services.
- Other income mainly consists of government subsidies and foreign currency exchange differences. The Coal Trading Business also accrued some interest income from customers who did not make payment within the timeframe disclosed in the terms of the coal purchase.
- In FY13 and FY14, distribution and marketing expenses mainly comprised the transport and delivery charges discussed above. The Coal Trading Business would then on-charge these costs to the customer. FY14 shows a slight decrease from FY13 as the Coal Trading Business transitioned away from providing transport and delivery of the coal to the customer. FY15 and FY16 show a significant decrease in distribution and marketing expenses on prior years as the business no longer provided any transport and delivery services. A reduction in FY16 from FY15 is due to the scale back in operations discussed above.
- Administrative expenses has remained broadly stable over the Coal Trading Business Analysis Period with the exception of FY16 falling slightly due to the scale back in operations.
- Finance costs consisted of interest expenses and bank charges. The interest expenses relate to the working capital overdraft facility the Coal Trading Business requires to fund the purchase of coal.

12.1.2. FME valuation of the Coal Trading Business

When performing an FME valuation we must determine what the future maintainable earnings of the business is and then determine an appropriate capitalisation multiple to apply to these earnings.

In assessing future maintainable earnings, the figure selected should represent what is currently sustainable. Any anticipated growth in earnings is accounted for via the capitalisation rate.

Our unadjusted EBITDA is derived by making the following adjustments to the profit before tax as presented in section 12.1.1. These adjustments are outlined below.

Coal Trading Business	Unaudited for the year ended 31-Oct-16 $'000	Unaudited for the year ended 31-Oct-15 $'000	Unaudited for the year ended 31-Oct-14 $'000	Unaudited for the year ended 31-Oct-13 $'000
Profit before tax	365	(740)	2,175	2,058
Add: Interest expense	4,123	3,948	5,499	5,810
Add: Depreciation	212	307	300	267
Unadjusted EBITDA	**4,700**	**3,515**	**7,974**	**8,135**

Source: Extracted from the audited consolidated financial statements of Blackgold for the years ended 31 October 2013, 2014, 2015 and 2016

We note that we have not been provided any forecast financial information and therefore cannot use forecast financial information to provide support for our assessed maintainable level of earnings.

Typically with a future maintainable earnings valuation, historical earnings will be normalised for the following:

- Non-recurring or one-off items such as profit on sale of assets;
- Non-operating revenues and expenses;
- Unrecorded items; and
- Abnormal or non-commercial transactions.

However, we consider the Coal Trading Business to have undergone significant and unquantifiable changes over the Coal Trading Business Analysis Period. Based on our inquiries of management and our analysis outlined in section 12.1.1, we consider the non-recurring historical items to be unquantifiable and inseparable for the following reasons:

- In the year ended 31 October 2013 the business provided delivery arrangement from the supplier to the customer. These costs were expensed by the Coal Trading Business and subsequently charged back to the customer, with an additional margin. Throughout the year ended 31 October 2014, the business gradually ceased the delivery aspect of the services it provided to customers. Therefore the years ended 31 October 2015 and 31 October 2016 present financial performance of the Coal Trading Business that does not include any form of delivery expenses and subsequent on charge income, which is indicative of how the business is expected to continue operating.
- As discussed above, the demand for the Coal Trading Business' services increased over the period from FY13 to FY15. Following these periods of revenue growth, the Coal Trading Business scaled back operations on the back of declining margins. Management advise that the intention is to continue this scale back of operations in the coming years.

Management has explained that scaling down and scaling up the operations is heavily dependent on the conditions of the coal industry. Therefore, as a rule of thumb, we would consider the most recent financial performance of the business and data from the coal industry to give the best indication of future performance. However, we note that the coal price has made a sudden recent resurgence in the period subsequent to July 2016.

The recovery of the coal price would normally precede an increase in coal production and supply into the market, which would increase demand for the Coal Trading Business' services. However, the restrictions on coal production in China will continue to limit the supply of coal into the market, the effects of which will not be reliably quantifiable until actual results are available.

The EBITDA of the Coal Trading Business over the Coal Trading Business Analysis Period is set out below.

Coal Trading Business	Unaudited for the year ended 31-Oct-16 $'000	Unaudited for the year ended 31-Oct-15 $'000	Unaudited for the year ended 31-Oct-14 $'000	Unaudited for the year ended 31-Oct-13 $'000
EBITDA	4,700	3,515	7,974	8,135

Source: BDO analysis

Based on the above, we consider the Coal Trading Business' future maintainable earnings to be in the range of $3.5 million and $4.5 million per annum. As detailed above, we do not consider the earnings of the Coal Trading Business across the years ended 31 October 2013 and 31 October 2014 to be reflective of the expected future performance of the Coal Trading Business given the change in service offerings and the scaling back of operations. We consider the earnings of the Coal Trading Business across the years ended 31 October 2015 and 31 October 2016 to be indicative of the range of earnings that it would reasonably be expected to produce going forward.

Calculation and Application of an Earnings Multiple

The standard FME methodology guides us to derive our capitalisation multiple from the multiples which apply to comparable companies. However in practice it is accepted that because there is no identical company from which to derive the capitalisation multiple, it will comprise a multiple derived from the most comparable companies for which information is publicly available, adjusted to take account of the various ways in which the most comparable companies are different to the company being valued.

We selected a group of public listed companies considered to be comparable due to activity or exposure to a similar end user market and risks to the Coal Trading Business to determine an appropriate earnings multiple. The EBITDA multiples included in the tables below have been calculated using the twelve month trailing EBITDA from the comparable company's most recent reporting date prior to 31 October 2016. The enterprise value of the comparable companies used in the calculation of an EBITDA multiple was based on the market capitalisation of the comparable companies at 31 October 2016, being the valuation date. We have then adjusted the market capitalisation for the company's net debt position at the most recent reporting date. In determining an appropriate earnings multiple to apply to the Coal Trading Business, the following factors were considered:

- economic factors (e.g. economic growth, inflation, interest rates) affecting the market in which the Coal Trading Business operates;
- strategic attractions of the Coal Trading Business – its particular strengths and weaknesses, market position, strength of competition and barriers to entry;
- nature and size of the Coal Trading Business;
- exchange on which the Coal Trading Business is listed;
- industry cycle considerations;
- relationship with and dependence on key clients;
- stability and quality of earnings;

- the asset backing of the underlying business;
- dependence on suppliers, customers and key personnel;
- the future prospects for the operations of Coal Trading Business; and
- share market conditions.

We have reviewed the resultant multiples (observable for publicly listed companies) and adjusted these for:

- variations in the factors above between the Coal Trading Business and the comparable companies; and
- a control premium.

We have considered the EBITDA trading multiples of companies with similar exposure to the global coal industry and trading operations based in China, however given that these companies are listed on the SEHK and SHSE, the companies are subject to different market factors to those experienced by Blackgold and therefore the Coal Trading Business. The trading multiples of these comparable companies with China based operations are set out below.

Company Name	Exchange	Enterprise value as at 31-Oct-16 ($m)	Trailing revenue for the year ended 31-Oct-16 ($m)	Trailing EBITDA for the year ended 31-Oct-16 ($m)	Historical EBITDA multiple
APAC Resources Limited	SEHK	91.3	21.3	(1.6)	n/a
China Chengtong Development Group Ltd.	SEHK	462.8	94.8	5.1	91.3
China Public Procurement Limited	SEHK	164.4	126.3	(18.7)	n/a
Global Strategic Group Limited	SEHK	257.6	8.1	(6.7)	n/a
Loco Hong Kong Holdings Limited	SEHK	48.5	345.8	0.6	86.4
Loudong General Nice Resources (China) Holdings Limited	SEHK	834.8	240.0	(63.0)	n/a
National United Resources Holdings Limited	SEHK	222.9	67.8	(9.6)	n/a
Tianjin Tianhai Investment Co., Ltd.	SHSE	3,430.4	351.1	14.6	234.3
Wealth Glory Holdings Limited	SEHK	25.6	12.1	(7.6)	n/a
Zhejiang China Commodities City Group Co., Ltd.	SHSE	8,924.0	1,621.9	525.2	17.0

Table 4 - Chinese listed companies exposed to the coal industry

Source: CapitalIQ and BDO analysis

We also considered the EBITDA trading multiples observed for ASX listed companies with exposure to commodities trading and the global coal industry, which show significantly lower multiples as presented below.

Company Name	Exchange	Enterprise value as at 31-Oct-16 ($m)	Trailing revenue for the year ended 31-Oct-16 ($m)	Trailing EBITDA for the year ended 31-Oct-16 ($m)	Historical EBITDA multiple
Blackgold	ASX	158.8	402.0	35.8	4.4
Bathurst Resources Limited	ASX	64.8	48.7	10.2	6.3
BHP Billiton Limited	ASX	160,066.4	41,494.7	15,407.5	10.4
Universal Coal plc	ASX	104.4	97.6	17.0	6.2
Whitehaven Coal Limited	ASX	3,866.0	1,164.4	557.4	6.9
Mean					6.8
Median					6.3
Mean (excluding BHP)					6.0
Median (excluding BHP)					6.3

Table 5 - ASX listed companies exposed to the coal industry

Source: CapitalIQ and BDO analysis

We note that the above companies do not have directly comparable operations to that of the Coal Trading Business, however it highlights the different magnitude of earnings multiples observed on SEHK, SHSE, and SZSE when compared with ASX. The mean and median (excluding outliers) excludes BHP Billiton Limited given the difference in size and diversification when compared with the Coal Trading Business.

We have also considered trading EBITDA multiples of international companies with exposure to the global coal industry and commodities trading operations that are listed on various exchanges including the Jakarta Stock Exchange (‘**JKSE**’), BSE, and National Stock Exchange of India (‘**NSEI**’) as set out in Table 6 below.

Company Name	Exchange	Enterprise value as at 31-Oct-16 ($m)	Trailing revenue for the year 31-Oct-16 ($m)	Trailing EBITDA for the year ended 31-Oct-16 ($m)	Historical EBITDA multiple
PT AKR Corporindo Tbk	JKSE	3,161.0	1,562.3	162.4	19.5
Chandra Prabhu International Ltd	BSE	2.3	9.7	0.2	14.0
Gujarat Metallic Coal & Coke Ltd	BSE	3.6	97.2	0.3	11.5
PT Mitrabara Adiperdana Tbk	JKSE	207.1	260.8	58.3	3.6
Hemang Resources Limited	BSE	2.0	64.5	1.1	1.8
T Spiritual World Ltd	BSE	0.3	0.2	0.0	12.6
Amrapali Industries Ltd	BSE	9.3	907.1	1.2	7.5
Ausom Enterprise Ltd	BSE	5.0	68.6	1.5	3.4
National Steel and Agro Industries Limited	NSEI	35.5	776.1	31.3	1.1
Mean					**8.3**
Median					**7.5**

Table 6 - International listed companies exposed to the coal industry

Source: CapitalIQ and BDO analysis

We have based our assessment of an appropriate earnings multiple on the results contained in Table 4, Table 5 and Table 6. We note that the comparable companies identified are not directly comparable therefore we have considered the trading multiples of the identified comparable companies broadly. We have considered the trading multiples of the following:

- coal trading companies listed on the SEHK, SHSE and SZSE;
- coal companies listed on the ASX; and
- coal companies listed on other international exchanges.

A description of the comparable companies used in our analysis is set out in Appendix 4.

Based on the above analysis, we have selected a listed comparable earnings multiple of between 6.0 and 7.0.

The main factors which we consider must be applied to adjust the multiple derived from the comparable listed multiple to determine a multiple for the Coal Trading Business are set out in the paragraphs below.

Control Premium

We consider the control premium of 30% to 40% selected for the Shipping Business in section 11.1.2 appropriate for application to the Coal Trading Business.

Smaller size and lack of diversification

A significant difference exists between the Coal Trading Business and the most comparable publicly listed companies in terms of size, scale and diversification. As detailed in Appendix 4, most of the comparable companies identified are significantly larger and have more diversified operations. For example, the average market capitalisation of the comparable China based companies is $1.48 billion when compared with the Coal Trading Business which only represents a portion of the value of Blackgold which has a pre-Transaction market capitalisation of $18.65 million. We also note that most of the comparable companies also hold other investments and operations such as mining or trading goods and commodities other than coal, compared with the Coal Trading Business which operates solely as a trading intermediary between producers and consumers of coal.

Based on the above, we consider it appropriate to apply a further discount due to the smaller size of the Coal Trading Business and its lack of diversification compared with the comparable companies.

Uncertainty in Chinese coal industry

As noted previously, the Coal Trading Business is heavily exposed to changes in the Chinese coal industry. We consider there to be significant uncertainty around the outlook of the coal industry in China given the Chinese Government's recent imposition of production restrictions and more stringent safety regulations.

The International and ASX listed comparable companies noted above operate in coal production and trading markets all over the world, and therefore the risks associated with the Coal Trading Business' reliance on the Chinese coal market are inherently higher than the International and ASX listed comparable companies. Therefore, we have applied a discount to the comparable company multiples to account for this.

Multiple Adopted

In consideration of all the above factors we consider that an appropriate earnings multiple to apply to the earnings of the Coal Trading Business is in the range from 2.0 to 2.5. This is derived as set out in the table below.

	Low	High
Comparable company EBITDA multiple selected	6.0	7.0
Premium for control	*30%*	*40%*
Comparable company EBITDA multiple selected (controlling interest basis)	**7.8**	**9.8**
Discounts for the above factors	*75%*	*75%*
Adjusted EBITDA multiple (rounded)	**2.0**	**2.5**

Source: BDO analysis

Summary of Future Maintainable Earnings Value

We consider that an appropriate multiple to apply to the earnings of the Coal Trading Business is between 2.0 and 2.5. The application of this multiple results in the values shown below:

	Low Value $'000	High Value $'000
Future Maintainable EBITDA	3,500	4,500
EBITDA Multiple	2.0	2.5
Enterprise Value of the Coal Trading Business	**7,000**	**11,250**

Source: BDO analysis

Our assessed enterprise value of the Coal Trading Business is between $7.00 million and $11.25 million with a rounded midpoint value of $9.12 million.

13. Valuation of other assets and liabilities

Other assets and liabilities of Blackgold represent the assets and liabilities which have not been specifically adjusted and have not been accounted for in the valuation of the Shipping Business, Coal Trading Business or Mining Business. From our review of these other assets and liabilities, outlined in the table below, we do not believe that there is a material difference between their book value and their fair value unless an adjustment has been noted.

We note our valuation date for each of the Shipping Business, Coal Trading Business and the Mining Business is 31 October 2016.

Set out below is a table of Blackgold's assets and liabilities which have not been included in the valuation of the Shipping Business, Coal Trading Business or the Mining Business.

Other assets and liabilities	Note	Low $'000	Preferred $'000	High $'000
Assets				
Cash and cash equivalents	a	4,514	4,514	4,514
Trade and other receivables	b	4,366	4,366	4,366
Investments accounted for using the equity method	c	375	375	375
Other financial assets	d	3,884	3,884	3,884
Less: Liabilities				
Trade and other payables	e	(8,366)	(8,366)	(8,366)
Borrowings	f	(102,359)	(102,359)	(102,359)
Financial liabilities	g	(21,096)	-	-
Provision for restoration costs	h	(2,036)	(2,036)	(2,036)
Deferred tax liability	i	(1,980)	(1,980)	(1,980)
Provision for taxation	j	(3,738)	(3,738)	(3,738)
Amount owing to a related party	k	(622)	(622)	(622)
Amount owing to an associate	l	(264)	(264)	(264)
Net other assets and liabilities		**(127,322)**	**(106,226)**	**(106,226)**

Source: Audited financial statements for the year ended 31 October 2016 and BDO analysis

We note the following in relation to the other assets and liabilities of Blackgold.

Note a) Cash and cash equivalents

Management have provided bank statements and bank reconciliations supporting the cash balance at 31 October 2016, which we have relied upon in our valuation of other assets and liabilities. Given that management has advised that the cash generated by the Shipping Business and Coal Trading Business is retained for working capital the FME valuations of the Shipping Business and Coal Trading Business already accounts for this cash. Therefore, we have only adjusted other cash and cash equivalents for the surplus cash held by the Mining Business. Based on the consolidation spreadsheet at 31 October 2016, the Mining Business holds cash of approximately $4.52 million (converted at an exchange rate of 1RMB:$0.1942). Based on the forecast cash flows in the Adjusted Models, we consider this to be surplus cash and have therefore included it in other assets and liabilities.

Note b) Trade and other receivables

The trade and other receivables included in other assets and liabilities comprise receivables directly related to the Mining Business at 31 October 2016, which have not been incorporated in the Adjusted Models. Management have provided an aged receivables listing at 31 October 2016, therefore we have reasonable grounds for reliance on this balance. Blackgold's remaining trade and other receivables primarily relate to the Coal Trading Business and the Shipping Business, which are captured by the FME valuations for those respective businesses and are therefore excluded from this value.

Note c) Investments accounted for using the equity method

The investments accounted for using the equity method represent unquoted shares measured at cost, with an adjustment for the Company's share of net profits of the associate. Given that it is an unquoted investment, we do not consider its market value to materially differ from its book value, therefore we have valued it at its book value at 31 October 2016.

Note d) Other financial assets

The other financial assets relate to the Company's 0.29% interest in Guizhou China Energy, which is measured at cost in the Company's audited financial statements as a result of its fair value not being able to be reliably measured. We do not have a reasonable basis for concluding that the market value of this investment materially differs from the book value that is presented in the audited financial statements at 31 October 2016.

Note e) Trade and other payables

The trade and other payables included in other assets and liabilities comprise payables directly related to the Mining Business at 31 October 2016, which have not been incorporated in the Adjusted Models. Management have provided an aged payables listing at 31 October 2016, therefore we have reasonable grounds for reliance on this balance. Blackgold's remaining trade and other payables primarily relate to the Coal Trading Business and the Shipping Business, which are captured by the FME valuations of those respective businesses and are therefore excluded from this value.

Note f) Borrowings

Borrowings represent the current borrowings at 31 October 2016 per the Company's audited financial statements.

Note g) Financial liabilities

The financial liabilities relates to the Convertible Bond issued to Vibrant. The terms of the Convertible Bond are outlined in section 5.4.

The Convertible Bond shall convert to shares upon Blackgold receiving the necessary approvals. Nothing has come to our attention to suggest that these approvals would not be obtained. Given that the conversion price is greater than the current share price we consider it likely that Blackgold will obtain these approvals and therefore convert the Convertible Bond. However, in the event that the approvals cannot be obtained, the Convertible Bond will be redeemed. Given the conversion price is higher than the current share price, this is not an optimal outcome for Blackgold, therefore we have adopted this assumption in our low valuation. We note that the Convertible Bond also redeems on completion of a reverse takeover, however we do not have reasonable grounds to believe that a reverse takeover will be completed prior to the completion date of 18 August 2017. Given that the Convertible Bond is convertible at $0.10, which is significantly higher than the pre-Scheme share price of $0.021, we consider it likely that the Convertible Bond will be converted rather than redeemed. Therefore, in our preferred and high valuation scenarios we have adjusted the value of the Convertible Note to nil to reflect its conversion. Consequently, we have increased the number of shares on issue by 210.96 million, to reflect the full conversion of the Convertible Bond for the preferred and high valuation ranges in section 14.1.1. Our low value of financial liabilities represents the book value of the Convertible Bond at 31 October 2016, which is on the assumption that the Convertible Bond will be redeemed rather than converted.

Note h) Provision for restoration costs

The Adjusted Models do not include restoration costs at the end of the respective life of mine. Therefore, we have included the provision for restoration costs in the valuation of other assets and liabilities per the Company's audited financial statements. AM&A have confirmed the reasonableness of this provision.

Note i) Deferred tax liability

The deferred tax liability adjustment of $1.98 million is based on the balance per the audited financial statements at 31 October 2016.

Note j) Provision for taxation

The Adjusted Models provide for the forecast tax to be incurred over the life of the mines, whereas the provision for taxation is a current liability arising from current year earnings.

Note k) Amount owing to a related party

The amount owing to a related party relates to a loan from Prima Network Financial group Limited, a company in which Dr James Tong is a director and shareholder. We do not consider the book value of this loan to materially differ from its market value.

Note l) Amount owing to an associate

The amount owing to an associate is held as part of the Shipping Business, however given that the loan is non-trade in nature we consider it a surplus liability of the Shipping Business and have therefore included it in other liabilities. Given its nature, we do not consider the market value of this loan to materially differ from its book value.

14. Valuation of Blackgold

14.1 Value of Blackgold using the Sum-of-Parts methodology

The value of Blackgold on a going concern basis is reflected in our valuation below:

Sum-of-Parts Valuation	Ref	Low $'000	Preferred $'000	High $'000
Value of the Coal Mining Business	10.6	174,800	329,650	481,500
Value of the Shipping Business	11	10,850	13,810	16,770
Value of the Coal Trading Business	12	7,000	9,120	11,250
Value of other assets and liabilities	13	(127,322)	(106,226)	(106,226)
Net asset value of Blackgold (control basis)		**65,328**	**246,354**	**403,294**
Shares on issue ('000)	14.1.1	888,004	1,098,964	1,098,964
Value per share ($)		**0.074**	**0.224**	**0.367**

Our assessed value of Blackgold on a control basis is between $0.074 and $0.367 with a preferred value of $0.224.

14.1.1. Number of shares on issue

The low end of our assessed range assumes that the Convertible Bond is redeemed and therefore not converted to shares. The Convertible Bond shall convert to shares upon Blackgold receiving the necessary approvals. Nothing has come to our attention to suggest that these approvals would not be obtained. Given that the conversion price is greater than the current share price we consider it likely that Blackgold will obtain these approvals and therefore convert the Convertible Note. However, in the event that the approvals cannot be obtained, the Convertible Bond will be redeemed. Given the conversion price is higher than the current share price, this is not an optimal outcome for Blackgold, therefore we have adopted this assumption in our low valuation. We note that the Convertible Bond also redeems on completion of a reverse takeover, however we do not have reasonable grounds to believe that a reverse takeover will be completed prior to the completion date of 18 August 2017. As such, the number of shares on issue for the low end of our assessed range represents the number of shares on issue prior to the Scheme.

For the preferred and high end of our assessed value range, we have assumed that the Convertible Bond will be converted to shares (as we consider this the most likely outcome). Given that the Convertible Bond is convertible at a price of $0.10 per share, which is significantly higher than the pre-Scheme share price of $0.021, we consider it likely that the Convertible Bond will be converted rather than redeemed. Conversion of the $21.096 million liability at $0.10 results in the issue of 210.96 million shares, which we have set out in the table below.

Number of shares on issue	Low Value ('000)	Preferred Value ('000)	High Value ('000)
Number of shares on issue prior to the Scheme	888,004	888,004	888,004
Number of shares issued on conversion of Convertible Bond	-	210,960	210,960
Total	**888,004**	**1,098,964**	**1,098,964**

14.2 Quoted Market Prices for Blackgold Securities

To provide a comparison to the valuation of Blackgold in Section 14.1, we have also assessed the quoted market price for a Blackgold share.

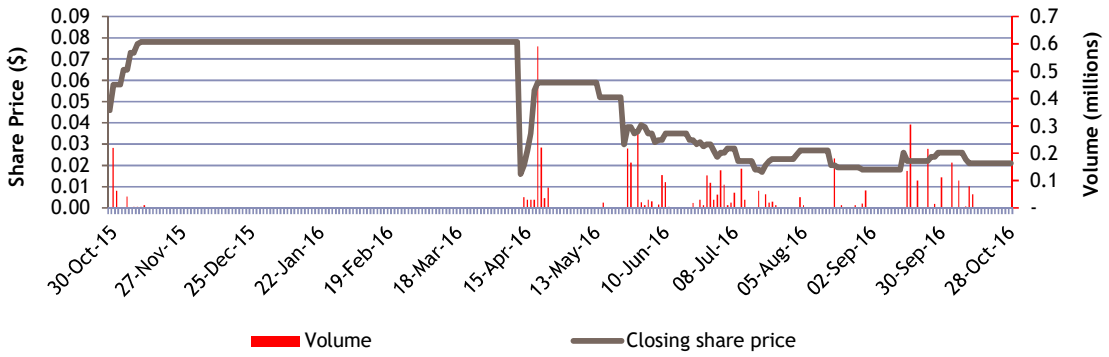
The quoted market value of a company's shares is reflective of a minority interest. A minority interest is an interest in a company that is not significant enough for the holder to have an individual influence in the operations and value of that company.

Minority interest value

Our analysis of the quoted market price of a Blackgold share is based on the pricing prior to the announcement of the Scheme. This is because the value of a Blackgold share after the announcement may include the effects of any change in value as a result of the Scheme.

The Scheme was announced on 31 October 2016 therefore, the following chart provides a summary of the share price movement over the twelve months to 28 October 2016, the last trading day prior to the announcement.

Blackgold share price and trading volume history



Source: Bloomberg, BDO analysis

The daily price of Blackgold shares over the twelve months to 28 October 2016 has ranged from a low of $0.016 on 13 April 2016 to a high of $0.078 on 12 April 2016. As illustrated by the graph above, there have been periods where no Blackgold shares were traded. Specifically, over the period from November 2015 to April 2016, Blackgold's share price remained at $0.078 due to no trading activity. This inactivity was followed by a significant price decline to a low of $0.016 on 13 April 2016. There was no announcement made to the market around this date, therefore we consider this an unexplained price movement.

From the period May 2016 to October 2016, the Blackgold share price exhibited a downwards trend and continued to be traded infrequently.

During this period a number of announcements were made to the market. The key announcements are set out below:

Date	Announcement	Closing Share Price Following Announcement $ (movement)			Closing Share Price Three Days After Announcement $ (movement)		
30/08/2016	Quarterly Activities Report	0.018	▼	5.3%	0.018	▶	0.0%
30/06/2016	Appendix 4D and Interim Financial Report	0.027	▼	10.0%	0.026	▼	3.7%
27/05/2016	Quarterly Activities Report	0.038	▶	0.0%	0.039	▲	2.6%
19/05/2016	Extension of Convertible Bonds Completion End Date	0.052	▶	0.0%	0.052	▶	0.0%
26/02/2016	Quarterly Activities Report	0.078	▶	0.0%	0.078	▶	0.0%
29/01/2016	Circumstances Affecting Preliminary Final Report	0.078	▶	0.0%	0.078	▶	0.0%
31/12/2015	Appendix 4E	0.078	▶	0.0%	0.078	▶	0.0%
26/11/2015	Quarterly Activities Report	0.078	▶	0.0%	0.078	▶	0.0%

Source: Bloomberg, BDO analysis

On 26 November 2015, the Company released a quarterly activities report for the quarter ended 31 October 2015. Total mine production achieved for the quarter was approximately 93.4% higher compared to the quarter ended 31 October 2014, and trading sales volume for the quarter was approximately 49.8% higher compared to the previous quarter. On the date of the announcement, Blackgold's share price remained unchanged at $0.078 and remained unchanged over the three subsequent trading days.

On 31 December 2015, the Company released an Appendix 4E detailing results for the twelve months ended 31 October 2015. On the date of the announcement, the share price remained unchanged at $0.078. The share price also remained unchanged over the three subsequent trading days.

On 29 January 2016, the Company announced the circumstances affecting its preliminary final report. The announcement provided an explanation in regards to the difference between the Company's profits after income tax stated in the Appendix 4E on 31 December 2015, to the number disclosed within the annual report dated 29 January 2016. The announcement did not impact the share price on the date of the announcement nor in the subsequent three days.

On 19 May 2016, the Company announced the extension of the end date of the Convertible Bond issued to LionHeart, a wholly owned subsidiary of Vibrant. The announcement did not impact the share price.

On 27 May 2016, the Company released a quarterly activities report for the quarter ended 30 April 2016 which outlined that the mine production achieved for the quarter was approximately 25.9% higher compared to the same quarter in 2015. On the date of the announcement, the share price remained unchanged at $0.038. However, over the three trading days following the announcement, the share price increased by 2.6% to close at $0.039.

On 30 June 2016, the Company released an Appendix 4D and Interim Financial Report. Profit from ordinary activities decreased by approximately 62% for the six months ended 30 April 2016, and total production for the period was approximately 13.3% higher compared to total production achieved in the six months ended 30 April 2015. On the date of the announcement the Company's share price decreased by 10% from $0.030 to $0.027. Over the three trading days following the announcement, the share price declined by a further 3.7% to close at $0.026.

On 30 August 2016, the Company released a quarterly activities report for the quarter ended 31 July 2016. Total mine production achieved for the quarter was approximately 26% lower compared to the quarter ended 31 July 2015 and trading sales volume for the quarter was approximately 1.8% higher compared to the previous quarter. On the date of the announcement, the share price decreased 5.3% from $0.019 to $0.018 and remained at this level for the three trading days following the announcement.

To provide further analysis of the market prices for a Blackgold share, we have also considered the volume weighted average market price for 10, 30, 60 and 90 day periods to 28 October 2016.

Share Price per unit	28-Oct-16	10 Days	30 Days	60 Days	90 Days
Closing price	$0.021				
Volume weighted average price		$0.021	$0.025	$0.023	$0.024

Source: Bloomberg, BDO analysis

The above weighted average prices are prior to the date of the announcement of the Scheme, to avoid the influence of any increase in price of Blackgold shares that has occurred since the Scheme was announced.

An analysis of the volume of trading in Blackgold shares for the twelve months to 28 October 2016 is set out below:

Trading days	Share price low	Share price high	Cumulative volume traded	As a % of Issued capital
1 Day	$0.021	$0.021	-	0.00%
10 Days	$0.021	$0.021	2,700	0.00%
30 Days	$0.021	$0.027	846,684	0.10%
60 Days	$0.018	$0.027	1,568,684	0.18%
90 Days	$0.017	$0.030	2,558,017	0.29%
180 Days	$0.016	$0.078	4,663,127	0.53%
1 Year	$0.016	$0.078	5,012,942	0.56%

Source: Bloomberg, BDO analysis

We have also conducted the above analysis excluding the shares held by Lucky Magic Enterprises Limited, which represents approximately 61.3% of the Company's issued capital. The liquidity of the free float is therefore set out in the table below.

Trading days	Share price low	Share price high	Cumulative volume traded	As a % of Issued capital
1 Day	$0.021	$0.021	-	0.00%
10 Days	$0.021	$0.021	2,700	0.00%
30 Days	$0.021	$0.027	846,684	0.25%
60 Days	$0.018	$0.027	1,568,684	0.46%
90 Days	$0.017	$0.030	2,558,017	0.74%
180 Days	$0.016	$0.078	4,663,127	1.36%
1 Year	$0.016	$0.078	5,012,942	1.46%

Source: Bloomberg, BDO analysis

The above tables indicate that Blackgold's shares display a low level of liquidity, with 0.56% of the Company's current issued capital being traded in a twelve month period. Similarly, even if we exclude the

61.3% interest held by Lucky Magic Enterprises Limited, the Company's share is still illiquid, with only 1.46% of the free float traded in a twelve month period. For the quoted market price methodology to be reliable there needs to be a 'deep' market in the shares. RG 111.69 indicates that a 'deep' market should reflect a liquid and active market. We consider the following characteristics to be representative of a deep market:

- regular trading in a company's securities;
- approximately 1% of a company's securities are traded on a weekly basis;
- the spread of a company's shares must not be so great that a single minority trade can significantly affect the market capitalisation of a company; and
- there are no significant but unexplained movements in share price.

A company's shares should meet all of the above criteria to be considered 'deep', however, failure of a company's securities to exhibit all of the above characteristics does not necessarily mean that the value of its shares cannot be considered relevant.

In the case of Blackgold, we do not consider there to be a deep market for the Company's shares as a result of only 0.56% of the Company's current issued capital being traded over a twelve month period prior the announcement of the Scheme. We note that only 0.10% of the Company's current issued capital was traded over the 30 days prior to the announcement, which also indicates the illiquidity of the stock. Also there are significant and unexplained price movements occurring over the one year period prior to the announcement of the Scheme.

Our assessment is that a range of values for Blackgold's shares based on market pricing, after disregarding post announcement pricing, is between $0.021 and $0.025, with a midpoint value of $0.023.

Control Premium

We have reviewed the control premiums paid by acquirers of companies listed on the ASX over the past eight years. We have summarised our findings below:

Year	Number of Transactions	Average Deal Value ($m)	Average Control Premium (%)
2016	16	996.82	41.62
2015	36	966.08	41.70
2014	42	518.19	34.56
2013	38	206.79	51.55
2012	49	345.13	46.38
2011	61	551.76	53.88
2010	64	841.15	42.12
2009	61	456.18	49.48
	Mean	**610.26**	**45.16**
	Median	**534.97**	**44.25**

Source: Bloomberg

Based on the analysis contained in section 11.1.2, we consider an appropriate control premium to apply in our valuation of Blackgold shares is between 30% and 40%.

Quoted market price including control premium

Applying a control premium to Blackgold's quoted market share price results in the following quoted market price value including a premium for control:

	Low $	Midpoint $	High $
Quoted market price value	0.021	0.023	0.025
Control premium	30%	35%	40%
Quoted market price valuation including a premium for control	**0.027**	**0.031**	**0.035**

Source: BDO analysis

Therefore, our valuation of a Blackgold share based on the quoted market price method and including a premium for control is between $0.027 and $0.035, with a midpoint value of $0.031.

14.3 Assessment of the value of Blackgold

The results of the valuations performed are summarised in the table below:

	Low $	Preferred $	High $
Sum-of-Parts (Section 14.1)	0.074	0.224	0.367
ASX market prices (Section 14.2)	0.027	0.031	0.035

Source: BDO analysis

From the above values, we observe a significant difference between the values derived under the two methodologies. We attribute the reasons for this disparity in values to the following:

- As detailed in section 14.2, we consider a Blackgold share to be highly illiquid with only 0.56% of its current issued capital being traded over the year prior to the announcement of the Scheme. This is likely a result of the fact that the issued capital is tightly held, with Lucky Magic Enterprises Limited, an entity controlled by Mr Peng, the CEO and Executive Director of Blackgold holding 61.32% of the Company's issued capital. Also, the top 20 shareholders on 21 December 2016 hold 96.73% of Blackgold's issued capital. This is likely to be one of the causes for the Company's shares to trade at a discount to its actual value.
- The recent resurgence of coal pricing as outlined above and further in section 8, may not be fully reflected in the trading price of Blackgold given its illiquidity.
- Given that the Company historically has not paid dividends and have a track record of reinvesting profits for acquisitions and expansions, there may be pessimism in the market around shareholders' ability to realise their investment. This is compounded by the lack of liquidity highlighted above, meaning that shareholders may have difficulty exiting their investment and

realising a capital gain. These factors are likely to have a negative impact on the Company's share price and may explain part of the value differential between the two methods.

- The market price of Blackgold is likely to be affected by the uncertainty surrounding the production restrictions and increased safety regulations to be imposed on Chinese coal producers. Incorporated in our Sum-of-Parts valuation is confirmation from an independent technical specialist that the current restrictions will not impact on Blackgold's operations. Also, AM&A advise that they have conducted site visits and consider the safety standards on Blackgold's mines to be advanced and the assumptions contained within the model are achievable. Therefore, our Sum-of-Parts valuation is unlikely to capture the level of uncertainty which may be currently reflected in Blackgold's market price. We note that in certain scenarios that were considered the Sum-of-Parts value was below the QMP.

We consider the Sum-of-Parts methodology to be the most appropriate valuation methodology to employ when valuing Blackgold for the following reasons:

- The core value of Blackgold lies in the exploration, production and development assets that it owns;
- The Sum-of-Parts methodology includes the DCF valuation of each of the Company's four mines, which incorporates technical assumptions which have been verified by AM&A, an independent specialist.
- Given that Blackgold shares are illiquid and there has been significant and unexplained price movements, we do not consider the quoted market price of a Blackgold share to represent its value as a primary methodology.

Based on the results above we consider the value of a Blackgold share to be between $0.074 and $0.367, with a preferred value of $0.224.

15. Valuation of Cash Consideration

Under the Scheme, Shareholders will receive $0.045 per share in cash for each share held in Blackgold.

16. Is the Scheme fair?

16.1 Fairness assessment

The value of a Blackgold share compares with the value of the Cash Consideration as set out below:

	Ref	Low $	Preferred $	High $
Value of a share in Blackgold	14.3	0.074	0.224	0.367
Value of Cash Consideration	15	0.045	0.045	0.045

We note from the table above that the value of a share in Blackgold is greater than the value of the Cash Consideration. Therefore, we consider that the Scheme is not fair.

We note that the low end of the above valuation is based on the assumption that Caotang produces at the average of its 2015 and 2016 production levels over the life of mine. Given the uncertainty surrounding the future of the Chinese coal industry, we have considered different scenarios in our valuation of the Mining Business. The above range of values of a Blackgold share incorporates our base case assumptions which form the basis of our primary fairness assessment.

16.2 Alternate scenario

We have also considered an alternate scenario to demonstrate to Shareholders that the values are highly sensitive to the production assumptions underpinning our Adjusted Models. Given the level of uncertainty surrounding the future operations of Blackgold, we consider this to be relevant information for Shareholders to assist them in their decision on whether to approve the Scheme.

As outlined in section 10.1.3, under the assumption that the next mining licence application which would be due for renewal in December 2019 is not granted the value of Caotang to Blackgold would be $96 million. If we were to adopt this as the low end of our valuation range for Caotang, our Sum-of-Parts valuation of a Blackgold share would be as follows.

Sum-of-Parts Valuation	Low $'000	Preferred $'000	High $'000
Value of the Coal Mining Business	122,800	303,650	481,500
Value of the Shipping Business	10,850	13,810	16,770
Value of the Coal Trading Business	7,000	9,120	11,250
Value of other assets and liabilities	(127,322)	(106,226)	(106,226)
Net asset value of Blackgold (control basis)	**13,328**	**220,354**	**403,294**
Shares on issue ('000)	888,004	1,098,964	1,098,964
Value per share ($)	**0.015**	**0.201**	**0.367**

16.3 Conclusion on fairness

Based on our analysis in section 16.1, the Scheme is not fair for Shareholders because based on current information and our assessment of the most likely outcomes, we consider the value of a Blackgold share to be greater than the value of the Cash Consideration.

17. Is the Scheme reasonable?

17.1 Alternative Proposal

The Directors and management advise that there are no alternative proposals that they are aware of which might offer the Shareholders of Blackgold a premium over the value of the Cash Consideration. We note that Blackgold has attempted to undertake corporate transactions in the past. In June 2012 a submission was made to list on the Hong Kong Stock Exchange that was unsuccessful. The Company then subsequently resubmitted in March 2013, which was also unsuccessful. Following this, in May 2013, a secondary listing on the Singapore ST exchange was sought but also failed to proceed after initial consultations. On 31 December 2014 the Company announced a proposed transaction with SGX listed Matex. This purported to be for a value of S$475m, compared to the market capitalisation of Matex at that time of approximately S$22.7 million and net assets of S$64.4m. This transaction did not proceed.

If this Scheme is not approved, there is no guarantee that an alternative proposal will arise and be successful in the future.

The possibility of disposal of the Company's assets at a higher price

Given the value gap between our assessed value of a Blackgold share and the Cash Consideration, despite management's advice we consider it possible that there may be a superior alternative available to Shareholders, however there is no certainty that this will emerge or the time period in which an offer may arise.

We acknowledge that our assessed value range of Blackgold's assets may not be immediately realisable, however, should a transaction emerge within such a range and if the resulting proceeds are distributed to shareholders by way of a dividend, this would represent a superior alternative to the Scheme and would result in Shareholders receiving a greater cash return. We note that should the Company reinvest in other assets this may not necessarily translate to an increase in share price as has been evidenced in the historical share trading.

We note that we are not speculating on potential offers available to Blackgold, merely indicating to Shareholders that there conceptually may be alternatives depending on their view of the future operations of the Company. If however the market's view of the value of the coal mining assets is in line with the low case scenarios considered, it is unlikely that a superior offer would emerge.

17.2 Consequences of not Approving the Scheme

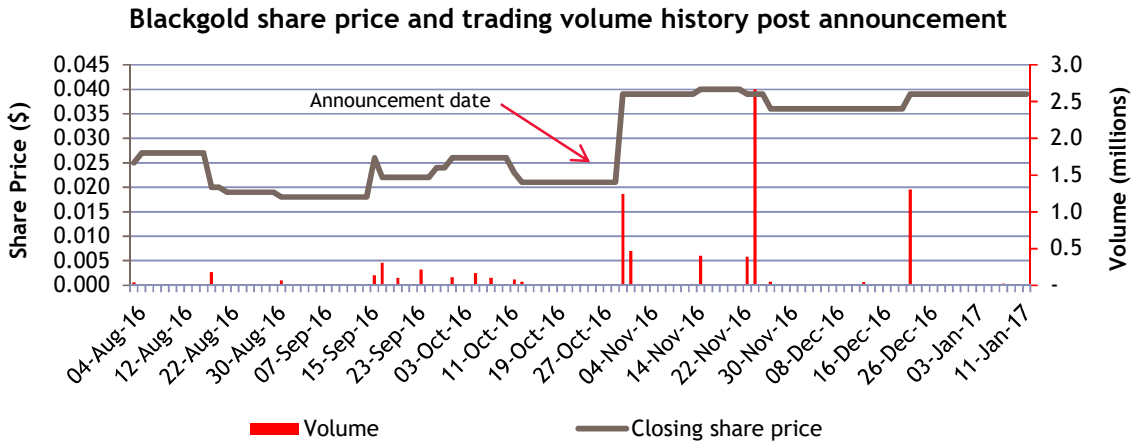
Shareholders will continue to hold an illiquid share

As outlined in section 14.2, Blackgold's shares display a low level of liquidity with only 0.56% of the Company's issued capital traded in the twelve months prior to the announcement of the Scheme. The Company's issued capital is closely held, with Mr Yuguo Peng, the CEO and Executive Director controlling approximately 61.3% of the shares on issue, which is likely to continue to affect the liquidity of a

Blackgold share in the event that the Scheme is not implemented. Even if we exclude the 61.3% interest held by Lucky Magic Enterprises Limited, the Company's shares are still illiquid, with only 1.46% of the free float traded in a twelve month period. This may lead to Shareholders having difficulty realising their investment, or being forced to realise at a significant discount to our assessed value in the foreseeable future. The Directors of Blackgold have advised that if the Scheme does not proceed that they will continue to operate the Company in accordance with its current operations and continue to consider other opportunities should they arise.

Potential decline in share price

We have analysed movements in Blackgold's share price since the Scheme was announced. A graph of Blackgold's share price since the announcement is set out below.



Source: Bloomberg

As illustrated in the graph above, Blackgold's share price increased following the announcement from $0.021 on 28 October 2016 to close at $0.039 on 31 October 2016. The announcement of the Scheme also triggered a spike in trading volumes with approximately 1.24 million shares traded on this day. Given the increase in trading volume and price immediately following the announcement of the Scheme, we consider it likely that if the Scheme is not approved then Blackgold's share price and liquidity may decline. This will likely impact Shareholders' ability to realise their investment at the current share price.

Conditions relating to conversion of Convertible Bond

As outlined in section 5.4, a condition of the Convertible Bond issued to Vibrant in 2014, was that if the Company did not complete a reverse takeover with an SGX listed company by the extended end date of 18 August 2017, the Convertible Bond would convert to shares at a price of $0.10 per share. This represents a 122% premium to the Cash Consideration of $0.045 and a 376% premium to the closing share price on the last trading day prior to the announcement of the Scheme. Therefore, in the event that the SGX listing condition is not met, the conversion of shares should theoretically be share price accretive based on the Company's current share price.

However, we note that the conversion price of $0.10 represents a 125% discount to our assessed preferred value of a Blackgold share.

We note that conceptually if the Scheme does not proceed the Convertible Bond holder may nominate an RTO target, we would consider the likelihood of this completing by 18 August 2017 to be remote given the necessary approvals and work that would be required once a target is nominated.

17.3 Advantages of Approving the Scheme

17.3.1 Shareholders obtain cash under the Scheme

The Scheme involves the acquisition of all the outstanding shares in Blackgold for a cash price of $0.045 per share. Shareholders will obtain cash for the exit on their investment, which offers certainty in their returns.

Given the demonstrated low level of liquidity in the trading of Blackgold's shares, the certainty of the cash consideration of $0.045 per share may be a benefit to Shareholders if they are not able to sell their shares at a higher price. In particular, those who hold large parcels of shares may have difficulty selling their shares on market or in the event they are able to sell, may cause the quoted market price to fall. This is evidenced by the market depth analysis conducted on 30 December 2016 as set out below.

Bid size	Bid price ($)	Value($)	Ask size	Ask price ($)	Value($)
394,800	0.036	14,213	50,000	0.045	2,250
1,500,000	0.005	7,500	25,000	0.050	1,250
			23,078	0.065	1,500
			28,200	0.069	1,946

Source: Bloomberg and BDO analysis

This consideration also represents a value where risks that are inherent in the industry (such as Government policy) are realised and the Company's coal mines cannot achieve their planned production.

The Directors of Blackgold have indicated that there is a significant risk that the planned production may not be achieved as a result of factors beyond the control of the Company, particularly the current regulatory environment in China with the mine closures and more stringent safety regulations being applied to operating coal mines. A cash return with certainty therefore represents a significant advantage to Shareholders.

17.3.2 Shareholders have the opportunity to realise their investment with certainty and at a premium to the Company's quoted market price

The terms of the Scheme involves the acquisition of outstanding shares for cash at $0.045 per share, which represents a premium to the quoted market price as outlined in section 14.2 of our Report. This presents an advantage to Shareholders in an uncertain global economic environment, particularly with an illiquid stock. We note that Shareholders can then take the opportunity to invest these funds in alternative investments that may provide a superior return.

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17.3.3 The Scheme consideration is greater than the value of a Blackgold share in certain scenarios

As outlined in section 16.2, our assessed low value of a Blackgold share, assuming that the next Caotang mining licence is not renewed, and the other low valuation scenarios eventuate, is less than the value of the Cash Consideration offered.

Similarly, under the assumption that Heiwan and Changhong also only produce for the remainder of their current mining licences, the value of a Blackgold share would be less than the value of the Cash Consideration.

We note that these scenarios are based on the realisation of certain risks in the future that may or may not eventuate.

17.3.4 The Scheme provides Shareholders with an opportunity to reduce their exposure to the risks of the Chinese coal industry

As outlined in section 8 of our Report, the Chinese coal industry has been subject to consolidation over the past few years, with the Chinese Government imposing production limits on operating coal mines.

Similarly, the coal industry in China has attracted increased scrutiny from the Chinese Government around the safety of producing coal mines in China. As outlined in the Scheme Booklet, the uncertainty around these initiatives from the Chinese Government and the resulting impact on Blackgold's operations is a material risk faced by Shareholders.

The Scheme therefore eliminates Shareholders' exposure to this uncertainty by providing them with the opportunity to exit their investment which is not currently available on market due to the illiquidity of the Company's shares.

17.3.5 Shareholders can realise their investment without incurring stamp duty or brokerage costs

The Scheme provides Shareholders with the opportunity to realise their investment in Blackgold without incurring stamp duty or brokerage costs.

17.4 Disadvantages of Approving the Scheme

17.4.1 The Scheme is not fair

Our assessed value of Blackgold is greater than the value of the Cash Consideration, therefore the Transaction is not fair for Shareholders. The alternatives to approving the Scheme that are available to Shareholders are outlined in section 17.1. We note that our assessment of fairness is based on a range of reasonably possible scenarios which are reliant on inherent risks not being realised despite reasonable grounds existing for the inputs to the model.

17.4.2 Shareholders will be unable to participate in the potential upside of Blackgold's operations

If Shareholders approve the Scheme, they would be unable to participate in any potential upside of the Company's Mining Business, Coal Trading Business or Shipping Business. We note that whilst there have been profitable operations during the Company's history this has not necessarily translated into growth in shareholder value either through dividends or share price appreciation.

17.4.3 Shareholders will forego the opportunity to receive future dividends

Based on the forecast cash flows included in the Adjusted Models, the Company may have the ability to pay dividends in the future. If the Scheme is approved, Shareholders will forego this opportunity to receive dividends in the future. We note that this is dependent on the Directors, we have been advised that the Directors may consider other investment opportunities in the future should the Scheme not proceed, accordingly there is no guarantee of a future dividend payment.

17.4.4 Shareholders may face potential tax implications

If the Scheme is approved, Shareholders may face potential tax implications such as crystallising a capital gains tax liability on the disposal of their shares earlier than expected for some Shareholders. Individual Shareholders should consult their tax advisers in relation to their specific circumstances.

17.5 Reasonableness conclusion

In our opinion, the position of Shareholders if the Scheme is approved is more advantageous than the position if the Scheme is not approved. Accordingly, in the absence of any other relevant information, we believe that the Scheme is reasonable for Shareholders.

18. Conclusion

We have considered the terms of the Scheme as outlined in the body of this report and have concluded that the Scheme is not fair but reasonable. Therefore, we conclude that the Scheme is in the best interests of Shareholders.

In particular we have considered that the value under certain scenarios forms a range within which the ASX quoted market price falls. There has been little opportunity on market for shareholders to exit the stock due to the extreme level of illiquidity. However we consider that the lack of liquidity may be attributable to the views of potential buyers on the level of uncertainty that currently faces the Chinese coal industry.

19. Sources of information

This report has been based on the following information:

- Scheme Implementation Deed dated 28 October 2016;
- Scheme Booklet on or about the date of this report;
- Audited financial statements of Blackgold for the years ended 31 October 2016, 31 October 2015 and 31 October 2014;
- Reviewed financial statements of Blackgold for the half year ended 30 April 2016;
- Independent Valuation Report of Blackgold's mineral assets dated 11 May 2017 performed by Al Maynard & Associates;
- The Mine Models;
- Share registry information;
- Bloomberg and Capital IQ;
- IBIS World Industry Reports;

- Information in the public domain including;
  - ASX announcements made by Blackgold;
  - RBA Statistical Tables;
  - RBA Publications (statements by Phillip Lowe);
  - Bloomberg news;
  - International Monetary and Financial Committee;
  - Publications released by the NDRC;
  - Sxcoal.com; and
- Discussions with Directors and Management of Blackgold.

20. Independence

BDO Corporate Finance (WA) Pty Ltd is entitled to receive a fee of $145,000 (excluding GST and reimbursement of out of pocket expenses). The fee is not contingent on the conclusion, content or future use of this Report. Except for this fee, BDO Corporate Finance (WA) Pty Ltd has not received and will not receive any pecuniary or other benefit whether direct or indirect in connection with the preparation of this report.

BDO Corporate Finance (WA) Pty Ltd has been indemnified by Blackgold in respect of any claim arising from BDO Corporate Finance (WA) Pty Ltd's reliance on information provided by the Blackgold, including the non provision of material information, in relation to the preparation of this report.

Prior to accepting this engagement BDO Corporate Finance (WA) Pty Ltd has considered its independence with respect to Blackgold and Vibrant and any of their respective associates with reference to ASIC Regulatory Guide 112 'Independence of Experts'. In BDO Corporate Finance (WA) Pty Ltd's opinion it is independent of Blackgold and Vibrant and their respective associates.

Neither the two signatories to this report nor BDO Corporate Finance (WA) Pty Ltd, have had within the past two years any professional relationship with Blackgold, or their associates, other than in connection with the preparation of this report.

A draft of this report was provided to Blackgold and its advisors for confirmation of the factual accuracy of its contents. No significant changes were made to this report as a result of this review.

BDO is the brand name for the BDO International network and for each of the BDO Member firms.

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21. Qualifications

BDO Corporate Finance (WA) Pty Ltd has extensive experience in the provision of corporate finance advice, particularly in respect of takeovers, mergers and acquisitions.

BDO Corporate Finance (WA) Pty Ltd holds an Australian Financial Services Licence issued by the Australian Securities and Investment Commission for giving expert reports pursuant to the Listing rules of the ASX and the Corporations Act.

The persons specifically involved in preparing and reviewing this report were Adam Myers and Sherif Andrawes of BDO Corporate Finance (WA) Pty Ltd. They have significant experience in the preparation of independent expert reports, valuations and mergers and acquisitions advice across a wide range of industries in Australia and were supported by other BDO staff.

Adam Myers is a member of Chartered Accountants in Australia & New Zealand and is a CA BV Specialist. Adam's career spans 18 years in the Audit and Assurance and Corporate Finance areas. Adam has considerable experience in the preparation of independent expert reports and valuations in general for companies in a wide number of industry sectors.

Sherif Andrawes is a Fellow of the Institute of Chartered Accountants in England & Wales and a Fellow of the Chartered Accountants in Australia & New Zealand. He has over twenty nine years' experience working in the audit and corporate finance fields with BDO and its predecessor firms in London and Perth. He has been responsible for over 300 public company independent expert's reports under the Corporations Act or ASX Listing Rules and is a CA BV Specialist. These experts' reports cover a wide range of industries in Australia with a focus on companies in the natural resources sector. Sherif Andrawes is the Chairman of BDO in Western Australia, Corporate Finance Practice Group Leader of BDO in Western Australia and the Natural Resources Leader for BDO in Australia.

22. Disclaimers and consents

This report has been prepared at the request of Blackgold for inclusion in the Scheme Booklet which will be sent to all Blackgold Shareholders. Blackgold engaged BDO Corporate Finance (WA) Pty Ltd to prepare an independent expert's report to consider the Scheme, whereby Vibrant proposes to acquire all of the shares in Blackgold in return for providing cash consideration of $0.045 per Blackgold share not already owned by Vibrant.

BDO Corporate Finance (WA) Pty Ltd hereby consents to this report accompanying the above Scheme Booklet. Apart from such use, neither the whole nor any part of this report, nor any reference thereto may be included in or with, or attached to any document, circular resolution, statement or letter without the prior written consent of BDO Corporate Finance (WA) Pty Ltd.

BDO Corporate Finance (WA) Pty Ltd takes no responsibility for the contents of the Scheme Booklet other than this report.

We have read the Expert Evidence Practice Note GPN-EXPT published by the Federal Court in 2016 including the Harmonised Expert Witness Code of Conduct and we agree to be bound by the practice note and the code.

We have made all enquiries which we believe are desirable and appropriate (save for any matters identified explicitly in this report) and no matters of significance which we regard as relevant have, to our knowledge, been withheld from the Court.

Our opinions are based wholly or substantially on specialised knowledge arising from the expert's training, study and experience.

We have no reason to believe that any of the information or explanations supplied to us are false or that material information has been withheld. It is not the role of BDO Corporate Finance (WA) Pty Ltd acting as an independent expert to perform any due diligence procedures on behalf of the Company. The Directors of the Company are responsible for conducting appropriate due diligence in relation to the Scheme. BDO Corporate Finance (WA) Pty Ltd provides no warranty as to the adequacy, effectiveness or completeness of the due diligence process.

The opinion of BDO Corporate Finance (WA) Pty Ltd is based on the market, economic and other conditions prevailing at the date of this report. Such conditions can change significantly over short periods of time.

The forecasts provided to BDO Corporate Finance (WA) Pty Ltd by Blackgold and its advisers are based upon assumptions about events and circumstances that have not yet occurred. Accordingly, BDO Corporate Finance (WA) Pty Ltd cannot provide any assurance that the forecasts will be representative of results that will actual be achieved. BDO Corporate Finance (WA) Pty Ltd disclaims any possible liability in respect of these forecasts. We note that the forecasts provided do not include estimates as to the effect of any future emissions trading scheme should it be introduced as it is unable to estimate the effects of such a scheme at this time.

With respect to taxation implications it is recommended that individual Shareholders obtain their own taxation advice, in respect of the Scheme, tailored to their own particular circumstances. Furthermore, the advice provided in this report does not constitute legal or taxation advice to the Shareholders of Blackgold, or any other party.

BDO Corporate Finance (WA) Pty Ltd has also considered and relied upon independent valuations for mineral assets held by Blackgold.

The valuer engaged for the mineral asset valuation, Al Maynard & Associates, possess the appropriate qualifications and experience in the industry to make such assessments. The approaches adopted and assumptions made in arriving at their valuation is appropriate for this report. We have received consent from the valuer for the use of their valuation report in the preparation of this report and to append a copy of their report to this report.

The statements and opinions included in this report are given in good faith and in the belief that they are not false, misleading or incomplete.

The terms of this engagement are such that BDO Corporate Finance (WA) Pty Ltd is required to provide a supplementary report if we become aware of a significant change affecting the information in this report arising between the date of this report and prior to the date of the meeting or during the offer period.

Yours faithfully

BDO CORPORATE FINANCE (WA) PTY LTD

Adam Myers

Director

Sherif Andrawes

Director

Appendix 1 – Glossary of Terms

Reference	Definition
Adjusted Baolong Model	The Baolong Model after adjustments made by BDO
Adjusted Caotang Model	The Caotang Model after adjustments made by BDO
Adjusted Changhong Model	The Changhong Model after adjustments made by BDO
Adjusted Heiwan Model	The Heiwan Model after adjustments made by BDO
The Adjusted Models	Collectively, the Adjusted Baolong Model, the Adjusted Caotang Model, the Adjusted Changhong Model and the Adjusted Heiwan Model
AM&A	Al Maynard & Associates Pty Ltd
Analysis Period	The historical performance of the Shipping Business and Coal Trading Business over the years ended 31 October 2013, 31 October 2014, 31 October 2015 and 31 October 2016
ASX	Australian Securities Exchange
Baolong	The Baolong mine, owned and operated by Chongqing Baolong Mining Company Ltd
Baolong Model	The DCF model relating to the Baolong mine, prepared by Blackgold, with the technical assumptions reviewed by AM&A
BDO	BDO Corporate Finance (WA) Pty Ltd
BHHK	Blackgold Holdings Hong Kong Limited
Blackgold	Blackgold International Holdings Limited
BSE	Bombay Stock Exchange
Caotang	The Caotang mine, owned and operated by Chongqing Caotang Coal Mine Resources Development Co Ltd
Caotang Model	The DCF model relating to the Caotang mine, prepared by Blackgold, with the technical assumptions reviewed by AM&A
Cash Consideration	The cash amount of $0.045 per share payable to all Blackgold Shareholders
CEO	Chief Executive Officer

Reference	Definition
Changhong	The Changhong mine, owned and operated by Qijiang Changhong Coal Industry Co Ltd
Changhong Model	The DCF model relating to the Changhong mine, prepared by Blackgold, with the technical assumptions reviewed by AM&A
Coal Mining Business	Blackgold's coal mining operations covers the sale of extracted coal from its own four mines, Heiwan, Caotang, Changhong and Baolong
Coal Trading Business	Blackgold's business of buying and selling coal which operates through its subsidiaries Shangmao and Heijin
The Company	Blackgold International Holdings Limited
Convertible Bond	Convertible bond issued to Vibrant with a face value of S$25 million
Corporations Act	The Corporations Act 2001 Cth
DCF	Discounted Future Cash Flows
EBIT	Earnings before interest and tax
EBITDA	Earnings before interest, tax, depreciation and amortisation
FME	Future Maintainable Earnings
GPST	Chongqing Guoping Shipping Transportation Co.,Ltd
Guizhou China Energy	Guizhou China Energy Investment Management Centre
Heijin	Chongqing Heijin Industrial Co Ltd
Heiwan	The Heiwan mine, owned and operated by Chongqing Guoping Heiwan Coal Mine Resources Development Co Ltd
Heiwan Model	The DCF model relating to the Heiwan mine, prepared by Blackgold, with the technical assumptions reviewed by AM&A
HOA	Heads of Agreement
JKSE	Jakarta Stock Exchange
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
KRX	Korea Exchange

Reference	Definition
LionHeart	Vibrant's wholly owned subsidiary, LionHeart Holding Group Corp
Matex	Matex International Limited
NAV	Net Asset Value
NDRC	National Development and Reform Commission
Newcastle Pricing	Australia Newcastle Port Thermal Coal 5,500 kcal/kg FOB
NSEI	National Stock Exchange of India
NYSE	New York Stock Exchange
Our Report	This Independent Expert's Report prepared by BDO
PRC	People's Republic of China
QMP	Quoted market price
Qinhuangdao Pricing	China Qinhuangdao Thermal Coal 5,500 kcal/kg FOB Spot Price
RBA	Reserve Bank of Australia
Regulations	Corporations Act Regulations 2001 (Cth)
RG 60	Regulatory Guide 60: Schemes of arrangement (September 2011)
RG 111	Regulatory Guide 111: Content of expert reports (March 2011)
RG 112	Regulatory Guide 112: Independence of experts (March 2011)
RG 170	Regulatory Guide 170: Prospective Financial Information (April 2011)
RMB	Chinese Renminbi
The Scheme	The Scheme of Arrangement with Blackgold whereby Vibrant proposes to acquire all of the shares in Blackgold for cash consideration of $0.045 per share, other than Blackgold shares owned or controlled by Vibrant and its related bodies corporate
Scheme Implementation Deed	Scheme Implementation Deed dated 28 October 2016
Section 411	Section 411 of the Corporations Act
SEHK	Stock Exchange of Hong Kong

Reference	Definition
Shangmao	Chongqing Guoping Shangmao Trading Co., Ltd
Shareholders	Shareholders of Blackgold not associated with Vibrant
Shipping Business	Blackgold's shipping and logistics business which operates through its subsidiary Chongqing Guoping Shipping Transportation Co.,Ltd
SHSE	Shanghai Stock Exchange
Sum-of-Parts	A valuation methodology whereby each component of the company are valued separately, whether it be businesses, assets or liabilities
S$	Singapore Dollars
SZSE	Shenzhen Stock Exchange
Technical Assessment and Valuation Report	Technical Assessment Report and Valuation Report prepared by AM&A detailing the reasonableness of the technical assumptions included in the Company's DCF model and the valuation of resources not included in the DCF model
TSE	Tokyo Stock Exchange
TSX	Toronto Stock Exchange
TWSE	Taiwan Stock Exchange
US$	US Dollars
Valmin Code 2015	Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets
Valuation Engagement	An Engagement or Assignment to perform a Valuation and provide a Valuation Report where the Valuer is free to employ the Valuation Approaches, Valuation Methods, and Valuation Procedures that a reasonable and informed third party would perform taking into consideration all the specific facts and circumstances of the Engagement or Assignment available to the Valuer at that time.
Vibrant	Vibrant Group Limited
VWAP	Volume Weighted Average Price

The Directors

BDO Corporate Finance (WA) Pty Ltd

38 Station Street

SUBIACO, WA 6008

Australia

Appendix 2 – Valuation Methodologies

Methodologies commonly used for valuing assets and businesses are as follows:

1 *Net asset value ('NAV')*

Asset based methods estimate the market value of an entity's securities based on the realisable value of its identifiable net assets. Asset based methods include:

- Orderly realisation of assets method
- Liquidation of assets method
- Net assets on a going concern method

The orderly realisation of assets method estimates fair market value by determining the amount that would be distributed to entity holders, after payment of all liabilities including realisation costs and taxation charges that arise, assuming the entity is wound up in an orderly manner.

The liquidation method is similar to the orderly realisation of assets method except the liquidation method assumes the assets are sold in a shorter time frame. Since wind up or liquidation of the entity may not be contemplated, these methods in their strictest form may not be appropriate. The net assets on a going concern method estimates the market values of the net assets of an entity but does not take into account any realisation costs.

Net assets on a going concern basis are usually appropriate where the majority of assets consist of cash, passive investments or projects with a limited life. All assets and liabilities of the entity are valued at market value under this alternative and this combined market value forms the basis for the entity's valuation.

Often the FME and DCF methodologies are used in valuing assets forming part of the overall Net assets on a going concern basis. This is particularly so for exploration and mining companies where investments are in finite life producing assets or prospective exploration areas.

These asset based methods ignore the possibility that the entity's value could exceed the realisable value of its assets as they do not recognise the value of intangible assets such as management, intellectual property and goodwill. Asset based methods are appropriate when an entity is not making an adequate return on its assets, a significant proportion of the entity's assets are liquid or for asset holding companies.

2 *Quoted Market Price Basis ('QMP')*

A valuation approach that can be used in conjunction with (or as a replacement for) other valuation methods is the quoted market price of listed securities. Where there is a ready market for securities such as the ASX, through which shares are traded, recent prices at which shares are bought and sold can be taken as the market value per share. Such market value includes all factors and influences that impact upon the ASX. The use of ASX pricing is more relevant where a security displays regular high volume trading, creating a 'deep' market in that security.

3 *Capitalisation of future maintainable earnings ('FME')*

This method places a value on the business by estimating the likely FME, capitalised at an appropriate rate which reflects business outlook, business risk, investor expectations, future growth prospects and other entity specific factors. This approach relies on the availability and analysis of comparable market data.

The FME approach is the most commonly applied valuation technique and is particularly applicable to profitable businesses with relatively steady growth histories and forecasts, regular capital expenditure requirements and non-finite lives.

The FME used in the valuation can be based on net profit after tax or alternatives to this such as earnings before interest and tax ('**EBIT**') or earnings before interest, tax, depreciation and amortisation ('**EBITDA**'). The capitalisation rate or 'earnings multiple' is adjusted to reflect which base is being used for FME.

4 *Discounted future cash flows ('DCF')*

The DCF methodology is based on the generally accepted theory that the value of an asset or business depends on its future net cash flows, discounted to their present value at an appropriate discount rate (often called the weighted average cost of capital). This discount rate represents an opportunity cost of capital reflecting the expected rate of return which investors can obtain from investments having equivalent risks.

Considerable judgement is required to estimate the future cash flows which must be able to be reliably estimated for a sufficiently long period to make this valuation methodology appropriate.

A terminal value for the asset or business is calculated at the end of the future cash flow period and this is also discounted to its present value using the appropriate discount rate.

DCF valuations are particularly applicable to businesses with limited lives, experiencing growth, that are in a start up phase, or experience irregular cash flows.

5 *Market Based Assessment*

The market based approach seeks to arrive at a value for a business by reference to comparable transactions involving the sale of similar businesses. This is based on the premise that companies with similar characteristics, such as operating in similar industries, command similar values. In performing this analysis it is important to acknowledge the differences between the comparable companies being analysed and the company that is being valued and then to reflect these differences in the valuation.

The resource multiple is a market based approach which seeks to arrive at a value for a company by reference to its total reported resources and to the enterprise value per tonne/lb of the reported resources of comparable listed companies. The resource multiple represents the value placed on the resources of comparable companies by a liquid market.

Appendix 3 – Shipping Business Comparable Companies

Set out below is a description of the comparable companies presented in Table 1 which forms part of the basis for our assessment of an appropriate earnings multiple to apply to the Shipping Business.

Company name	Description
COSCO Shipping Energy Transportation Co., Ltd.	COSCO SHIPPING Energy Transportation Co., Ltd is an investment holding company that engages in the shipment of oil and cargoes along the coast of the People's Republic of China and internationally. The company operates through Oil Shipment and Dry Bulk Shipment segments. It ships oil, coal, iron ore, and other dry bulk, such as metal ore, non-metallic ore, steel, cement, timber, grains, and fertilizers, as well as liquefied natural gas. The company also charters vessels; and offers vessel management and financial services. As of June 30, 2016, it operated a fleet of 99 vessels with approximately 14.06 million deadweight tons. The company was founded in 1994 and is based in Shanghai, China.
Changjiang Shipping Group Phoenix Co. Ltd	Changjiang Shipping Group Phoenix Co., Ltd specialises in the water transportation of dry bulk goods in China and internationally. The company provides integrated logistics services for water transportation in dealing with various goods, such as mineral ores, iron and steel products, cement, crops, fertilizers, special goods, and others. It is also involved in the distribution, storage, and transportation of coal products; and a provision loading and unloading services. The company is based in Wuhan, China.
Pacific Basin Shipping Ltd	Pacific Basin Shipping Limited is an investment holding company that provides dry bulk shipping services worldwide. As of January 31, 2016, the company had a fleet of 225 ships. It also offers offshore anchor handling and barge support services to the oil and gas industry and its contractors; and coastal bulk transportation of rock and aggregate for marine construction projects. In addition, the company provides ship and crew management, shipping consulting and ship agency, crewing, and secretarial services. The company was founded in 1987 and is headquartered in Central, Hong Kong.
Ningbo Marine Company Limited	Ningbo Marine Company Limited is engaged in marine transportation and road operation activities. The company principally transports electrical coal from northern coal ports to power station in Zhejiang and coastal areas south of Zhejiang, China. It also operates the western section of Ningbo city ring expressway, and provides automobile guidance services, toll collection and management and electronic toll collection systems. The company has a fleet of approximately 20 cargo ships. Ningbo Marine Company Limited is based in Ningbo, China.
China Shipping Haisheng Co., Ltd	China Shipping Haisheng Co., Ltd engages in cargo transportation businesses in China and internationally. It offers domestic and ocean sea transportation of raw materials, such as coal, iron ore, and grain, as well as ocean sea transportation of liquefied asphalt and chemicals. The company also provides trade and vessel operator and agency services. China Shipping Haisheng Co., Ltd was founded in 1989 and is based in Haikou, China.

Company name	Description
Tianjin Tianhai Investment Co., Ltd	Tianjin Tianhai Investment Co., Ltd operates a shipping business in China and South Korea, specifically it operates shipping routes for container goods transportation. The company also offers shipping related services; and engages in commodity trading. The company was founded in 1992 and is headquartered in Tianjin, China.
Sinotrans Shipping Ltd	Sinotrans Shipping Limited owns, manages, and operates dry bulk and container fleet worldwide. It operates through dry bulk shipping, container shipping, and other segments. Its dry bulk fleet is used for the transportation of cargoes, such as iron ore, coal, grain, steel, and other commodities. The company is also involved in ship building business; trading vessels; and the provision of agency services for shipping forwarding and air cargo. As of December 31, 2015, it owned a fleet of 49 vessels, including 38 dry bulk vessels and 11 container vessels and controlled a fleet of 109 vessels. Sinotrans Shipping Limited serves charterers, including large ship operators and shipping companies. The company was founded in 2003 and is headquartered in Wanchai, Hong Kong.
COSCO Shipping Company Limited	COSCO Shipping Company Limited operates as a shipping company. It provides regular liner service from the Far East to Mediterranean Sea/Europe, Persian Gulf/Red Sea, America/Australia, Africa, and South East Asia. The company provides transportation of heavy cargoes, including cargoes with special loading and unloading requirements. It also transports general cargoes, petrochemical equipment, nuclear power equipment, wind power and thermal power equipment, vehicle and railway equipment, heavy machinery and construction machinery and offshore structures. In addition, the company provides labour exporting services. The company was founded in 1999 and is based in Guangzhou, China.
Tianjin Port Company Limited	Tianjin Port Co., Ltd engages in cargo loading and unloading operations in China. The company is also involved in import and export handling of various cargo, ores, metals, wood, and other goods; commodity storage, transit transport, and car transport activities. The company also offers freight forwarding and labour; economic information consulting; pipeline transportation, warehousing, transportation, and agency and booking. In addition, it engages in leasing houses, garages, machinery, and equipment. Further, it is involved in collection and payment, claims, maritime, and other related treatment activities and is also involved the provision of international and domestic passenger flights, import and export of cars, import and distribution of dairy products and sale of machinery and equipment. The company is based in Tianjin, China.
Jinzhou Port Co.,Ltd.	Jinzhou Port Co., Ltd operates the Jinzhou Port in Liaoning province, China. The port has 24 berths and handles oil, grain, ore, coal, steel, fertilizers, and domestic container supply. The company also engages in foreign trade in containers and oil products, chemicals, bulk cargo, general cargo handling, warehousing, transportation, bulk bag filling, and distribution of integrated logistics services. The Jinzhou Port has shipping routes around the various ports in north and south China, and approximately 100 countries and regions across Asia, Europe, Oceania, the Americas, and Africa. The company is based in Jinzhou, China.
Zhuhai Port Co.,Ltd.	Zhuhai Port Co., Ltd., together with its subsidiaries, provides port logistics services in China. It engages in terminal investment and operations; petrochemical storage and transportation; provision of logistics services, including logistics, warehousing, bonded VMI, and value-added logistics services; and provision of port and shipping services, such

Company name	Description
	as cargo handling, freight forwarding, tugboat, and other shipping services. The company is also involved in electrical energy, gas pipeline, and investment business; and real estate, logistics park development, property management, and industrial manufacturing and other service businesses. The company was formerly known as Fuhua Group Co., Ltd. Zhuhai Port Co., Ltd was founded in 1986 and is based in Zhuhai, China.
Zhongchang Big Data Corporation Limited	Zhongchang Big Data Corporation Limited, together with its subsidiaries, operates as a marine company. The company offers marine freight transportation services along China East Coast and Yangtze River ports. It also provides supporting services, such as cargo management, ship repair and maintenance, ship sales and leasing, crew management, and other marine related services. In addition, the company is involved in dredging the waterway of the port; and provision of land reclamation, and other services. Zhongchang Big Data Corporation Limited was incorporated in 1993 and is based in Yangjiang, China.
SITC International Holdings Co., Ltd.	SITC International Holdings Company Limited, a shipping logistics company, provides integrated transportation and logistics solutions in Mainland China, Japan, Southeast Asia, and internationally. The company operates through two segments, Sea Freight Logistics and Land-Based Logistics. As of December 31, 2015, it operated 44 self-owned container vessels and 27 chartered container vessels, as well as owned 6 dry bulk vessels with a gross tonnage of 438,595 DWT. The company also offers freight forwarding, shipping agency, depot and warehousing, customs clearance, trucking, and ship brokerage services. In addition, it provides container holding and chartering, and storage and terminal services. The company was founded in 1991 and is headquartered in Causeway Bay, Hong Kong.

Set out below is the description of the ASX listed comparable companies as presented in Table 2:

Company name	Description
Blackgold International Holdings Limited	Blackgold International Holdings Limited engages in producing, mining, and trading thermal coal in the People's Republic of China. The company owns four underground thermal coal mines. It is also involved in the shipping of coal and other construction materials and also is engaged in the trading of coal. Blackgold International Holdings Limited was incorporated in 2010 and is based in Chongqing, the People's Republic of China.
CI Resources Limited	CI Resources Limited, together with its subsidiaries, engages in the mining, processing, and sale of phosphate rock, phosphate dust, and chalk in Australia. The company also provides earthmoving, fuel pilotage, maintenance, and stevedoring services to other organizations in Christmas Island; operates a palm oil estate; and processes and sells palm oil products. It exports its phosphate products to New Zealand, Malaysia, Thailand, and Indonesia. In addition, the company offers shipping services; and fuel and marketing services. CI Resources Limited was incorporated in 1987 and is based in Burswood, Australia.
Steamships Trading Company Limited	Steamships Trading Company Limited engages in the shipping, transport, property, manufacturing, hotels, and information technology businesses in Papua New Guinea. The company operates through four segments: Commercial, Hotels and Property, Logistics, and Finance and Investment. It operates through a fleet of 21 coastal vessels. The company offers various shipping services, including scheduled cargo liner, and stevedoring

Company name	Description
	and handling services; short and long term vessel charters specialized in shallow water river shipping; and intermodal logistics solutions. It also operates a fleet of prime movers, heavy trucks, light trucks, and forklifts. In addition, the company offers licensed customs cargo clearance service in Lae and Port Moresby; operates an export coffee processing facility in Lae; and provides project solutions for the mining, oil, and gas sectors. The company was founded in 1919 and is headquartered in Port Moresby, Papua New Guinea.
MMA Offshore Limited	MMA Offshore Limited provides marine logistics and supply base services to the offshore oil and gas industry in Australia and internationally. It operates through Vessels, Supply Base, and Slipway segments. The company engages in a range of offshore marine activities, including FPSO offtake support; construction support; survey support; dive support; subsea installation support; subsea inspection, maintenance, and repair; and tug and barge operations, as well as supply operations comprising drilling and production. It also offers a suite of marine services, such as vessels, wharf facilities, supply base facilities, slipway facilities, and engineering support services. Additionally, the company operates onshore facilities that build commercial and customized offshore support vessels; and focus on vessel mobilizations and demobilizations. It owns and operates approximately 50 vessels. The company was formerly known as Mermaid Marine Australia Limited and changed its name to MMA Offshore Limited in December 2014. MMA Offshore Limited was founded in 1982 and is headquartered in Fremantle, Australia.

Set out below is the description of the international shipping and logistics companies as presented in Table 3:

Company name	Description
Intergis Co., Ltd	Intergis Co., Ltd provides marine transportation services in South Korea and internationally. Its services include transportation of imported raw materials, such as steel slabs and coils; and export products to destinations, such as North and South America, Europe, etc. The company also offers charter services, which include voyage, time, and bareboat charter services; and general shipping agency services in various loading and discharging ports. The company was founded in 1956 and is headquartered in Seoul, South Korea with a branch in Japan.
Wisdom Marine Lines Co., Limited	Wisdom Marine Lines Co., Limited, together with its subsidiaries, provides marine cargo transportation services in Japan, Singapore, Denmark, the Netherlands, Hong Kong, and internationally. It also offers maintenance, vessel leasing, shipping agency and management services. The company owns and operates a fleet of 114 vessels. The company was founded in 1999 and is headquartered in Taipei, Taiwan.
Mitsui OSK Lines Ltd.	Mitsui O.S.K. Lines, Ltd. provides ocean shipping services in Japan, North America, Europe, Asia, and internationally. The company operates through Bulkships, Containerships, Ferry & Domestic Transport, Associated Business, and Others segments. Its fleet consists of dry bulk carriers for the transportation of iron ore, coal, grain, wood, wood chips, cement, fertilizer, and salt; very large crude oil carriers; product tankers that transport refined petroleum products, such as gas oils, naphtha, and gasoline; chemical tankers and methanol carriers for the transportation of liquid chemical products; and liquefied petroleum gas and liquefied natural gas (LNG) carriers. The company's fleet also includes car and truck carriers that transport automobiles; containerships; and ferry and coastal liners, which market and transport industrial raw materials and products, foodstuffs, and other products, as well as cruise ships. It operates 883 vessels and the company also operates container terminals in Japan and internationally. The company was founded in 1884 and is headquartered in Tokyo, Japan.
Kirby Corporation	Kirby Corporation operates domestic tank barges and transports bulk liquid products. The company's Marine Transportation segment provides marine transportation services and towing vessels transporting bulk liquid products, as well as operates tank barges throughout the Mississippi River System, on the Gulf Intracoastal Waterway, coastwise along three United States coasts, and in Alaska and Hawaii. This segment transports petrochemicals, black oil, refined petroleum products, and agricultural chemicals by tank barges. This segment also operates offshore dry-bulk barge and tugboat units that are engaged in the offshore transportation of dry-bulk cargoes in the United States coastal trade. As of February 19, 2016, this segment owned or operated 898 inland tank barges with 17.9 million barrels of capacity, 243 inland towboats, 70 coastal tank barges with 6 million barrels of capacity, 73 coastal tugboats, 6 offshore dry-bulk cargo barges, 7 offshore tugboats, and 1 docking tugboat. Kirby Corporation was founded in 1921 and is headquartered in Houston, Texas.

Company name	Description
Matson, Inc	Matson, Inc, through its subsidiaries, operates as an ocean cargo carrier. The company operates in two segments, Ocean Transportation and Logistics. The Ocean Transportation segment offers ocean transportation services to the domestic economies of Hawaii, Alaska, and Guam, as well as to other island economies in Micronesia and in the South Pacific. This segment also operates an expedited service from China to Long Beach, California; and provides container and conventional freight services between New Zealand and other South Pacific Islands. It primarily transports mixed commodities, refrigerated commodities, packaged foods, household goods, automobiles, seafood and other retail merchandise. It operates a fleet of 23 owned and 3 chartered vessels. The Logistics segment provides multimodal transportation services, including domestic and international rail intermodal service; long-haul and regional highway brokerage, specialised hauling, flat-bed and project work, supply chain management, and warehousing and distribution services. Matson, Inc was founded in 1882 and is headquartered in Honolulu, Hawaii.
Wisdom Marine Lines Co., Limited	Wisdom Marine Lines Co., Limited, together with its subsidiaries, provides marine cargo transportation services in Japan, Singapore, Denmark, the Netherlands, Hong Kong, and internationally. It also offers maintenance, vessel leasing, and shipping agency and management services. The company owns and operates various types of vessels and containers. The company was founded in 1999 and is headquartered in Taipei, Taiwan.
Wan Hai Lines Ltd	Wan Hai Lines Ltd engages in the marine transportation business. It provides full-containerised shipping service covering ports in Japan, Korea, Taiwan, China, Hong Kong, Thailand, Indonesia, the Philippines, Singapore, Malaysia, Vietnam, Myanmar, Cambodia, India, Pakistan, Sri Lanka, Bangladesh, the Middle East, the United States, Mexico, Guatemala, Columbia, Ecuador, Peru, Chile, the Netherlands, Belgium, Germany, Greece, Romania, Ukraine, and Turkey. The company also offers shipping agency services for the import and export of vehicles and other cargoes. In addition, it is involved in the purchase, sale, and leasing of vessels and containers. Wan Hai Lines Ltd was founded in 1965 and is headquartered in Taipei, Taiwan.
Korea Line Corporation	Korea Line Corporation operates as an energy resource shipping company worldwide. It transports iron, ore, coal, LNG, grains, cement, fertilizers, steel products and scraps. The company owns a fleet of 29 vessels. Korea Line Corporation was founded in 1968 and is headquartered in Seoul, South Korea.
Navios Maritime Partners L.P.	Navios Maritime Partners L.P. owns and operates dry cargo vessels in Europe, Asia, North America, and Australia. It provides seaborne transportation services for a range of dry cargo commodities that include iron ore, coal, grain, and fertilizers, as well as charters its vessels under medium to long-term charters. The company's fleet comprises 12 Panamax vessels, 8 Capesize vessels, 3 Ultra-Handymax vessels, and 8 container vessels. Navios GP L.L.C. serves as the general partner of Navios Maritime Partners L.P. The company was founded in 2007 and is based in Monaco.

Company name	Description
Mercator Limited	Mercator Limited, together with its subsidiaries, engages in coal, shipping, dredging, and oil and gas businesses in India, Singapore, and Indonesia. It operates through Shipping; Offshore; and Coal Mining, Procurement/Trading and Logistics segments. The company is involved in coal mining, procurement, and logistics activities. It holds interests in three mines in Indonesia; and a mining licence in Mozambique. The company also explores for petroleum located in India and owns a mobile offshore production and a floating storage offloading unit. In addition, it has a fleet of tankers and vessels to transport wet bulk cargo and dry bulk commodities, such as coal and iron ore. Mercator Limited was incorporated in 1983 and is based in Mumbai, India.
Algoma Central Corp.	Algoma Central Corporation owns and operates a fleet of dry and liquid bulk carriers on the Great Lakes - St. Lawrence Waterway in Canada. It operates in three segments: Domestic Dry-Bulk, Product Tankers, and Ocean Shipping. The Domestic Dry-Bulk segment owns and manages a domestic dry-bulk fleet of 24 vessels that carry cargoes of raw materials, such as coal, grain, iron ore, salt, and aggregates. It also provides ship repair and steel fabricating services. The Product Tankers segment owns and manages 7 tanker vessels that carry petroleum products on the Great Lakes, the St. Lawrence Seaway, and the east coast of North America. The Ocean Shipping segment owns 2 vessels that carry dry-bulk commodities in worldwide ocean trades. Algoma Central Corporation also owns and manages commercial real estate in Sault Ste. Marie, Waterloo, and St. Catharines, Ontario. Algoma Central Corporation was founded in 1899 and is based in St. Catharines, Canada.
Heung-A Shipping Co., Ltd	Heung-A Shipping Co., Ltd operates as an integrated logistics company. The company offers shipping services for container and chemical freight, as well as various logistics solutions. It also provides land trucking, railroad transportation, storage, and warehousing services, as well as operates car ferry services between Korea and China. The company operates a fleet of 40 vessels, including container carriers, chemical tankers, and car-ferry ships. It provides transportation services to customers in Korea, Japan, China, Southeast Asia, India, the Middle East, and Australia. The company was founded in 1961 and is headquartered in Seoul, South Korea.
Shreyas Shipping & Logistics Limited	Shreyas Shipping and Logistics Limited owns and operates vessels operating between Indian ports and international Asian trans-shipment ports. It operates through three segments: Shipping, Logistics, and Freight Forwarding. As of June 6, 2016, it owned and operated a fleet of nine vessels. The company was incorporated in 1988 and is based in Mumbai, India.
Shahi Shipping Limited	Shahi Shipping Limited operates as a shipping company in India. The company is involved in the transportation of cargo and lighterage operation in the inland water limits of various ports of India. It also supplies water to sea going vessels; and provides fuel to the fishing vessels/trawlers, sea going vessels, etc. In addition, the company designs low draft vessels suitable for operation on Indian coasts. Further, it provides various port services, including tugs for towing purposes; consultancy solutions for bulk movement of goods; and container services. It operates a fleet of mini bulk carriers, general cargo carriers, chemical carriers, petroleum carriers, water supply barges, tugs, and launches. Shahi Shipping Limited was founded in 1985 and is based in Navi Mumbai, India.

Appendix 4 – Coal Trading Business Comparable Companies

Set out below is a description of the comparable companies presented in Table 4 which forms part of the basis for our assessment of an appropriate earnings multiple to apply to the Coal Trading Business.

Company name	Description
APAC Resources Limited	APAC Resources Limited, an investment holding company, engages in commodity trading and natural resource investment businesses. The company trades and invests in listed and unlisted securities; and invests and develops mineral resources. It also provides treasury and other management services; consultancy services in corporate management; and metallurgy technology services. The company offers its products and services primarily in the People's Republic of China. APAC Resources Limited is headquartered in Wan Chai, Hong Kong.
China Chengtong Development Group Ltd.	China Chengtong Development Group Limited, an investment holding company, primarily engages in the trading of bulk commodity and coal; and property development and investment businesses in the People's Republic of China. It is also involved in processing and sale of coal; financial leasing activities, such as arranging sales and leaseback transaction; provision of property rental and marine travelling services; and operation of hotel. The company is based in Wanchai, Hong Kong.
China Public Procurement Limited	China Public Procurement Limited, an investment holding company, engages in the public procurement related business activities in the People's Republic of China and Hong Kong. The company's activities include bulk commodity trading, energy management contracting, development and operation of electronic public procurement platforms and the provision of procurement information. In addition, it provides technological development, advisory, business planning, public-relations, and online procurement services; sells software; and provides information technology services. China Public Procurement Limited is headquartered in Wanchai, Hong Kong.
Global Strategic Group Limited	Global Strategic Group Limited, an investment holding company, provides commodity trading, and IT solutions in the People's Republic of China. The company primarily trades in copper and offers e-commerce platform for payment process for retail customers and e-malls, as well for the sale of garments. It also provides data processing and selling, and consulting services. The company is headquartered in Tsim Sha Tsui, Hong Kong.
Hao Tian Development Group Limited	Hao Tian Development Group Limited, an investment holding company, engages in money lending business in the People's Republic of China. It offers personal loans and mortgage loans to high net worth clients. The company is also involved in the trading of securities investment, futures, and commodities, as well as provision of management services. In addition, it engages in logistics and warehousing business.
Loco Hong Kong Holdings Limited	Loco Hong Kong Holdings Limited, an investment holding company, engages in the trading of metals and commodities in Hong Kong, Singapore, Australia, Japan, the United Kingdom, and China. It primarily trades in silver, gold, and tin. The company is also involved in metal and commodity forward contracts trading, silver processing, and property holding activities. It serves licensed banks and metal traders. The company was founded in 2009 and is headquartered in Hong Kong.

Company name	Description
Loudong General Nice Resources (China) Holdings Limited	Loudong General Nice Resources (China) Holdings Limited, an investment holding company, engages in coal processing and production of metallurgical coke and by-products in the People's Republic of China, Singapore, and internationally. The Coke Manufacturing segment produces and sells metallurgical coke from the coke plant. The Commodities Trading segment engages in the trading of purchased commodities. The Oil segment engages in the exploration and production of oil and provision of well drilling services. The logistics segment is involved in the provision of transportation and warehousing services. Loudong General Nice Resources (China) Holdings Limited is also involved in manufacturing relevant chemicals; and investing in properties. The company was incorporated in 1993 and is headquartered in Causeway Bay, Hong Kong.
Shougang Concord International Enterprises Co. Ltd.	Shougang Concord International Enterprises Company Limited, an investment holding company, manufactures and sells steel products in the People's Republic of China, Australia, Hong Kong, and internationally. The Steel Manufacturing segment produces iron and steel slabs and plates for application in petrochemical, shipping, pressure vessel, industrial machineries, and constructions. This segment is also involved in pre-treatment of ship plates, heavy machinery engineering, and structural steel. The Commodity Trading segment trades steel products, iron ore, coal, and coke. The Mineral Exploration and Processing segment engages in the mining, processing, and sale of iron ore. The Others segment offers management services and leases floating cranes. The company also charters vessels and provides value-added services on steel products. Shougang Concord International Enterprises Company Limited is based in Wanchai, Hong Kong.
Sino Resources Group Limited	Sino Resources Group Limited, an investment holding company, primarily engages in investing and developing unconventional gas business and trading of commodities in Asia. The company offers technical consulting and operation services in unconventional gas well drilling, and completion and production stimulation for exploration and development work in Heilongjiang Province. It is also involved in the import of technical equipment for the unconventional gas industry; and trade of coal and metals, as well as provision of agency services. Sino Resources Group Limited is based in Central, Hong Kong.
Tianjin Tianhai Investment Co., Ltd.	Tianjin Tianhai Investment Co., Ltd. engages in shipping business in China and South Korea. It operates shipping routes for container goods transportation. The company also offers shipping related services; and engages in commodity trading. Tianjin Tianhai Investment Co., Ltd. was founded in 1992 and is headquartered in Tianjin, China.
Zhejiang China Commodities City Group Co., Ltd.	Zhejiang China Commodities City Group Co., Ltd. is primarily engaged in the construction and operation of commodities trading platforms in China. The company's activities include operation of markets, commodities distribution, and provision of hotel services. It is also involved in exhibition advertisements, real estate, distribution, international trade, logistics, shopping, and tourism, as well as provision of other services. Zhejiang China Commodities City Group Co., Ltd. was founded in 1993 and is based in Yiwu, China.
National United Resources Holdings Limited	National United Resources Holdings Limited, an investment holding company, engages in the trading of coking coal, fuel oil, and aluminium rods in the People's Republic of China and Singapore. The company is also involved in the operation of outdoor advertisement mediums/billboards, design and production of advertisements, graphic and brand designing; provision of media management and consulting services, operating chain broadcasting advertising networks and provision of advertising and information consultancy services. National United Resources Holdings Limited is based in Wanchai, Hong Kong.

Company name	Description
Wealth Glory Holdings Limited	Wealth Glory Holdings Limited, an investment holding company, engages in the trading of natural resources and commodities in the People's Republic of China and Indonesia. The company offers iron ore concentrate, coal, and crude palm oil. In addition, the company distributes vehicles, develops and promotes brands, and designs, manufactures, and sells fashion merchandises and other consumer products. Wealth Glory Holdings Limited was incorporated in 2010 and is based in Central, Hong Kong.

Set out below is the description of the ASX listed comparable companies as presented in Table 5:

Company name	Description
Blackgold International Holdings Limited	Blackgold International Holdings Limited engages in producing, mining, and trading thermal coal in the People's Republic of China. The company owns four underground thermal coal mines. It is also involved in the sale of construction and steel materials, manufacture of machineries, and provision of shipping transportation and agency services. The company primarily sells its thermal coal for industrial power generation to power plant customers in Shanghai. Blackgold International Holdings Limited was incorporated in 2010 and is based in Chongqing, the People's Republic of China.
Bathurst Resources Limited	Bathurst Resources Limited, together with its subsidiaries, engages in the exploration, development, and production of coal in New Zealand. It holds interests in the Cascade and Escarpment mines located in the Buller coalfield near Denniston; the Takitimu mine in Southland; and the Canterbury coal mine near Christchurch. Bathurst Resources Limited was incorporated in 2013 and is headquartered in Wellington, New Zealand.
BHP Billiton Limited	BHP Billiton Limited discovers, acquires, develops, and markets natural resources worldwide. It operates through four segments: Petroleum, Copper, Iron Ore, and Coal. The company explores for, develops, produces, and markets oil and gas in the Gulf of Mexico, Western Australia, and Trinidad and Tobago. It also explores for copper, silver, lead, zinc, molybdenum, uranium, gold, iron ore, and metallurgical and thermal coal.
Universal Coal plc	Universal Coal Plc, a coal mining company, engages in acquisition, exploration, development, and commercialization of coal projects in the Republic of South Africa. The company holds interests in thermal coal projects, including 70.5% interest in the Kangala project located in the Witbank coalfield in Mpumalanga province, interest in the New Clydesdale Colliery coal project situated in the Kriel district, and interest in the Brakfontein coal project located in the Delmas district. It also holds 50% interest in coking coal projects, such as Berenice/Cygnus projects situated in the Soutpansberg coalfield southwest of Musina and the Somerville project located in the Tuli coalfield. Universal Coal Plc is based in London, the United Kingdom.
Whitehaven Coal Limited	Whitehaven Coal Limited engages in the development and operation of coal mines. The company operates through two segments, Open Cut Operations and Underground Operations. Its principal products include low ash and low sulphur thermal coal, and metallurgical coal used in the production of steel. The company holds interests in various projects located in New South Wales, including Maules Creek, Narrabri, Werris Creek, Rocglen, Tarrawonga, and Vickery projects. It also owns interests in various other exploration and potential development projects in Queensland and New South Wales. It sells its coal in Australia, Japan, Korea, India, Taiwan, China, Mexico, Malaysia, Chile, and internationally.

Set out below is the description of the international companies exposed to the coal industry and commodities trading operations as presented in Table 6:

Company name	Description
PT AKR Corporindo Tbk	PT AKR Corporindo Tbk, together with its subsidiaries, distributes and trades in petroleum and chemical products primarily in Indonesia. The Trading and Distribution segment distributes petroleum products and various basic chemicals. The Logistics Services segment offers various logistics services in Indonesia, as well as operates ports in Guigang, China. The Manufacturing segment produces sorbitol liquid and powder, as well as adhesive materials. The Industrial Estate segment is involved in the development and construction of industrial projects. The Coal Mining and Trading segment has coal mining licences in Indonesia. PT AKR Corporindo Tbk was founded in 1977 and is headquartered in Jakarta, Indonesia.
Chandra Prabhu International Ltd.	Chandra Prabhu International Ltd. trades in coal, synthetic rubber, and chemicals primarily in India. Its synthetic rubber products include nitrile rubber, styrene butadiene rubber, and polybutadiene rubber products for use in the production of tires and technical rubber goods. The company also trades in gilsonite, a natural asphalt for use as bitumen modifier and in the oil well industries as a part of drilling mud formulation. In addition, it exports a range of basmati rice, pickles, spices, soybean, sugar, pulses and wheat. Chandra Prabhu International Ltd. was incorporated in 1984 and is based in New Delhi, India.
Gujarat Metallic Coal & Coke Ltd.	Gujarat Metallic Coal & Coke Limited trades in coal and coke products in India. Gujarat Metallic Coal & Coke Limited was incorporated in 1992 and is based in Kolkata, India.
PT Mitrabara Adiperdana Tbk	PT Mitrabara Adiperdana Tbk, together with its subsidiaries, engages in coal mining, trading, and industrial businesses. Its coal mines are located in the Malinau Regency, North Kalimantan. The company was founded in 1992 and is headquartered in Central Jakarta, Indonesia.
Hemang Resources Limited	Hemang Resources Limited engages in coal trading business in India. The company operates through Coal Trading and Infrastructure divisions. It also trades in land and provides stevedoring and logistic services. Hemang Resources Limited was incorporated in 1993 and is based in Chennai, India.
T Spiritual World Ltd	T. Spiritual World Limited engages in trading agricultural commodities and its allied products primarily in India. The company was incorporated in 1986 and is based in Kolkata, India.
Amrapali Industries Ltd.	Amrapali Industries Limited engages in commodity trading and entertainment activities in India. The company trades in gold, silver, chana, castor, jeera, and various other money market securities. It provides equity market trade execution and broking, derivatives trading and broking, online trading facility, IPO, and mutual fund distribution services. Amrapali Industries Limited was incorporated in 1988 and is based in Ahmedabad, India.
Yutaka Shoji Co., Ltd.	Yutaka Shoji Co., Ltd. engages in commodity futures trading business in Japan. The company is also involved in financial instruments trading, foreign exchange margin trading, stock index margin trading, securities intermediary, and gold bullion sales activities. Yutaka Shoji Co. Ltd. was founded in 1957 and is headquartered in Tokyo, Japan.
Ausom Enterprise Ltd	Ausom Enterprise Limited engages in trading activities in India and internationally. It trades in commodities, bullions, gold jewelry products, shares and securities, mutual funds units, diamonds and derivative transactions. Ausom Enterprise Limited was incorporated in 1984 and is based in Ahmedabad, India.

National Steel and Agro Industries Limited	National Steel and Agro Industries Limited engages in the steel, agriculture, power, and metal businesses. It offers cold rolled, galvanized, and colour coated steel coils, slits, profiles, and plain and corrugated sheets under various brands. It also trades agro commodities, including pulses, beans, and others. In addition, the company engages in the generation and transmission of gas and diesel based electricity; and the manufacture/recycling of aluminium alloy, pure lead, and refined lead and lead alloy ingots. It serves customers in India, the United States, the European Union, the United Arab Emirates, and Africa. The company was founded in 1985 and is based in Mumbai, India.

Appendix 5 – Discount Rate Assessment

Determining the correct discount rate, or cost of capital, for a business requires the identification and consideration of a number of factors that affect the returns and risks of a business, as well as the application of widely accepted methodologies for determining the returns of a business.

The discount rate applied to the forecast cash flows from a business represents the financial return that will be before an investor would be prepared to acquire (or invest in) the business.

The capital asset pricing model (**'CAPM'**) is commonly used in determining the market rates of return for equity type investments and project evaluations. In determining a business' weighted average cost of capital (**'WACC'**) the CAPM results are combined with the cost of debt funding. WACC represents the return required on the business, whilst CAPM provides the required return on an equity investment.

We have determined the discount rate relevant to Blackgold's Caotang, Heiwan, Baolong and Changhong projects. In alignment with the purpose of this report, we have determined that the discount rates applied to the aforementioned projects should reflect the financial return an investor in Australia would require in order to invest in it.

Cost of Equity and Capital Asset Pricing Model

CAPM is based on the theory that a rational investor would price an investment so that the expected return is equal to the risk free rate of return plus an appropriate premium for risk. CAPM assumes that there is a positive relationship between risk and return, that is, investors are risk averse and demand a higher return for accepting a higher level of risk.

CAPM calculates the cost of equity and is calculated as follows:

CAPM	
K_e	$= R_f + \beta \times (R_m - R_f)$
Where:	
K_e	= expected equity investment return or cost of equity in nominal terms
R_f	= risk free rate of return
R_m	= expected market return
$R_m - R_f$	= market risk premium
β	= equity beta

The individual components of CAPM are discussed below.

Risk Free Rate (R_f)

The risk free rate is normally approximated by reference to a long term government bond with a maturity equivalent to the timeframe over which the returns from the assets are expected to be received. Having regard to the period of operations to Blackgold's Caotang, Heiwan, Baolong and Changhong projects we have adopted the current yield to maturity on the 10-year Australian Government bond rate of 2.36% as at 31 October 2016. We have used the Australian Government bond rate as a proxy for the risk free rate because Blackgold is listed on the ASX, therefore the Australian risk free rate is the most appropriate rate to use when assessing the required rate of return for a risk free asset.

Market Risk Premium (R_m - R_f)

The market risk premium represents the additional return that investors expect from an investment in a well-diversified portfolio of assets. It is common to use a historical risk premium, as expectations are not observable in practice.

We have noted that the market risk premium in Australia is approximately 7.39% at 31 October 2016 based on ten years of historical returns, which we have sourced from Bloomberg. The market risk premium is derived on the basis of capital weighted average return of all members of the Australian Stock Exchange composite index minus the risk free rate which is dependent on the ten year Australian Government bond rates. The Australian market risk premium is the appropriate rate to use because Blackgold is listed on the ASX, therefore the Australian market risk premium is the appropriate rate to use when assessing the required rate of return for investors.

Equity Beta

Beta is a measure of the expected correlation of an investment's return over and above the risk free rate, relative to the return over and above the risk free rate of the market as a whole. A beta greater than one implies that an investment's return will outperform the market's average return in a rising market and underperform the market's average return in a falling market. On the other hand, a beta less than one implies that the business' performance compared to that of a business whose beta is greater than one will provide an inverse relationship in terms of the market's average return.

Equity betas are normally either a historical beta or an adjusted beta. The historical beta is obtained from the linear regression of a stock's historical data and is based on the observed relationship between the security's return and the returns on an index. An adjusted beta is calculated based on the assumption that the relative risk of the past will continue into the future, and hence derived from the historical data. It is then modified by the assumption that a stock will move towards the market over time, taking into consideration the industry risk factors when assessing the equity beta for an investment project.

It is important to note that it is not possible to compare the equity betas of different companies without having regard to their gearing levels. Thus, a more valid analysis of betas can be achieved by 'ungearing' the equity beta (β_a) by applying the following formula:

$\beta_a = \beta / (1+(D/E \times (1-t))$

In order to assess the appropriate equity beta for Blackgold's Caotang, Heiwan, Baolong and Changhong projects we have also had regard to the equity betas of listed companies involved in similar activities in similar industry sectors. The geared betas below have been calculated using daily and weekly data over a two to five year period.

Caotang, Heiwan and Changhong

We have assessed the operations and business risks of Caotang, Heiwan and Changhong to be broadly comparable to the companies outlined in the table below as they hold producing mining assets in coal and other commodities. Although the comparable companies are, on average, larger and more diversified than the operations of Caotang, Heiwan and Changhong, we consider the companies to be involved in similar activities and industry sectors.

Company	Market Capitalisation as at 31-Oct-16 ($m)	Geared Beta (β)	Gross Debt/Equity (%)	Ungeared Beta (βa)
BHP Billion Limited	97,461.44	1.56	61%	1.09
Intra Energy Corporation Limited	3.92	1.35	34%	1.09
Rio Tinto Limited	80,014.77	1.23	48%	0.92
South32 Limited	9,769.10	1.49	10%	1.39
Stanmore Coal Limited	60.07	1.23	0%	1.23
White Energy Company Limited	19.05	1.27	0%	1.27
Whitehaven Coal Limited	1,728.89	1.83	33%	1.49
Mean	**27,008**	**1.42**	**27%**	**1.21**
Median	**1,729**	**1.35**	**33%**	**1.23**

Source: Bloomberg, S&P Capital IQ and BDO analysis

Baolong

We have assessed the operations and business risks of Baolong to be broadly comparable to the companies outlined in the table below as they hold exploration, development and pre-production assets in coal and other commodities. Although the comparable companies are involved in a wide range of commodities in regions outside of China, we consider the companies to be involved in similar activities and industry sectors to that of Baolong.

Company	Market Capitalisation as at 31-Oct-16 ($m)	Geared Beta (β)	Gross Debt/Equity (%)	Ungeared Beta (βa)
Acacia Coal Limited	6.24	1.27	0%	1.27
County International Limited	2.83	1.33	0%	1.33
Draig Resources Limited	3.74	1.20	0%	1.20
Ikwezi Mining Limited	10.16	1.87	0%	1.87
Pacific American Coal Limited	14.94	1.17	0%	1.17
Paringa Resources Limited	66.62	1.16	0%	1.16
Mean	**17.41**	**1.34**	**0%**	**1.34**
Median	**8.20**	**1.24**	**0%**	**1.24**

Source: Bloomberg, S&P Capital IQ and BDO analysis

Selected Beta (ß)

In selecting an appropriate beta for Blackgold's Caotang, Heiwan, Baolong and Changhong projects, we have considered the similarities and differences between the projects and the comparable companies selected above.

The comparable similarities and differences noted are:

- The comparable companies operate, in varying degrees, within the coal mining and exploration industry.
- The size and diversification of the operations of the comparable companies is much greater than that of Blackgold's mining, development and exploration assets. The comparable companies have mining operations all over the world, developing and extracting a range of commodities, diversifying risk away from the coal industry;
- The comparable companies do not have any operating coal mines in China. Blackgold's reliance on the Chinese coal industry is inherently riskier than the comparable companies, given the recent uncertainty in China surrounding coal production restrictions currently being imposed by the Chinese government;
- the comparable companies' mining and exploration assets have varying risk profiles depending on the maturity of the assets and the stages of production;
- several of the comparable companies having been producing for a considerable time period; and
- several comparable companies are still in the prefeasibility and evaluation stage.

Having regard to the above, we consider that an appropriate ungeared beta to apply to Blackgold's Caotang, Heiwan, Baolong and Changhong projects is reflected in the table below:

Project	Ungeared beta	Geared beta
Caotang	1.60 - 2.00	1.60 - 2.00
Heiwan	1.60 - 2.00	1.60 - 2.00
Changhong	1.60 - 2.00	1.60 - 2.00
Baolong	1.80 - 2.20	1.80 - 2.20

Source: Bloomberg, S&P Capital IQ and BDO analysis

We have selected our beta from the range of comparable companies' betas. Taking the points noted above into consideration, we have applied a premium to the beta figures of the comparable companies presented above for the increased inherent risk in the Blackgold projects relative to the comparable companies. The capital structure of Blackgold's Caotang, Heiwan, Baolong and Changhong projects are 100% equity funded. Therefore, the geared beta is the same as the ungeared beta for each of the projects.

Cost of Equity

On this basis we have assessed the cost of equity to be:

Input	Caotang		Heiwan		Changhong		Baolong	
	Low	High	Low	High	Low	High	Low	High
Risk free rate of return	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%
Equity market risk premium	6.00%	8.00%	6.00%	8.00%	6.00%	8.00%	6.00%	8.00%
Geared Beta	1.60	2.00	1.60	2.00	1.60	2.00	1.80	2.20
Cost of Equity (rounded)	**12%**	**18%**	**12%**	**18%**	**12%**	**18%**	**13%**	**20%**

Source: BDO analysis

Weighted Average Cost of Capital

The WACC represents the market return required on the total assets of the undertaking by debt and equity providers. WACC is used to assess the appropriate commercial rate of return on the capital invested in the business, acknowledging that normally funds invested consist of a mixture of debt and equity funds. Accordingly, the discount rate should reflect the proportionate levels of debt and equity relative to the level of security and risk attributable to the investment.

In calculating WACC there are a number of different formulae which are based on the definition of cash flows (i.e., pre-tax or post-tax), the treatment of the tax benefit arising through the deductibility of interest expenses (included in either the cash flow or discount rate), and the manner and extent to which they adjust for the effects of dividend imputation. The commonly used WACC formula is the post-tax WACC, without adjustment for dividend imputation, which is detailed in the below table.

CAPM	
WACC	$= \frac{E}{E+D} K_e + \frac{D}{D+E} K_d (1- t)$
Where:	
K_e	= expected return or discount rate on equity
K_d	= interest rate on debt (pre-tax)
T	= corporate tax rate
E	= market value of equity
D	= market value of debt
(1- t)	= tax adjustment

Gearing

Before WACC can be determined, the proportion of funding provided by debt and equity (i.e., gearing ratio) must be determined. The gearing ratio adopted should represent the level of debt that the asset can reasonably sustain (i.e., the higher the expected volatility of cash flows, the lower the debt levels which can be supported). The optimum level of gearing will differentiate between assets and will include:

- the variability in earnings streams;
- working capital requirements;
- the level of investment in tangible assets; and
- the nature and risk profile of the tangible assets.

As described earlier, we have regeared the beta having regard to the capital structure of each project. We understand that the capital structure of each of Blackgold's projects to be 100% equity.

Calculation of WACC

Input	Caotang		Heiwan		Changhong		Baolong	
	Low	High	Low	High	Low	High	Low	High
Cost of Equity	12%	18%	12%	18%	12%	18%	13%	20%
Cost of Debt	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Proportion of Equity (E/(E+D))	100%	100%	100%	100%	100%	100%	100%	100%
Proportion of Debt (D/(D+E))	-	-	-	-	-	-	-	-
WACC	12%	18%	12%	18%	12%	18%	13%	20%

Source: BDO analysis

Based on the above inputs, we have determined a WACC for each of the following projects:

- Caotang – 12% to 18% with a preferred WACC of 15%
- Heiwan – 12% to 18% with a preferred WACC of 15%
- Changhong – 12% to 18% with a preferred WACC of 15%
- Baolong – 13% to 20% with a preferred WACC of 17%

Description of comparable listed companies used in the determination of the discount rate for Blackgold's Caotang, Heiwan, and Changhong projects are summarised below. Note we have used the same set of comparable companies due to the similar nature and risk of its projects.

Comparable ASX Company	Description
BHP Billiton Limited	BHP Billiton Limited discovers, acquires, develops, and markets natural resources worldwide. It operates through four segments: Petroleum, Copper, Iron Ore, and Coal. The company explores for, develops, produces, and markets oil and gas in the Gulf of Mexico, Western Australia, and Trinidad and Tobago. It also explores for copper, silver, lead, zinc, molybdenum, uranium, gold, iron ore, and metallurgical and thermal coal.
Intra Energy Corporation Limited	Intra Energy Corporation Limited, a mining and energy company, engages in the exploration and production of coal in Eastern Africa. The company operates in two segments, Australia and Africa. Its flagship project is the Tancoal Mbalawala coal mine in the Ngaka basin. The company also operates the Nkhachira coal mine in northern Malawi. In addition, it has two coal-fired energy projects, including the Pamodzi project in Tanzania and the Ngaka project located in Malawi.
Rio Tinto Limited	Rio Tinto Limited, a mining and metals company, focuses on finding, mining, processing, and marketing mineral resources. Its primary products include bauxite, alumina, aluminium, copper, thermal and metallurgical coal, gold, silver, molybdenum, diamonds, titanium dioxide, borates, salt, uranium, and iron ore. It has operations primarily in Australia, South America, Asia, Europe, and Africa.
South32 Limited	South32 Limited operates as a diversified metals and mining company primarily in Australia, South America, and Southern Africa. It has a portfolio of assets producing alumina, aluminium, bauxite, energy and metallurgical coal, manganese ore and alloy, ferronickel, silver, lead, and zinc. South32 Limited also exports its products.

Comparable ASX Company	Description
Stanmore Coal Limited	Stanmore Coal Limited explores, produces, and sells metallurgical and thermal coal in Australia. It holds interest in the Isaac Plains, Belview, The Range, Lilyvale, Mackenzie, Tennyson, Clifford, Kerlong, and New Cambria projects in the Bowen and Surat basins of Queensland. The company also exports its products.
White Energy Company Limited	White Energy Company Limited engages in coal mining and coal technology businesses in Australia, Asia, South Africa, Mauritius, the United States, and the United Kingdom. The company operates in four segments: Coal Technology, Coal Mining, Mining Exploration, and Property. The company holds exclusive licence for the Binderless Coal Briquetting (BCB) technology, which processes poor quality coal into a higher quality product; operates various coal mines in Kentucky, the United States; and holds interest in tenements near Cooper Pedy, South Australia.
Whitehaven Coal Limited	Whitehaven Coal Limited engages in the development and operation of coal mines. The company operates through two segments, Open Cut Operations and Underground Operations. Its principal products include low ash and low sulphur thermal coal, and metallurgical coal used in the production of steel. The company holds interests in various projects located in New South Wales, including Maules Creek, Narrabri, Werris Creek, Rocglen, Tarrawonga, and Vickery projects. It also owns interests in various other exploration and potential development projects in Queensland and New South Wales. As of August 18, 2016, the company had approximately 982 Mt of recoverable coal reserves; and 883 Mt of marketable coal reserves. It sells its coal in Australia, Japan, Korea, India, Taiwan, China, Mexico, Malaysia, Chile, and internationally. Australia.

Source: Bloomberg, S&P Capital IQ

Description of comparable listed companies used in the determination of the discount rate for Baolong are summarised below.

Comparable ASX Company	Description
Acacia Coal Limited	Acacia Coal Limited engages in the exploration and development of coal tenements in Australia. Its primary asset is the 100% interest owned Comet Ridge Project located in the Bowen Basin in Central Queensland.
County International Limited	County International Limited engages in the exploration and development of coal in the United States. It holds interests in the Miller Coal project located in the Powder River Basin in Wyoming.
Draig Resources Limited	Draig Resources Limited, together with its subsidiaries, engages in the exploration and development of coal resources primarily in Mongolia. It holds interests in two exploration licences in Ovorhangay province, central-southern Mongolia.
Ikwezi Mining Limited	Ikwezi Mining Limited engages in the acquisition, exploration, and development of coal projects in South Africa. The company holds a 70% interest in the Ntendeka Colliery project as well as a 60% interest in the Dundee project. It also holds a 60% interest in the Acorn project located in the Gauteng Province; and the Assegai project located in Mpumalanga Province. The company was incorporated in 2011 and is based in Johannesburg, South Africa.

Comparable ASX Company	Description
Pacific American Coal Limited	Pacific American Coal Limited focuses on the exploration, development, and production of metallurgical coal assets in North America. It holds a 100% interest in its flagship Elko coking coal project that is located in the Crowsnest Coalfield of the East Kootenay coal basin in British Columbia, Canada.
Paringa Resources Limited	Paringa Resources Limited engages in the exploration and development of resource projects, particularly coal. The company holds interests in the Poplar Grove Mine, the Cypress Mine, and the Buck Creek coal mining complex located in the Illinois coal basin in western Kentucky. It also holds interests in the Arkoma coal basin in Arkansas. The company was incorporated in 2012 and is headquartered in Evansville, Indiana.

Source: Bloomberg, S&P Capital IQ

Appendix 6 – Independent Technical Assessment and Valuation Report

AL MAYNARD & ASSOCIATES Pty Ltd
Consulting Geologists

www.geological.com.au *ABN 75 120 492 435*

9/280 Hay Street,	*Tel: (+618) 9388 1000*	*Mob: 04 0304 9449*
SUBIACO, WA, 6008	*Fax: (+618) 9388 1768*	*al@geological.com.au*
Australia		

Australian & International Exploration & Evaluation of Mineral Properties

INDEPENDENT TECHNICAL ASSESSMENT AND VALUATION

OF THE

FOUR COAL MINING PROPERTIES

HELD BY

BLACKGOLD INTERNATIONAL HOLDINGS LIMITED

IN

CHONGQING MUNICIPALITY

PEOPLE'S REPUBLIC OF CHINA

PREPARED FOR

BDO CORPORATE FINANCE (WA) PTY LTD

Author: Brian J. Varndell, BSc(Spec.Hons.), FAusIMM.
Peer Review: Allen J. Maynard BAppSc(Geol), MAIG, MAusIMM
Company: Al Maynard & Associates Pty Ltd

Issue Date of Report: 11 May 2017

EXECUTIVE SUMMARY

This Independent Technical Assessment and Valuation Report ("ITV") has been prepared by Al Maynard & Associates ("AM&A") at the request of Mr Adam Myers (Director) of BDO Corporate Finance (WA) Pty Ltd ("BDO"). BDO will rely on this report in order to prepare an Independent Expert's Report ("IER") for inclusion with a scheme booklet to assist shareholders in their decision whether or not to approve the scheme of arrangement ("Scheme") under which Vibrant Group Limited ("Vibrant") will acquire all the issued shares in Blackgold International Holdings Limited ("Blackgold" or "Company"), other than Blackgold shares already owned or controlled by Vibrant, for a cash consideration of A$0.045 per share. The IER will provide the Blackgold shareholders with a document including an opinion to Blackgold shareholders on whether the Scheme is in the best interests of shareholders. AM&A is not operating under an Australian financial services licence.

At the request of BDO, AM&A has reviewed the reasonableness of the technical project assumptions associated with the cash flow model and all its associated input parameters, as described in the recent Resource and Reserve Update which was required as part of the valuation exercise and reported in accordance with the JORC Code (2012) ("R&R Report") attached in full in Appendix 1, as part of this report and to be read in conjunction with this report, for the four coal mining properties owned by Blackgold in Chongqing Municipality, People's Republic of China ("Coal Projects" or "Projects"), namely:

- Caotang
- Heiwan
- Baolong
- Changhong

The Projects comprise four coal properties in China of which two are currently in profitable production, one was marginally profitable and now in suspended production due to previous low coal prices and the fourth is in the development stage.

In performing this review, AM&A has provided an assessment and confirms the reasonableness of the following key assumptions used in the cash-flow model that addressed the Proven and Probable Reserve components:

- resources and reserves incorporated into the models for the Coal Projects;
- mining physicals (including tonnes of ore mined, ore quality, waste material and mine life);
- processing physicals (including ore processed and produced);
- production and operating costs (including but not limited to drilling and blasting, mining, haulage, processing, transport, barging, subcontractor production costs, general administration, distribution and marketing, contingencies and royalties or levies);
- capital expenditure (including but not limited to pre-production costs, project capital costs, sustaining capital expenditure, salvage value, rehabilitation and contingency); and
- any other relevant technical assumptions not specified above.

In addition to the above, AM&A has also prepared an independent valuation of all the Inferred Resources. The Inferred Resources are not included in the cash flow models of the Coal Projects. This report provides a technical valuation of the Inferred Resources of the Projects as at a valuation date of 31st March, 2017 and has been prepared in accordance with the guidelines of the Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (the "Valmin Code") (2015) as adopted by the Australian Institute of Geoscientists ("AIG") and the Australasian Institute of Mining and

Metallurgy ("AusIMM").

Blackgold is a public company with assets in the People's Republic of China. Its principal business includes coal mining and Blackgold owns 100% of the Projects that are prospective for continued coal production over the next 20 years at least subject to favourable product prices. Previous exploration over the project areas indicates that there is a reasonable possibility to extend these coal mines life span.

A reference to comparable transactions of coal property sales is also included however cannot be used to reach a meaningful conclusion since this ITV only addresses the Inferred Resources which comprise a minor portion of the total reserves and resources. Blackgold's Reserves were valued in 2009 by "AAL" (private Chinese company, unpublished) and that information is not relevant to this current report as this report does not value the Reserves plus a lot of mining has occurred since then and both the coal price and the currency exchange rate have changed.

This valuation appraises the resources portion of the projects using the Yardstick method for the Inferred Resources.

Given the relevance of the assumptions and factors underlying the development and conceptual prospectivity for future production and exploration of the projects Inferred Resources, AM&A concludes that it is reasonable to rely on this data for the purposes of this report and the derivation of a current valuation accordingly based on that information. AM&A has relied on the technical data supplied by Blackgold and accepted that data after critically reviewing it in conjunction with a recent site visit in reaching our conclusions, unless AM&A expressly states otherwise.

The valuation is based upon the anthracitic coal resources that are thermal coals with a generally high ash content and at Changhong also a high sulphur content. The Reserves and Resources as at 31 July, 2016 are summarised in Table 1.

Mine	Reserves		Resources
	Proved (Mt)	Probable (Mt)	Inferred (Mt)
Baolong	29.10	26.1	29.3
Caotang	18.62	2.0	0.0
Changhong	11.89	6.8	9.7
Heiwan	3.13	0.4	0.0
Rounded Totals	62.74	35.2	39.0

Table 1: Summary of Blackgold Coal Reserves and Resources as at 31 July, 2016.

Note that Exploration Target estimates mentioned in the R&R Report are not valued as future early exploration devoted to conversion of these targets is not envisaged due to the current substantial life of mines available.

The summary of the valuation conclusions is presented in Table 15. This current valuation used a form of the Yardstick method applied to Inferred Resources at the Projects. in AM&A's opinion the selection of the Yardstick method is deemed the most appropriate method for valuation estimate purposes.

This Report concludes that the value of 100% of the Blackgold Projects Inferred Resources in China as at as at a valuation date of 31st March, 2017, is ascribed at $13 M from within the range of $6 M to $21 M.

The opinions expressed and conclusions drawn with respect to this valuation of the mineral assets are appropriate at the valuation date of 31st March, 2017. The valuation is only valid for this date and may change with time in response to variations in economic, market, legal or political conditions, in addition to future exploration results.

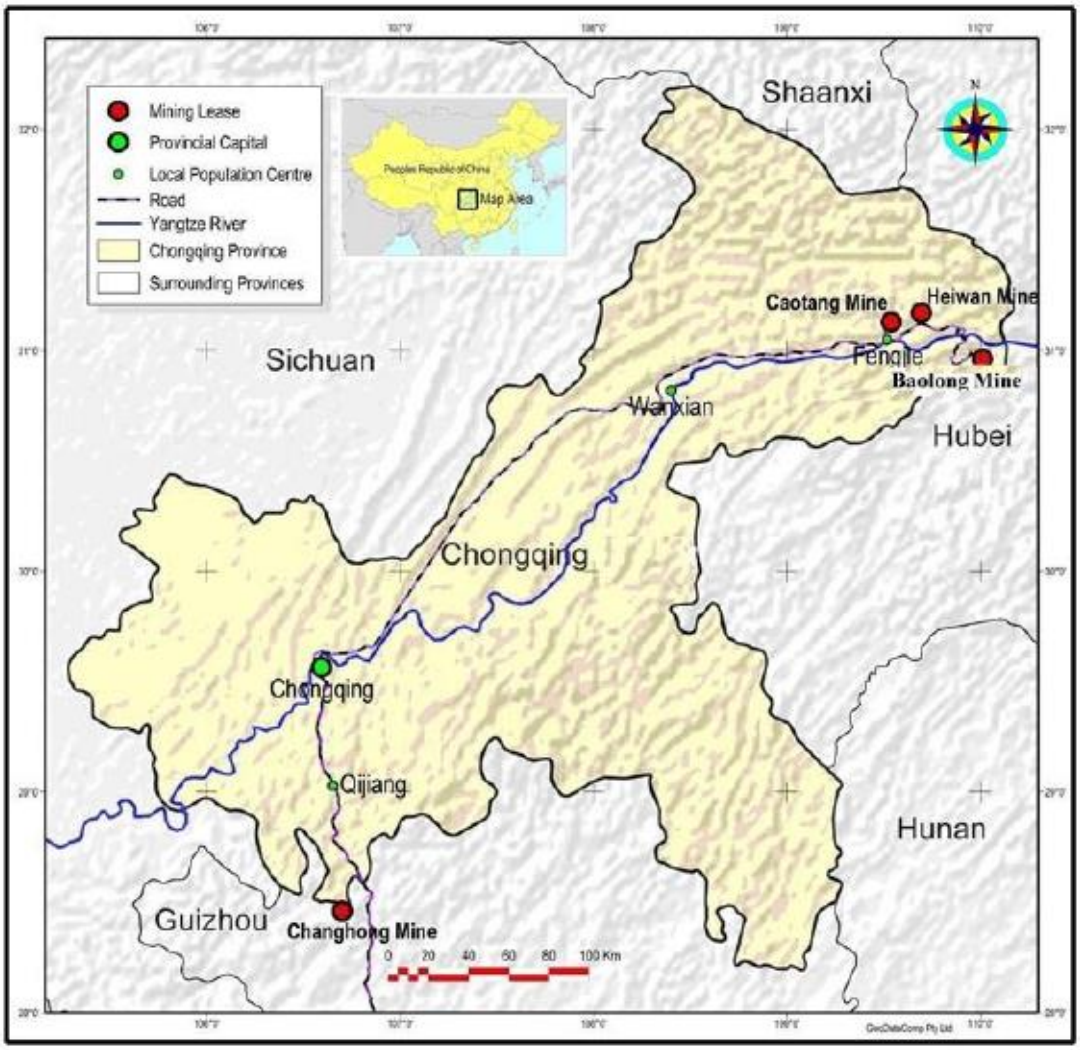

Figure 1: Blackgold Coal Projects in China - Location Plan.

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The Directors, 11 May 2017
BDO Corporate Finance (WA) Pty Ltd
38 Station Street,
Subiaco, WA 6008.
Australia.

Dear Sirs,

VALUATION OF THE BLACKGOLD INTERNATIONAL HOLDINGS LIMITED COAL MINE PROJECTS

1.0 Introduction

This Independent Technical Assessment and Valuation Report was prepared by AM&A at the request of Mr Adam Myers (Director) of BDO. BDO requires this report in order to prepare an IER for inclusion with a scheme booklet, to assist shareholders in their decision whether or not to approve the scheme of arrangement under which Vibrant will acquire all the issued shares in Blackgold, other than Blackgold shares owned or controlled by Vibrant, for a cash consideration of A$0.045 per share. The IER will provide the Blackgold shareholders with a document including an opinion to Blackgold shareholders whether the scheme is in the best interests of shareholders.

At the request of BDO, AM&A has reviewed the reasonableness of a number of technical project assumptions associated with the cash-flow model and all its associated input parameters, as described in the recent updated R&R Report attached in full in Appendix 1, for the four coal mining properties owned by Blackgold in Chongqing Municipality, People's Republic of China, namely:

- Caotang
- Heiwan
- Baolong
- Changhong

The Projects comprise four coal properties in China of which two are currently in profitable production, one was marginally profitable but now in suspended production due to previous low coal prices and the fourth is in the development stage.

In performing this review, AM&A has provided an assessment and confirms the reasonableness of the following key assumptions used in the cash-flow model that addressed the Proven and Probable Reserve components:

- resources and reserves incorporated into the models for the Coal Projects;
- mining physicals (including tonnes of ore mined, ore quality, waste material and mine life);
- processing physicals (including ore processed and produced);
- production and operating costs (including but not limited to drilling and blasting, mining, haulage, processing, transport, barging, subcontractor production costs, general administration, distribution and marketing, contingencies and royalties or levies);
- capital expenditure (including but not limited to pre-production costs, project capital costs, sustaining capital expenditure, salvage value, rehabilitation and contingency); and
- any other relevant technical assumptions not specified above.

In addition to the above, AM&A has prepared an independent valuation of all of the Inferred Resources. The Inferred Resources are not included in the cash flow models of

the Coal Projects.

This report provides a technical valuation of the Inferred Resources of the Projects as at a valuation date 31st March, 2017 and has been prepared in accordance with the guidelines of the Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (the "Valmin Code") (2015) as adopted by the Australian Institute of Geoscientists ("AIG") and the Australasian Institute of Mining and Metallurgy ("AusIMM") and specifically:-

- ASIC Regulatory Guideline 111 – Content of expert's Reports ("RG 111"); and
- ASIC Regulatory Guideline 112 – Independence of Experts ("RG 112")

1.1 Scope and Limitations

The valuation date in this report is 31st March, 2017 which represents the date of the latest data and technical information reviewed and there has been no consideration of any material changes to this data or valuation since that date. The valuation can be expected to change over time having regard to political, economic, market and legal factors. The valuation can also vary due to the success or otherwise of any mineral exploration that is conducted either on the mineral assets concerned or by other explorers on prospects in the near environment. The valuation could also possibly be affected by the consideration of other exploration data from adjacent licences with production history affecting the mineral assets which have not been made available to the writers.

In order to form an opinion as to the value of any mineral asset, it is necessary to make assumptions as to certain future events, which might include economic and political factors and the likelihood of exploration success. The writers have taken all reasonable care in formulating these assumptions to ensure that they are appropriate to the case. These assumptions are based on the writers' technical training and over 40 years' experience in the exploration and mining industry. Whilst the opinions expressed represent the writers' professional opinion at the time of this Report, these opinions are not however, forecasts as it is never possible to predict accurately the many variable factors that need to be considered in forming an opinion as to the value of any mineral asset.

The information presented in this Report is based on technical information provided by Blackgold supplemented by our own inquiries as to the reasonableness of the supplied data. At the request of AM&A, copies of relevant technical reports and agreements were readily made available. There is also information available in the public domain and relevant references are listed in Section 7.0 –References. A recent site visit was undertaken by Brian Varndell from 18 to 22 September, 2016 to update mining parameters and project progress and remain familiar with the production costs and technical information as provided by Blackgold to enable an informed opinion to be derived.

Blackgold will be invoiced and expected to pay a fee, estimated at $22,000 for the preparation of this Report. This fee comprises a normal, commercial daily rate plus expenses. Payment is not contingent on the results of this report.

Blackgold has confirmed in writing that all technical data known to it was made available to AM&A. The working papers and models for this valuation are being kept in our files and would be available for further reference. The title of this report shall not pass to the Company until all professional fees have been paid in full.

The valuation presented in this Report is restricted to a statement of the technical value of the mineral asset package. The Valmin Code defines Technical Value is an assessment of a Mineral Asset's future net economic benefit at the Valuation Date under a set of assumptions deemed most appropriate by a Practitioner, excluding any premium or discount to account for market considerations. We do not consider the Market Value to

differ materially from the Technical Value in this report.

It should be noted that in all cases, the valuation of the mineral assets presented is analogous with the concept of "valuation in use" commonly applied to other commercial valuations. This concept holds that the assets have a particular value only in the context of the usual business of the company as a going concern. This value will sometimes be higher than the disposal value, where there is not a willing seller. Disposal values for mineral assets may be a small fraction of going concern values.

In accordance with the Valmin Code, we have prepared the "Range of Values" as shown in Table 15, Section 6.5. Regarding the Projects it is considered that sufficient technical data has been provided from the reports covering the previous mining and exploration of the relevant areas to enable an understanding of the geology. This provides adequate information to enable an informed opinion as to the current value of the mineral assets. The recent fifth site visit was to assist the author to verify up to date information on the properties.

1.2 Statement of Competence

This Report has been prepared by Brian J. Varndell with Peer Review by Allen J. Maynard. Maynard is the Principal of AM&A, a qualified geologist, a Member of the AusIMM (No 104986) and a Member of the Australian Institute of Geoscientists ("AIG" #2062). He has had over 35 years of continuous experience in mineral exploration and evaluation and more than 30 years' experience in mineral asset valuation. Brian J. Varndell BSc (SpecHonsGeol), FAusIMM (No111022), is a geologist with over 40 years in the industry and 35 years in mineral asset valuation. The writers each hold the appropriate qualifications, experience and independence to qualify as an "Expert" and "Competent Person" under the definitions of the Valmin Code.

1.3 Federal Court of Australia and Expert Evidence Practice Note GPN – EXPT

Allen J. Maynard and Brian J. Varndell have read the *Expert Evidence Practice Note GPN-EXPT* published by the Federal Court in 2016 including the *Harmonised Expert Witness Code of Conduct* and they agree to be bound by the practice note and the code.

Allen J. Maynard and Brian J. Varndell have made all enquiries which they believe are desirable and appropriate (save for any matters identified explicitly in this Report) and no matters of significance which they regard as relevant have, to their knowledge, been withheld from the Court.

The opinions in the Report are based wholly or substantially on specialised knowledge arising from the training, study and experience of Allen J. Maynard and Brian J. Varndell.

2.0 Blackgold Mining Projects

2.1 Introduction

Blackgold's four coal mining properties are located in the Chongqing Municipality, People's Republic of China. Three of the Blackgold coal mining properties are located in the northeast portion of the Chongqing Municipality and one of the properties is located in the southernmost portion of the Chongqing Municipality (Figures 1 & 2).

Chongqing is a developed industrial city and one of China's largest centres for motor vehicle and motorcycle production. Agriculture remains significant within a region where natural resources are also abundant including coal, natural gas, and more than 40 other known minerals.

Chongqing is located in a mountainous region. It is a major transportation hub with the biggest river port in southwestern China, located at the junction of the Jialing River and the

Yangtze River. Ocean-going vessels can reach Chongqing port along the Yangtze River. Chongqing is also a major rail and airline hub in southwestern China. The express highway connects major counties within Chongqing city to all surrounding provinces.

The Blackgold Mines are located in mountainous rural areas, a linear distance of 100 km to 200 km from the municipal urban centre. The road distance is generally much longer than the linear distance due to the rugged terrain of the area. Reasonably maintained paved roads connect the city's urban centre with different district and township centres, but the last few kilometres of the roads to the actual mine sites are narrow gravel roads impacted by the truck traffic hauling coal to loading sites.

2.2 Properties Location and Access

2.2.1 Caotang Coal Mine

The profitable Caotang Mine is located 10 km north of the township of Fengjie County within the municipality of Chongqing City. The coal field covers a total area of 9.10 km^2. Coal mining is permitted between 300 m and 970 m elevation. The main portal is at an elevation of 435 m in the foothills of mountainous countryside. It is 14 km north-northeast of Fengjie County town, approximately 33 km by road from the town centre and approximately 25 km from the port on the Yangtze River. The corners of the mining permit area extend from longitude 109°31′00″ to 109°34′09″E and latitude 31°06′47″ to 31°09′45″N. The coordinates of the major adit portal are 109°31′27″E and 31°08′15″N at an elevation of 435.13 m.

The coalfield infrastructure is reasonable with a total travelling distance by road of approximately 20 km between the coalfield to the coal loading wharf at Bei Di Town on the Chang Jiang River. The coal field is administered by Bei Di Town and Fen He Town.

The current mine layout consists of three production portals joined to form a single production system as was required per Government consolidation requirements.

2.2.2 Heiwan Coal Mine

The profitable Heiwan Mine is located 26 km north of the new township of Feng Jie County within the municipality of Chongqing City. The coalfield covers a total area of 3.25 km2. Coal mining is permitted between 1,300 m to 1,050 m elevation.

The coalfield infrastructure is reasonable with a total traveling distance of approximately 30 km between the coalfield to the coal loading wharf at Feng Jie County on the Chang Jiang River. The coal field is administered by Bei Di Town and Fen He Town.

2.2.3 Baolong Coal Mine

Baolong Mine is currently being developed with coal production planned to commence in 2017. The mine is located 17 km southeast of Wu Shan County township within the municipality of Chongqing City.

The coalfield infrastructure is reasonable with 80 km of asphalt roads connecting to Wu Shan County, and 70 km of asphalt roads to Jian Shi County. The coal wharf is located at Pu Tao Dam on the Yangtze Jiang River from where the coal can be transported to Yichang, Wuhan, Shanghai, Wanzhou and Chongqing. The coalfield is administered by Bao Long Town Wu Shan County.

2.2.4 Changhong Mine

Changhong Mine, which was recently marginally profitable, is in suspended production due to previous low coal prices, is located 108 km south of the provincial capital Chongqing, a distance that can be covered in 2 hours by vehicle, bordering Xishui County in Guizhou and Qijiang District in Chongqing. The Mine is approximately 62 km southeast of Qijiang

town and 18 km from the nearest railway station. The mining permit allows mining between elevations between 800 m and 1,350 m and covers a total area of 0.7719 km^2.

The coal field is administered by Wanlong Village, Shihao Town. The main adit coordinates are 106°42′14″E and 28°27′47″N. There is a 3.0 km gravel access road to the secondary bitumen road that links to Shihao Town, Qijiang County 28 km to the north and Xianyuan Town in Guizhou to the south. Shihao County serves as a coal transportation hub with the cross provincial highway and railway passing through it.

Changhong Coal Mine has been established by integrating three existing coal mines, Changhong Coal Mine, Shanshuwan Coal Mine and Jixing Coal Mine. The mine is bordered by the Nanniwan Coal Mine to the west and Zhanghegou Coal Mine to the north-east. The mining tenement boundary was delineated by the Land Administration Bureau of Chongqing City which has confirmed that there is no disputed illegal encroachment of adjacent coal mines by the Changhong Coal Mine. Access to the mine is currently through two adits with two other adits for ventilation. To increase the future output capacity of the Changhong Coal Mine a new, lower 600 m long adit was recently completed and is ready for operations that were recently suspended due to degassing operations and low coal prices that affect the newly opened working areas.

2.3 Regional Geological Setting

The four mines are located within the Yangtze Block (South China Block) that contains Archaean and Palaeo-proterozoic high grade crystalline metamorphic rocks mainly as gneiss, amphibolites, marbles and banded iron formation overlain by a Palaeozoic and Mesozoic to Cainozoic sedimentary successions (i.e. from greater than 2500 to less than 65 million years old) and these rocks form the Yangtze platform. These sediments are gently folded and the basin stratigraphic relationships between the stratigraphic units are well recorded.

The marine sediments are a result of tectonic subsidence caused by collisions with neighbouring tectonic plates that dominated until the Late Triassic when the sedimentation regionally shifted to fluvial deposition as the basin began to rise from the ocean. The Triassic margin of the Yangtze platform extends in a sigmoidal SW/NE trend from Yunnan through Guizhou.

The post-Triassic gradual rise of the Yangtze platform resulted in erosion of the extensive Proterozoic marine sediments, particularly the limestones, resulting in the characteristic and spectacular karstic topography found throughout Guizhou and Guangxi.

Coal can be found in the Yangtze Platform within many of the terrestrial sediments from the Carboniferous to the Cretaceous. The coal deposits found at the Blackgold mines are however restricted to flat dipping, 10° to 30°, freshwater continental sediments and sea water deposits in a coastal plain environment from between the Late Permian to Late Triassic.

The sedimentary strata exposed in the Blackgold coal mining areas are mainly Permian, Triassic, and Jurassic. The main coal seams at the Baolong and Changhong Mines are located in the Late Permian Longtan (Wujiaping) Formation. The Caotang and Heiwan coal was deposited within a typical continental sedimentary environment during the Late Triassic along the eastern margin of the Sichuan inland lake basin. The sediments in this area include typical pediment alluvial plain, delta plain, and shallow lake deposits.

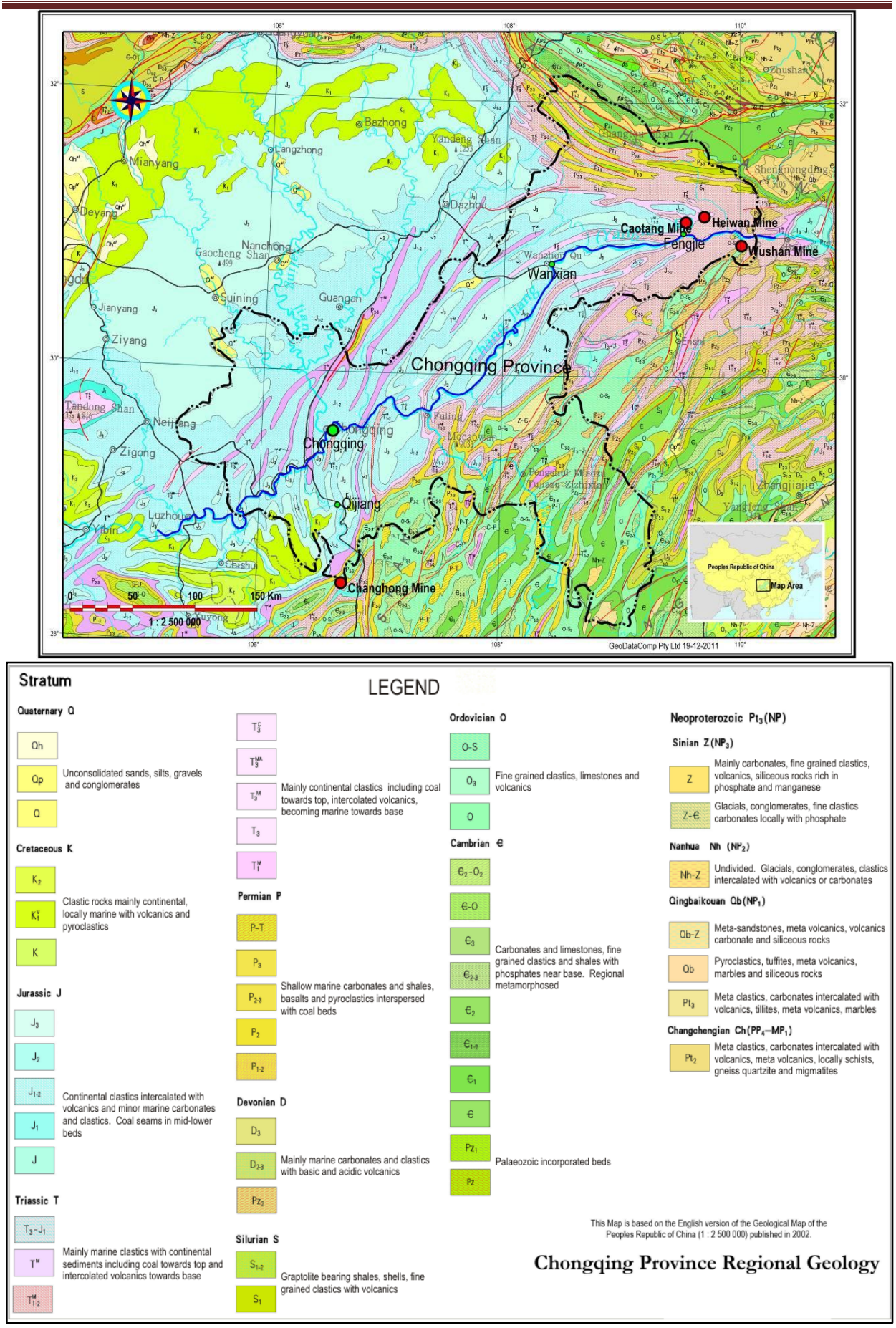

Figure 2: Geological Map of Chongqing.

2.4 Local Geological Settings

2.4.1 Caotang Mine

The mining area is situated in the eastern part of the arcuate Xinhuaxia Qiyueshan Fold Belt. The mine area covers the north of Qumahe compound syncline with the subsidiary east-west Xujiaping Anticline and Shitaowan Syncline in the north of mine where limbs dip to 15^0. Locally however, the south limb of the Xujiaping Anticline is steeper, with a maximum dip of 68^0, and an average of 32^0 between 750-850 m. The oldest exposed strata at Caotang is the Middle Triassic Badong Formation (T2b) that passes unconformably upwards into the Upper Triassic Xujiahe Formation (T3xj) that is in turn unconformably capped by the Lower Jurassic Zhenzhuchong Formation (J1zh). Quaternary sediments occur along the water courses. The Xujiahe and Zhenzhuchong Formations both host coal seams.

Caotang Mine exploits the Triassic K1 and K2 coal seams located near the base of the Upper Triassic Xujiahe Formation which provides a relatively stable mining environment. The thickness of the K1 coal seam ranges between 0-2.4 m averaging 2.0 m within the mine while K2 coal seam ranges between 0-1.00 m with an average of 1.0 m in the mine. The hanging wall to the K1 seam and footwall to the K2 seam is clayey sandstone. The mine produces thermal coal for local, regional, and national power plants or furnace operators. The coal is classified as high ash, medium to high sulphur, medium to high phosphorous and medium calorific value coal suitable for thermal energy market.

2.4.2 Heiwan Mine

The Heiwan mining permit covers some extremely rugged, mountainous country where the mining area lies on the eastern limb of the Chuandong Fold Belt which includes a number of parasitic folds and faults. From north to south, these folds are the Hongyan Syncline, Longchi Anticline, Qumahe Syncline, Tongcun Anticline, Gulingzhen Syncline, Wenyaoshan Anticline, Wushan Syncline, Hengshixi Anticline and the Maocaoba Anticline. Generally the anticlines are tight and the synclines open with the folds tightening to the east. Strata within the mine area are mainly Triassic and Lower Jurassic sediments. Regionally the folding and faults affect the coal seam thickness, in some instances to total destruction.

In the local mine area the stratigraphy includes the basal Triassic Badong Formation (T2b) progressing up through the Upper Triassic Xujiahe Formation (T3xj) and Lower Jurassic Zhenzhuchong Formation (J1z).

The strata generally strikes 330^0 dipping 13^0 north with numerous small, generally dry, east-west micro-scale faults. There are five mineable coal seams at Heiwan namely K1, K2, K3, K4 and K5 of which K3 is currently the primary coal seam with an average thickness of 0.5 m.

Heiwan produces thermal coal for local, regional and national power plants or furnace operators. The raw coal is vitreous black, clearly defined bedding and with planar and conchoidal fractures. The coal is hard with a calorific value generally around 5,500 kcal/kg. The coal is classified as a high to medium ash, low sulphur anthracite.

2.4.3 Baolong Mine

The Baolong district has a rugged, mountainous terrain with steeply incised valleys with limited flat lowlands. The topographic range is 160 m from the Baolong River to the highest point at Liyinyang with an elevation of 1717 m.

The Baolong Mine area is located on the northeast of the Yudong Fold Belt which is part of the Neocathaysian Tectonic System with northeast-southwest striking fold axes. The folds are asymmetrical having open synclines and tight anticlines. The nearby fold structures appear in an en-echelon array. The area covered by the mine is over the central portion of

the northwest limb of the Changliangzi Anticline. Local compression and tension has caused normal and thrust faulting with secondary parasitic folds.

In the local mine area the stratigraphy includes the basal Lower to Mid Silurian Middle Shamao Formation (S2s) unconformably overlain by Devonian Yuntaiguan (D3y), unconformably overlain by Huangjiacheng and Xiejingsi (D3h+x) formations, Carboniferous Huanglong Formation (C2h), Permian Liangshan (P1l), Xixia (P1q), Maokou (P1m), Gufeng (P1g), Wujiaping (P2w), Changxing (P2c), Dalong (P2d) formations, unconformably overlain by Triassic Daye (T1d), Jialingjiang (T1j) and Badong (T2b) formations progressing up unconformably through Quaternary alluvials along the rivers.

There are two mineable coal seams at the Baolong Coal Mine, namely K1 and K2 which are separated by an average 350 m of Permian sediments. Both coal seams have clay partings of variable thicknesses. The thickness of the K1 coal seam varies 0.5-2.4 m and has 1-2 clay partings. The clay partings are grey mudstone with variable thickness from 0.05-0.5 m. The central to upper K1 seam is mainly bright coal with minor dull coal, soft, grey black to black with an oily sheen. The lower part is mainly dull coal mixed with bedded bright coal with a steel grey appearance. The national standard classifies the K1 seam as high ash, high sulphur, special low phosphorus, low chlorine, low calorific value coal.

The thickness of K2 seam ranges from 0.72-1.5 m averaging 1.2 m and is dull grey black with black striations and minor half bright coal with an adamantine and oily sheen. It has many fracture planes breaking irregularly into mostly powder with minor blocks. The national standard classifies the K2 seam as medium ash, medium-high sulphur, medium calorific value blind coal.

The K1 coal can be used for general industrial or domestic uses while K2 coal can be used for thermal power generation, motive power or domestic uses. The high arsenic content of the K2 coal prohibits its use for steam generation in the food processing industry and the high fluorine content requires it can only be used in special combustion stoves when used domestically.

2.4.4 Changhong Mine

The Changhong Mine site is located on the northwest limb of the Guandian Syncline in the northwest of the Loushan Mountain Fold Belt. The bedding at the mine strikes 142-147° and dips 29-32°SE. The district is structurally stable with limited risk of landslides. There are no faults or folds that affect mining.

In the local mine area the stratigraphy includes the basal Permian Maokou (P1m), Longtan (P2 l) and Changxing (P2c) formations, unconformably overlain by Triassic Yulongshan (T1y) and Feixianguan (T1f) formations progressing up unconformably through to Quaternary alluvials scattered along the rivers.

The coal seams at Changhong are gas producing so the mine has been classified as having potential for gas explosions. The absolute gas emission rate is 4.72 m^3/min and the relative gas emission rate is 54.8 m^3/t. The average temperature of the mine at 800 m is a safe 22.8^{0}C. Since the mine is located in a karstic area where most of the limestones are aquifers regularly recharged by rainfall, safety precautions are required.

The two current commercial coal seams at the Changhong Coal Mine, namely M6 and M8, are part of the Upper Permian Longtan Formation dipping approximately 30°. According to Chinese standards the M6 coal seam is high-ash, high sulphur anthracite with a medium calorific value while the M8 coal seam is medium ash, medium sulphur anthracite with high calorific value. Both coals are suitable for power generation, domestic consumption or steaming coal.

2.5 Previous Exploration

The initial regional exploration and mapping of the concessions in the early 1970s was mainly conducted by the state owned Geological Brigades in China when the commercial potential of the coal resources were first identified. Initial Chinese standard resource estimates were completed by the Brigades and these estimates were used to support the initial mining licence applications.

Blackgold has followed up the regional exploration with channel sampling programs in its three operating coal mines supplemented with underground drilling at Heiwan Mine. Within the areas targeted for room and pillar mining, the sample channel spacing was generally 50 m inside the drilled 500x500 m and in some areas 1,000×1,000 m drill spacing.

2.6 Resources and Reserves

All the usual standard QA/QC procedures were followed and are adequately described in the AM&A updated R&R Report. Recent production reconciliation revealed that at both Caotang and Heiwan mines differences in reported mine production and the reserve modelling is mainly due to thicker coal seam measurements in new mine development areas being slightly greater than previously modelled adding extra resources to inventory.

All samples collected, either from drill core or underground channels, follow procedures that ensured accurate unbiased samples were collected. The coal qualities of the samples were measured at a Chinese government accredited laboratory, Intertek Testing Services Co Ltd, Shanghai, to ISO standards. AM&A therefore state that the resource and reserve estimates quoted in the R&R Report satisfy the requirements for reporting coal resources according to the JORC Code (2012) and that the reliability of the estimates is properly implied by the resource classifications used for the estimates.

The Coal Reserves and Resources estimates are summarised in Tables 2 and 3.

	Resources									
Seam	**Measured Mt**	**Indicated Mt**	**Inferred Mt**	**H_2o %**	**Ash %**	**Vol %**	**FC %**	**S %**	**CV kcal/kg**	**Thickness m**
Caotang										
K1	15.8	2.1	0.0	0.7	36.5	7.2	55.7	0.8	4,696	2.0
K2	9.9	0.6	0.0	0.8	32.0	7.1	60.9	0.7	5,278	1.0
K3										
Total	25.7	2.7	0.0	0.7	34.8	7.2	57.6	0.8	4,911	1.6
Changhong										
M5	0.0	0.0	3.6	0.5	19.4	9.2	70.8	2.5	7,101	3.8
M6	11.4	0.1	0.0	0.5	18.5	8.7	72.3	2.7	6,535	13.0
M7	0.0	7.6	0.1	0.5	17.9	9.0	56.0	2.5	6,945	6.6
M8	6.7	0.1	0.0	0.5	17.8	9.2	72.6	2.6	6,935	10.4
M10	0.0	0.0	0.0							
M12	0.0	0.0	6.0	0.6	20.0	9.3	70.5	2.6	7,098	6.3
Total	18.1	7.8	9.7	0.5	18.6	9.0	68.4	2.6	6,852	9.1
Heiwan										
K1	3.4	0.4	0.0	0.7	25.5	6.7	66.6	1.0	5,702	0.9
K2	2.1	0.2	0.0	0.9	26.2	7.2	65.7	0.4	5,726	0.5
K3	0.6	0.0	0.0	0.7	31.0	7.0	61.4	0.6	5,210	0.5
K4	0.0	0.0	0.0	0.0						
K5	0.0	0.0	0.0	0.0						
Total	6.1	0.6	0.0	0.8	26.2	6.9	65.8	0.8	5,667	0.7
Baolong										
K1	19.5	22.4	19.2	0.5	28.1	6.8	62.7	0.7	5,527	1.9
K2	19.4	12.1	10.1	0.5	28.5	6.9	64.0	0.5	5,496	1.6

Total	38.9	34.5	29.3	0.5	28.3	6.8	63.3	0.6	5,515	1.8
TOTAL	**88.7**	**45.6**	**39.0**	**0.6**	**27.2**	**7.3**	**63.6**	**1.1**	**5,704**	**3.2**

Table 2: Coal Resources estimates at 31 July, 2016.

Mining coal underground will result in coal losses such as pillars, particularly supporting access and conveyor drives, left for underground support; areas left unmined where faulting or other geo-structural features make the ground unstable and unsafe to mine; pillars left to support infrastructure, buildings and rivers at the surface; and coal left on the backs and floors of stopes to prevent mining dilution with waste. Taking these factors into consideration, the Measured and Indicated resources were converted to Proved and Probable Reserves by multiplying the resource tonnes by recovery factors determined considering the life-of-mine designs developed by the China Coal International Engineering Chongqing Coalmine Design.

	Reserves		Resources							
Seam	**Proved Mt**	**Probable Mt**	**Inferred Mt**	**H_2o %**	**Ash %**	**Vol %**	**FC %**	**S %**	**CV kcal/kg**	**Thickness m**
Caotang										
K1	11.5	1.5	0.0	0.7	36.5	7.2	55.7	0.8	4,696	2.0
K2	7.2	0.47	0.0	0.8	32.0	7.1	60.9	0.7	5,278	1.0
K3										
Total	18.6	2.0	0.0	0.7	34.9	7.2	57.6	0.8	4,907	1.6
Changhong										
M5	0.0	0.0	3.6	0.5	19.4	9.2	70.8	2.5	7,101	3.8
M6	7.5	0.1	0.0	0.5	18.5	8.7	72.3	2.7	6,535	13.0
M7	0.0	6.6	0.1	0.5	17.9	9.0	56.0	2.5	6,945	6.6
M8	4.4	0.1	0.0	0.5	17.8	9.2	72.6	2.6	6,935	10.4
M10	0.0	0.0	0.0							
M12	0.0	0.0	6.0	0.6	20.0	9.3	70.5	2.6	7,098	6.3
Total	11.9	6.7	9.7	0.5	18.7	9.0	67.9	2.6	6,886	8.5
Heiwan										
K1	1.8	0.3	0.0	0.7	25.5	6.7	66.6	1.0	5,702	0.9
K2	1.1	0.2	0.0	0.9	26.2	7.2	65.7	0.4	5,726	0.5
K3	0.3	0.0	0.0	0.7	31.0	7.0	61.4	0.6	5,210	0.5
K4	0.0	0.0	0.0							
K5	0.0	0.0	0.0							
Total	3.1	0.4	0.0	0.8	26.2	6.9	65.9	0.8	5,669	0.7
Baolong										
K1	14.6	16.9	19.2	0.5	28.1	6.8	62.8	0.7	5,528	1.9
K2	14.5	9.1	10.1	0.5	28.5	6.9	64.0	0.5	5,495	1.6
Total	29.1	26.0	29.3	0.5	28.3	6.8	63.3	0.6	5,515	1.8
TOTAL	**62.7**	**35.2**	**39.0**	**0.6**	**27.3**	**7.3**	**63.4**	**1.0**	**5,704**	**3.1**

Table 3: Reserve and Resource estimates as at 31 July, 2016.

3.0 Valuation of the Mineral Assets – Methods and Guides

With due regard to the guidelines for assessment and valuation of mineral assets and mineral securities as adopted by the AusIMM Mineral Valuation Committee on 17th February, 1995 – the Valmin Code (updated 1999, 2005 & 2015). AM&A has derived the estimates listed below using several methods for the current technical value of the mineral assets.

The ASIC publications “Regulatory Guides 111 & 112” have also been referred to and duly considered in relation to the valuation procedure. The subjective nature of the valuation task is kept as objective as possible by the application of the guideline criteria of a “technical value”. This is a value that an informed, willing, but not anxious, arms’ length purchaser will pay for a mineral (or other similar) asset in a transaction devoid of “forced sale” circumstances. Throughout this report AM&A do not consider the Market Value to differ materially from the Technical Value.

3.1 General Valuation Methods

Various methods of valuing mineral assets include

- Discounted cash flow,
- Joint Venture and farm-in terms for arms' length transactions,
- Precedents from similar comparable asset sales/valuations,
- Multiples of exploration expenditure,
- Ratings systems related to perceived prospectivity,
- Real estate value and rule of thumb or yardstick approach.

3.2 Discounted Cash Flow/Net Present Value

This method provides an indication of the value of a mineral asset with identified reserves. It utilises an economic model based upon known resources, capital and operating costs, commodity prices and a discount for risk estimated to be inherent in the project.

Net present value ('NPV') is determined from discounted cash flow ('DCF') analysis where reasonable mining and processing parameters can be applied to an identified ore reserve. It is a process that allows perceived capital costs, operating costs, royalties, taxes and project financing requirements to be analysed in conjunction with a discount rate to reflect the perceived technical and financial risks and the depleting value of the mineral asset over time. The NPV method relies on reasonable estimates of capital requirements, mining and processing costs.

3.3 Joint Venture Terms

The terms of a proposed joint venture agreement may be used to provide a market value based upon the amount an incoming partner is prepared to spend to earn an interest in part or all of the mineral asset. This pre-supposes some form of subjectivity on the part of the incoming party when grass roots mineral assets are involved.

3.4 Similar or Comparable Transactions

When commercial transactions concerning mineral assets in similar circumstances have recently occurred, the market value precedent may be applied in part or in full to the mineral asset under consideration.

3.5 Multiple of Exploration Expenditure

The multiple of exploration expenditure method ('MEE') is used whereby a subjective factor (also called the prospectivity enhancement multiplier or 'PEM') is based on previous expenditure on a mineral asset with or without future committed exploration expenditure and is used to establish a base value from which the effectiveness of exploration can be assessed. Where exploration has produced documented positive results a MEE multiplier can be selected that take into account the valuer's judgment of the prospectivity of the mineral asset and the value of the database. PEMs can typically range between 'zero' to 3.0 and occasionally up to 5.0 where very favourable exploration results have been achieved, applied to previous exploration expenditure to derive a dollar value.

Typical PEM Factors are shown in Table 4.

PEM Range	Criteria
0.1 – 0.5	Exploration (past and present) has downgraded the tenement prospectivity, no mineralisation identified

0.5 – 1.0	Exploration potential has been maintained (rather than enhanced) by past and present activity from regional mapping
1.0 – 1.3	Exploration has maintained, or slightly enhanced (but not downgraded) the prospectivity
1.3 – 1.5	Exploration has considerably increased the prospectivity (geological mapping, geochemical or geophysical)
1.5 – 2.0	Scout Drilling has identified interesting intersections of mineralisation
2.0 – 2.5	Detailed Drilling has defined targets with potential economic interest.
2.5 – 3.0	A resource has been defined at Inferred Resource Status, no feasibility study has been completed
3.0 – 4.0	Indicated Resources have been identified that are likely to form the basis of a prefeasibility study
4.0 – 5.0	Indicated and Measured Resources

Table 4: Typical PEM Factors.

3.6 Ratings System of Prospectivity (Kilburn)

The most readily accepted method of this type is the modified Kilburn Geological Engineering/Geoscience Method and is a rating method based on the basic acquisition cost ('BAC') of the mineral asset that applies incremental, fractional or integer ratings to a BAC cost with respect to various prospectivity factors to derive a value. Under the Kilburn method the valuer is required to systematically assess four key technical factors which enhance, downgrade or have no impact on the value of the mineral asset. The factors are then applied serially to the BAC of each mineral asset in order to derive a value for the mineral asset. The factors used are; off-property attributes, on-property attributes, anomalies and geology. A fifth factor that may be applied is the current state of the market.

3.7 Empirical Methods (Yardstick – Real Estate)

The market value determinations may be made according to the expert's knowledge of the particular mineral asset. This can include a discount applied to values arrived at by considering conceptual target models for the area. The market value may also be rated in terms of a dollar value per unit area or dollar value per unit of resource in the ground. This includes the range of values that can be estimated for an exploration mineral asset based on current market prices for equivalent assets, existing or previous joint venture and sale agreements, the geological potential of the mineral assets, regarding possible potential resources, and the probability of present value being derived from individual recognised areas of mineralisation.

This method is termed a "Yardstick" or a "Real Estate" approach. Both methods are inherently subjective according to technical considerations and the informed opinion of the valuer.

3.8 General Comments

The aims of the various methods are to provide an opinion of a "technical value" for the mineral asset under consideration and to provide as much detail as possible of the manner in which the value is reached. It is necessarily subjective according to the degree of risk perceived by the mineral asset valuer in addition to all other commercial considerations. Efforts to construct a transparent valuation using sophisticated financial models are still hindered by the nature of the original assumptions where no known resource exists and are not applicable to mineral assets without an identified resource or reserve.

3.9 Environmental implications

Information to date is that there are no identified existing material environmental liabilities

on the mineral assets. Blackgold provides for restoration and environmental costs based on their past experiences and estimation of future expenditures, taking into account existing relevant China laws and regulations. As at the date of this report, the provisions have been adequately provided in the books of Blackgold. Accordingly, no adjustment was made during this Report for environmental implications.

3.10 Indigenous Title Claims

No native style claims over the project area have been indicated to AM&A.

3.11 Commodity prices

Where appropriate, current coal prices are used sourced from market publications or commodity price reviews (e.g."australianmining.com.au/news/coal-price-soars).

3.12 Resource/Reserve Summary

There are JORC Code (2012) compliant resource and reserve estimates declared for the Projects.

3.13 Previous Valuations

No published previous recent Valmin Code compliant valuation of the tenement package within the last two years is known to the authors.

3.14 Encumbrances/Royalty

The Projects are subject to government royalties as stipulated by the Government where currently applicable. Royalty payments are considered in this valuation as applicable where mining is occurring.

4.0 Background Information

4.1 Introduction

This valuation has been provided by way of a detailed study of existing information and data provided by Blackgold regarding the project with a valuation date of 31st March, 2017. JORC Code (2012) compliant resource and reserve estimates have been declared for the Project valid as at 31st July, 2016. With a still ever increasing population in China AM&A opines that the need or political desire to replace coal generated power will not change during the life of the BGG mining operations. It is interesting to note that during the last 12 months a new coal power generating facility has just finished being totally constructed at Fengjie and requires 3 Mtpa feedstock. The government is currently seeking suppliers in the locale.

4.2 Project Risks

The main risks pertaining to the Coal Projects are as follows:

- Resource risk due to changes in geological interpretation, assumed mining and processing parameters and new geological information and or sampling data;
- Commodity prices and exchange rates are constantly changing;
- Risks inherent in exploration and mining include, among other things, successful exploration and identification of ore reserves, satisfactory performance of mining operations if a mineable deposit is discovered and competent management;
- Risks associated with obtaining renewal of tenements upon expiry of their current term, including the grant of subsequent titles where applied for over the same ground. The grant or refusal of tenements is subject to ministerial discretion and there is no certainty that the renewal of tenements will be granted.

- The risk of material adverse changes in the government policies or legislation of China that may affect the level and practicality of mining activities;
- Environmental management issues with which the Company may be required to comply from time to time. There are very substantive legislative and regulatory regimes with which the Company needs to comply for land access and mining which can lead to delays.
- Poor weather conditions over a prolonged period, earthquakes or other natural events which might adversely affect mining and exploration activities and the timing of earning revenues;
- Unforeseen major failures, breakdowns or repairs required to key items of mining and processing equipment, mining plant and equipment or mine structure resulting in significant delays, notwithstanding regular programs of repair, maintenance and upkeep;

This is not an exhaustive list. Further clarification of the major risks can be found in the R&R Report as attached to this report.

4.3 Specific Valuation Methods

There are various methods acceptable for the valuation of a mineral prospect ranging from the most favoured DCF analysis of identified Proved & Probable Reserves to the more subjective rule-of-thumb assessment when no Reserves have yet been calculated but Resources may exist. These are discussed above in Section 3.0.

For the Blackgold Projects Inferred Resources, a form of the Yardstick method has been applied to determine a value range as at a valuation date of 31st March, 2017 and a preferred or most likely value ascribed within that range.

4.4 Tenement Holding

The Company has 100% ownership of all four mining projects. A summary of the tenure details for the four properties depicted in Figure 1 is provided in Table 5. Clarification of ownership and the relevant permits is covered in the Independent Legal Due Diligence Opinion issued by Grandall Law Firm (Shanghai) on the 30th September 2016.

Permits	Current Holder	Permit Number	Date Granted	Date Expires	Area km^2
Mining	Caotang	C5000002009041130019437	14-Mar-17	27-Dec-19	9.1
	Heiwan	C5000002009041130019439	05-Apr-16	30-Dec-17	3.34
	Baolong	C5000002009041130020052	23-Jul-14	21-Sep-17	2.87
	Changhong	C5000002009041130018279	29-Oct-15	31-Jan-18	0.77
Exploration	Baolong	T50120090301025873	22-Mar-15	22-Mar-17	23.12
Safe Production	Caotang	[2015] 1501008	15-May-15	14-May-18	NA
	Heiwan	[2015] 1501006	13-Mar-15	13-Mar-18	NA
	Changhong	[2014] 1410018	24-Nov-14	23-Nov-17	NA

Table 5: Summary of the Blackgold Permits.

5.0 Technical Assessment

5.1 Introduction

This report relies on the attached JORC Code (2012) Compliant R&R Report which is also applicable to coal deposits. The key parameters are summarised below.

5.2 Coal Resource Estimates

5.2.1 JORC Code (2012) Definitions

A 'Measured Coal Resource' represents the part of a coal resource for which tonnage, densities, shape, physical characteristics, quality 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 quality continuity.

An 'Indicated Coal Resource' represents the part of the coal resource for which tonnage, densities, shape, physical characteristics, quality and mineral content can be estimated with a reasonable level or 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.

An 'Inferred Coal Resource' is that part of a Coal Resource for which quantity and quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and quality continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

An Inferred Coal Resource has a lower level of confidence than that applying to an Indicated Coal Resource and must not be converted to a Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Coal Resources with continued exploration.

5.2.2 Data

The diamond drill hole and underground sampling data used for these resource estimates were received as several Excel spreadsheets while the maps were received as dxf format files and/or scanned pdf files. The main data used in this resource estimate are summarised in Table 6.

Data	Description
Hole/sample coordinates	Excel spreadsheets received from client.
Sample qualities	Excel spreadsheets received from client.
Bulk Density	1.5 used for calculations based on information received from client.
Tenement boundaries	Digitised from maps received from client.
Coal limits	Outcrops digitised from maps received from client.
Mined out limits	Digitised from maps received from client.

Table 6: Data used to estimate the Blackgold coal resources.

5.2.3 Samples

The number of drill hole and underground samples used for each seam estimate are summarised in Table 7. The drill holes at Heiwan were drilled down from underground development on the K3 level while the remaining drill holes were drilled from the surface.

Mine	Seam	Drill Holes	UG Samples	Total Samples	Ave Seam Thickness	Min Seam Thickness	Max Seam Thickness

Changhong	M5	2	0	2	3.8	3.1	4.5
Changhong	M6	2	59	61	12.9	9.1	15.7
Changhong	M7	2	2	4	6.6	5.7	7.3
Changhong	M8	2	13	15	9.2	8.7	12.1
Changhong	M10	1	0	1	4.0		
Changhong	M12	2	0	2	5.4	3.0	7.9
Caotang	K1	0	417	417	2.04	1.35	2.53
Caotang	K2	0	223	223	1.08	0.35	1.2
Caotang	K3	0	0	0	0.9		
Heiwan	K1	12	0	12	0.8	0.7	0.9
Heiwan	K2	12	0	12	0.5	0.4	0.7
Heiwan	K3	0	213	213	0.48	0.40	0.63
Heiwan	K4	0	0	0	0.3		
Heiwan	K5	0	0	0	0.3		
Baolong	K1	12	0	12	1.8	0.9	3.2
Baolong	K2	21	0	21	1.5	0.5	2.5
Totals		68	927	995			

Table 7: Summary of sampling used in these resource estimates.

These resource estimates used the assays from both the diamond drill holes and the underground channel samples.

5.2.4 Bulk Density

Bulk densities between 1.5 and 1.45 were used in all calculations to convert volumes of coal to tonnes. These values are based on measurements on 20 samples analysed by Chongqing Wanzhou Measure and Quality Inspection Centre. These values are typical for the coal qualities mined at these mines.

5.2.5 Mining Lease, Coal Limits and Mined Out Areas

The mining lease boundaries, coal limits and mined out areas were digitised from maps supplied by the Company.

5.2.6 Estimation Method

The coal volumes were estimated by gridding the coal limits, i.e. within the tenement boundary and the mapped outcrop, using 20 x 20 m cells in MineMap© software. The coal qualities and thickness were interpolated into the cells using an inverse distance squared (ID^2) algorithm. Two interpolation passes were done, the first with a 4,000 m search radius then the second with a 1,000 m search radius. The first pass allowed all the model cells to be filled (for Target Mineralisation) while the second pass was used for resource estimation.

The coal seams that have been sampled or drilled with at least six points and within 500 m of a sample point were considered to be Measured, between 500 m and 1,000 m Indicated, between 1,000 m and 2,000 m Inferred and beyond 2,000 m Exploration Target. If the seam was sampled at two to six points, the coal within 500 m of a sample point was considered as Indicated and 500 m to 1,000 m as Inferred and beyond 1,000 m Exploration Target.

The volume was calculated by multiplying the area of the coal modelled by the average modelled coal seam thickness. This volume was then multiplied by the bulk density to calculate the tonnes.

One parameter in the model was reserved for marking if the cell was within the mined out area as digitised from the maps supplied.

Plans showing the resource models and sample points for the seams mined during 2016 are presented in Figures 3 to 6.

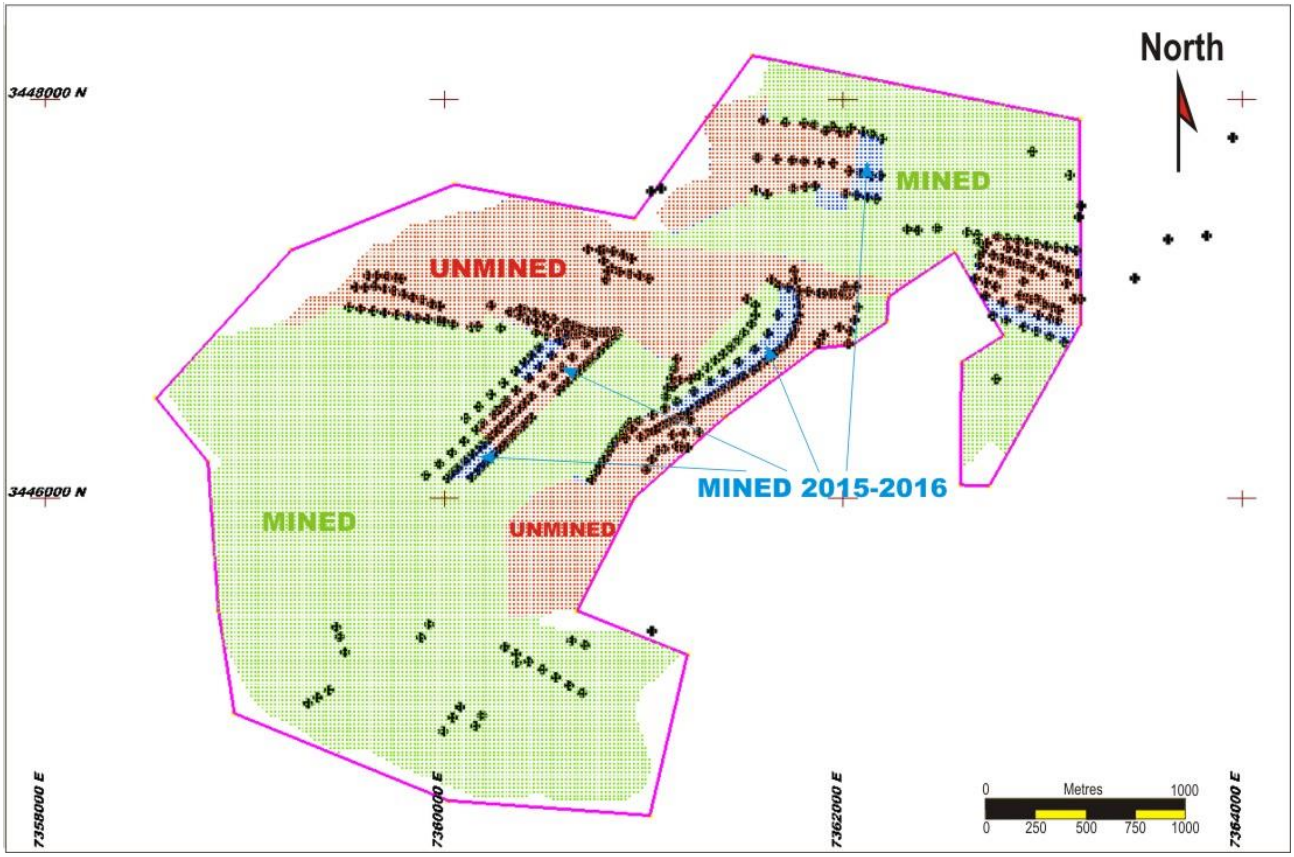

Figure 3: Caotang K1 Resource Estimation Plan.

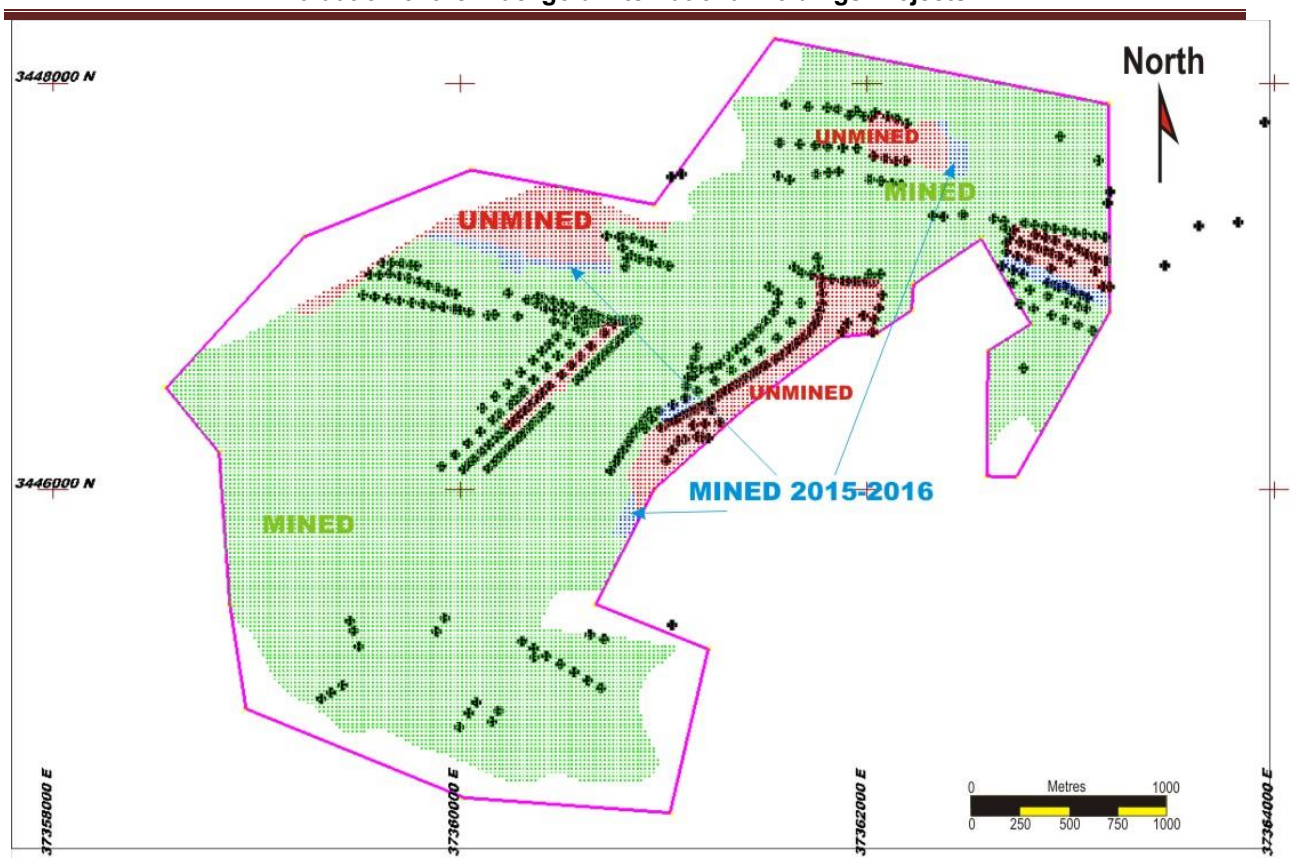

Figure 4: Caotang K2 Resource Estimation Plan.

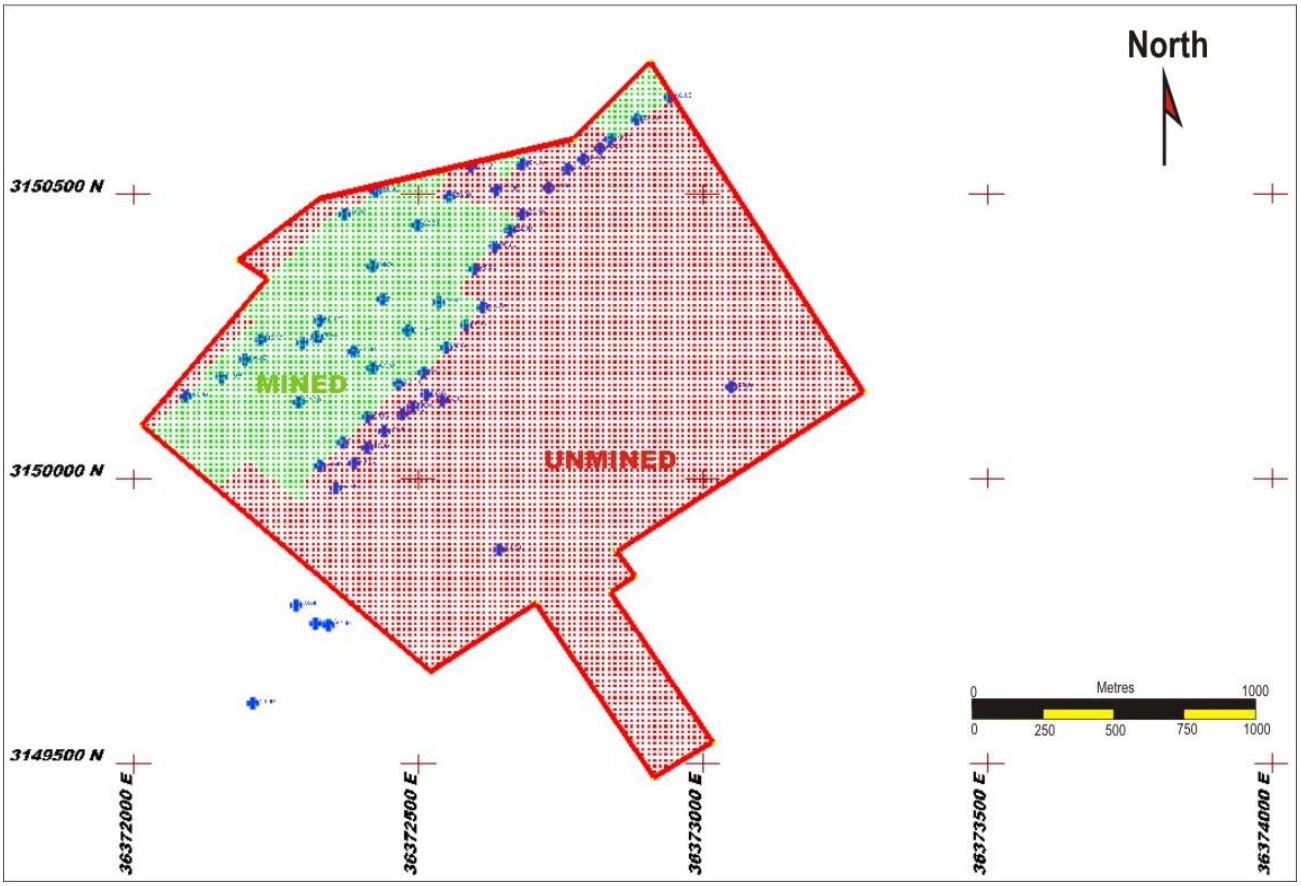

Figure 5: Changhong K6 Resource Estimation Plan.

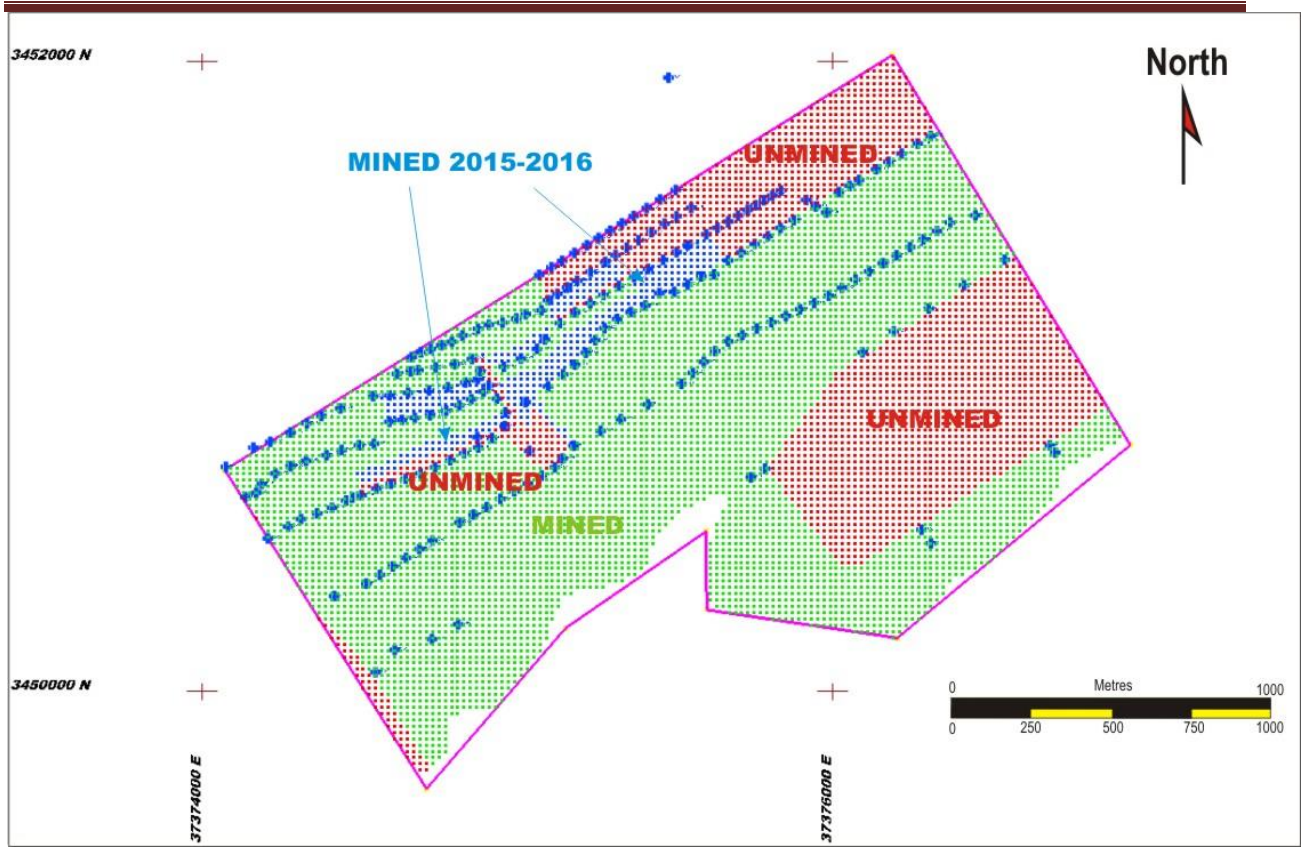

Figure 6: Heiwan K3 Resource Estimation Plan.

5.2.7 2016 Production Reconciliation

Between 1st May 2015, the date of the last resource/reserve update, and 31 July, 2016 the Company has reported that a total of 1.78 Mt was mined and sold from the Company's two operating mines (Table 8: Summary of BGG Mines Production for Financial Year 2016.). The differences in reported mine production and the reserve modelling for Caotang is mainly due to extra coal seam thickness measurements in new mine development areas being slightly more than previously modelled adding extra resources to inventory. AM&A advise that the 2016 R&R Update Report prepared by AM&A and dated 18 January 2017 and released by Blackgold to the ASX on 20 January 2017 (the "Reserves 2016 Report") had the figure of 3.1 million tonnes for the Caotang Probable Reserve which has subsequently been amended to 2.0 million tonnes using a revised recovery factor. See Section 5.3.3 Mining Factors for details.

Mine	Seam	Reserves 2015 Report			Reserves 2016 Report			Mined	Difference
		Proved (Mt)	Probable (Mt)	Total (Mt)	Proved (Mt)	Probable (Mt)	Total (Mt)	(Mt)	(Mt)
Caotang	K1 & K2	18.8	3.4	22.2	18.6	3.1	21.7	1.6	-0.5
Heiwan	K3	3.2	0.5	3.6	3.1	0.4	3.6	0.2	0.0
Totals		22.0	3.8	25.8	21.8	3.5	25.3	1.8	-0.5

Table 8: Summary of BGG Mines Production for Financial Year 2016.

(Notes: Production statistics supplied by the Company. This AM&A report for the Scheme has the figure of 2.0 tonnes for Caotang Probable Reserves and this figure of 2.0 tonnes replaces the previous figure of 3.1 tonnes in the 2016 R&R Update Report (the "Reserves 2016 Report"))

5.2.8 Resource Estimates

The Coal Resource estimates are summarised below in Table 9.

Caotang										
	Resources									
Seam	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	$\sum H_2O$ (%)	Ash (%)	Volatiles (%)	FC (%)	Sulphur (%)	CV Kcal/kg	Thickness (m)
K1	15.8	2.1	0.0	0.7	36.5	7.2	55.7	0.8	4,696	2.0
K2	9.9	0.6	0.0	0.8	32.0	7.1	60.9	0.7	5,278	1.0
K3										
Total	25.7	2.7	0.0	0.7	34.8	7.2	57.6	0.8	4,911	1.6
Changhong										
	Resources									
M5	0.0	0.0	3.6	0.5	19.4	9.2	70.8	2.5	7,101	3.8
M6	11.4	0.1	0.0	0.5	18.5	8.7	72.3	2.7	6,535	13.0
M7	0.0	7.6	0.1	0.5	17.9	9.0	56.0	2.5	6,945	6.6
M8	6.7	0.1	0.0	0.5	17.8	9.2	72.6	2.6	6,935	10.4
M10	0.0	0.0	0.0							
M12	0.0	0.0	6.0	0.6	20.0	9.3	70.5	2.6	7,098	6.3
Total	18.1	7.8	9.7	0.5	18.6	9.0	68.4	2.6	6,852	9.1
Heiwan										
	Resources									
K1	3.4	0.4	0.0	0.7	25.5	6.7	66.6	1.0	5,702	0.9
K2	2.1	0.2	0.0	0.9	26.2	7.2	65.7	0.4	5,726	0.5
K3	0.6	0.0	0.0	0.7	31.0	7.0	61.4	0.6	5,210	0.5
K4	0.0	0.0	0.0	0.0						
K5	0.0	0.0	0.0	0.0						
Total	6.1	0.6	0.0	0.8	26.2	6.9	65.8	0.8	5,667	0.7
Baolong										
	Resources									
K1	19.5	22.4	19.2	0.5	28.1	6.8	62.7	0.7	5,527	1.9
K2	19.4	12.1	10.1	0.5	28.5	6.9	64.0	0.5	5,496	1.6
Total	38.9	34.5	29.3	0.5	28.3	6.8	63.3	0.6	5,515	1.8
Total	**88.7**	**45.6**	**39.0**	**0.6**	**27.2**	**7.3**	**63.6**	**1.1**	**5,704**	**3.2**

Table 9: Summary of BGG Coal Resources Estimates as at 31st July, 2016.

5.2.9 JORC Compliance

All the samples were collected, from drill core and underground channels, following procedures that ensured accurate unbiased samples were collected. The coal qualities of the samples were measured at a Chinese government accredited laboratory. AM&A therefore believes that the resource and reserve estimates quoted in this report satisfy the requirements for reporting coal resources according to the JORC Code (2012) and that the reliability of the estimates is properly implied by the resource classifications used for the estimates.

5.2.10 Coal Reserve Estimates

Mining coal underground will result in coal losses such as pillars, particularly supporting access and conveyor drives, left for underground support; areas left unmined where faulting or other geo-structural features make the ground unstable and unsafe to mine; pillars left to support infrastructure, buildings and rivers at the surface; and coal left on the backs and floors of stopes to prevent mining dilution with waste.

Taking these factors into consideration, the Measured and Indicated resources, except for the Caotang Probable Reserve, were converted to Proved and Probable reserves by multiplying the resource tonnes by recovery factors determined by Behre Dolbear ("BD") who in turn considered the life-of-mine designs developed by the China Coal International

Engineering Chongqing Coalmine Design. AM&A considered that the recovery factor of 113% used by BD for the Caotang Probable Reserve was not consistent with the actual mining recovery for this reserve so the mining recovery factor BD used for the much larger Proved Reserve, i.e. 72%, was used instead.

The estimated Reserves and Resources for the Company's deposits are summarised in the Table 10

.

Caotang										
	Reserves		**Resources**							
Seam	**Proved (Mt)**	**Probable (Mt)**	**Inferred (Mt)**	**$\sum H_2O$ (%)**	**Ash (%)**	**Volatiles (%)**	**FC (%)**	**Sulphur (%)**	**CV Kcal/kg**	**Thickness (m)**
K1	11.5	1.5	0.0	0.7	36.5	7.2	55.7	0.8	4,695.9	2.0
K2	7.2	0.4	0.0	0.8	32.0	7.1	60.9	0.7	5,278.1	1.0
K3										
Total	18.6	2.0	0.0	0.7	34.9	7.2	57.6	0.8	4,907	1.6
Changhong										
	Reserves		**Resources**							
M5	0.0	0.0	3.6	0.5	19.4	9.2	70.8	2.5	7,101	3.8
M6	7.5	0.1	0.0	0.5	18.5	8.7	72.3	2.7	6,535	13.0
M7	0.0	6.6	0.1	0.5	17.9	9.0	56.0	2.5	6,945	6.6
M8	4.4	0.1	0.0	0.5	17.8	9.2	72.6	2.6	6,935	10.4
M10	0.0	0.0	0.0							
M12	0.0	0.0	6.0	0.6	20.0	9.3	70.5	2.6	7,098	6.3
Total	11.9	6.7	9.7	0.5	18.7	9.0	67.9	2.6	6,886	8.5
Heiwan										
	Reserves		**Resources**							
K1	1.8	0.3	0.0	0.7	25.5	6.7	66.6	1.0	5,702	0.9
K2	1.1	0.2	0.0	0.9	26.2	7.2	65.7	0.4	5,726	0.5
K3	0.3	0.0	0.0	0.7	31.0	7.0	61.4	0.6	5,210	0.5
K4	0.0	0.0	0.0							
K5	0.0	0.0	0.0							
Total	3.1	0.4	0.0	0.8	26.2	6.9	65.9	0.8	5,669	0.7
Baolong										
	Reserves		**Resources**							
K1	14.6	16.9	19.2	0.5	28.1	6.8	62.8	0.7	5,528	1.9
K2	14.5	9.1	10.1	0.5	28.5	6.9	64.0	0.5	5,495	1.6
Total	29.1	26.0	29.3	0.5	28.3	6.8	63.3	0.6	5,515	1.8
Total	**62.7**	**35.2**	**39.0**	**0.6**	**27.3**	**7.3**	**63.4**	**1.0**	**5,704**	**3.1**

Table 10: BGG Reserve and Resource Estimates for Mines as at 31st July, 2016.

These reserve and resource estimates of good quality coals are sufficient to underpin profitable operations well into the future. The budgeted annual production levels are acceptable and considered to be achievable based on past results and recent and current production.

5.3 Mining at the Projects

5.3.1 Introduction

The initial regional exploration of the concessions in the early 1970s was mainly conducted by the state owned geology brigades in China when the commercial potential of the coal resources was first identified.

Blackgold has followed up the regional exploration with underground drilling and channel sampling programs in its three operating coal mines. Within the areas targeted for mining, the drill hole and sampling channel spacing was generally 500 × 500 m and in some areas 1,000 × 1,000m.

5.3.2 Mining Method

The main factors affecting choice of mining method are the dip and thickness of the coal seams and the stability of surrounding rock. The Company's Projects at Caotang, Heiwan and Changhong have long histories of coal mining. However no BGG mining has occurred to date at Baolong.

Room and pillar mines are developed on a grid basis except where geological features such as faults require the regular pattern to be modified. The size of the pillars is determined by the load-bearing capacity of the material above ("hanging wall") and below ("footwall") the coal seam being mined and the load bearing capacity of the coal itself in the pillars will determine the pillar size.

To prevent pillar and back failure the mine is divided up into areas or panels. Pillars known as barrier pillars separate the panels. The barrier pillars are significantly larger than the "panel" pillars and are sized to allow them to support a significant part of the panel and prevent progressive collapse of the mine in the event of failure of the panel pillars.

Retreat mining is the final stage of room and pillar mining in the Company's mines. Once the coal between the pillars has been exhausted, the pillars that were left behind initially are removed, retreating back towards the panel's entrance.

After the pillars are removed, the roof (or back) is allowed to collapse a safe distance behind the mining area into the mined out void. Pillar removal must occur in a very precise order to reduce the risks to workers, owing to the high stresses placed on the remaining pillars by the abutment stresses of the caving ground.

For the thick seams at Changhong the seams are mined using the same basic room and pillar method with up to three slices approximately 2.0 m high.

Since the ground stability can be considered generally good as the coal seams are situated within competent hanging and foot walls, AM&A considers the conventional retreat mining room and pillar mining method is well suited for all the Company's mines.

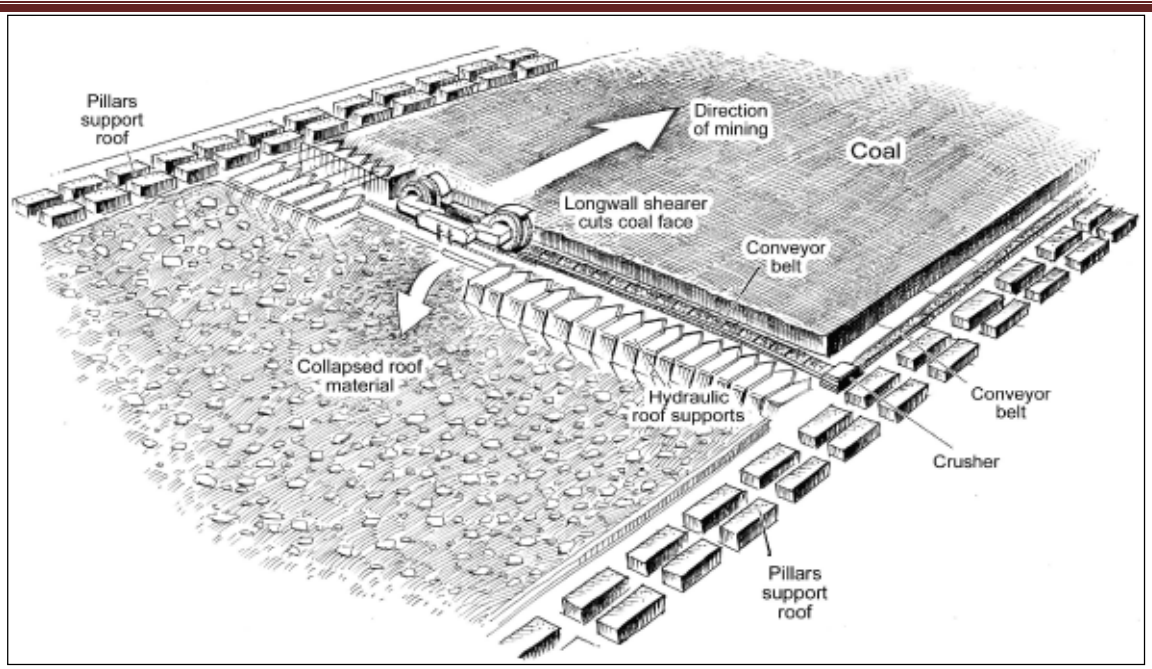

Figure 7: Views of Conventional Retreat Mining Method, top Plan View, lower 3D View.

5.3.3 Mining Factors

Normally, not all of a resource is eventually mined. Some coal is lost as spillage and left behind on floors and roofs as well as coal left behind un-mined as safety pillars for various reasons. Pillar dimensions at the three projects vary according to ground condition, seam thickness and pillar purpose.

The amount of coal lost during mining as spillage and left behind on roofs and floors is usually estimated based on experience in similar seams. The percentage lost is generally greatest in narrow seams and where the country rock is soft and unstable. The amount lost in pillars depends on the configuration of the mine development, the mining method used and the stability of the country rock.

The recovery factors assumed by AM&A for converting the resources to reserves, except for the Probable Caotang, are the same as those used by Behre Dolbear (BD) in the Company's last resource/reserve update in 2015 which were in turn based on the life-of-mine designs created by China Coal International Engineering Chongqing Coalmine Design Institute (see Table 11 below).

Mine	Proved Million Tonnes	Proved Recovery Factor	Probable Million Tonnes	Probable Recovery Factor	Total Reserves
Baolong	29.10	75%	26.0	76%	75%
Caotang	18.62	72%	2.0	72%	72%
Changhong	11.86	66%	6.7	87%	73%
Heiwan	3.13	52%	0.4	77%	55%
Total	**62.71**		**35.2**		

Table 11: Recovery Factors for converting Resources to Reserves.

BD opined that "the coal mine design work was adequately organized by the Chongqing Institute and considers the reports produced by the Chongqing Institute to be at least at a pre-feasibility study level, as defined by the JORC Code Edition 2012". AM&A considered that the recovery factor of 113% used by BD for the Caotang Probable Reserve was not consistent with the actual mining recovery for this reserve so the mining recovery factor BD used for the much larger Proved Reserve, i.e. 72%, was used instead. These mining recovery rates were determined by AM&A to be reasonable and consistent with actual mine production records.

As coal is mined it is usually expected that waste rock will be mined and mixed with the coal as dilution. The amount of dilution is variable and is usually greatest where the seams are thin and the country rock is soft and unstable. This dilution effectively increases the ash content of the coal and lowers its calorific value. It is expected that much of the excessive waste rock included as dilution will be removed underground and at the surface by hand picking and by selective mining practices.

Please refer to the R&R Report (Appendix 1) for further details on the Mining and Exploration History of the Projects.

5.3.4 Mine Life and Mining Schedule

The cash-flow model assumes the following mine life and production plan (Table 12).

In '000 t	Caotang	Heiwan	Baolong	Changhong	Total
FY2016Q4	219	13	-	-	232
FY2017	1,000	300	510	150	1,960
FY2018	1,200	500	1,000	450	3,150
FY2019	1,500	600	1,500	900	4,500
FY2020	1,500	600	1,800	900	4,800
FY2021	1,500	600	1,800	900	4,800
FY2022	1,500	600	1,800	900	4,800
FY2023	1,500	311	1,800	900	4,511
FY2024	1,500	-	1,800	900	4,200
	Till FY2031		Till FY2048	Till FY2039	
Total reserves	21,700	3,500	55,200	18,700	

Table 12: BGG Mines Life and Production Schedule.

Accordingly for the cash-flow model, the Caotang operation was examined until year 2031 with 1.5 Mtpa peak production level, Changhong until year 2039 with 0.9 Mtpa peak production level, Baolong until year 2048 with 1.8 Mtpa peak production level and Heiwan only until year 2023 with a 0.6 Mtpa peak production level. However at Heiwan the K1 and K2 seams can be readily exploited from the existing infrastructure once permits to mine are approved.

In view of the current mine development plans, theoretically the mine plan schedule is achievable and the appropriate capex has to be incurred in tandem. However there are some considerations as follow:

- Caotang is only producing around 780,000 t and Heiwan is only producing around 81,000 t in FY2016. The expected ramp up in production and scale has to be handled by the installed infrastructure
- Chinese government has been controlling over capacity and as a result, has been shutting down unsafe and inefficient coal mines with small capacity and will continue to do so over the next few years. Although this may help ensure markets for BGG product, AM&A cannot foretell possible future government interventions.

5.3.5 Selling Prices of the Coal

The Blackgold coal mines sell their coal locally in the PRC in Renminbi ("RMB") which is the official currency of the PRC. Blackgold management determines the selling prices based on several factors including the PRC coal pricing benchmarks, coal quality and volume targets. The coal mined from different adits deliver relatively consistent quality of coal sold from the adit. Hence usually monthly fixed prices are determined for coal mined from different adits. However, customers trust the quality and return for the same coal quality purchased from the same mine adits. Blackgold does not rely on long term sales

contracts and the customers are easily replaceable as the mines are not far from the dock, which channels down to the major ports along the Yangtze River. The main customers include power plants and industrial end-users coming from as far as downstream locations in Shanghai.

Some of the sales prices include delivery costs via trucking and shipping costs. These determine the range of actual selling prices as the cost of sales varies. However in recent years, Blackgold had mostly transferred ownership of its coal free on board ("FOB") at the nearest dock. This practice is believed to reduce the uncertainties involved in engaging third party logistics arrangements.

The mining operations also involved extraction and selling by Blackgold itself (Mining Sales) and subcontracting out to external parties to do their own extraction and sales (Mining Fees). For Mining Fees, they are usually charged on a fixed RMB per ton basis. Historically, the margins are also higher as Blackgold does not have to pay income tax and sales tax on those sales.

For cash-flow purposes, the average historical selling prices for the past 12 months have been adopted. It is noted that future selling prices may still vary due to the following factors:

- There has been a recent spike in the local PRC selling prices in the second half of 2016 due to a reduction of supply mainly due to government interventions. The Chinese government limited coal mine operating days from the standard rate of 330 days per year to 276 days per year in March 2016. However in November 2016, this policy was reversed. No future increase in the sales price has been catered for and,
- The Chinese economy is slowing as evidenced by their recent GDP figures. There is stagnation of heavy industries such as manufacturing which typically require a lot of power from coal. This may cause coal prices to stagnate.

In addition, since Baolong has not yet commenced sales for the cash-flow computation it uses the Heiwan sales price as a reference, since the coal quality is considered to be similar. In the cash-flow computation, the coal sale price for Changhong is also taken to be the last normalised selling price when it was still producing in April 2014.

5.4 Projects Operating Costs

5.4.1 VAT, Government Levies, and Income Tax

Blackgold mines incur VAT taxes and government levies when they sell their coal. Table 13 shows the major taxes and levies applicable to the Mines.

Items	Amount
ROM Coal Weighing Charges	16.3RMB/tonne
Road Construction Tax	5% of VAT
Education Tax	3% of VAT
Local Education Tax	2% of VAT
Resource Tax	3% of revenue from coal (exclude any re-charge on transportation costs)
Stamp duty	Annually 0.03% of sales contract
Value Added Tax	17.00% of gross revenue
Corporate Income Tax	For Caotang and Heiwan: 2.5% of gross revenue (valid for a year, approved on a yearly basis); For Baolong and Changhong:

	standard rate of 25%

Table 13: BGG Major Tax Commitments.

Value Added Tax (VAT) is chargeable to customers at 17% but this can be offset against the VAT paid on supplies and purchases. The net VAT is to be paid to the tax authorities. There are some other taxes like Road Construction Tax, Education and Local Education taxes that are computed based on the VAT. These rates are set by the Chinese government and are not expected to change in the coming years.

For the convenience of computation, a flat rate of 4% to 5% of revenue can reasonably be adopted for the cash-flow computations for each mine.

For corporate income tax, Caotang and Heiwan are enjoying a concessionary income tax rate of 2.5% of revenue for the period from 1 January to 31 December 2016. This concessionary tax rate has to be applied for and approved every year. There is no certainty that the Caotang and Heiwan mines can continue to enjoy the concessionary tax rates going forward. For purpose of the cashflow computation, all mines should use the standard tax rate of 25% unless there is a confirmed concessionary rate as approved by the government.

5.4.2 Mining and Production Costs

The mining and production costs of the mines mainly consist of raw materials (consumables), salaries, labour insurance, maintenance, utilities, depreciation and amortisation components. The production process is labour intensive. The extraction tools being used are manually operated and the coal wagons also requires some supervision and manual loading and unloading operation. However, China has an abundance of labour and workers can come from nearby villages or faraway suburbs. Other than providing the adequate training, it is easy to replace the work force. Blackgold also ensures that adequate insurance and coverage is provided to their workforce.

Depreciation is provided on the property, plant and equipment ("PPE"), and also the mine development costs, using a straight line method over their estimated useful life. The depreciation costs for the cash-flow going forward includes the already incurred net book value of PPE and mine development, and also the estimated capital expenditures ("capex") going forward.

5.4.2.1 Caotang

For the half year ended 30 April 2016, the mining and production costs for Mining Sales were at RMB163/t. Based on review of the historical costs and the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs (except for depreciation and amortization costs). This inflation rate of 3% to 5% was adopted to introduce a degree of conservatism to the current PRC target inflation rate of around 1.9 to 2.1% per annum, as well as the PRC Government's target inflation rate of 3.0 % per annum.

Caotang is currently the only mine with Mining Fees operation where the extraction is operated by subcontractors. In this case, the Production Cost is computed only using the apportioned depreciation and amortization of PPE and mine development costs. For the half year ended 30 April 2016, the mining and production costs for Mining Fees were at RMB42/t. This should be fairly stable as depreciation and amortisation costs mainly depend on the already incurred net book value of PPE and mine development, and also the estimated capital expenditures ("capex") going forward.

5.4.2.2 Heiwan

For the half year ended 30 April 2016, the mining and production costs for Mining Sales were at RMB204/t. Based on review of the historical costs and the nature of these cost

components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs (except for depreciation and amortisation costs).

5.4.2.3 Changhong

Changhong has suspended its operations and the cash-flow costs are estimated based on the last normalised operating figures, for the six months ended 30 April 2014. For the half year ended 30 April 2014, the mining and production costs for Mining Sales were at RMB168/t.

Based on review of the historical costs and the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs (except for depreciation and amortisation costs), commencing from April 2014.

5.4.2.4 Baolong

Baolong mine has not started production. For the cash-flow computation, Baolong is assuming the mining and production costs will be similar to those of Caotang, noting that Baolong will have the similar rate of production as Caotang. This is except for depreciation and amortisation of PPE and mine development where a separate estimated capex is provided.

For each year going forward, the mining and production costs for Mining Sales is estimated at RMB163/t. Based on review of the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs (except for depreciation and amortisation costs).

5.4.3 Selling and Distribution Expenses

This mainly consists of transportation, loading and unloading charges. The transfer of ownership of sales is usually taking place FOB at the nearby dock. Hence BGG incurs third party trucking costs to deliver to the dock and also load product onto the designated barges. BGG may also have some sales staff at the mines to service the customers although the costs are not significant as Blackgold usually have repeat customers and are familiar with the Blackgold produced coal qualities.

5.4.3.1 Caotang

For the half year ended 30 April 2016, the selling and distribution costs were at RMB25/t. Based on review of the historical costs and the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs.

5.4.3.2 Heiwan

For the half year ended 30 April 2016, the selling and distribution costs were at RMB44/t. Based on review of the historical costs and the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs.

5.4.3.3 Changhong

When Changhong was in production sales were always such that customers would collect the coal at the mine gate and hence, there is no selling and distribution costs, due to its easy accessibility. It is reasonable to assume the same will pertain in the future.

5.4.3.4 Baolong

Baolong mine has not started production. For the cash-flow computation, Baolong is assuming the selling and distribution costs will be similar to those of Caotang, noting that they have the similar rate of production.

For each year going forward, the selling and distribution costs is assumed at RMB25/t. Based on review of the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs.

5.4.4 Administrative Expenses

Administrative expenses mainly includes staff salaries and related benefits and insurance, labour protection fees, entertainment, travelling, communications, depreciation, taxes and stamp duties, consultant and audit fees. There is a team of management, admin and accounting staff to be maintained due to the size of its operations. Adequate insurance coverage and protection is provided for due to the nature of its operations, and hence the insurance costs are usually important. China also has requirements for staff to be paid several components including old age insurance, industrial insurance, medical insurance, housing provident funds, etc.

5.4.4.1 Caotang

For the half year ended 30 April 2016, the actual administrative expenses incurred were RMB1.8 M, assumed to be incurred evenly through each month. Based on review of the historical costs and the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs (except for depreciation costs).

5.4.4.2 Heiwan

For the half year ended 30 April 2016, the actual administrative expenses incurred were RMB1.8 M assumed to be incurred evenly through each month. Based on review of the historical costs and the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs (except for depreciation costs).

5.4.4.3 Changhong

As Changhong is currently not operating, the cash-flow computation has adopted the administrative expenses of Caotang as an estimate, since the size of its office is similar. Hence, it is assumed for 6 months that the administrative expenses will be RMB1.8 M, assumed to be incurred evenly through each month.

Based on review of the historical costs and the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs (except for depreciation costs).

5.4.4.4 Baolong

Baolong mine has not started production yet. For the cash-flow computation, BGG is assuming that selling and distribution costs will be similar to those of Caotang, noting that they have the similar rates of production.

For going forward, the administrative costs are estimated at RMB1.8 M for a six months period, assumed to be incurred evenly through each month. Based on review of the nature of these cost components, there is no reason to believe that this will fluctuate significantly in the future. However, for cash-flow computations, an annual inflation rate of 3% to 5% should be adopted to better reflect the future estimated costs.

5.4.5 Capital Expenditure

Capital expenditure is expected to be incurred going forward. For those operating mines, capex is for maintenance and also further exploration. At Baolong, which has not commenced operations, more capex is required to be incurred to prepare for the production. The capex refers to PPE and mine development costs. PPE refers to the plant and machinery, equipment, motor vehicles, furniture and fittings, and buildings. Mine development costs includes mining rights, mine infrastructure and underground development.

Based on the mine designs and considering the capex already incurred, we have reviewed the estimated future capex and found them to be reasonable. These include the capex to bring about the production levels as shown in the cash-flow computation. The estimated total capex for the mines are: Caotang RMB78 M; Heiwan RMB4 M; Changhong RMB20 M; and Baolong RMB672 M.

5.4.6 Provision for Restoration Costs

Blackgold provides for restoration and environmental costs based on their past experiences and estimation of future expenditures, taking into account existing relevant Chinese laws and regulations. As at the date of this report, the provisions have been adequately provided for in the BGG books.

6.0 Valuation of the Project

When valuing any mineral asset/project it is important to consider as many factors as possible that may either assist or impinge upon the current value estimates of the mineral asset under consideration. In this Report AM&A considers that the primary features to be taken into account are the Mineral Resource & Reserve estimates, tenement security; available Infrastructure; relevant expenditure on development and the general geological setting.

Basically, these issues have all been resolved as described above.

6.1 Selection of Valuation Methods

6.1.1 Methodologies

The following valuation methods, as described above in Section 3, are not considered applicable for the respective reasons provided:

- The Kilburn ‘prospectivity’ method - as the range of values generated by this method is typically too wide to be realistic due to the ‘multiplier effect’ of applying subsequent factors to previous totals.
- The MEE method is not adopted as Blackgold acquired the Caotang and Heiwan mines during 2010, and Changhong mine in August 2011. The working mines had steady production when acquired and there are no records available on the historical exploration expenditure incurred to discover the resources.
- The Joint venture method is not applicable since there are no Joint Ventures pertaining to any of the properties.
- Comparable transactions – with the recent general demise of the exploration industry, through lack of ‘high-risk funds’, this has curtailed much activity thus only a few similar recent relevant coal transactions could be located for projects in the Asian region. Expanded comments are provided below in Section 6.4.
- Real estate value which is usually based on a value ascribed to varying areas of tenement holdings which may consequently become unrealistic due to the extremely varying areas of projects with generally only small footprint portions of mineralisation (eg a current resource footprint may be <0.3% of the total project area. Assigning value to the non-mineralised area is foolhardy and simply not valid).

A cash-flow model is deemed reliable for the Projects to be used by BDO applied to the Proved and Probable Reserves. The Yardstick approach, with appropriate discounts, is deemed by AM&A to be the only remaining viable and valid method applicable for the remaining Inferred Resources valuation.

6.2 Cash-flow Method

For the Blackgold Projects the Proved and Probable Reserves will be used by BDO in a DCF calculation using current actual cost parameters over the life of the resource at permitted production levels as the main basis for the valuation.

All the mining physical parameters such as tonnes of ore mined, coal quality, waste material handled, mine life, annual production and operating costs including mining, haulage, transport, barging, subcontractor production costs, general administration, distribution and marketing, contingencies, royalties and levies, capital expenditure requirements and sales price information were supplied by Blackgold for use initially in the conversion of Indicated and Measured Resources to Probable and Proven Reserves and are available for BDO to use in the DCF calculations. Blackgold announced a significant profit from its mining operations which provides veracity for the assumptions used.

Checks and discussions regarding these parameters have all been undertaken during the recent site visit and previous annual site visits.

Accordingly for the cash-flow model the Caotang operation was examined until 2031 with 1.5 Mtpa peak production level, Changhong until 2039 with 0.9 Mtpa peak production level, Baolong until 2048 with 1.8 Mtpa peak production level and Heiwan only until 2023 with a 0.6 Mtpa peak production level. However at Heiwan the K1 and K2 seams can be readily exploited from the existing infrastructure once permits to mine are approved. The mines exploit good quality seams with little grade variation between underground channel samples so cut-off grade parameters are not required and accordingly not an issue. This also provides confidence regarding quality to buyers.

With regard to processing some initial coal washing tests, samples have been collected but definitive results from testing are not yet available. Accordingly no upgrade parameters have been applied to coal sales quality or price.

6.3 Yardstick Method

The Inferred Resources were assigned the same sales price value for the coal at the relevant operation which is based on historical sales factual data and AM&A contend is a reasonable approach. (Refer to Section 5.3.5 for the discussion of selling prices). For Baolong which has not yet commenced production and sales, the computation below adopted the Heiwan average selling price over the past 12 months, since the coal quality is considered to be similar. For the coal selling price for Changhong production, the last normalised selling price while still in production in April 2014, was adopted. Historically coal prices have been rather cyclical and in the second half of the year 2016, the coal prices have been increasingly high mainly due to government interventions. Hence the average selling price is more representative and it is prudent to adopt them in this ITV.

In the Yardstick method of valuation, specified percentages of the price of the commodity is used to value the in-situ resource. Commonly used Yardstick factors are:

- Inferred Resource – 0.5% to 1% of price;
- Indicated Resource – 1% to 2% of price; and
- Measured Resource – 2% to 5% of price.

As the resource being valued is an "Inferred Resource", AM&A consider that percentages of 0.25% to 0.75% are appropriate, with a preferred percentage of 0.50%. These results, which include computation, are presented in Table 14.

Yardstick Method						Discount Factors					
			Sale Rmb M			0.25%	0.75%	0.5%	A$ M		
Mine	Inf Mt	Coal Rmb/t	Low	High	Pref	Low	High	Pref	Low	High	Pref
Baolong	29.30	328	8,649	10,571	9,610	0.0025	0.0075	0.0050	4.3	15.7	9.5
Changhong	9.70	335	2,925	3,574	3,250	0.0025	0.0075	0.0050	1.4	5.3	3.2
TOTAL									**5.7**	**21.0**	**12.7**
Exchange Rate RMB:A$		0.198*									

Table 14: Summary of Inferred Resources Values.

Notes explaining Table 14 calculations for the Baolong mine:

1. Material inputs used in valuation model:
   (1) total inferred resource is 29.30 million tonnes – see Table 9 above.
   (2) coal selling price is RMB328 per tonne – see Section 5.3.5 above.
   (3) discount factors applied to the total amount of 0.25% to 0.75%.
   (4) * Exchange rate of RMB to A$ at 0.198 is adopted, being a recent rate (as at 19 December 2016) deemed appropriate for the valuation model, as the exchange rates have been fluctuating for the past 24 months with a range between 0.1742 to 0.2243.
2. The Inferred Resource of 29.30 million tonnes was multiplied by a coal selling price of RMB328 totalling RMB9,610 million (preferred). The low total figure of RMB8,649 million is RMB9,610 million (preferred) minus 10%. The high total figure of RMB10,571 million is RMB9,610 million (preferred) plus 10%. The total amount of RMB9,610 million is the preferred amount. This preferred amount of RMB9,610 million was then discounted by a discount factor of 0.5% (i.e 0.0050) which is the preferred discount factor, resulting in a total of RMB48.05 million. The total of RMB48.05 million was then converted to Australian dollars using the exchange rate of RMB:A$ 0.198, resulting in **A$9.5 million**.
3. The low total figure of RMB8,649 million was discounted by a discount factor of 0.25% (i.e 0.0025), resulting in RMB21.62 million. This amount was then converted to Australian dollars using the exchange rate of RMB:$A 0.198, resulting in A$4.28 million.
4. The high total figure of RMB10,571 million was discounted by a discount factor of 0.75% (i.e 0.0075), resulting in RMB79.28 million. This amount was then converted to Australian dollars using the exchange rate of RMB:$A 0.198, resulting in A$15.69 million.

Notes explaining Table 14 calculations for the Changhong mine:

1. Material inputs used in valuation model:
   (1) total inferred resource is 9.70 million tonnes – see Table 9 above.
   (2) coal selling price is RMB335 per tonne - see Section 5.3.5 above.
   (3) discount factors applied to the total amount of 0.25% to 0.75%.
   (4) * Exchange rate of RMB to A$ at 0.198 is adopted, being a recent rate (as at 19 December 2016) deemed appropriate for the valuation model, as the exchange rates have been fluctuating for the past 24 months with a range between 0.1742 to 0.2243.
2. The Inferred Resource of 9.70 million tonnes was multiplied by a coal selling price of RMB335 totalling RMB3,250 million (preferred). The low total figure of RMB2,925 million is RMB3,250 million (preferred) minus 10%. The high total figure of RMB3,574 million is RMB3,250 million (preferred) plus 10%. The total amount of RMB3,250 million is the preferred amount. This preferred amount of RMB3,250 million was then discounted by a discount factor of 0.5% (i.e 0.0050) which is the preferred discount factor, resulting in a total of RMB16.25 million. The total of RMB16.25 million was then converted to Australian dollars using the exchange rate of RMB:A$ 0.198, resulting in **A$3.2 million**.
3. The low total figure of RMB2,925 million was discounted by a discount factor of 0.25% (i.e 0.0025), resulting in RMB7.3125 million. This amount was then converted to Australian dollars using the exchange rate of RMB:$A 0.198, resulting in A$1.44 million.

4. The high total figure of RMB3,574 million was discounted by a discount factor of 0.75% (i.e 0.0075), resulting in RMB26.8 million. This amount was then converted to Australian dollars using the exchange rate of RMB:$A 0.198, resulting in A$5.3 million.

6.4 Comparable Transactions

A search was conducted for public domain comparable coal transactions. Invariably the equivalent cash values involved for the transaction generally do not enunciate the full reserve and resource database involved in the purchase so derivation of S/t style of asset for each resource category is not possible. In the examined examples the quantum of "Cash Equivalent" paid for the total resource inventory purchased are very different to the Blackgold total resource base and value. This means that comparisons on a totals basis cannot be drawn. In addition the comparable transactions of full coal property sales cannot be used to reach a meaningful comparison conclusion with this report since this ITV only addresses the Inferred Resources which comprise a minor percentage of the total reserves and resources.

6.5 Valuation Conclusions

As stated above the Yardstick method for Inferred resources was selected as the most appropriate for Projects valuation estimate purposes. The summary of the final valuation totals is presented in Table 15.

		A$ M		
Project	**Method**	**Low**	**High**	**Preferred**
Baolong	Yardstick	4.3	15.7	**9.5**
Changhong	Yardstick	1.4	5.3	**3.2**
TOTAL		5.7	21.0	**12.7**
	Rounded	**6**	**21**	**13**

Table 15: Blackgold Coal Projects - Summary Range of Current Values.

This Report concludes that the technical value of 100% of the Blackgold Projects Inferred Resources as at a valuation date of 31st March, 2017 is ascribed at $13M from within the range of $6M to $21M. Based on our analysis and enquiries of management, nothing has come to our attention that would suggest that the market value of the Inferred Resources does materially differ from the technical value.

The opinions expressed and conclusions drawn with respect to this valuation of the mineral assets are appropriate at the valuation date of 31st March, 2017. The valuation is only valid for this date and may change with time in response to variations in economic, market, legal or political conditions, in addition to future exploration results.

Yours faithfully,

Allen J. Maynard, (Peer Review)
BAppSc(Geol), MAIG, MAusIMM.

Brian J. Varndell (Author)
BSc(Spec Hons) FAusIMM.

Competent Persons Statement

The information in this report which relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Allen Maynard, who is a Member of the Australian Institute of Geosciences ("AIG"), a Corporate Member of the Australasian Institute of Mining & Metallurgy ("AusIMM") and independent consultant to the Company. Mr Maynard is the Director and principal geologist of Al Maynard & Associates Pty Ltd and has over 35 years of exploration and mining experience in a variety of mineral deposit styles. Mr Maynard 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 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves".(JORC Code). Mr Maynard consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

Competent Persons Statement

The information in this report which relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Brian Varndell, who is a Fellow of the Australasian Institute of Mining and Metallurgy and independent consultant to the Company. Mr Varndell is an associate of Al Maynard & Associate Pty Ltd and has over 40 years of exploration and mining experience in a variety of mineral deposit styles including iron ore mineralisation. Mr Varndell 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 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves".(JORC Code). Mr Varndell consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

7.0 References

Valuation

AusIMM - JORC Code, 2012. *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserve,* prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australasian Institute of Geoscientists and Minerals Council of Australia (JORC), 2012 Edition.

ClM, (2003): - "Standards and Guidelines for Valuation of Mineral Properties. Final Version, February 2003". Special Committee of the Canadian Institute of Mining, Metallurgy and Petroleum on Valuation of Mineral Properties (CIMVAL).

Oxford Dictionary of Current English; for any terms not covered in the Glossary: Oxford University Press.

VALMIN, 2015. Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports, prepared by the VALMIN Committee, a joint committee of the Australasian Institute of Mining and Metallurgy, Australasian Institute of Geoscientists and Mineral Industry Consultants Association with the participation of the Australian Securities and Investment Commission, the Australian Stock Exchange Limited, the Minerals Council of Australia the Petroleum Exploration Society of Australia, the Securities Association of Australia and representatives of the Australian financial section, 2015 Edition.

Reports

AM&A, 2010: INDEPENDENT GEOLOGISTS' REPORT For Blackgold International Holdings Limited for inclusion in Blackgold's IPO Prospectus.

AM&A, 2016: Independent Geological Report for a Resource and Reserve Update Reported in Accordance with the JORC Code (2012). Prepared for BLACKGOLD INTERNATIONAL HOLDINGS LIMITED, dated 18 January 2017 and released by Blackgold to the ASX on 20 January 2017.

AM&A, 2017: Independent Geological Report for a Resource and Reserve Update Reported in Accordance with the JORC Code (2012). Prepared for BLACKGOLD INTERNATIONAL HOLDINGS LIMITED, issue date 11 May 2017 (set out in **Appendix 1**).

Behre Dolbear, 2014: Updated JORC Independent Technical Review Report.

Guo, Y, Cooper, DK, 2015, Independent Qualified Person's Report on Four Coal Mining Properties Blackgold International Holdings Limited in Chongqing Municipality People's Republic Of China, Behre Dolbear, Prepared for Blackgold International Holdings Limited, dated 23 October 2015 (effective date 30 April 2015)

Grandall Law Firm (Shanghai), 30 Sept 2016. - The Subsidiaries (within the PRC) of Blackgold International Holdings Limited For the Proposed Acquisition by Vibrant Group Limited

8.0 Abbreviations

Ash	Ash as a percentage	B	Billion
CV	Calorific value	g	gram
FC	Fixed Carbon	H_2O	Moisture Content
k	kilo	kg	kilogram
km	kilometre	km^2	square kilometre
M	million	m	metre
m^2	square metre	m^3	cubic metre
mm	millimetre	oz	troy ounce
RMB	Renminbi	S	sulphur
t	tonne	tpa	Tonnes per annum
Vol	volatiles		

Appendix 1: Updated Resource and Reserve Report.

AL MAYNARD & ASSOCIATES Pty Ltd
Consulting Geologists

www.geological.com.au *ABN 75 120 492 435*

9/280 Hay Street,	*Tel: (+618) 9388 1000*	*Mob: 04 0304 9449*
SUBIACO, WA, 6008	*Fax: (+618) 9388 1768*	*al@geological.com.au*
Australia		

Australian & International Exploration & Evaluation of Mineral Properties

Independent Geological Report

for a

Resource and Reserve Update Reported in Accordance with the JORC Code (2012)

Prepared for

BLACKGOLD INTERNATIONAL HOLDINGS LIMITED

Authors: Brian J Varndell BSc BSc(Spec.Hons.), FAusIMM
Phil Jones BAppSc(AppGeol), MAIG, MAusIMM
Peer Review: Allen J Maynard, BAppSc(Geol), MAIG, MAusIMM
Company: Al Maynard & Associates Pty Ltd

Issue Date of Report: 11 May 2017

EXECUTIVE SUMMARY

Blackgold International Holdings Limited ("Blackgold" or "BGG") has been a public listed company on the Australian Securities Exchange since February 2011. Its current organisation structure is shown in Figure 8: Blackgold Organisation structure. Through its subsidiaries, BGG owns a 100% interest in four coal mines located near Chongqing City, People's Republic of China. The BGG head office is located in downtown Chongqing City and the Company has subsidiary offices in Fengjie County and Qijiang District, all in Chongqing Special Economic Zone in the People's Republic of China (Figure 9 and Figure 10). BGG requested Al Maynard & Associates ("AM&A") to update the Resources and Reserves at its four coal mines reported in accordance with the JORC Code guidelines. This report is to be read in conjunction with our 'Independent Technical Assessment and Valuation of the Four Coal Mining Properties Held by Blackgold International Holdings Limited in Chongqing Municipality People's Republic of China to which it is attached as an appendix.

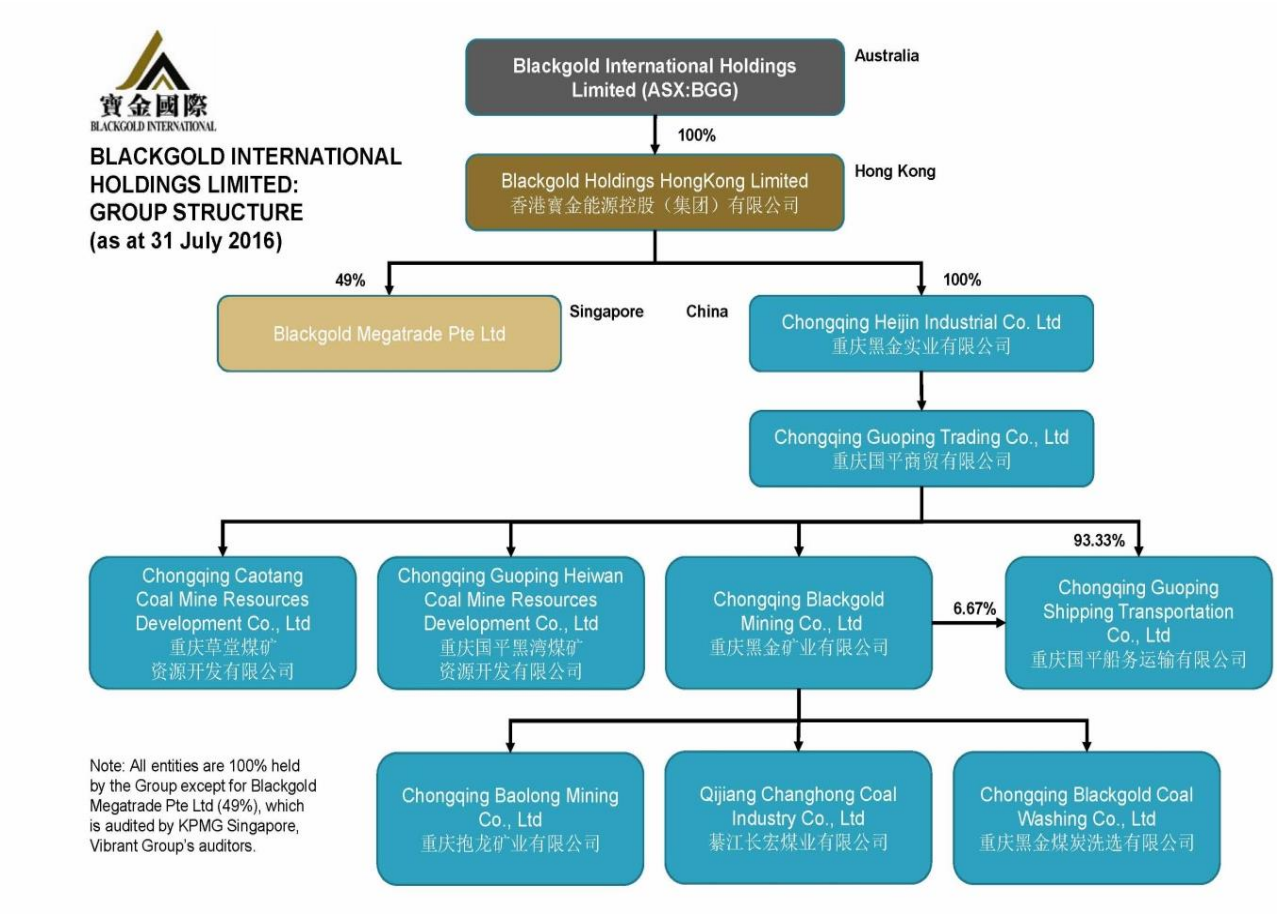

Figure 8: Blackgold Organisation structure.

BGG's primary assets are within the Chongqing Special Economic Zone, with the two operating underground coal mines in Fengjie County in the north-east and one other coal mine with production voluntarily suspended in Qijiang District to the south and one developing underground coal mine in Wushan County in the north-east (Figure 10). The four mines are:

- Caotang Coal Mine, in production, Fengjie County
- Heiwan Coal Mine, in production, Fengjie County
- Baolong Coal Mine, developing in Wushan County
- Changhong Coal Mine, in suspension, Qijiang District

Caotang and Heiwan mines are located within the Late Triassic coal measures while Baolong and Changhong mines occur within the Permian coal measures.

BGG produced approximately 1.78 Mt of raw coal since 1 May 2015, the date of the last reported Resource/Reserve update, to 31 July, 2016 from the Caotang and Heiwan mines.

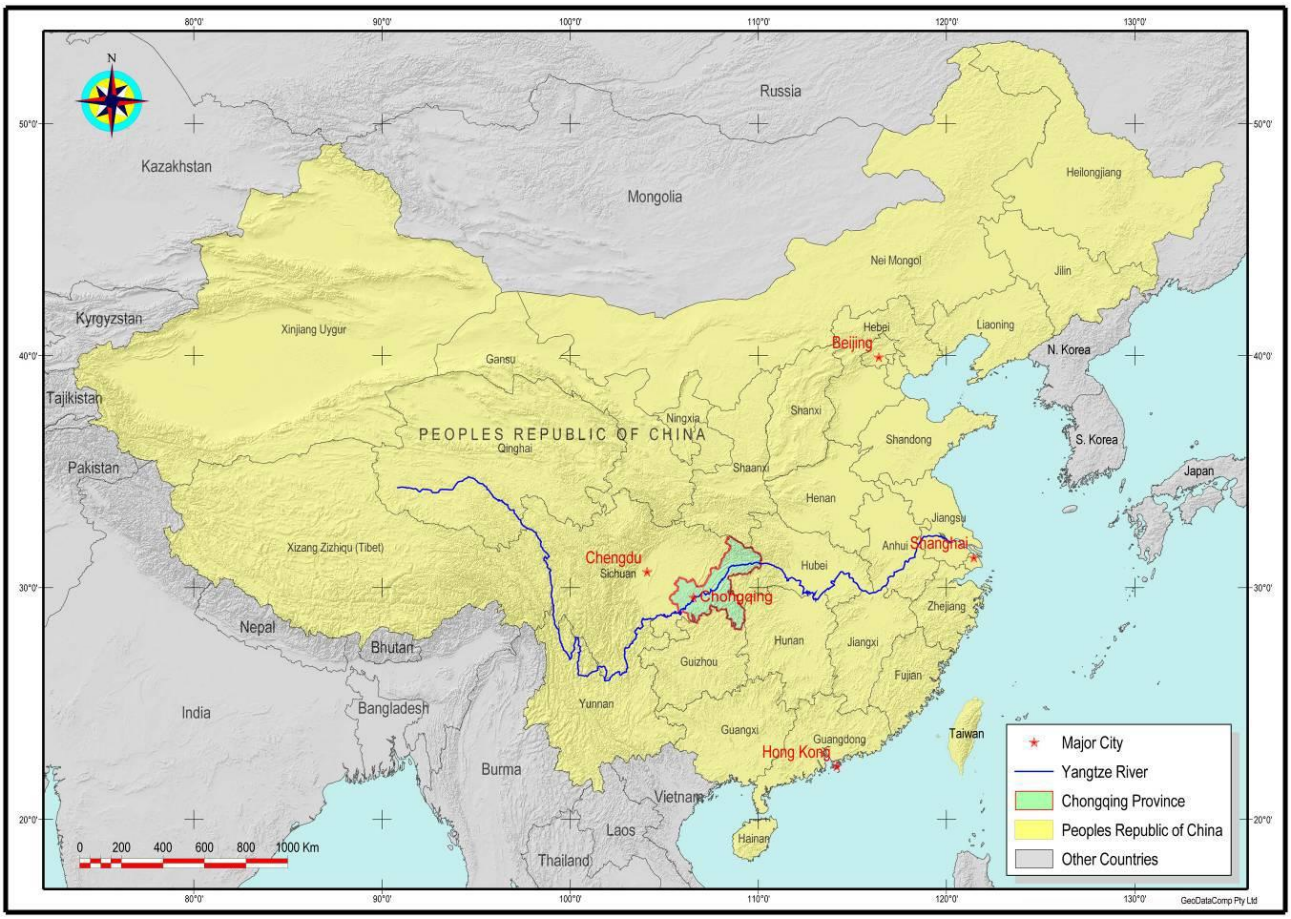

Figure 9: Blackgold Mines Location Plan.

AM&A estimated resources, as summarised in Table 16: Summary of Blackgold Coal Reserves, Resources and Exploration Targets (31 July, 2016)., for all the Company's projects using the latest mining and sampling data as at July, 31, 2016.

	Reserves		Resources	Exploration Target*	
Mine	Proved (Mt)	Probable (Mt)	Inferred (Mt)	(Mt) to	(Mt)
Baolong	29.10	26.0	29.3	8.6	6.9
Caotang	18.62	2.0	0.0	6.6	5.3
Changhong	11.86	6.7	9.7	6.8	5.5
Heiwan	3.13	0.4	0.0	1.7	1.4
Total	**62.71**	**35.2**	**39.0**	**23.7**	**19.0**

Table 16: Summary of Blackgold Coal Reserves, Resources and Exploration Targets (31 July, 2016).

*Note that an Exploration Target estimate is only conceptual in nature as it is estimated without sufficient verifiable accurate data for a reliable resource estimate and so it cannot be assumed that any part of an Exploration Target estimate will eventually be converted to a resource after further

exploration. Future early exploration devoted to conversion of these targets is not envisaged due to the current substantial life of mine available.

These anthracitic coal resources are Thermal Coals with a generally high ash content and at Changhong also a high sulphur content.

Mine	Moisture Mad (%)	Ash Content Ad (%)	Volatiles Vd (%)	Fixed Carbon Fcd (%)	Sulphur Std (%)	Calorific Value (Kcal/kg)	Thickness (m)
Baolong	0.5	28.3	6.8	63.3	0.6	5,515	1.8
Caotang	0.7	34.7	7.2	57.9	0.7	4,910	1.6
Changhong	0.5	18.6	9.0	68.5	2.6	6,863	8.9
Heiwan	0.8	26.3	6.9	65.8	0.7	5,660	0.7
Average	0.6	27.2	7.3	63.6	1.1	5,704	3.2

Table 17: Estimated Coal Qualities (Proximal Analyses) for the Resources.

Mine	Moisture Mad (%)		Ash Content Ad (%)		Volatiles Vd (%)		Fixed Carbon Fcd (%)		Sulphur Std (%)		Calorific Value (Kcal/kg)		Thickness m	
	From	To	From	To	From	To	From	To	From	To	From	To	From	To
Baolong	0.4	0.6	28.0	28.5	6.3	7.3	62.8	63.8	0.5	0.7	5,200	5,800	1.6	2.0
Caotang	0.6	0.8	34.2	35.2	6.7	7.7	57.4	58.4	0.6	0.8	4,600	5,200	1.4	1.8
Changhong	0.4	0.6	18.1	19.1	8.5	9.5	68.0	69.0	2.4	2.8	6,500	7,100	8.4	9.4
Heiwan	0.7	0.9	25.8	26.8	6.4	7.4	65.3	66.3	0.6	0.8	5,400	6,000	0.6	0.8
Total	**0.5**	**0.7**	**26.7**	**27.7**	**6.8**	**7.8**	**63.1**	**64.1**	**1.0**	**1.2**	**5,400**	**6,000**	**3.0**	**3.4**

Table 18: Blackgold Mines Exploration Targets Quality Parameters Ranges in Value.

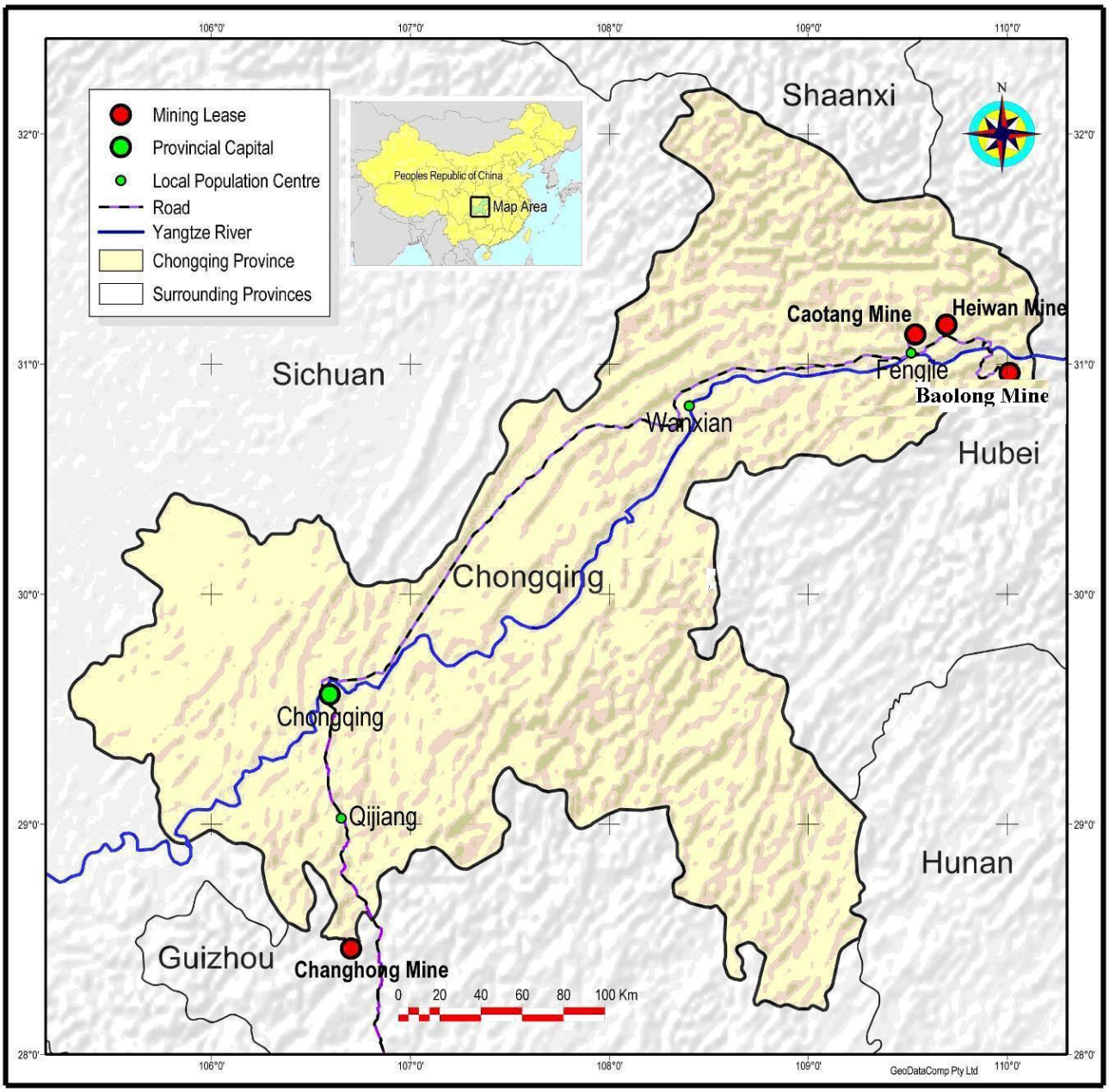

Figure 10: Blackgold Mines Location Map.

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The Directors, 11 May 2017
Blackgold International Holdings Limited,
Level 12, No. 18 Mian Hua Street,
Yuzhong District,
Chongqing City, 400011
People's Republic of China.

Dear Sirs, **Resources and Reserves Update at 31st July, 2016**

Al Maynard and Associates ("AM&A") was engaged by Blackgold International Holdings Limited ("BGG") to prepare an updated Report on the Resources and Reserves reported in accordance with the JORC Code (2012) for their four coal mines located near Chongqing City, People's Republic of China (Figure 9: Blackgold Mines Location Plan. and Figure 10: Blackgold Mines Location Map.). Opinions are presented in accordance with the JORC Code (2012) and other regulations and guidelines that govern the preparation of such reports.

This report is not a Valuation Report and does not express an opinion as to the value of the mineral assets or tenements involved, nor to the fairness and reasonableness of any transactions between BGG and any other party.

This report is to be used by BGG for ASX and other reporting requirements at their discretion.

The legal status of the tenure of the BGG Mineral Assets, is subject to a separate Solicitor's Report from Grandall Law Firm (Shanghai), titled "LEGAL DUE DILIGENCE OPINION" With respect to The Subsidiaries (within the PRC) of Blackgold International Holdings Limited. The present status of tenements listed in this report is based on information provided by BGG and the report has been prepared on the assumption that the tenements will have lawful access for evaluation and development.

In the course of the preparation of this report, access has been provided to all relevant data held by BGG and various other technical reports and information quoted in the bibliography. We have made all reasonable endeavours to verify the accuracy and relevance of the database. The past exploration history for these tenements has been derived from previous exploration reports, as provided by BGG and Government records of exploration activities within the project areas.

BGG has warranted to AM&A that full disclosure has been made of all material in its possession and that information provided, is to the best of its knowledge, accurate and true. None of the information provided by BGG has been specified as being confidential and not to be disclosed in our report. A recent site trip was undertaken by Brian Varndell from 18th September to 22nd September 2016 to update knowledge of all operations. As recommended by the Valmin Code, BGG has indemnified AM&A for any liability that may arise from AM&A's reliance on information provided by or not provided by BGG.

This report was prepared by geologist, Brian J. Varndell, BSc (SpecHonsGeol), FAusIMM (No 111022) with resource estimation by Phil Jones BAppSc (AppGeol), AusIMM (#1903) and MAIG (#105653) and subjected to peer review by Allen J. Maynard BAppSc(Geol), MAIG, MAusIMM. The writers are qualified to provide such reports for the purpose of inclusion in public company documents. This report has been prepared in accordance with the relevant requirements of the Listing Rules of the Australian Securities Exchange Limited, Australian Securities and Investment Commission ("ASIC") Regulatory Guidelines 111 & 112 and the Guidelines for Assessment and Valuation of Mineral Assets and Mineral Securities for Independent Expert reports (the Valmin Code) which is binding on Members of the Australasian Institute of Mining and Metallurgy ("AusIMM") and the Australian Institute of Geoscientists (AIG").

AM&A is an independent geological consultancy established over 30 years ago and has operated continuously since then. Neither AM&A nor any of its directors, employees or associates have any material interest either direct, indirect or contingent in BGG nor in any of the mineral properties included in this report nor in any other asset of BGG nor has such interest existed in the past. This report

has been prepared by AM&A strictly in the role of an independent expert. Professional fees payable for the preparation of this report constitutes our only commercial interest in BGG. Blackgold will be invoiced and expected to pay a fee, estimated to be $19,000 for the preparation of this Report. This fee comprises a normal, commercial daily rate plus expenses. Payment of fees is in no way contingent upon the conclusions of these documents.

AM&A has given, and has not withdrawn its written consent to being named author of this Report and to the inclusion of this Report in other documents to be issued by BGG.

Yours faithfully,

Brian J. Varndell, BSc (SpecHonsGeol) FAusIMM

Phil Jones, BAppSc (AppGeol), MAIG, MAusIMM.

Allen J. Maynard BAppSc(Geol), MAIG, MAusIMM

Competent Persons Statement

The information in this report which relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Allen Maynard, who is a Member of the Australian Institute of Geosciences ("AIG"), a Corporate Member of the Australasian Institute of Mining & Metallurgy ("AusIMM") and independent consultant to the Company. Mr Maynard is the Director and principal geologist of Al Maynard & Associates Pty Ltd and has over 35 years of exploration and mining experience in a variety of mineral deposit styles. Mr Maynard 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 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves".(JORC Code). Mr Maynard consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

Competent Persons Statement

The information in this report which relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Brian Varndell, who is a Fellow of the Australasian Institute of Mining and Metallurgy and independent consultant to the Company. Mr Varndell is an associate of Al Maynard & Associate Pty Ltd and has over 40 years of exploration and mining experience in a variety of mineral deposit styles including iron ore mineralisation. Mr Varndell 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 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves".(JORC Code). Mr Varndell consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

Competent Persons Statement

The information in this report which relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Philip A. Jones, who is a Corporate Member of the Australasian Institute of Mining and Metallurgy, a Member of the Australian Institute of Geoscience and independent consultant to the Company. Mr Jones is an associate of Al Maynard & Associates and has over 35 years of exploration and mining experience in a variety of mineral deposit styles including iron mineralisation. Mr Jones 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 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves".(JORC Code). Mr Jones consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

DISCLAIMER

The opinions expressed in this Report have been based on the information supplied to AM&A by BGG. The opinions in this Report are provided in response to a specific request from BGG to do so. AM&A has exercised all due care in reviewing the supplied information. Whereas AM&A has compared key-data supplied, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. AM&A does not accept responsibility for any errors or omissions in the supplied information and not accept any consequential liability arising from commercial decisions and actions resulting from them.

INTRODUCTION

Blackgold's primary assets are two operating underground coal mines in Fengjie County, one underground coal mine with production voluntarily suspended in Qijiang District and one developing underground coal mine in Wushan County, all in the Chongqing Special Economic Zone (Figure 9: Blackgold Mines Location Plan. and Figure 10: Blackgold Mines Location Map.). The four mines are:

Caotang Coal Mine, in production, Fengjie County
Heiwan Coal Mine, in production, Fengjie County
Baolong Coal Mine, developing in Wushan County
Changhong Coal Mine, in suspension, Qijiang District

The physical and chemical characteristics of Blackgold's coals are categorized as anthracite coal with dry volatile matter contents ranging from 1% to 10%, as defined by the State Standard of China Coal Classification System (GB5751-86) and ASTM. The data indicates that the vast majority of the Company's coal is suitable for the thermal energy market and some of it is suitable for use in Pulverized Coal Injection (PCI) systems. The dry ash contents of most of the Company's coals indicate that beneficiation (coal washing) will be required prior to facilitate utilisation in some instances.

Tenure

The Company has 100% ownership of all the four mining licences. A summary of the tenure details is provided in Table 19: Summary of Blackgold's Mining Licences.

Permits	Current Holder	Permit Number	Date Granted	Date Expires	Area (km2)
Mining	Caotang	C5000002009041130019437	14-Mar-17	27-Dec-19	9.10
	Heiwan	C5000002009041130019439	05-Apr-16	30-Dec-17	3.34
	Baolong	C5000002009041130020052	23-Jul-14	21-Sep-17	2.87
	Changhong	C5000002009041130018279	29-Oct-15	31-Jan-18	0.77
Exploration	Baolong	T50120090301025873	22-Mar-15	22-Mar-17	23.12

Table 19: Summary of Blackgold's Mining Licences.

AM&A has not attempted to establish the legal status of the tenements within the Project area with respect to potential environmental and access restrictions. The mining licences all cover sufficient area to permit the mining of all the coal resources described in this Report and also provide sufficient area for the entire surface infrastructure including waste dumps necessary for the current and projected mining operations.

It has been noted that the following taxes and levies are applicable to the Mines (Table 20: Summary of taxes and levies applicable to the Company mines):

Items	Amount
ROM Coal Weighing Charges	16.3RMB/tonne
Road Construction Tax	5% of VAT
Education Tax	3% of VAT
Local Education Tax	2% of VAT
Resource Tax	3% of revenue from coal (exclude any re-charge on transportation costs)
Stamp duty	Annually 0.03% of sales contract

Value Added Tax	17.00% of gross revenue
Corporate Income Tax	For Caotang and Heiwan: 2.5% of gross revenue (valid for a year, to be approved on a yearly basis); For Baolong and Changhong: standard tax rate of 25% on profit before tax

Table 20: Summary of taxes and levies applicable to the Company mines

Environmental Liabilities

Information to date is that there are no identified existing material environmental liabilities on the mineral assets. Blackgold provides for restoration and environmental costs based on their past experiences and estimation of future expenditures, taking into account existing relevant China laws and regulations. As at the date of this report, the provisions have been adequately provided in the books of Blackgold. Accordingly, no adjustment was made during this Report for environmental implications.

Permits Required

To the extent known, the Company confirms the validity of the following Safety permits that must be acquired to conduct the work proposed for the properties (Table 21: Safety permits required for Company's mines to maintain mining operations.):

Permits	Current Holder	Permit Number	Date Granted	Date Expires
Safety Production	Caotang	(Yu)MK Safe Permit No. (2015)1501008	15-May-15	14-May-18
	Heiwan	(Yu)MK Safe Permit No. (2015)1501006	13-Mar-15	12-Mar-18
	Changhong	(Yu)MK Safe Permit No. (2014)1410018	24-Nov-14	23-Nov-17

Table 21: Safety permits required for Company's mines to maintain mining operations.

Other Relevant Information

To the extent known, the Company confirms the following relevant and material information for the operation of the projects:

- There are no records of public opposition to the operations of the mines. As such, the community presents no identified risk to the continuity of operations.
- There was no record of any non-governmental organisation impact on sustainability of mineral and/or exploration projects.

LOCATION AND ACCESS

Caotang Coal Mine is located 10 km north of the township of Fengjie County within the municipality of Chongqing City. The coal field covers a total area of 9.10 km^2. Coal mining is permitted between 300 m and 970 m elevation. The main portal is at an elevation of 435 m in the foothills of mountainous countryside. It is 14 km north-northeast of Fengjie County town, approximately 33 km by road from the town centre and approximately 25 km from the port on the Yangtze River. The corners of the mining permit area extend from longitude 109°31′00″ to 109°34′09″E and latitude 31°06′47″ to 31°09′45″N. The coordinates of the major adit portal are 109°31′27″E and 31°08′15″N at an elevation of 435.13 m.

The coal field infrastructure is reasonable with a total travelling distance by road of approximately 20 km between the coalfield to the coal loading wharf at Bei Di Town on the Yangtze River. The coal field is administered by Bei Di Town and Fen He Town.

The current mine layout consists of three production portals joined to form a single production system as was required per Government consolidation requirements.

Heiwan Coal Mine is located 26 km north of the new township of Feng Jie County within the municipality of Chongqing City. The coal field covers a total area of 3.25 km^2. Coal mining is permitted between 1,300 m to 1,050 m elevation.

The coal field infrastructure is reasonable with a total traveling distance of approximately 30 km between the coal field to the coal loading wharf at Feng Jie County on the Yangtze River. The coal field is administered by Bei Di Town and Fen He Town.

Baolong Coal Mine, is currently being developed with coal production planned to commence in Q2, 2017. The mine is located 17 km southeast of Wu Shan County township within the municipality of Chongqing City.

The coal field infrastructure is reasonable with 80 km of asphalt roads connecting to Wu Shan County, and 70 km of asphalt roads to Jian Shi County. The coal wharf is located at Pu Tao Dam on the Yangtze Jiang River from where the coal can be transported to Yichang, Wuhan, Shanghai, Wanzhou and Chongqing. The coal field is administered by Bao Long Town Wu Shan County.

Changhong Mine is located 108 km south of the provincial capital Chongqing, a distance that can be covered in 2 hours by vehicle, bordering Xishui County in Guizhou and Qijiang District in Chongqing. The Mine is approximately 62 km southeast of Qijiang town and 18 km from the nearest railway station. The mining permit allows mining between elevations between 800 m and 1,350 m and covers a total area of 0.7719 km^2.

The coal field is administered by Wanlong Village, Shihao Town. The main adit coordinates are 106°42′14″E and 28°27′47″N. There is a 3.0 km gravel access road to the secondary bitumen road that links to Shihao Town, Qijiang County 28 km to the north and Xianyuan Town in Guizhou to the south. Shihao County serves as a coal transportation hub with the cross provincial highway and railway passing through it.

Changhong Coal Mine has been established by integrating three existing coal mines, Changhong Coal Mine, Shanshuwan Coal Mine and Jixing Coal Mine. The mine is bordered by the Nanniwan Coal Mine to the west and Zhanghegou Coal Mine to the north-east. The mining tenement boundary was delineated by the Land Administration Bureau of Chongqing City which has confirmed that there is no disputed illegal encroachment of adjacent coal mines by the Changhong Coal Mine.

Access to the mine is currently through two adits with two other adits for ventilation. To increase the output capacity of the Changhong Coal Mine, another 600 m long adit was recently completed and is ready for operations although not currently in production.

Climate

Chongqing Province is located within a moist subtropical monsoon climate zone with four distinct seasons. The mean annual temperature is 18.4°C with a minimum of -7°C during December to January and maximum of 42°C during July to August.

The region has an average annual precipitation of 1050-1400 mm increasing in the higher elevations and mostly occurring during the monsoonal wet season from May to September. Landslides on steeper

slopes occasionally cause problems during the monsoon season. The dry period extends between December and February.

Winds tend from the northeast to north with the windiest period between May and June.

Seismicity
Much of China lies within high seismic hazard zones however the Company's projects all lie within a low hazard zone, Figure 11. In eastern Chongqing the nearby Qi Yao Shan fault line is relatively inactive with only six, low intensity earthquakes recorded since 1327. The relevant seismic bureaus rate the rocks in the area as having a low velocity response and consequently there is only a low risk of property damage by earthquakes. The same rating has been applied to the Changhong Mine area.

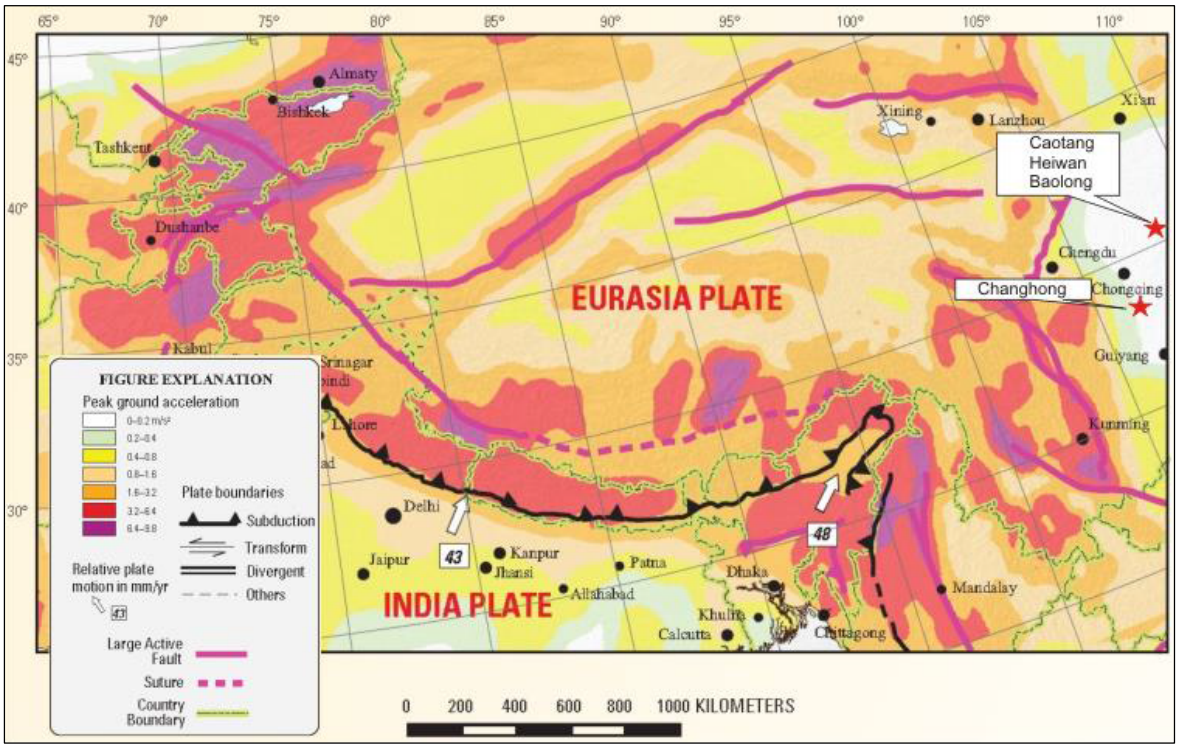


Figure 11: Seismic hazard map of Central Asia.
USGS, 2015

GEOLOGY
Coal Qualities and Characteristics

Coal originates from ancient accumulations of dead tropical and subtropical plants that have undergone physical and chemical alteration after settling in swampy areas, first forming peat which after becoming buried below further sediments, with increased heat and pressure, transforms into coal. In general, increasing burial pressure and heat increases the quality of the coal produced. This process takes several millions of years.

There are four general coal types of increasing quality; peat, lignite, bituminous and anthracite. Higher-ranking coal is denser, contains less moisture and volatile gases and has a higher heat value than lower-ranking coals.

The coal mined at the Company's mines is categorised as anthracite which is mostly sold into the thermal market, Figure 12.

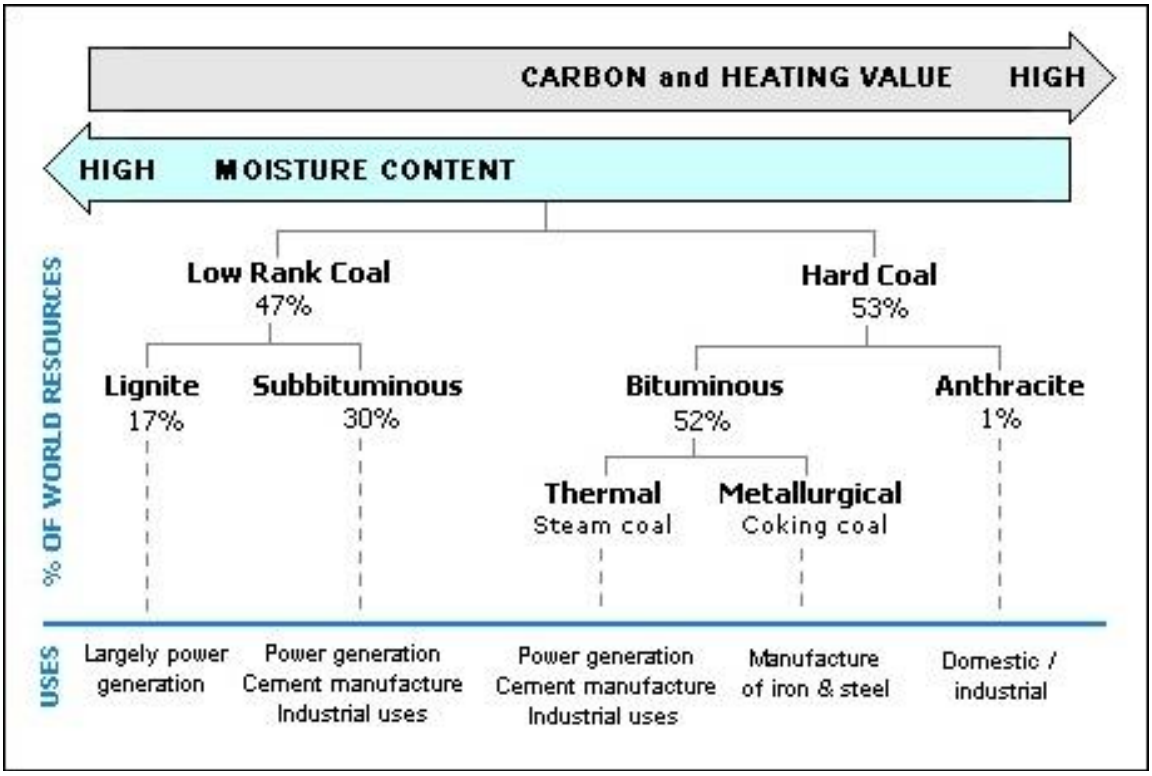


Figure 12: Typical uses and the estimated percentage of the world's coal reserves.
(Source: World Coal Institute)

Thermal Coals

Low rank thermal coals are mainly used to generate heat to produce steam in power plants with high ranking coals used domestically for heating and cooking. The best thermal coals have a low ash content and high calorific value with low contaminant levels, mainly sulphur. Normally in China the total sulphur content of thermal coals is below 2.5% since high sulphur coals, once burnt, produce noxious and highly corrosive gases.

The coal seams at Caotang, Heiwan and Baolong are low in sulphur however the Changhong coals, averaging 2.63% S are classified as high sulphur content coals. A summary of each coal seam characteristics is reported in Table 22.

Caotang Seam	Moisture %	Ash %	Volatile %	Fixed Carbon %	Sulphur %	Calorific Value %	Seam Thickness Metres
K1	0.7	36.5	7.2	55.7	0.8	4,696	2.0
K2	0.8	32.0	7.1	60.9	0.7	5,278	1.0
Total	0.7	34.8	7.2	57.6	0.8	4,911	1.6

Changhong Seam	Moisture %	Ash %	Volatile %	Fixed Carbon %	Sulphur %	Calorific Value %	Seam Thickness Metres
M5	0.5	19.4	9.2	70.8	2.5	7,101	3.8
M6	0.5	18.5	8.7	72.3	2.7	6,535	13.0
M7	0.5	17.9	9.0	56.0	2.5	6,945	6.6
M8	0.5	17.8	9.2	72.6	2.6	6,935	10.4
M12	0.6	20.0	9.3	70.5	2.6	7,098	6.3
Total	**0.5**	**18.6**	**9.0**	**68.5**	**2.6**	**6,863**	**8.9**

Heiwan Seam	Moisture %	Ash %	Volatile %	Fixed Carbon %	Sulphur %	Calorific Value %	Seam Thickness Metres
K1	0.7	25.5	6.7	66.6	1.0	5,702	0.9
K2	0.9	26.2	7.2	65.7	0.4	5,726	0.5
K3	0.7	31.0	7.0	61.4	0.6	5,210	0.5
Total	**0.8**	**26.2**	**6.9**	**65.8**	**0.8**	**5,667**	**0.7**

Baolong Seam	Moisture %	Ash %	Volatile %	Fixed Carbon %	Sulphur %	Calorific Value %	Seam Thickness Metres
K1	0.5	28.1	6.8	62.8	0.7	5,528	1.9
K2	0.5	28.5	6.9	64.0	0.5	5,495	1.6
Total	**0.5**	**28.3**	**6.8**	**63.3**	**0.6**	**5,515**	**1.8**

Table 22: Summary of BGG coal seam qualities.

According to the Chinese coal classification system all the coal seams are classified as Anthracite, Figure 13.

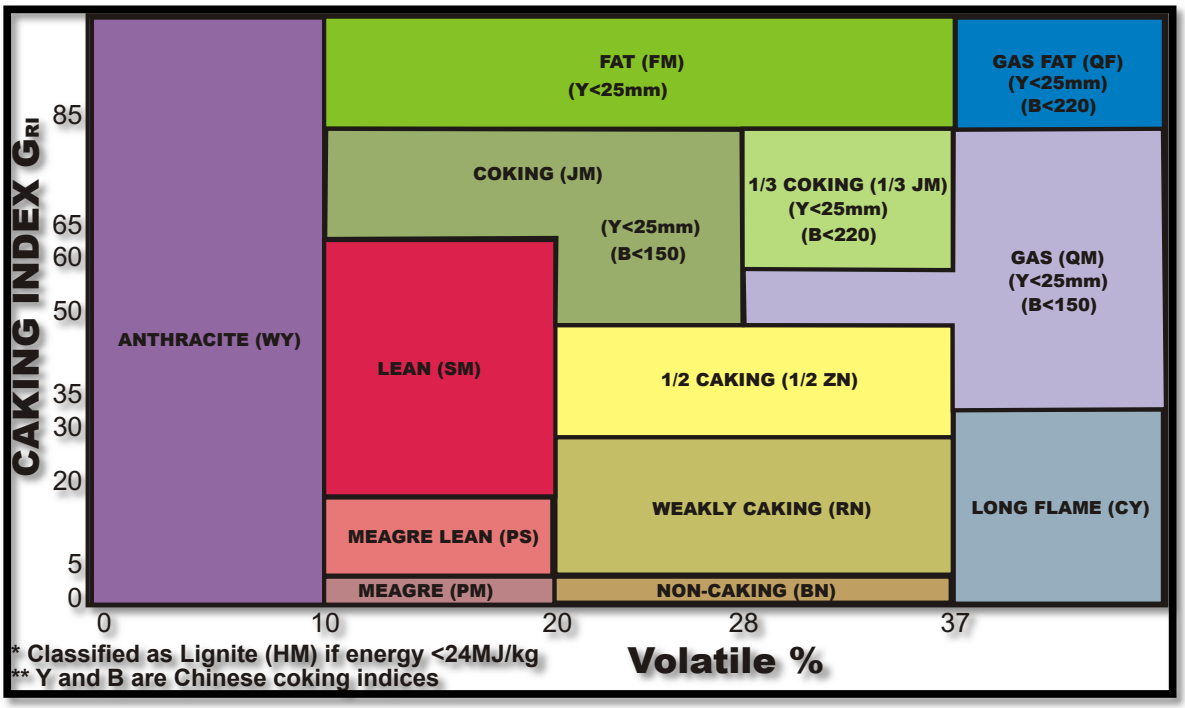


Figure 13: Chinese Coal Classifications.

All the Company's coal is sold as thermal coal for power generation. Where the Company's coal does not meet customer specifications, e.g. the high sulphur content of the Changhong coals, the Company's coal is blended with coal bought from other mines that exceeds the specifications until the blended coal just meets the customer's requirement specifications.

REGIONAL GEOLOGY

The four mines are located within the Yangtze Block (South China Block).

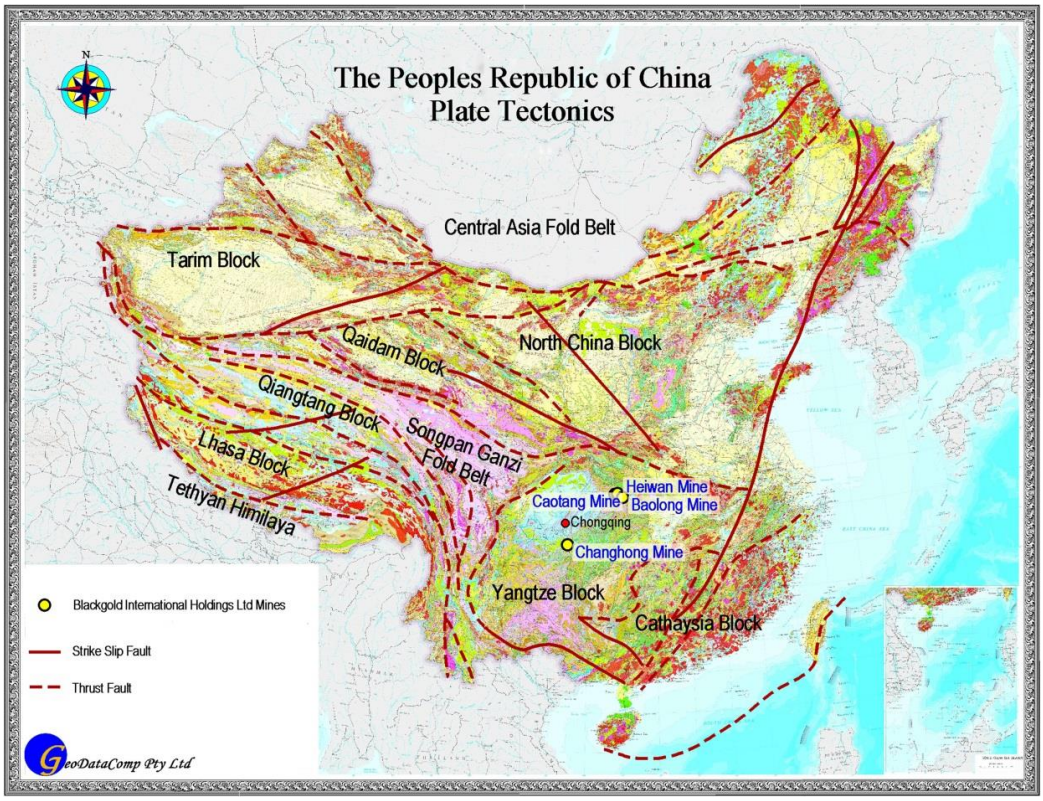


Figure 14: Regional Geological Map of China.

The Yangtze Block contains Archaean and Palaeo-proterozoic high grade crystalline metamorphic rocks, (mainly gneiss, amphibolites, marbles and banded iron formation) overlain by a Palaeozoic and Mesozoic to Cenozoic sedimentary succession (i.e. from greater than 2500 to less than 65 million years old), forming the Yangtze platform. These sediments are gently folded and the stratigraphic relationships between the stratigraphic units are well recorded (Table 23).

Era	Period	Lithology
Cenozoic	Quaternary	Widespread loess deposits
	Tertiary	Un-cemented sands with a 1 m thick gravel base layer
Mesozoic	Cretaceous	Sandy mudstone of continental inland basin and intermontane basin facies
	Jurassic	
	Triassic	
Paleozoic	Permian	Dominated by alluvial sandstones and shales Shanxi, Xiashangshihezi and Shiqianfeng Formation
	Carboniferous	Coal-bearing sandy shales. Benxi and Taiyuan Formations
	Silurian	Metamorphosed sandstone, skate, phyllite and tuff
	Ordovician	Carbonate rocks, limestone and dolomites with clastic rocks at base, total thickness approx. 600m well developed karst
	Cambrian	Mainly massive limestone, well developed karst
Proterozoic		Mainly schist, phyllite, gneiss and conglomerate
Archaean		Crystalline metamorphosed basement, gneiss and migmatite

Table 23: Stratigraphic Column for the Yangtze Craton.

In Guizhou and Guangxi, the Middle Palaeozoic marine clastic and calcareous facies are conformably overlain by Upper Palaeozoic marine calcareous and clastic sediments partly inter-bedded that laterally change to more siliceous facies in certain horizons. The boundary between the Permian and the Triassic in some sections is represented by the gradual change in lithology.

The marine sediments are a result of tectonic subsidence caused by collisions with neighbouring tectonic plates that dominated until the Late Triassic when the sedimentation regionally shifted to fluvial deposition as the basin began to rise from the ocean. The Triassic margin of the Yangtze platform extends in a sigmoidal SW/NE trend from Yunnan through Guizhou.

The post-Triassic gradual rise of the Yangtze platform resulted in erosion of the extensive Proterozoic marine sediments, particularly the limestones, resulting in the characteristic and spectacular karstic topography found throughout Guizhou and Guangxi.

Coal can be found in the Yangtze Platform within many of the terrestrial sediments from the Carboniferous to the Cretaceous. The coal deposits found at the Company's mines that are the subject of this Report are however restricted to flat dipping, 10° to 30°, freshwater continental sediments and sea water deposits in a coastal plain environment from between the Late Permian to Late Triassic.

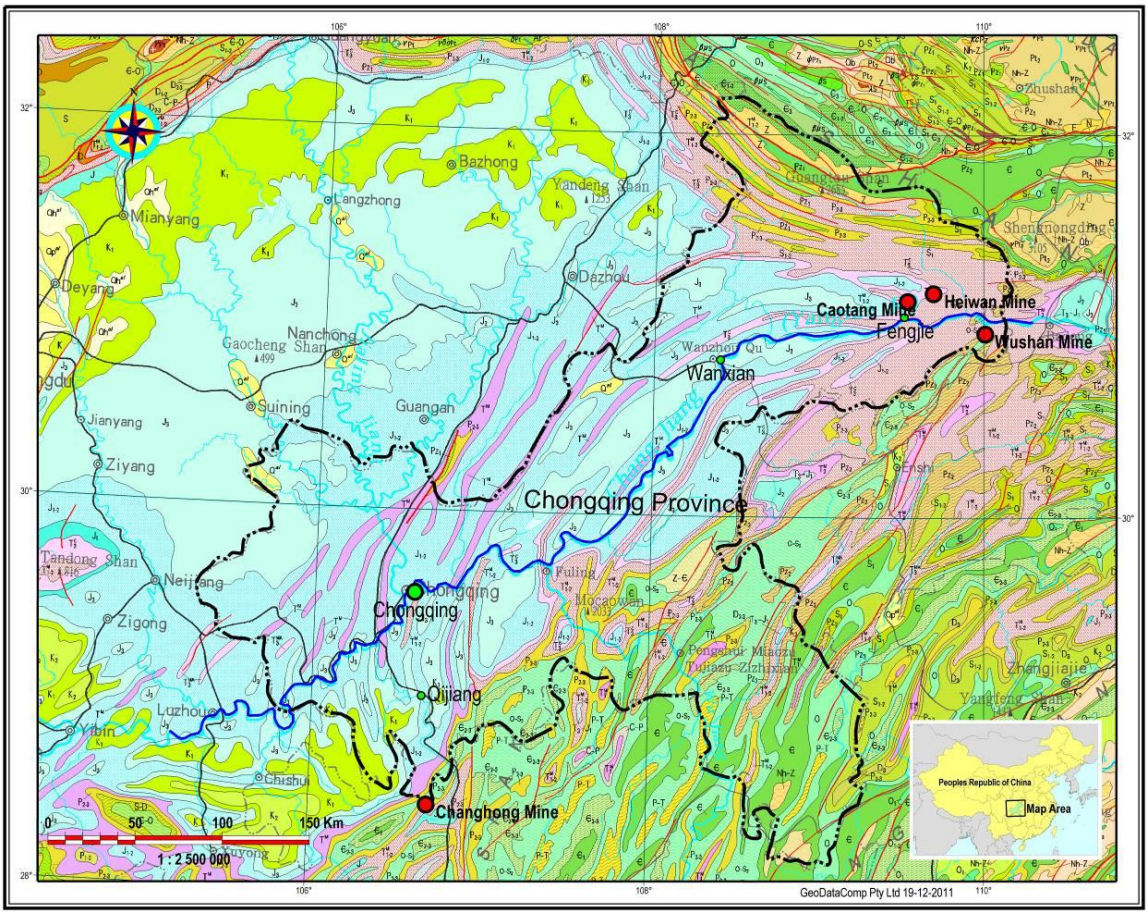
The sedimentary strata exposed in the Company's four coal mining areas are mainly Permian, Triassic, and Jurassic, Table 24.

The main coal seams at the Baolong and Changhong Mines are located in the Late Permian Longtan (Wujiaping) Formation.

The Chongqing coal was deposited within a typical continental sedimentary environment during the Late Triassic along the eastern margin of the Sichuan inland lake basin. The sediments in this area include typical pediment alluvial plain, delta plain, and shallow lake deposits.

Jurassic		
		UNCONFORMITY
Triassic		
	Xujiahe Formation (Txj)	
	Badong Formation (T2b)	
	Jialingjiang Formation (T1j)	
	Daye Formation (T1d)	
		UNCONFORMITY
Permian		
	Dalong Formation (P2d)	
	Changxing Formation (P2c)	
	Longtan (Wujiaping) Formation (P2w)	Main Permian coal bearing Formation
	Gufeng Formation (P1g)	
	Maokou Formation (P1m)	
	Qixia Formation (P1q)	
	Liangshan Formation (P1l)	

Table 24: Stratigraphic column for sediments in Project areas.



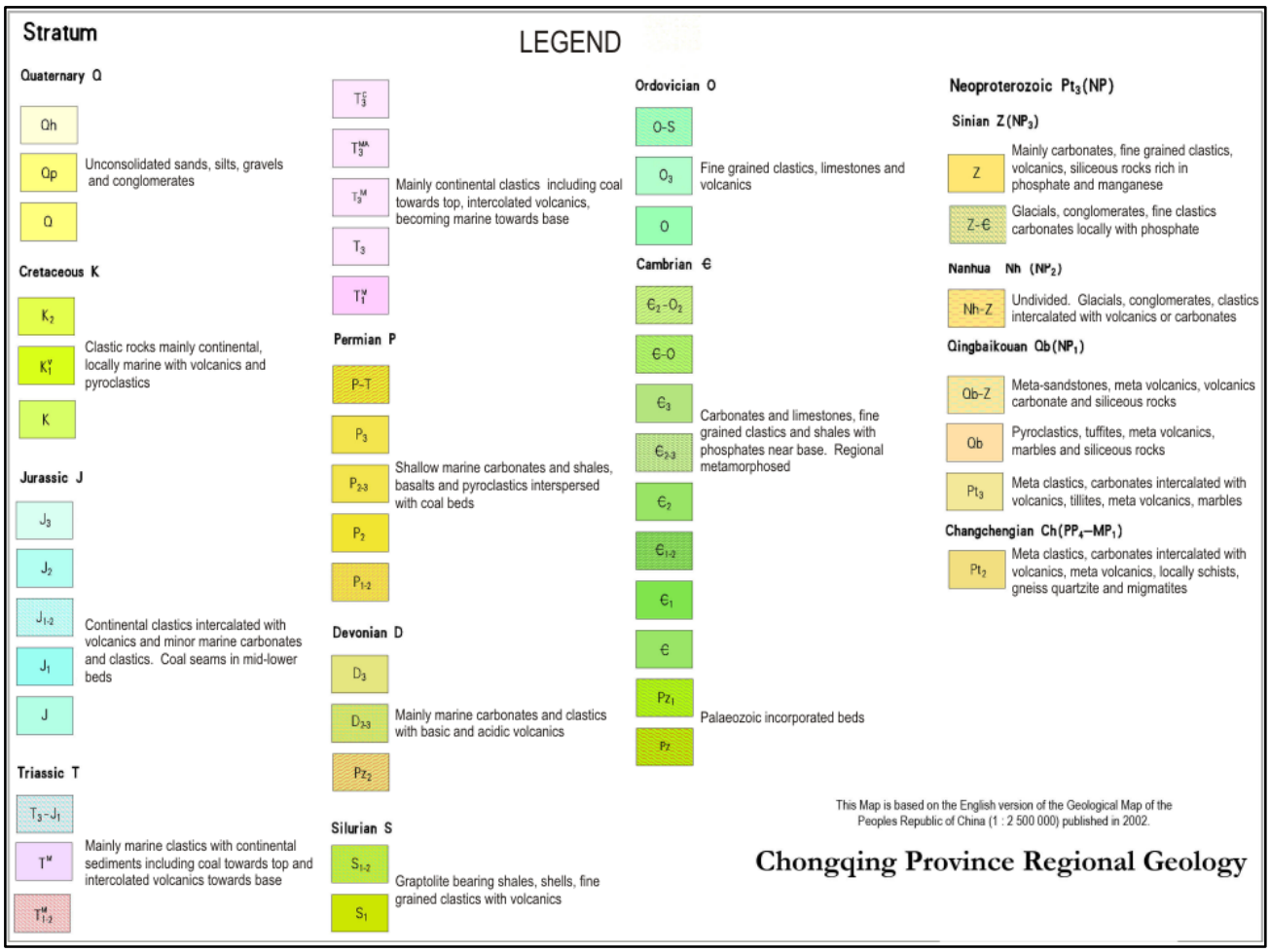


Figure 15: Geological map of Chongqin.

Faulting is common throughout the region and in the coalfields. Approximately 20 of these faults have been delineated in the Blackgold Mine workings showing minor displacements ranging from 0.2 m to 2 m. The sub-vertical dipping faults have two main strike directions: (a) north-south perpendicular to the axial plane of the Qumahe Syncline and (b) east-west parallel to the axial plane of the Qumahe Syncline.

LOCAL GEOLOGY

Caotang Coal Mine

Plate 1: Caotang Pit No1 Portal (L) and Pit No2 Portal (R).

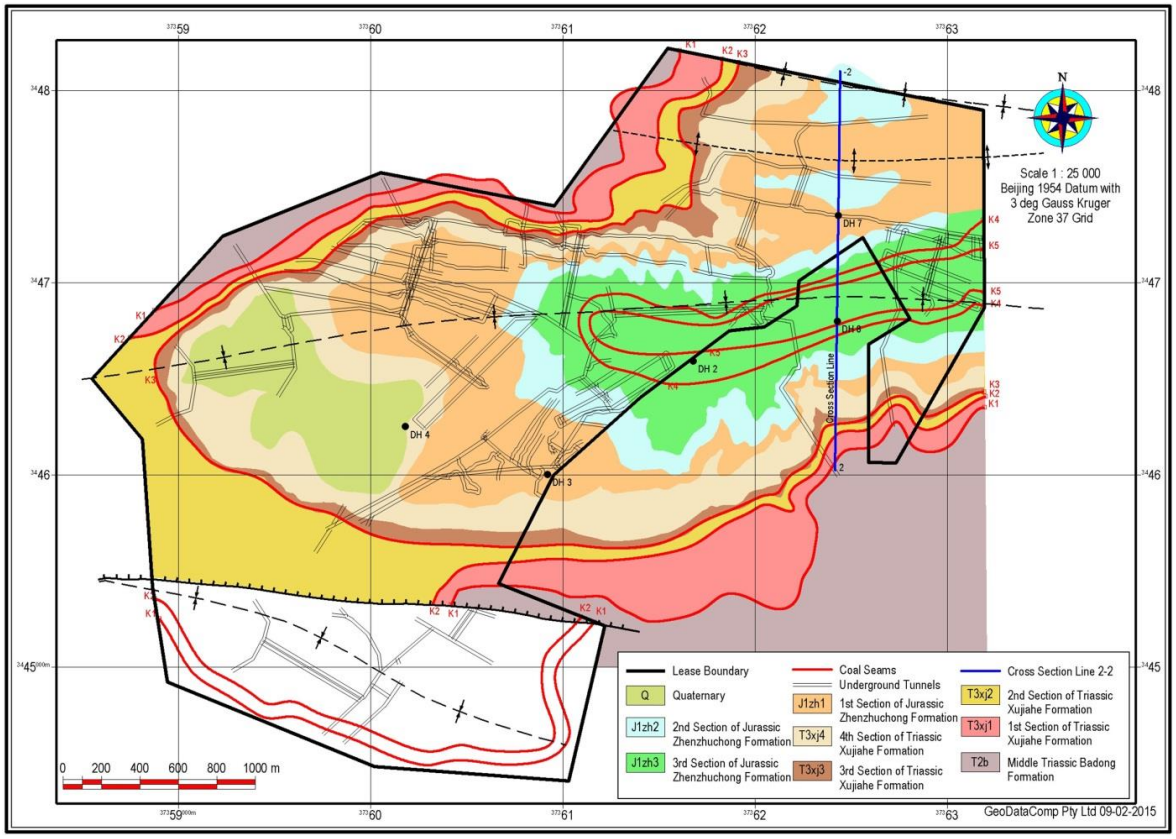


Figure 16: Caotang Mine local geology.

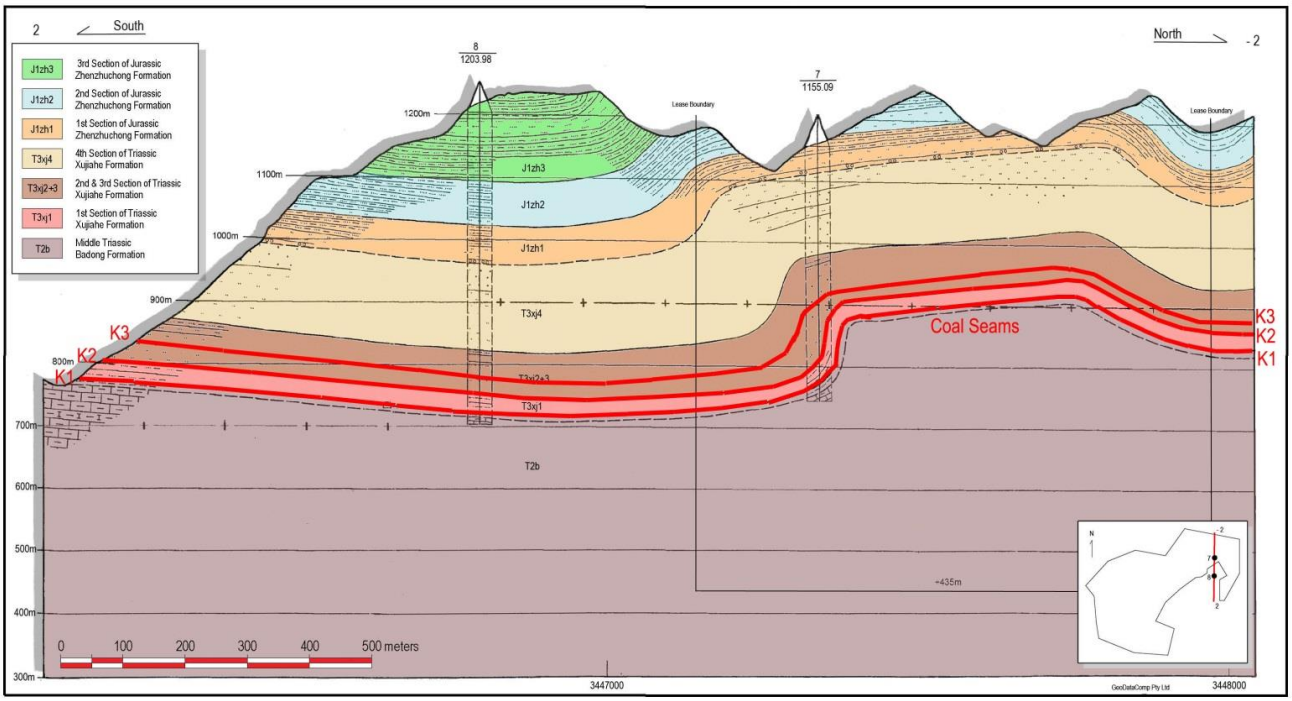


Figure 17: Caotang Mine Area Cross Section 2-2'.

Age	Name	Thickness	Description
Quaternary	Q_4	0-35 m	Mainly in valleys and flatter slopes. Boulders, pebbles, silty clay and coal gangue.

			Unconformity
Lower Jurassic	Zhenzhuchong Formation (J_1zh)	150-400 m averaging 275 m	Light grey to dark grey fine grained lithic quartz sandstone, with minor muddy sandstone, sandy mudstone, and siltstone, and intermittent coal seams.
			Unconformity
Upper Triassic	Xujiahe Formation ($T_s$xj)		
	T_3xj4	126-138 m averaging 132 m	Light grey to grey medium to coarse grained lithic sandstone with minor hematite near the top capped by gravel. Central contains feldspathic lithic cross bedded sandstone with thin sandy mudstones containing siderite, muddy inclusions and some coaly inclusions.
	T_3xj3	6-14 m averaging 9.0 m	Grey medium grained sandy mudstone, muddy siltstone containing clavatus sp fossils and intermittent K3 coal seam.
	T_3xj2	59-63 m averaging 61 m	Grey to light-grey medium grained lithic feldspathic quartz-wacke with a middle section coarse grained lithic quartz-wacke with horizontal fine grained siltstones containing siderite and discontinuous 'coaly' lines
	T_3xj1	31-49 m averaging 37.0 m	Upper predominantly dark grey sandy mudstone with minor siltstone and muddy siltstone that hosts the 0.99 m K2 coal seam. Central is dark-grey to grey medium grained sandy mudstone, and muddy siltstone with minor pyrite nodules, medium grained sandstone, fine grained sandstone and muddy limestone. Lower dark grey sandy siltstone, mudstone and muddy siltstone with the 1.96 m thick K1 coal seam situated at the top.
			Unconformity
Middle Triassic	Badong Formation (T_2b)	780-1014 m	Siltstones, mudstones, calcareous shales, dolomites, shales and quartzites

Figure 18: Stratigraphic column at Caotang.

The mining area is situated in the eastern part of the arcuate Xinhuaxia Qiyueshan Fold Belt. The mine area covers the north of Qumahe compound syncline with the subsidiary east-west Xujiaping Anticline and Shitaowan Syncline in the north of mine where limbs dip to 15^0. Locally however the south limb of the Xujiaping Anticline is steeper, with a maximum dip of 68^0, and an average of 32^0 between 750-850 m.

The oldest exposed strata at Caotang is the Middle Triassic Badong Formation (T_2b) that passes unconformably upwards into the Upper Triassic Xujiahe Formation (T_3xj) that is in turn unconformably capped by the Lower Jurassic Zhenzhuchong Formation (J_1zh). Quaternary sediments occur along the water courses. The Xujiahe and Zhenzhuchong Formations both host coal seams, Figure 18.

The Caotang Mine exploits the Triassic K1 and K2 coal seams located near the base of the Upper Triassic Xujiahe Formation which provides a relatively stable mining environment. The thickness of the K1 coal seam ranges between 0-2.4 m averaging 2.0 m within the mine while K2 coal seam ranges

between 0-1.00 m with an average of 1.0 m in the mine. The hanging wall to the K1 seam and footwall to the K2 seam is clayey sandstone.

Caotang Coal Mine produces thermal coal for local, regional, and national power plants or furnace operators. The coal is classified as high ash, medium to high sulphur, medium to high phosphorous and medium calorific value coal suitable for thermal energy market.

Heiwan Coal Mine

The Heiwan mining permit covers some extremely rugged, mountainous country.

Plate 2: Heiwan Mine Pit No. 1 (L) and View South Over Pit No1 Main Portal towards Main Road and New Office (R).

The mining area lies on the eastern limb of the Chuandong Fold Belt which includes a number of parasitic folds and faults. From north to south, these folds are the Hongyan Syncline, Longchi Anticline, Qumahe Syncline, Tongcun Anticline, Gulingzhen Syncline, Wenyaoshan Anticline, Wushan Syncline, Hengshixi Anticline and the Maocaoba Anticline.

Generally the anticlines are tight and the synclines open with the folds tightening to the east. Strata within the mine area are mainly Triassic and Lower Jurassic sediments. Regionally the folding and faults affect the coal seam thickness, in some instances to total destruction.

In the local mine area the stratigraphy includes the basal Triassic Badong Formation (T_2b) progressing up through the Upper Triassic Xujiahe Formation (T_3xj) and Lower Jurassic Zhenzhuchong Formation (J_1z), Figure 19 to Figure 21.

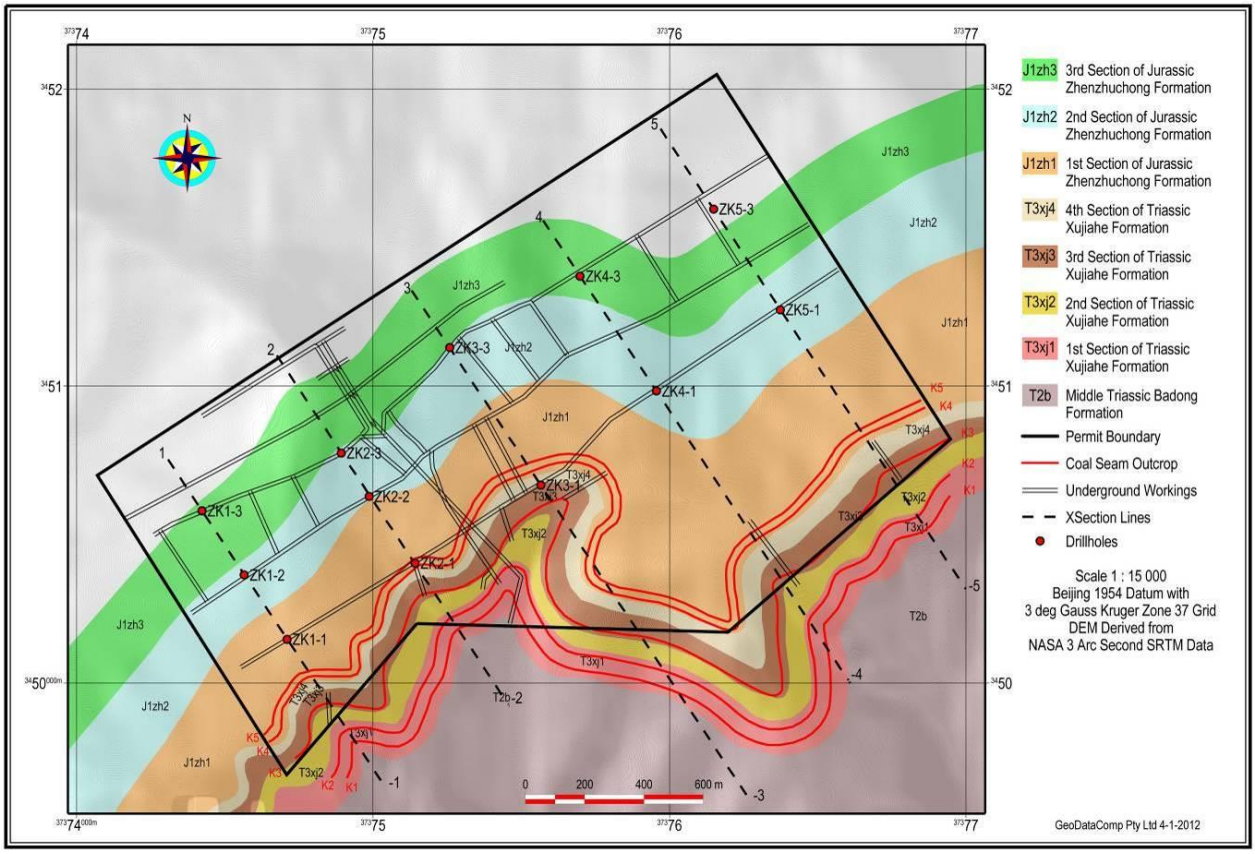


Figure 19: Heiwan Local Geological Map and Underground Drillhole Sites within Mining Permit.

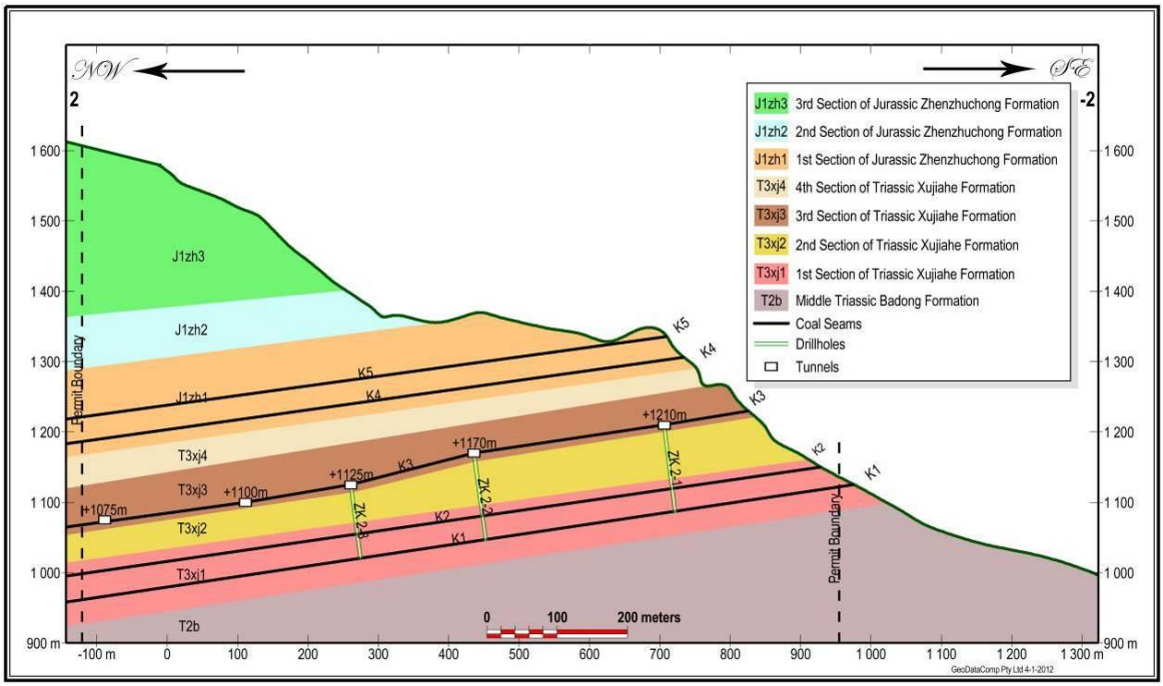


Figure 20: Section 2-2' Through Heiwan Mine.

Age	Name	Thickness	Description
Lower Jurassic	Zhenzhuchong Formation (J_1z)	230 m	Yellow grey to brownish grey to grey fine grained sandstone, siltstone and sandy mudstones and shale. Basal zone is dark grey siltstone, mudstone and shale,

			containing 2 to 4 coal seams including K6 and K7 that are locally economic. These two seams are approximately 30-50 m apart. Upper 200 m brownish grey to grey fine grained mudstone, siltstone and quartz sandstones deposited in a drying braided stream environment.
			Unconformity
Upper Triassic	Xujiahe Formation (T3xj)		
	T_3xj6 "Iron Top"	70-130 m	Light grey to grey, medium to coarse grained quartz sandstone, siltstone and mudstone with some locally developed coal seams
	T_3xj5	21-38 m averaging 55 m	Grey to dark grey, fine to medium grained siltstone, quartz sandstone, calcareous shale and mudstone, including 2-3 coal seams with 0.3 m K4 and 0.25 m K5 with variable widths of clay partings representing locally economic seams.
	T_3xj4 "Iron floor"	120 m-150 m	Grey to white coarse grained quartz sandstone, fine grained siltstone with large-scale cross bedding. Some 20-30 m above coal seam K3 and 30-50 m below seam K4 is a marker horizon composed of 20-60 mm granules 60% flinty sandstone, 25% grey to white quartz and remainder very fine grained sandy cement with basal 0.2 m of marker horizon sideritic coal seam with a reniform texture.
	T_3xj3	40 m-51 m	Dark grey fine to medium grained sandstone, siltstone, and calcareous shale with coal seams near the top and bottom that locally attain economic thickness. Main economic seam central K3 seam averaging 0.5 m.
	T3xj2	75 m	Light grey to yellow grey coarse feldspathic quartz sandstone with bedding that weathers into distinctive shell-like fragments. Siderite nodules scattered near base.
	T_3xj1	27 m to 41 m	Light to dark grey, fine to medium grained siltstone, quartz sandstone, sandy mudstone and shale. Base 0.5 m white to grey clay with minor pyrite. Two to three coal seams but only 0.9 m K1 and 0.5 m K2 seams are economic.
			Unconformity
Middle Triassic	Badong Formation (T2b)		Mainly thin mudstones and sandy mudstone. Top is medium grained sandy mudstone.

Figure 21: Stratigraphic column at Heiwan.

The strata generally strikes 330^0 dipping 13^0 north with numerous small, generally dry, east-west micro-scale faults. There are five mineable coal seams at the Heiwan Coal Mine namely K1, K2, K3, K4 and K5 of which K3 is the primary coal seam with an average thickness of 0.5 m.

Heiwan produces thermal coal for local, regional and national power plants or furnace operators. The raw coal is vitreous black, clearly defined bedding and with planar and conchoidal fractures. The coal is hard with a calorific value generally around 5,500 kcal/kg. The coal is classified as a high to medium ash, low sulphur anthracite.

Baolong (Wushan) Coal Mine

The Baolong district has a rugged, mountainous terrane with steeply incised valleys with limited flat lowlands. The topographic range is 160 m in the Baolong River with the highest point at Liyinyang with an elevation of 1717 m.

Plate 3: Baolong Maojiawan No 1 East Mine Production Adit (L) and Ventilation Adit (R).

The Baolong Mine area is located on the northeast of the Yudong Fold Belt which is part of the Neocathaysian Tectonic System with northeast-southwest striking fold axes. The folds are asymmetrical having open synclines and tight anticlines. The nearby fold structures appear in an en-echelon array. The area covered by the mine is over the central portion of the northwest limb of the Changliangzi Anticline. Local compression and tension has caused normal and thrust faulting with secondary parasitic folds, Figure 23.

In the local mine area the stratigraphy includes the basal Lower to Mid Silurian Middle Shamao Formation (S2s) unconformably overlain by Devonian Yuntaiguan (D3y), unconformably overlain by Huangjiacheng and Xiejingsi (D3h+x) formations, Carboniferous Huanglong Formation (C2h), Permian Liangshan (P1l), Xixia (P1q), Maokou (P1m), Gufeng (P1g), Wujiaping (P2w), Changxing (P2c), Dalong (P2d) formations, unconformably overlain by Triassic Daye (T1d), Jialingjiang (T1j) and Badong (T2b) formations progressing up unconformably through Quaternary alluvials along the rivers (Figure 24: Stratigraphic column at Baolong.).

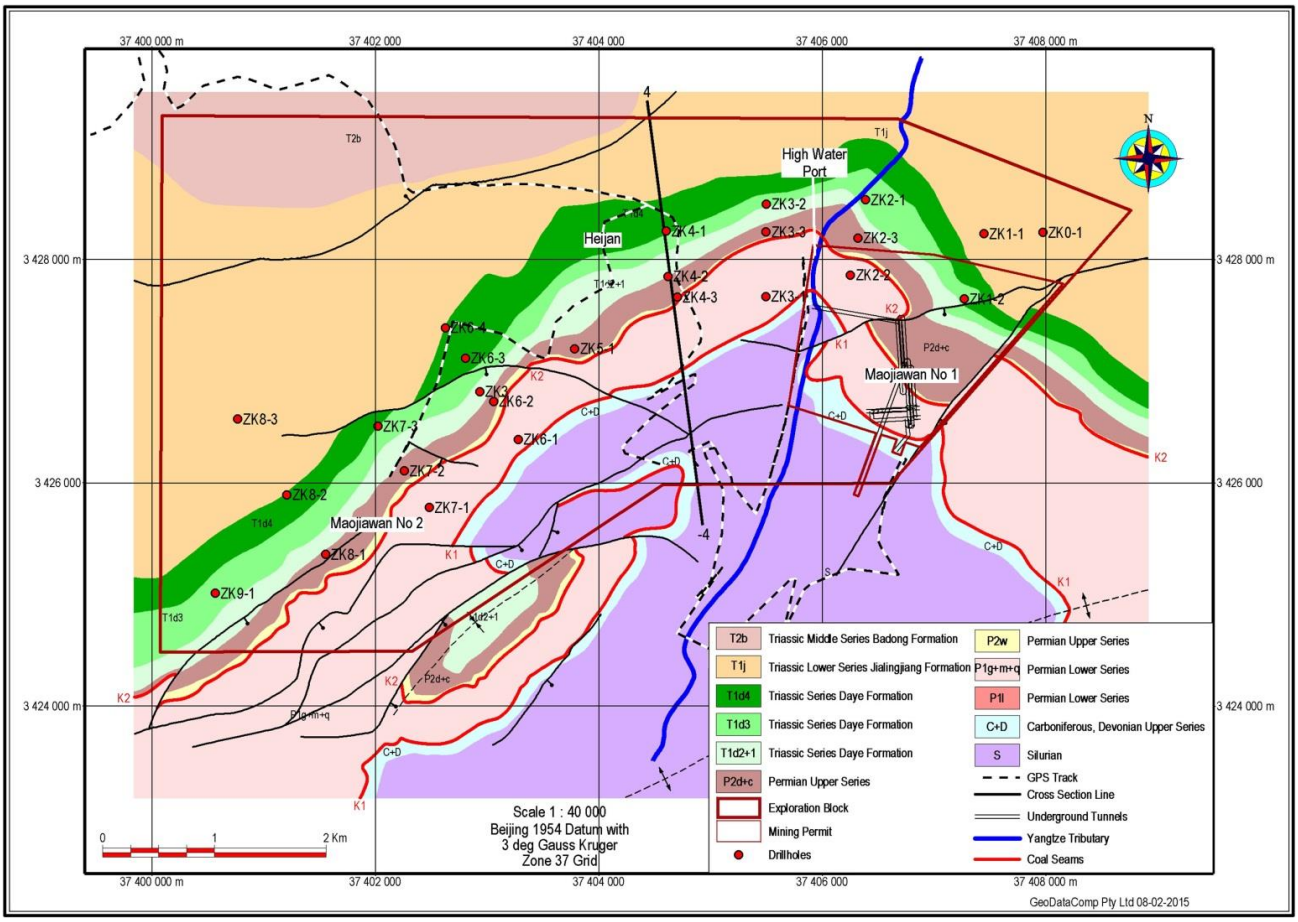


Figure 22: Baolong Mine Local Geology.

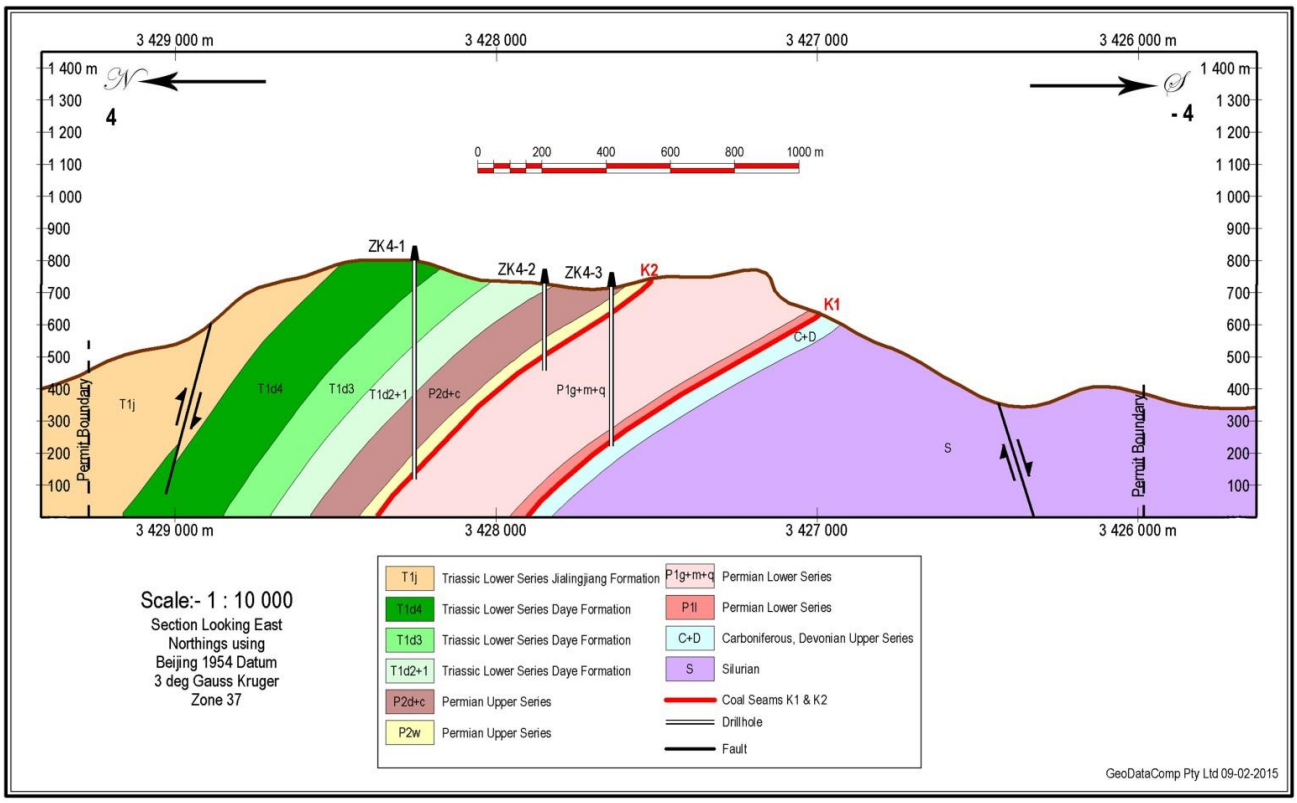


Figure 23: Baolong cross-section 4-4.

Age	Name	Thickness	Description
Quaternary	Quaternary (Q)	0 – 5 m	Mainly yellow and yellow-brown clays, silty clay, and cobbles along gullies and scree slopes off mountains.
			Unconformity
Middle Triassic	Badong Formation (T_2b)		Brown red and purple red mudstones with yellow grey calcareous shales and marl
Lower Triassic	Jialingjiang Formation (T_1j)	800-1400 m	The first and third units are thin to medium bedded grey limestone and bio-detritus limestone mixed with lesser dolomitic limestone. The second and fourth units are grey to light grey medium bedded dolomite, dolomitic limestone mixed with evaporites and minor fossils.
	Daye Formation (T_1d)		
	T_1d4	211 m	Light grey thin muddy limestone and dolomitic limestone with wavy structural development. Upper part purplish red muddy limestone, muddy limestone and dolomitic limestone.
	T_1d3	110-159 m averaging 130 m	Grey, light grey medium to coarse limestone, locally oolitic with minor shale layers
	T_1d2	25-35 averaging 35 m	Light grey thin muddy limestone and dolomitic limestone, limestone and minor shales with a wavy structure.
	T_1d1	50-80 averaging 70 m	Dark grey and black mudstone, muddy limestone and limestone.
			Unconformity
Upper Permian	Dalong Formation (P_2d)	25-35 m	Grey black silty limestone mixed with grey black to grey and yellow grey muddy limestone with fossils.
	Changxing Formation (P_2c)	90-120 averaging 105 m	Grey black medium to coarse bedded limestone. Upper mixed with flinty limestone where flint appears cloddy or stripped slowly decreasing downwards. Lower grey black medium bedded fine grained limestone mixed with carbonaceous shale.
	Wujiaping Formation (P_2w)		
	P_2w2	30 m	Grey to dark grey fine to medium grained bedded mudstone, flinty limestone and siliceous limestone, mixed with siliceous lenses of nodular flint with dark grey muddy layers. Contains coral and brachiopod fossils. The bottom 5m is a marker horizon of bio-detritus limestone or silty limestone with lenses of pyrite that usually occurs some 5.3 m above the K2 coal seam.

	P_2w1	9 m	Minor pyrite with upper sandy mudstone mixed with very fine sandstone and K2 coal seam, lower sandstone and clayey mudstone.
Lower Permian	Gufeng Formation (P_1g)	28 m	Dark grey to black muddy limestone or siliceous limestone mixed with calcareous shale. The upper part is mixed with siliceous dolomite in spots or as lenses. The central and lower part is mixed with coal lenses over 20~35 m.
	Maokou Formation (P_1m)	184 m	Light grey, grey thickly bedded fine grained limestone. Upper mixed flint veinlets or siliceous beds, lower grey thick bedded bio-detritus, fine grained limestone mixed with thin bedded bio-detritus muddy limestone.
	Xixia Formation (P_1q)	100 m	Grey medium grained bedded to blocky limestone, muddy limestone, asphalt bearing with flint veinlets.
	Liangshan Formation (P_1l)	2-15 m averaging 5 m	Mixed coal, sandstone and mudstone. Upper grey to black carbonaceous mudstone and claystone with 0.4-4.0 m K1 coal seam, generally with two claystone partings between 0.23~0.50 m, for an average width 1.72m. Footwall bauxitic mudstone and grey white to dark grey with light red fine to coarse grained quartz sandstone.
			Unconformity
Carboniferous	Huanglong Formation (C_2h)	40 m	Upper light grey compact limestone, sometimes mixed with siliceous beds. Central light grey to grey fine grained limestone and dolomitic limestone with local calcite zones. Lower grey to grey green muddy limestone and dolomitic limestone, sometimes mixed with thin shales with rare pyrite crystals, main 1st marker horizon for K1 coal seam occurring within 2.5 m below seam.
			Unconformity
Upper Devonian	Huangjiacheng and Xiejingsi Formation (D_3h+x)	7-54 m averaging 20 m	Light grey to grey green claystone and sandy mudstone. Lower light grey to grey green dolomitic clay
	Yuntaiguan Formation (D_3y)	26-61 m averaging 40 m	Grey white to light grey coarse bedded fine quartz sandstone, with light yellow to light red medium to coarse grained quartz sandstone and thin sandy mudstone.
			Unconformity
Silurian	Middle Shamao Formation		Yellow green to yellow grey sandstone, quartz sandstone, sandy mudstone and shales.

	(S_2s)		

Figure 24: Stratigraphic column at Baolong.

There are 13 faults, mostly normal but F8, F11and F12 are reverse faults, within the Baolong mine area. Details on the faults are summarised in Table 25.

Fault	Length (km)	Strike ^{0}	Dip ^{0}	Throw (m)
F1	24	120-165	50-75	550
F4	0.675	137	65	40
F7	3	150	73	120
F8	3.4	130	67	70
F9	2.0	143-170	67	80
F10	4.0	190	70	50
F11	0.700	190	50	50
F12	5	330-340	76	>200
F13		160	65	50

Table 25: Summary of major faults in Baolong Area.

There are two mineable coal seams at the Baolong Coal Mine, namely K1 and K2 are separated by an average 350 m of Permian sediments. Both coal seams have clay partings of variable thicknesses.

The thickness of the K1 coal seam varies 0.5-2.4 m and has 1-2 clay partings. The clay partings are grey mudstone with variable thickness from 0.05-0.5 m. The central to upper K1 seam is mainly bright coal with minor dull coal, soft, grey black to black with an oily sheen. The lower part is mainly dull coal mixed with bedded bright coal with a steel grey appearance. The national standard classifies the K1 seam as high ash, high sulphur, special low phosphorus, low chlorine, low calorific value blind coal.

The thickness of K2 seam ranges from 0.72-1.2 m averaging 1.5 m and is dull grey black with black striations and minor half bright coal with an adamantine and oily sheen. It has many fracture planes breaking irregularly into mostly powder with minor blocks. The national standard classifies the K2 seam as medium ash, medium-high sulphur, medium calorific value blind coal.

The K1 coal can be used for general industrial or domestic uses while K2 coal can be used for thermal power generation, motive power or domestic uses. The high arsenic content of the K2 coal prohibits its use for steam generation in the food processing industry and the high fluorine content requires it can only be used in special combustion stoves when used domestically.

Changhong Coal Mine

Plate 4: Changhong Mine 1023m New Production Adit Portal (L) and 1093 m Production Adit Portal (R).

The Changhong Mine site is located on the northwest limb of the Guandian Syncline in the northwest of the Loushan Mountain Fold Belt. The bedding at the mine strikes 142-147° and dips 29-32°SE.

The district is structurally stable with limited risk of landslides. There are no faults or folds that affect mining.

In the local mine area the stratigraphy includes the basal Permian Maokou (P_1m), Longtan (P_2l) and Changxing (P_2c) formations, unconformably overlain by Triassic Yulongshan (T1y) and Feixianguan (T_1f) formations progressing up unconformably through to Quaternary alluvials scattered along the rivers (Figure 25 to Figure 27: Stratigraphic column at Changhong.)

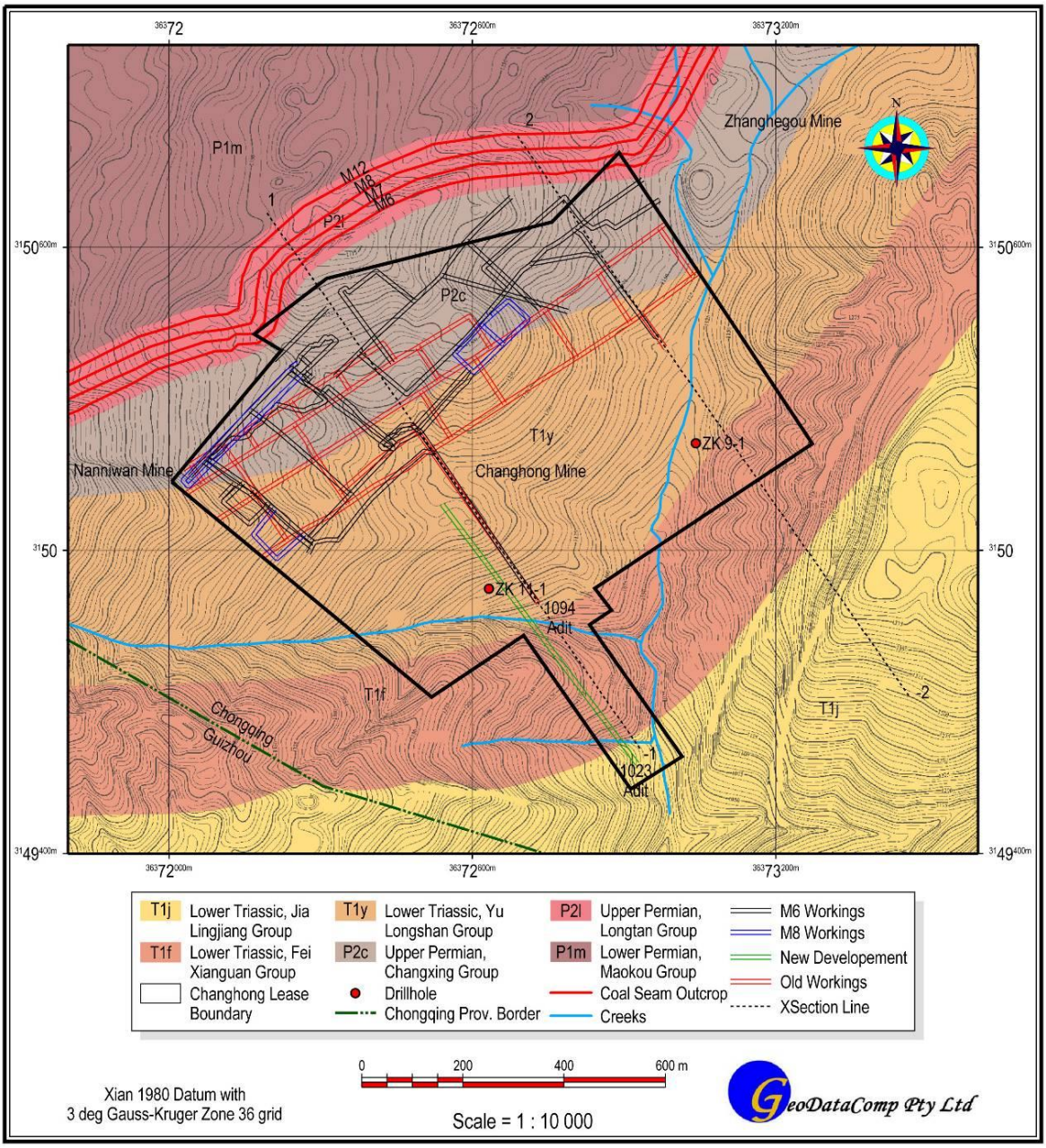


Figure 25: Changhong Mine regional geology.

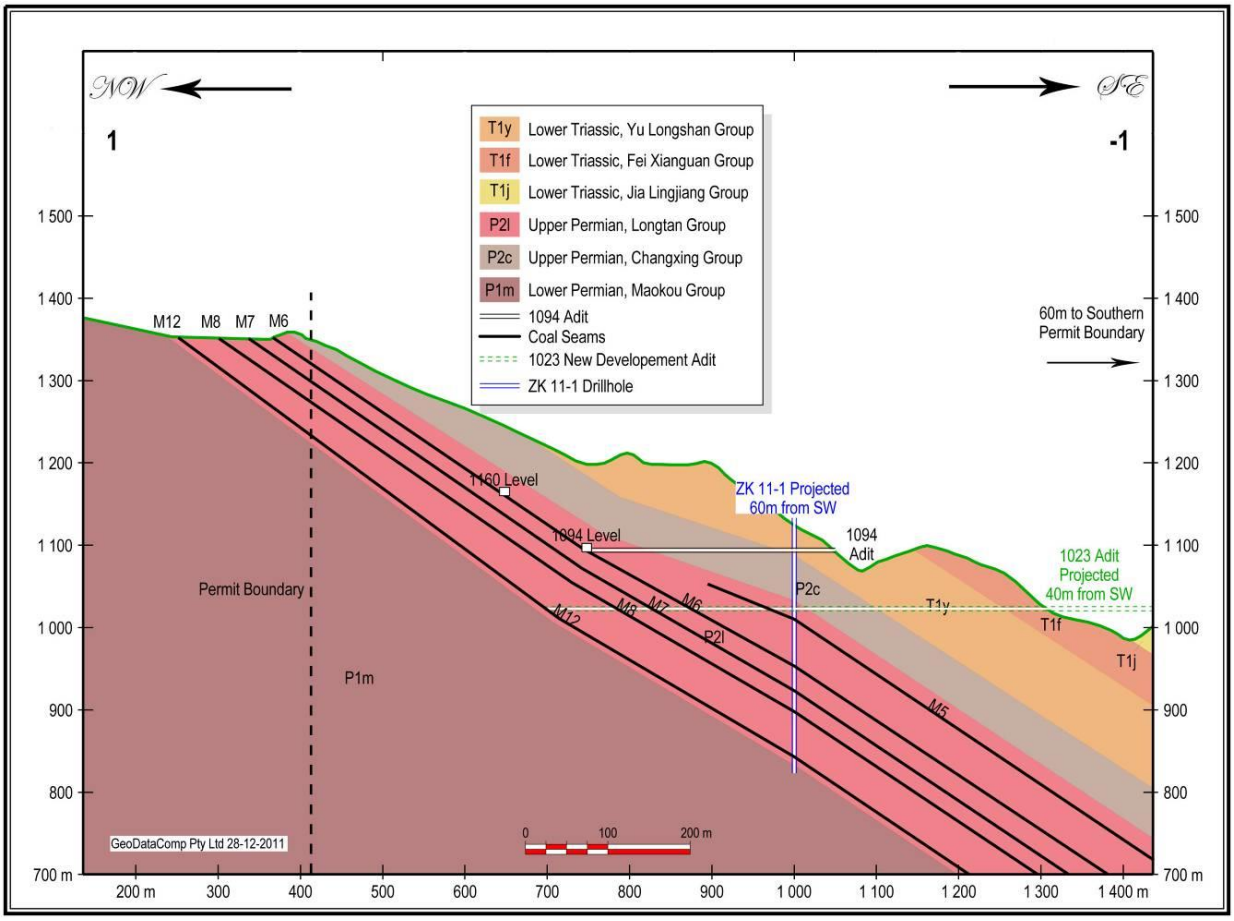


Figure 26: Changhong Mine cross section 1-1'.

Age	Name	Thickness	Description
Quaternary	Quaternary (Q)	0 -1.2 m	Mainly yellow and yellow-brown clays, silty clay, and cobbles along gullies and scree slopes off mountains.
			Unconformity
Lower Triassic	Feixianguan Formation (T_1f)	191 m	Thin-medium bedded red purple and dark red purple calcareous mudstones. Central several thin-bedded grey and dark grey limestone layer and two layers of medium-bedded grey limestone. Basal layer of thin-bedded slate-grey argillaceous limestone or grey micaceous claystone.
	Yulongshan Formation (T1y)	133 m	Thin-medium bedded light grey and grey limestone and argillaceous limestone with central and lower thin-bedded mudstone. Lower 0.3-1.5 m grey-green calcareous mudstone with "claw-like" calcite veins.
Upper Permian	Changxing Formation (P_2 c)	49 m	Thick-medium bedded massive grey to dark grey to blackish limestone with thin-bedded dolomitic limestone in middle. Chert nodules exuding an asphalt odour when broken. Lower beds medium-bedded grey limestone with calcareous mudstone, asphaltene mudstone and characteristic brachiopod fossils.
	Longtan	72 m	Upper 24 m grey to dark grey mudstone,

	Formation (P_2 l)		marlstone or sandy mudstone with minor fine sandstone, siltstone and coal lines. Central 30m thick grey and dark grey sandy mudstone, mudstone, claystone, fine sandstone and coal seams with partial argillaceous limestone. Lower part approximately 18 m of grey argillaceous limestone, sandy mudstone, mudstone, siltstone and thin coal seams. The lowest zone is fireclay with pyrite. Includes 5-8 coal seams of which two are workable, M6 and M8, while M7 has been worked sporadically.
			Unconformity
Lower Permian	Maokou Formation (P_1m)	120 m	Dark grey, light grey and brown grey thick-bedded limestone. Base black compact limestone; lower central spotted dolomitic limestone; upper central black limestone with chert and multiple stylolitic structures; upper compact off-white limestone.

Figure 27: Stratigraphic column at Changhong.

The coal seams at Changhong are gas producing so the mine has been classified as having potential for gas explosions. The absolute gas emission rate is 4.72 m^3/min and the relative gas emission rate is 54.8 m^3/t. The average temperature of the mine at 800 m is a safe 22.8^{0}C. Since the mine is located in a karstic area where most of the limestones are aquifers regularly recharged by rainfall, safety precautions are required.

The two current commercial coal seams at the Changhong Coal Mine, namely M6 and M8, are part of the Upper Permian Longtan Formation dipping approximately 30°.

According to Chinese standards the M6 coal seam is high-ash, high sulphur anthracite with a medium calorific value while the M8 coal seam is medium ash, medium sulphur anthracite with high calorific value. Both coals are suitable for power generation, domestic consumption or steaming coal.

MINING AND EXPLORATION HISTORY OF THE PROJECTS

The initial regional exploration of the concessions in the early 1970s was mainly being conducted by the state owned geology brigades in China when the commercial potential of the coal resources were first identified.

Blackgold has followed up the regional exploration with underground drilling and channel sampling programs in its operating coal mines. Within the areas targeted for mining, the drill hole and sampling channel spacing was generally 500 m × 500 m and in some areas 1,000 m × 1,000 m.

Mining Method

The main factors affecting choice of mining method are the dip and thickness of the coal seams and the stability of surrounding rock. The Company's Projects at Caotang, Heiwan and Changhong have long histories of coal mining however no legal mining has occurred to date at Baolong.

Room and pillar mines are developed on a grid basis except where geological features such as faults require the regular pattern to be modified. The size of the pillars is determined by the load-bearing capacity of the material above ("hangingwall") and below ("footwall") the coal seam being mined and the load bearing capacity of the coal itself in the pillars will determine the pillar size.

To prevent pillar and back failure the mine is divided up into areas or panels. Pillars known as barrier pillars separate the panels. The barrier pillars are significantly larger than the "panel" pillars and are sized to allow them to support a significant part of the panel and prevent progressive collapse of the mine in the event of failure of the panel pillars.

Retreat mining is the final stage of room and pillar mining in the Company's mines. Once the coal between the pillars has been exhausted, the pillars that were left behind initially are removed, retreating back towards the panel's entrance. After the pillars are removed, the roof (or back) is allowed to collapse a safe distance behind the mining area into the mined out void. Pillar removal must occur in a very precise order to reduce the risks to workers, owing to the high stresses placed on the remaining pillars by the abutment stresses of the caving ground.

For the thick seams at Changhong the seams are mined using the same basic room and pillar method with up to three slices approximately 2 m high.

Since the ground stability can be considered generally good as the coal seams are situated within competent hanging and foot walls, AM&A considers the conventional retreat mining room and pillar mining method is well suited for all the Company's mines.

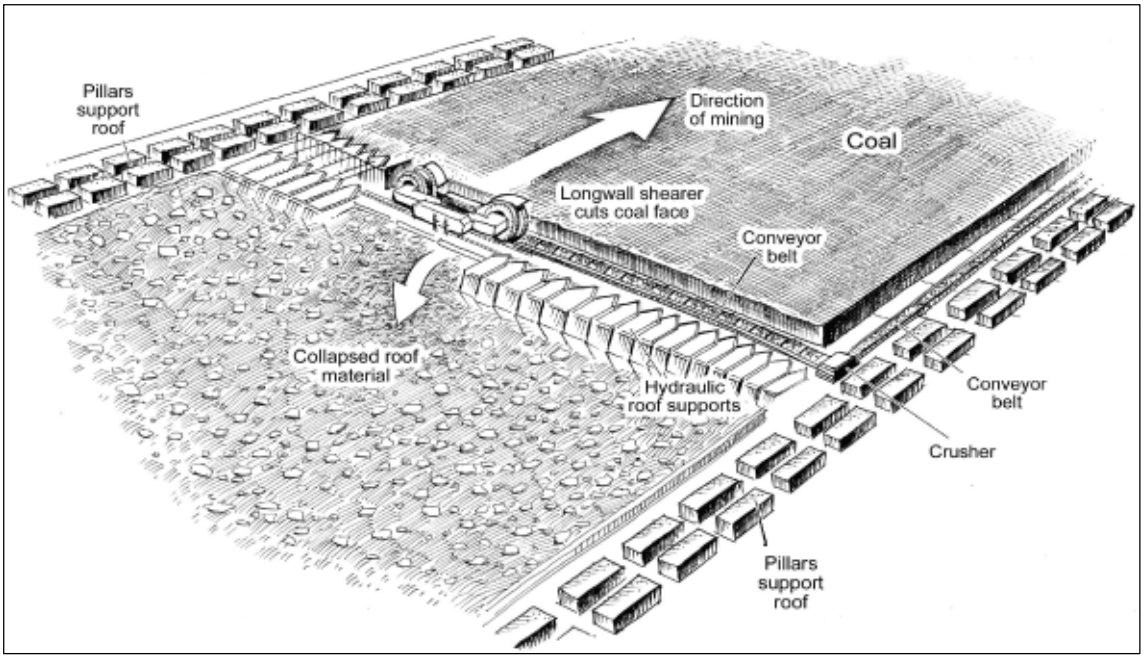


Figure 28: View of conventional retreat mining method.

Mining Factors

Normally not all of a resource is eventually mined. Some coal is lost as spillage and left behind on floors and roofs as well as coal left behind un-mined as safety pillars for various safety and economic reasons. Pillar dimensions at the projects vary according to ground condition, seam thickness and pillar purpose.

The amount of coal lost during mining as spillage and left behind on roofs and floors is usually estimated based on experience in similar seams. The percentage lost is generally greatest in narrow seams and where the country rock is soft and unstable. The amount lost in pillars depends on the configuration of the mine development, the mining method used and the stability of the country rock.

The recovery factors assumed by AM&A for converting the resources to reserves, except for the Probable Caotang, are the same as those used by Behre Dolbear (BD) in the Company's last resource/reserve update in 2015 which were in turn based on the life-of-mine designs created by China Coal International Engineering Chongqing Coalmine Design Institute.

BD opined that "*the coal mine design work was adequately organized by the Chongqing Institute and considers the reports produced by the Chongqing Institute to be at least at a pre-feasibility study level, as defined by the JORC Code Edition 2012*". AM&A considered that the recovery factor of 113% used by BD for the Caotang Probable Reserve was not consistent with the actual mining recovery for this reserve so the mining recovery factor BD used for the much larger Proved Reserve, i.e. 72%, was used instead. Since these recovery factors have reconciled well with actual production for the three producing mines (one in voluntary suspension), we have assumed they are also acceptable for the Baolong mine which has very similar coal seam characteristics as the Caotang mine.
These mining recovery rates were determined by AM&A to be reasonable and consistent with actual mine production records.

As coal is mined it is usually expected that waste rock will be mined and mixed with the coal as dilution. The amount of dilution is variable and is usually greatest where the seams are thin and the country rock is soft and unstable. This dilution effectively increases the ash content of the coal and lowers its calorific value. It is expected that much of the excessive waste rock included as dilution will be removed underground and at the surface by hand picking and by selective mining practices.

Mine	Proved Million Tonnes	Proved Recovery Factor	Probable Million Tonnes	Probable Recovery Factor	Total Reserves
Baolong	29.10	75%	26.0	76%	75%
Caotang	18.62	72%	2.0	72%	72%
Changhong	11.86	66%	6.7	87%	73%
Heiwan	3.13	52%	0.4	77%	55%
Total	**62.71**		**35.2**		

Table 26: Recovery factors for converting Resources to Reserves.

Mine Safety

Underground mining of coal is a risky occupation and over the years many miners have died throughout the world mining coal underground. All mines in China must comply with increasingly strict Chinese government laws and regulations that require high standards of mine safety are followed. These laws and regulations affect training of staff, mine design, operating practices, equipment and management. All operating mines are monitored by the government authorities and regular safety audits carried out. All the Company's mines will need to meet at least the minimum requirements of these laws and regulations or else they will be closed down and, in some cases where accidents have occurred, penalties may apply ranging from fines to imprisonment of the responsible management.

The most important safety measures that the Company are proper training of all mine staff and creating a culture that puts personal safety ahead of all else. Careful planning and mine production scheduling with strong capable management is critical if mine accidents are eliminated or kept to an absolute minimum.

During the site visits, different risk mitigation measures are observed. These include:

- Only approved materials and clothing are allowed within the mine to prevent possible explosion caused by sparks.
- Use of blast doors to control ventilation and possible explosions
- Use of water and airflow direction to control dust

- Faulted zones are cemented, preventing water ingress

In additional, AM&A notes that the mines have:
- Statutory reporting of accidents as per Chinese law
- Annual regular safety audits by the government

Ground Stability

The sediments that make up the rock formations exposed during the mining of the coal in all of the mines are considered to be moderately stable. If proper care is taken and appropriate safety measures are taken, all the mines in the Report can be mined safely. It is pointed out that with the retreat mining method used to mine the Company's coal, controlled roof collapsing in mined out areas is normal and should not be a risk to the safety of the miners.

The stability of the formations exposed by mining is well known and mining methods have evolved to compensate for any structural weaknesses at the coal mines covered in this report that are currently being mined. There are also numerous other operating coal mines in the mining districts near all the Company's mining operations that are successfully and safely mining identical seams included in this Report.

It is imperative that all active mining areas are monitored and structural features such as shears and weak wall rocks are mapped by experienced geologists and appropriate actions taken, including increased ground support measures and where necessary abandoning dangerous areas, to avoid roof collapses and side wall failures in areas where miners are at risk.

Ventilation and Gas

Typically high volume flow-through ventilation is used to maintain fresh air for the miners and to safely flush out any potentially combustible gases and dust. Fresh air enters the mine from the surface via the mine portal and is distributed through the mine via internal ventilation drives.
Air flow is controlled by regulators, dampeners and ventilation fans. Stale air is normally exhausted via large fans located on separate shafts or adits.

Coal mines generate methane and other combustible and poisonous gasses such as carbon dioxide and carbon monoxide as the coal seams are exposed during mining along with potentially explosive coal dust. If these gas and dust levels in the mine workings exceed acceptable limits fires, explosions or asphyxiation of the miners may occur. Continual monitoring of the gas concentrations in the mine workings in tandem with alarm systems are required and have been installed in all of the coal mines. The Chinese authorities are well aware of the dangers of such events and have enacted a number of laws and regulations to ensure mine workings are safe. All the Company's mines are fully compliant with the current laws and regulations.

AM&A is of the opinion that the ventilation systems and monitoring procedures currently in use or described in the feasibility study reports, if properly followed, meet current Chinese standards and should be sufficient to satisfy the requirements of the various coal mines. AM&A notes however that there have been no fatalities or serious incidents caused by gases in the active mines owned by the Company.

Drainage and Pumping

If uncontrolled large quantities of groundwater water enter operating mines the miners are at risk of drowning and the stability of the workings can be compromised.

The geology of all the mines, in particular the lack of deep shear zones and proximal rivers, and experience gained from current mining operations within the Company's licenses and in nearby mines indicate that they are not likely to experience major water ingress problems.

The geology and groundwater flows in all mine workings will need to be carefully and continually monitored and where there is any likelihood of excessive water flows appropriate action taken. There should also be sufficient pump capacity installed to cope with all the normal as well as any foreseeable excessive water flows that may occur.

All waste water generated by the mining operations must be properly managed and recycled wherever possible. Any water released into the environment must be properly cleaned to remove any sediment and any dissolved dangerous chemicals such as sulphur and arsenic must be removed or neutralized before it is released.

AM&A is of the opinion that the water management systems and monitoring procedures currently in use or described in the feasibility study reports, if properly followed, meets current Chinese standards and should be sufficient to satisfy the requirements of the various coal mines.

Dust Emissions

Dust generated by mining in coal mines especially, besides being a nuisance, can cause severe health problems to the miners and cause dust explosions. Much of the coal included in the quoted resource estimates has potential to produce problem dust. Similar measures will need to be taken as for gases including continual monitoring and installation of alarms. It is also important that dust levels are kept low by copious spraying of water in areas where dust can be generated and being careful that excessive dust is not generated by traffic or mining equipment.

Spontaneous Combustion

All coal has the potential for spontaneous combustion once coal is exposed to the air by mining; especially lower quality thermal coals with a high sulphur content as found at Changhong. If spontaneous combustion occurs in any coal mine the consequences can be disastrous leading to fatalities and mine closure.

The risk of spontaneous combustion can be minimised by keeping the period that active coal faces are exposed to the air to a minimum, properly sealing off mined out areas and keeping the time that broken coal stocks are left underground to an absolute minimum. This entails high standards of mine planning and production scheduling along with strict management.

Subsidence

Where mine workings are close to the land surface and the middlings, i.e. interstitial waste country rock between coal seams, is thin, the potential for problematic subsidence of the rocks above mined out stopes is a real possibility.

Where surface rocks collapse into a shallow mined out stope, structures and occupied land may be affected or destroyed and people and animals endangered. Collapsing stopes also could allow dangerous water in-flows into the mine below and provide air to remnant coal in mined out areas that could lead to spontaneous combustion.

As with all potentially dangerous situations, prevention is far more important than remediation so sufficiently thick crown pillars should be left un-mined above mined out areas and constant monitoring of all pillars is essential. If movement or cracks are detected the appropriate measures should be taken including abandoning dangerous areas and backfilling may be required. All cracks to the surface should be sealed if there is a risk of collapse or water in-flow.

Where seams are to be mined in areas with thin middlings, proper production scheduling of stopes is required so the mining on the different levels advance systematically in a proper sequence to eliminate the risk of pillar collapse between stopes while mining is in progress.

Mine Closure

The Chinese mining regulations require that all mines, upon closure, are left in a safe condition and all superfluous infrastructure removed and the mine site returned to a condition as close as possible to the state it was prior to the commencement of mining. All rubbish must be removed and mining waste left so it is safe and has minimal impact on the environment. The risk of collapse and dangerous chemicals leaching from waste dumps and abandoned mine workings into the environment has to be eliminated.

Approved mine closure plans are in place for all the active mines as required by the government authorities.

Caotang Mine

The Caotang Mine commenced producing coal in 1982. The property was purchased by the Guoping Group in 2003 and subsequently transferred to BGG in March 2010. Raw coal produced from the mine is transported by trucks approximately 25 km to the Company's Yangtze River port loading facility for shipping to customers.

The Caotang Mine produced 1.55 Mt of raw coal from combined K1 and K2 coal seams from 30 April 2015, the date of the last resource update, to 31 July 2016.

Heiwan Mine

Coal production at the Heiwan Mine commenced in 1996. The property was purchased by Guoping Group in 2001 and then transferred to Blackgold in March 2010. The Heiwan Mine is currently BGG's second largest producing mine. Raw coal produced from the mine is transported by trucks a distance of 35 km to the Fengjie Jinpen coal dock along a tributary of Yantze River.

The Heiwan Mine produced 0.26 Mt of raw coal from coal seam K3 between 30 April 2015, the date of the last resource update, to 31 July 2016.

Changhong Mine

Coal mining commenced at Changhong in the early 1990s and the property was purchased by BGG in August, 2011. Most of the coal produced is transported 18 km by truck to the nearby rail station for sale. The remainder is transported approximately 20 km to the river port loading facility on a tributary of the Yangtze River.

No coal has been produced from the Changhong Mine since the last resource/reserve update during refurbishment and expansion work on the mine infrastructure.

Baolong Mine

The Baolong Mine is a developing underground mine that was purchased by BGG in April 2011. The planned raw coal production capacity for the current mining permit is 60,000 tonnes per annum (tpa), which will be expanded to 1.5 Mt after the Company completes current development works. The trucking distance from the Maojiawan No. 1 adit to the local Baolong dock site on the Yangtze River at Putaoba Town is 25 km. No coal has been produced from the Baolong Mine since the last resource/reserve update as expansion work had been suspended due to weak coal prices.

Production Statistics

The Company's financial year is from 1 November to 31 October. The Company's records show that from 1 May 2015, the date of the last resource/reserve update, to 31 July 2016 a total of 1.78 Mt of coal was produced from the two operating coal mines.

Mine	Seam	Reserves 2015 Report			Reserves 2016 Report			Mined	Difference
		Proved (Mt)	Probable (Mt)	Total (Mt)	Proved (Mt)	Probable (Mt)	Total (Mt)	(Mt)	(Mt)
Caotang	K1 & K2	18.8	3.4	22.2	18.6	3.1	21.7	1.6	-0.5
Heiwan	K3	3.2	0.5	3.6	3.1	0.4	3.6	0.2	0.0
Totals		22.0	3.8	25.8	21.8	3.5	25.3	1.8	-0.5

Table 27: Mine production 1 May 2015 to 31 July 2016.

(Notes: Production statistics supplied by the Company. This AM&A report for the Scheme has the figure of 2.0 tonnes for Caotang Probable Reserves and this figure of 2.0 tonnes replaces the previous figure of 3.1 tonnes in the 2016 R&R Update Report (the "Reserves 2016 Report").)

Although 1.55 Mt of coal was mined at Caotang over the reporting period, the difference between the 2015 and 2016 resource estimates is only 0.5 Mt. This smaller difference is because coal seam thickness measurements in areas newly exposed by mining indicated that the coal seam in these areas were slightly thicker than previously modelled, and once the resources were remodelled using the new data and the modified mining recovery factor for the Caotang Probable Reserve, slightly more than 1 Mt tonnes of additional coal resources and reserves were modelled. The estimated coal resources at Heiwan were not reduced as much as the tonnes mined for the same reasons.

DRILLING AND UNDERGROUND SAMPLING

The sampling data used for the resource modelling is summarised in Table 28.

Mine	Seam	Drill Holes	UG Samples	Total Samples	Ave Seam Thickness (m)	Min Seam Thickness (m)	Max Seam Thickness (m)
Changhong	M5	2	0	2	3.8	3.1	4.5
Changhong	M6	2	59	61	12.9	9.1	15.7
Changhong	M7	2	2	4	6.6	5.7	7.3
Changhong	M8	2	13	15	9.2	8.7	12.1
Changhong	M10	1	0	1	4.0		
Changhong	M12	2	0	2	5.4	3.0	7.9
Caotang	K1	0	417	417	2.04	1.35	2.53
Caotang	K2	0	223	223	1.08	0.35	1.2
Caotang	K3	0	0	0	0.9*		
Heiwan	K1	12	0	12	0.8	0.7	0.9
Heiwan	K2	12	0	12	0.5	0.4	0.7
Heiwan	K3	0	213	213	0.48	0.40	0.63
Heiwan	K4	0	0	0	0.3*		
Heiwan	K5	0	0	0	0.3*		
Baolong	K1	12	0	12	1.8	0.9	3.2

Baolong	K2	21	0	21	1.5	0.5	2.5
Totals		68	927	995			

Table 28: Summary of sampling used in resource modelling.
**Based on surface mapping*

The drilling and underground sampling was carried out following prescribed Chinese standards for diamond drilling and underground sampling of coal seams. A copy of the Chinese Standards for Sampling Coal Seams, GB/T 482-2008, is attached as Appendix 1. These standards, if followed correctly, meet the requirements of the JORC Code (2012) for sampling coal seams.

The drilling was carried out using conventional NQ wire-line diamond drilling equipment and logged by qualified geologists with the lithologies and core recoveries recorded. All core within the coal seams is recorded as exceeding 95% recovery. The whole core within the coal seam was collected for analysis, after logging by the supervising geologist, and stored in sealed plastic bags labelled with unique codes before being transported to the laboratory. The drill collars are accurately surveyed by qualified surveyors. All the drill holes are vertical and, where the seams are dipping, the true seam thickness is calculated by correcting for the dip of the seam.

The coal seams are mapped, measured and sampled at approximately 50 m intervals along the underground development drives as they progress in the coal seams under the supervision of qualified geologists. All sample locations are surveyed by the mine surveyor. All the samples and seam measurements are taken perpendicular to the seam boundaries as true widths.

All the samples are transported to the laboratory in sealed bags that are themselves stored in strong, sealed polyweave bags

AM&A believes that the drilling and underground sampling and measurement methods and quality control protocols used by the Company are of a high standard that meets the requirements of the JORC Code (2012) for resource modelling.

SAMPLE PREPARATION, ANALYSES AND SECURITY

All the coal samples are analysed at independent certified laboratories (Intertek Testing Services Co., Ltd. Shanghai) following sample preparation and analytical methods and protocols described in Chinese Standard for Proximate Analysis of Coal GB/T 212-2008. An English translation of this standard is included at the end of this report as Appendix 2.

All the samples are analysed as follows:

- Total moisture content (Mt) is the amount of moisture in the sample as it is collected prior to being air dried. (Can only be done with drill core samples)
- Moisture Content air dried (Mad) is the amount of moisture in the sample after the sample has been fully dried by being left open to the air at room temperature.
- Ash content air dried (Ad) is a measure of ash left after combustion.
- Volatile content air dried (Vd) is a measure of the volatile gases liberated after air drying at a standard temperature.
- Sulphur content air dried (Std) is a measure of the sulphur content after air drying.
- Fixed Carbon content air dried (Fcd) is the carbon content of the sample after air drying.
- Calorific value (CV) is the amount of heat energy generated by combusting the coal, expressed as kcal/kg.

AM&A believes that the sample preparation and analytical methods and quality control protocols used by the laboratories are of a high standard that meets the requirements of the JORC Code (2012) for resource modelling and estimation.

DATA VERIFICATION

AM&A has visited all the Company's mines annually since 2011-2014 and again in 2016 to monitor the progress of the mines, discuss the mining and sampling procedures and verify the coal quality and seam thicknesses in the operating stopes.

A suite of channel and production dump samples were collected by AM&A in 2011 from the Caotang, Table 29, and Heiwan, Table 30, mines to compare assays between the local laboratory at Fengjie, where the exploration and mine samples were analysed, and SGS, an ISO accredited laboratory in Tianjin. Four channel samples were collected from K1 and one from K2 along with five "product" samples from stockpiles using a spear sampler at both mines.

	H_2O % ar	H_2O % ad	CV kcal/kg ar	CV kcal/kg ad	Ash % ad	Vol % ad	FC % ad	S % ad	P % ad
Fengjie K1	3.02	0.84	5,335	5,467	28.93	8.28	61.95	1.58	---
SGS K1	2.25	1.11	5,641	5,821	27.80	8.18	62.93	1.88	0.05
Difference	-0.77	0.27	306	354	-1.13	-0.10	0.98	0.30	---
Fengjie K2	2.54	0.62	5,714	5,838	25.74	10.0	63.61	2.03	---
SGS K2	2.11	1.10	6,111	6,293	22.64	8.04	68.22	1.39	0.15
Difference	-0.43	0.48	397	455	-3.10	-1.99	4.61	-0.64	---
Fengjie Product	3.37	0.69	5,410	5,577	28.24	9.40	61.67	1.78	---
SGS Product	2.32	1.00	5,648	5,835	27.20	8.83	62.95	2.10	0.06
Difference	-1.05	0.31	238	258	-1.04	-0.57	1.28	0.32	---

Table 29: Caotang Mine Inter Laboratory Assay Comparison.

	H_2O % ar	H_2O % ad	CV kcal/kg ar	CV kcal/kg ad	Ash % ad	Vol % ad	FC % ad	S % ad	P % ad
Fengjie K1	3.11	0.63	5,626	5,785	25.62	6.40	67.35	0.35	---
SGS K1	2.18	1.30	6,165	6,334	23.60	5.80	69.35	0.47	0.01
Difference	-0.93	0.67	539	549	-2.02	-0.60	2.00	0.12	---
Fengjie K2	2.54	0.49	5,780	5,914	24.42	8.22	66.87	1.65	---
SGS K2	1.90	0.73	6,073	6,262	22.50	9.07	67.70	1.35	0.14
Difference	-0.64	0.24	293	348	-1.92	0.85	0.83	-0.30	---
Fengjie Product	3.04	0.75	5,506	5,651	26.57	6.69	65.99	0.77	---
SGS Product	2.44	1.10	5,977	6,155	24.80	6.98	67.13	0.87	0.02
Difference	-0.60	0.35	471	504	-1.77	0.29	1.14	0.10	---

Table 30: Heiwan Mine Inter Laboratory Assay Comparison.

3.4.4 JORC Code Compliant Ore Reserves, Mineral Resources and Target Mineralisation

A statistical analysis of all the assay results from both mines, Table 31, indicates that generally the ISO accredited lab results produced better qualities than the Fengjie laboratory, i.e. lower Ash and higher calorific values. This could be due to slightly different operating standards and temperatures being used at the Fengjie lab than those used by the ISO accredited lab. These results therefore indicate an element of conservatism to the Fengjie assay results.

	H_2O % ar	H_2O % ad	CV kcal/kg ar	CV kcal/kg ad	Ash % ad	Vol % ad	FC % ad	S % ad	P % ad
Fengjie	3.08	0.71	5,496	5,645	27.12	7.87	64.30	1.21	---
SGS	2.20	1.11	5,877	6,056	25.52	7.61	65.77	1.35	0.05
Difference	-0.88	0.40	381	411	-1.60	-0.26	1.47	0.14	---

Table 31: Inter Laboratory All Assay Comparison for Caotang and Heiwan Mines.

It is AM&A's opinion that the quality and reliability of the coal quality and seam thickness data meets the standards expected for resource modelling and estimation to be reported in accordance with the JORC Code (2012), although with the potential of being slightly conservative.

MINERAL PROCESSING AND METALLURGICAL TESTING

To date all the coal has been sold unprocessed to customers as thermal coal for power generation and furnaces. When the coal does not meet customer specifications, e.g. the sulphur content of the Changhong coal or the ash content of the Baolong coal is too high, cleaner coal from other mines has been bought by the Company and this cleaner coal blended with the Company's coal to produce a product within the customer's specifications.

The Company's coal from all the mines has the potential for significant upgrading by washing to produce a significantly higher value product with a larger customer base.

Coal washing

Coal washing is a process where crushed coal is separated from waste material and possibly other contaminants such as sulphide minerals, usually by using a liquid (heavy media) with a density between the specific gravity of the waste and the coal. Finely ground minerals such as magnetite are used to form a slurry for the heavy media. If the washing is successful, the ash content and sulphur content of the coals can be significantly reduced and the calorific value increased.

The finely ground magnetite (media) and coal to be washed is pumped as a slurry(pulp) tangentially into a cyclone where the separation takes place. The higher specific gravity fractions, the magnetic media and contaminants, being subject to greater centrifugal forces pull away from the central core and descend downwards towards the apex along the wall of cyclone body and pass out as rejects/middlings. The lighter coal particles are caught in an upward stream and pass out as clean coal through the cyclone overflow outlet via the vortex finder.

The Heavy Media Cyclone may be lined with very high quality ceramic tiles or manufactured from Ni-hard (a very hard alloy of cast iron containing nickel) with a specially designed helical profile to reduce corrosion and wear. The pressure at the inlet of the cyclone is a very important factor as the pressure at which the pulp (mixture of coal and magnetite) is introduced in the cyclone is the principal means of controlling the forces within the cyclone. A decrease in the pressure will mean that more coal will report to the discard/middlings, thus impairing the efficiency of separation. This process may be repeated to produce a progressively cleaner product.

The Company has recently initiated washing tests but no meaningful results are available for this report.

MARKET STUDIES AND CONTRACTS

All the coal mined at the Company's mines is sold on the spot market as thermal coal to local electric power generating companies. Where the Company's coal does not meet minimum specifications for these customers, higher quality coal is bought from other mines and this better coal blended with the Company's coal to produce a marketable product just meeting the customer's requirements. All the coal produced in the high sulphur seams has to be blended with low sulphur coal to meet government air pollution regulations for thermal coal.

COAL RESOURCE ESTIMATES

JORC Code (2012) Definitions

A 'Measured Coal Resource' represents the part of a coal resource for which tonnage, densities, shape, physical characteristics, quality 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 quality continuity.

An 'Indicated Coal Resource' represents the part of the coal resource for which tonnage, densities, shape, physical characteristics, quality and mineral content can be estimated with a reasonable level or 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.

An 'Inferred Coal Resource' is that part of a Coal Resource for which quantity and quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and quality continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

An Inferred Coal Resource has a lower level of confidence than that applying to an Indicated Coal Resource and must not be converted to a Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Coal Resources with continued exploration.

Data Used

The diamond drill hole and underground sampling data used for these resource estimates were received as several Excel spreadsheets while the maps were received as dxf format files and/or scanned pdf files. The main data used in this resource estimate are summarised below in Table 32: Data used in estimating the Black Gold coal resources.

Data	Description
Hole/sample coordinates	Excel spreadsheets received from client.
Sample qualities	Excel spreadsheets received from client.
Bulk Density	1.5 used for calculations based on information received from client.
Tenement boundaries	Digitised from maps received from client.
Coal limits	Outcrops digitised from maps received from client.
Mined out limits	Digitised from maps received from client.

Table 32: Data used in estimating the Black Gold coal resources.

Samples

The number of drill hole and underground samples used for each seam estimate are summarised in Table 33: Summary of sampling used in these resource estimates.. The drill holes at Heiwan were drilled down from underground development on the K3 level while the remaining drill holes were drilled from the surface.

Mine	Seam	Drill Holes	UG Samples	Total Samples	Ave Seam Thickness	Min Seam Thickness	Max Seam Thickness
Changhong	M5	2	0	2	3.8	3.1	4.5
Changhong	M6	2	59	61	12.9	9.1	15.7
Changhong	M7	2	2	4	6.6	5.7	7.3
Changhong	M8	2	13	15	9.2	8.7	12.1
Changhong	M10	1	0	1	4.0		
Changhong	M12	2	0	2	5.4	3.0	7.9

Caotang	K1	0	417	417	2.04	1.35	2.53
Caotang	K2	0	223	223	1.08	0.35	1.2
Caotang	K3	0	0	0	0.9*		
Heiwan	K1	12	0	12	0.8	0.7	0.9
Heiwan	K2	12	0	12	0.5	0.4	0.7
Heiwan	K3	0	213	213	0.48	0.40	0.63
Heiwan	K4	0	0	0	0.3*		
Heiwan	K5	0	0	0	0.3*		
Baolong	K1	12	0	12	1.8	0.9	3.2
Baolong	K2	21	0	21	1.5	0.5	2.5
Totals		68	927	995			

Table 33: Summary of sampling used in these resource estimates.

These resource estimates used the assays from both the diamond drill holes and the underground channel samples.

Bulk Density

Bulk densities between 1.5 and 1.45 were used in all calculations to convert volumes of coal to tonnes. These values are based on measurements on 20 samples analysed by Chongqing Wanzhou Measure and Quality Inspection Centre. These values are typical for the coal qualities mined at these mines.

Mining Lease, Coal Limits and Mined Out Areas

The mining lease boundaries, coal limits and mined out areas were digitised from maps supplied by the Company.

Estimation Method

The coal volumes were estimated by gridding the coal limits, i.e. within the tenement boundary and the mapped outcrop, using 20 m x 20 m cells in MineMap© software. The coal qualities and thickness were interpolated into the cells using an inverse distance squared (ID^2) algorithm. Two interpolation passes were done, the first with a 4,000 m search radius then the second with a 1,000 m search radius. The first pass allowed all the model cells to be filled (for Target Mineralisation) while the second pass was used for resource estimation.

The coal seams that have been sampled or drilled with at least six points and within 500 m of a sample point were considered to be Measured, between 500 m and 1,000 m Indicated, between 1,000 m and 2,000 m Inferred and beyond 2,000 m Exploration Target. If the seam was sampled at two to six points, the coal within 500 m of a sample point was considered as Indicated and 500 m to 1,000 m as Inferred and beyond 1,000 m Exploration Target.

AM&A believes that the number and distance between samples method used to classify the coal resources described in the previous paragraph, when considered with reconciliations with past coal production where available, provides sufficient confidence in the resource classifications as required by clause 22 of the JORC Code (2012). This is a common method of classifying coal resources and considers the quantity, quality, densities, shape and physical characteristics of the coal seams with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable sampling and testing gathered through appropriate techniques from locations in underground workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.

The volume was calculated by multiplying the area of the coal modelled by the average modelled coal seam thickness. This volume was then multiplied by the bulk density to calculate the tonnes.

One parameter in the model was reserved for marking if the cell was within the mined out area as digitised from the maps supplied.

Maps showing the resource models and sample points for the seams mined during 2016, Figure 29 to Figure 32: Heiwan K3.

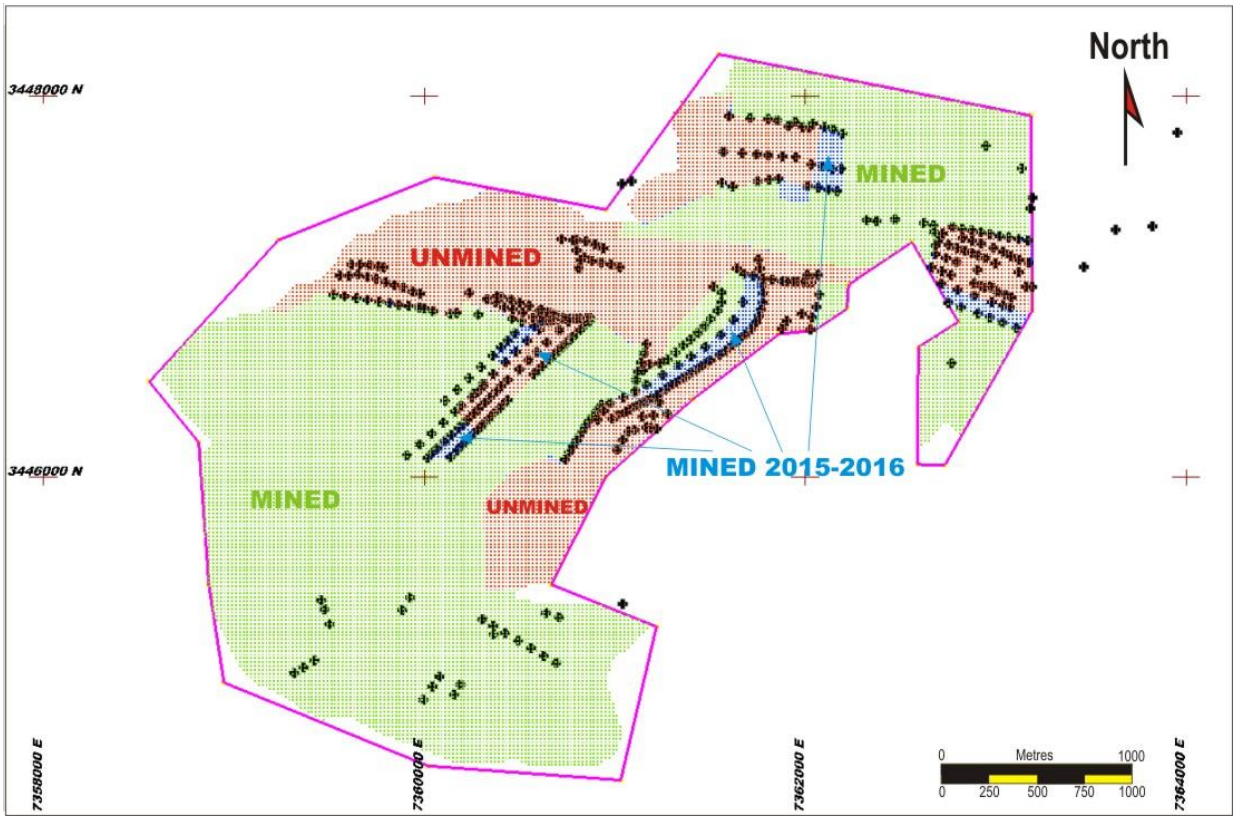


Figure 29: Caotang K1.

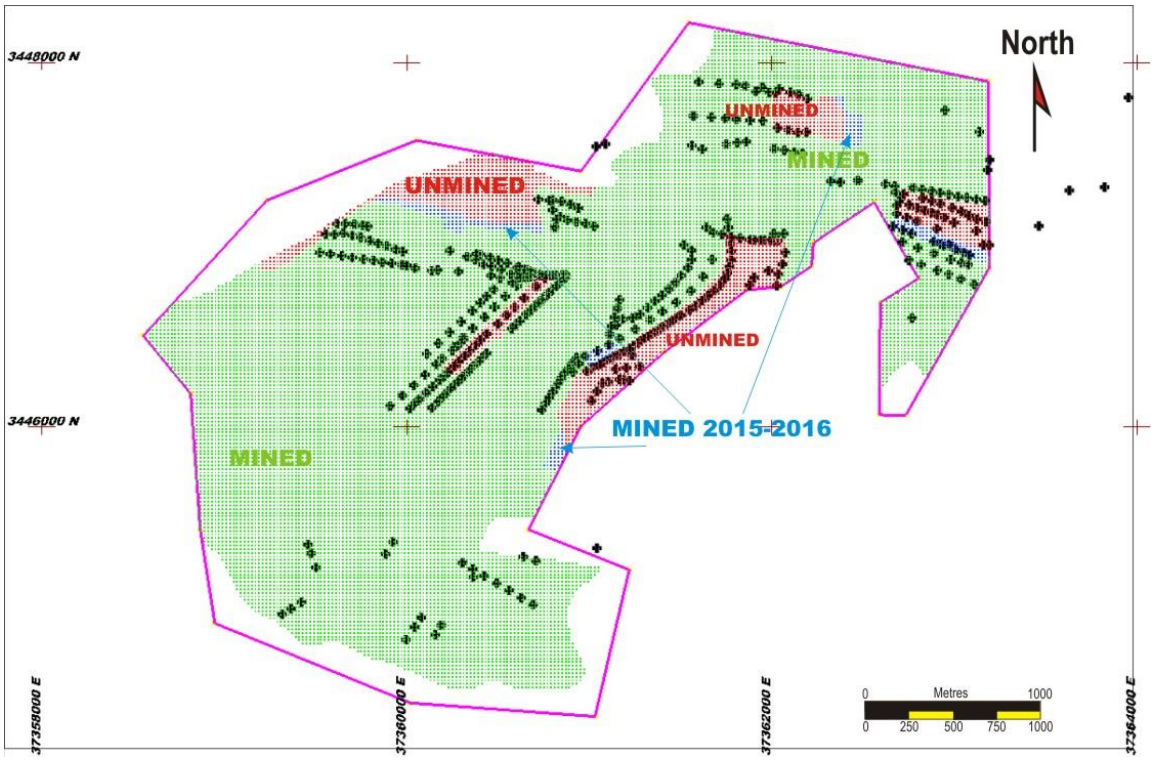


Figure 30: Caotang K2.

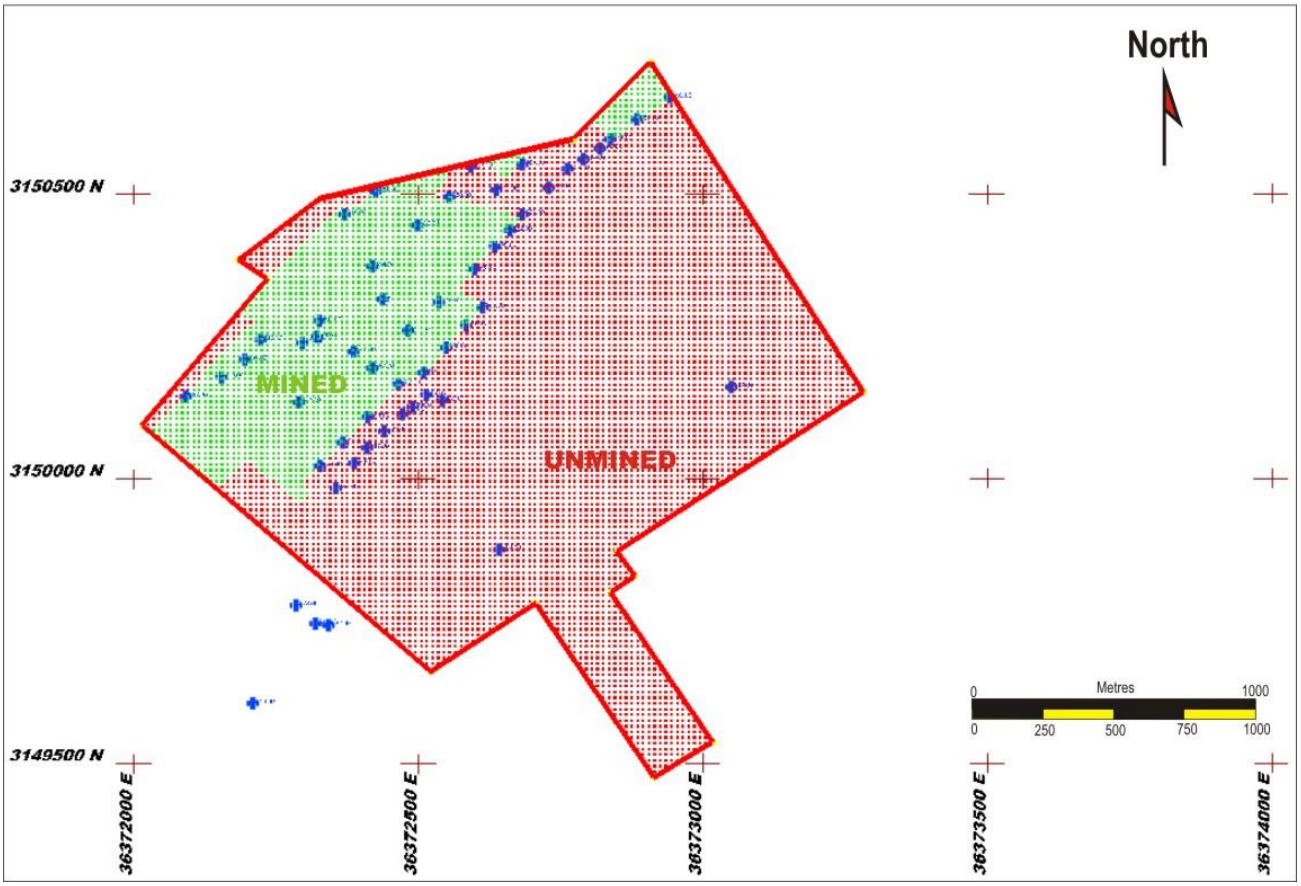


Figure 31: Changhong K6.

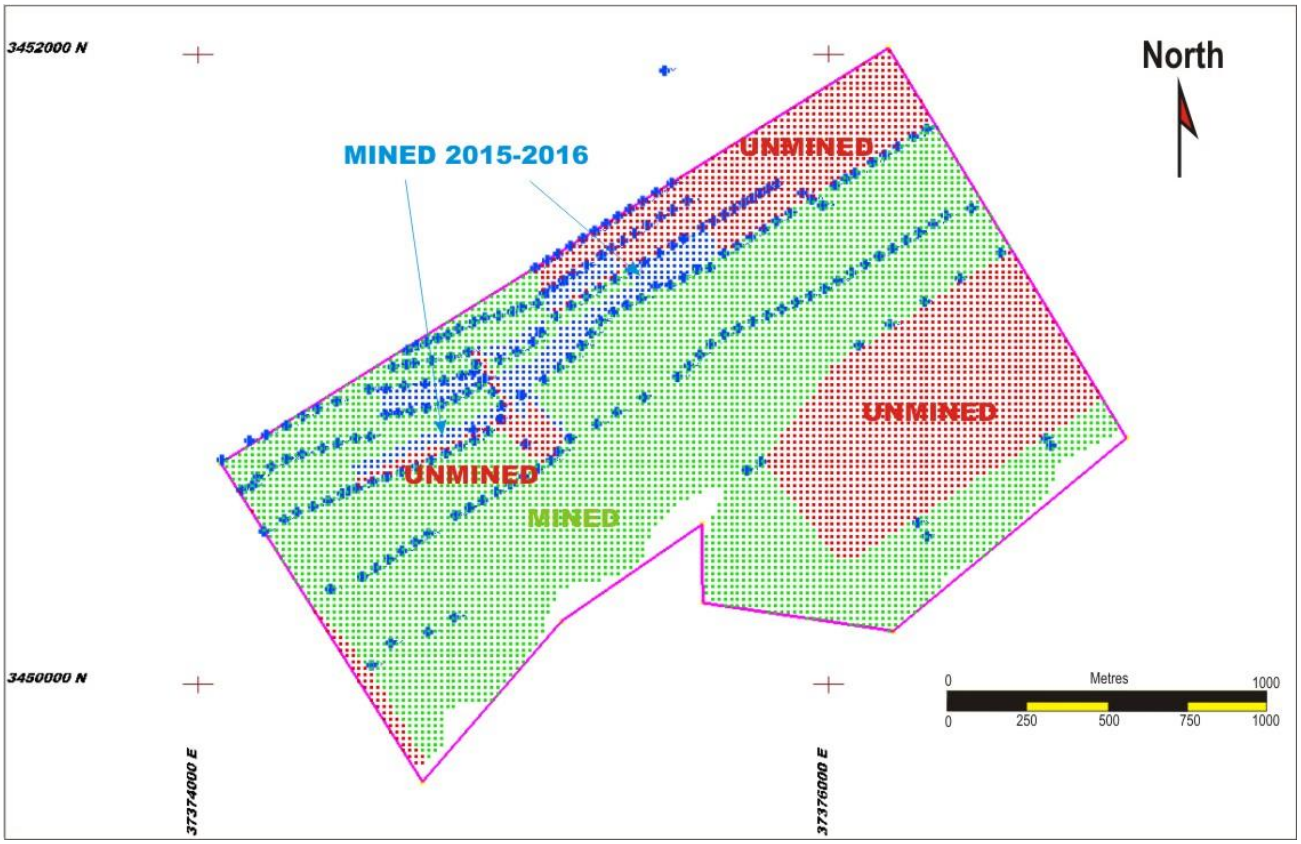


Figure 32: Heiwan K3.

2016 Production Reconciliation

Between 1 May 2015, the date of the last resource/reserve update, and 31 July 2016, the Company has reported that a total of 1.78 million tonnes was mined and sold from the Company's two operating mines, Table 34. AM&A advise that the 2016 R&R Update Report prepared by AM&A and dated 18 January 2017 and released by Blackgold to the ASX on 20 January 2017 (the "Reserves 2016 Report") had the figure of 3.1 million tonnes for the Caotang Probable Reserve which has subsequently been amended to 2.0 million tonnes using a revised recovery factor. See the Coal Reserve section of this report for details.

Mine	Seam	Reserves 2015 Report			Reserves 2016 Report			Mined	Difference
		Proved (Mt)	Probable (Mt)	Total (Mt)	Proved (Mt)	Probable (Mt)	Total (Mt)	(Mt)	(Mt)
Caotang	K1 & K2	18.8	3.4	22.2	18.6	3.1	21.7	1.6	-0.5
Heiwan	K3	3.2	0.5	3.6	3.1	0.4	3.6	0.2	0.0
Totals		22.0	3.8	25.8	21.8	3.5	25.3	1.8	-0.5

Table 34: Summary of BGG's mine production for Financial Year 2016.

(Notes: Production statistics supplied by the Company. This AM&A report for the Scheme has the figure of 2.0 tonnes for Caotang Probable Reserves and this figure of 2.0 tonnes replaces the previous figure of 3.1 tonnes in the 2016 R&R Update Report (the "Reserves 2016 Report").)

** Difference =2016 Total – 2015 Total + Mined*

Resource Estimates

The Coal Resource and Exploration Target estimates are summarised below in Table **35**.

Caotang

Seam	Resources Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total Moisture (%)	Ash Content (%)	Volatiles (%)	Fixed Carbon (%)	Sulphur (%)	Calorific Value	Thickness (m)	Exploration Target* (Mt) to	(Mt)
K1	15.8	2.1	0.0	0.7	36.5	7.2	55.7	0.8	4,696	2.0	0.0	0.0
K2	9.9	0.6	0.0	0.8	32.0	7.1	60.9	0.7	5,278	1.0	0.0	0.0
K3											6.6	5.3
Total	25.7	2.7	0.0	0.7	34.8	7.2	57.6	0.8	4,911	1.6	6.6	5.3

Changhong

Seam	Resources Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total Moisture (%)	Ash Content (%)	Volatiles (%)	Fixed Carbon (%)	Sulphur (%)	Calorific Value	Thickness (m)	Exploration Target* (Mt) to	(Mt)
M5	0.0	0.0	3.6	0.5	19.4	9.2	70.8	2.5	7,101	3.8	1.4	1.1
M6	11.4	0.1	0.0	0.5	18.5	8.7	72.3	2.7	6,535	13.0	4.7	3.7
M7	0.0	7.6	0.1	0.5	17.9	9.0	56.0	2.5	6,945	6.6	0.0	0.0
M8	6.7	0.1	0.0	0.5	17.8	9.2	72.6	2.6	6,935	10.4	0.0	0.0
M10	0.0	0.0	0.0								0.0	0.0
M12	0.0	0.0	6.0	0.6	20.0	9.3	70.5	2.6	7,098	6.3	0.8	0.6
Total	18.1	7.8	9.7	0.5	18.6	9.0	68.4	2.6	6,852	9.1	6.8	5.5

Heiwan

Seam	Resources Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total Moisture (%)	Ash Content (%)	Volatiles (%)	Fixed Carbon (%)	Sulphur (%)	Calorific Value	Thickness (m)	Exploration Target* (Mt) to	(Mt)
K1	3.4	0.4	0.0	0.7	25.5	6.7	66.6	1.0	5,702	0.9	0.0	0.0
K2	2.1	0.2	0.0	0.9	26.2	7.2	65.7	0.4	5,726	0.5	0.0	0.0
K3	0.6	0.0	0.0	0.7	31.0	7.0	61.4	0.6	5,210	0.5	0.0	0.0
K4	0.0	0.0	0.0	0.0							0.9	0.8
K5	0.0	0.0	0.0	0.0							0.8	0.6
Total	6.1	0.6	0.0	0.8	26.2	6.9	65.8	0.8	5,667	0.7	1.7	1.4

Baolong

Seam	Resources Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total Moisture (%)	Ash Content (%)	Volatiles (%)	Fixed Carbon (%)	Sulphur (%)	Calorific Value	Thickness (m)	Exploration Target* (Mt) to	(Mt)
K1	19.5	22.4	19.2	0.5	28.1	6.8	62.7	0.7	5,527	1.9	6.2	4.9
K2	19.4	12.1	10.1	0.5	28.5	6.9	64.0	0.5	5,496	1.6	2.4	1.9
Total	38.9	34.5	29.3	0.5	28.3	6.8	63.3	0.6	5,515	1.8	8.6	6.9

Total	88.7	45.6	39.0	0.6	27.2	7.3	63.6	1.1	5,704	3.2	23.7	19.0

Table 35: Summary of Coal Resources and Exploration Target estimates as at October 31, 2016.

Note that an Exploration Target is NOT a Resource and is only conceptual in nature and may not necessarily be converted to a resource after further exploration.

JORC Compliance

All the samples were collected, from drill core and underground channels, following procedures that ensured accurate unbiased samples were collected. The coal qualities of the samples were measured at a Chinese government accredited laboratory. AM&A therefore believes that the resource and reserve estimates quoted in this report satisfy the requirements for reporting coal resources according to the JORC Code (2012) and that the reliability of the estimates is properly implied by the resource classifications used for the estimates.

Coal Reserve Estimates

To convert Coal Resources to Coal Reserves 'Modifying Factors' are considered and used to produce Mining Recovery Factors. These Modifying Factors include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

Since none of the coal produced at the mines is further processed or metallurgically beneficiated and the mines are adequately serviced by infrastructure these modifying factors do not significantly affect the mining of the Coal Resources. In relation to economic factors and marketing factors, the operating mines have been operating profitably with established markets for a number of years. There are no known legal, environmental, social or governmental factors that could affect the future mining of the quoted Coal Resources.

Normally, not all of a resource is eventually mined. Mining coal underground will result in coal losses such as pillars, particularly supporting access and conveyor drives, left for underground support; areas left unmined where faulting or other geo-structural features make the ground unstable and unsafe to mine; pillars left to support infrastructure, buildings and rivers at the surface; and coal left on the backs and floors of stopes to prevent mining dilution with waste. Pillar dimensions at the three projects vary according to ground condition, seam thickness and pillar purpose.

The amount of coal lost during mining as spillage and left behind on roofs and floors is usually estimated based on experience in similar seams. The percentage lost is generally greatest in narrow seams and where the country rock is soft and unstable. The amount lost in pillars depends on the configuration of the mine development, the mining method used and the stability of the country rock.

The recovery factors assumed by AM&A for converting the resources to reserves, except for the Probable Caotang, are the same as those used by Behre Dolbear (BD) in the Company's last resource/reserve update in 2015 which were in turn based on the life-of-mine designs created by China Coal International Engineering Chongqing Coalmine Design Institute. BD opined that "*the coal mine design work was adequately organized by the Chongqing Institute and considers the reports produced by the Chongqing Institute to be at least at a pre-feasibility study level, as defined by the JORC Code Edition 2012*". AM&A considered that the recovery factor of 113% used by BD for the Caotang Probable Reserve was not consistent with the actual mining recovery for this reserve so the mining recovery factor BD used for the much larger Proved Reserve, i.e. 72%, was used instead. Since these recovery factors developed by the Chongqing Institute have considered all the Modifying Factors and reconciled well with actual production for the three producing mines (one in voluntary suspension), we have assumed they are also acceptable for the Baolong mine which has very similar coal seam characteristics as the Caotang mine. The Recovery percentages for converting Resources to Reserves are presented in Table 36 below. These mining recovery rates were determined by AM&A to be reasonable and consistent with actual mine production records.

Mine	Proved Million Tonnes	Proved Recovery Factor	Probable Million Tonnes	Probable Recovery Factor	Total Reserves
Baolong	29.10	75%	26.0	76%	75%
Caotang	18.62	72%	2.0	72%	72%
Changhong	11.86	66%	6.7	87%	73%
Heiwan	3.13	52%	0.4	77%	55%
Total	**62.71**		**35.2**		

Table 36: Recovery Factors for converting Resources to Reserves.

As coal is mined it is usually expected that waste rock will be mined and mixed with the coal as dilution. The amount of dilution is variable and is usually greatest where the seams are thin and the country rock is soft and unstable. This dilution effectively increases the ash content of the coal and lowers its calorific value. It is expected that much of the excessive waste rock included as dilution will be removed underground and at the surface by hand picking and by selective mining practices.

Taking these factors into consideration, the Measured and Indicated resources were converted to Proved and Probable reserves by multiplying the resource tonnes by recovery factors.

The estimated Reserves and Resources for the Company's deposits are summarised in the Table 37 below.

Caotang

Seam	Reserves Proved (Mt)	Reserves Probable (Mt)	Resources Inferred (Mt)	Total Moisture (%)	Ash Content (%)	Volatiles (%)	Fixed Carbon (%)	Sulphur (%)	Calorific Value	Thickness (m)	Target (Mt)	to (Mt)
K1	11.5	1.5	0.0	0.7	36.5	7.2	55.7	0.8	4,696	2.0	0.0	0.0
K2	7.2	0.4	0.0	0.8	32.0	7.1	60.9	0.7	5,278	1.0	0.0	0.0
K3											6.6	5.3
Total	18.6	2.0	0.0	0.7	34.8	7.2	57.6	0.8	4,911	1.6	6.6	5.3

Changhong

Seam	Reserves Proved (Mt)	Reserves Probable (Mt)	Resources Inferred (Mt)	Total Moisture (%)	Ash Content (%)	Volatiles (%)	Fixed Carbon (%)	Sulphur (%)	Calorific Value	Thickness (m)	Target (Mt)	to (Mt)
M5	0.0	0.0	3.6	0.5	19.4	9.2	70.8	2.5	7,101	3.8	1.4	1.1
M6	7.5	0.1	0.0	0.5	18.5	8.7	72.3	2.7	6,535	13.0	4.7	3.7
M7	0.0	6.6	0.1	0.5	17.9	9.0	56.0	2.5	6,945	6.6	0.0	0.0
M8	4.4	0.1	0.0	0.5	17.8	9.2	72.6	2.6	6,935	10.4	0.0	0.0
M10	0.0	0.0	0.0								0.0	0.0
M12	0.0	0.0	6.0	0.6	20.0	9.3	70.5	2.6	7,098	6.3	0.8	0.6
Total	11.9	6.7	9.7	0.5	18.7	9.0	67.9	2.6	6,886	8.5	6.8	5.5

Heiwan

Seam	Reserves Proved (Mt)	Reserves Probable (Mt)	Resources Inferred (Mt)	Total Moisture (%)	Ash Content (%)	Volatiles (%)	Fixed Carbon (%)	Sulphur (%)	Calorific Value	Thickness (m)	Target (Mt)	to (Mt)
K1	1.8	0.3	0.0	0.7	25.5	6.7	66.6	1.0	5,702	0.9	0.0	0.0
K2	1.1	0.2	0.0	0.9	26.2	7.2	65.7	0.4	5,726	0.5	0.0	0.0
K3	0.3	0.0	0.0	0.7	31.0	7.0	61.4	0.6	5,210	0.5	0.0	0.0
K4	0.0	0.0	0.0								0.9	0.8
K5	0.0	0.0	0.0								0.8	0.6
Total	3.1	0.4	0.0	0.8	26.2	6.9	65.9	0.8	5,669	0.7	1.7	1.4

Baolong

Seam	Reserves		Resources	Total Moisture (%)	Ash Content (%)	Volatiles (%)	Fixed Carbon (%)	Sulphur (%)	Calorific Value	Thickness (m)	Target	
	Proved (Mt)	Probable (Mt)	Inferred (Mt)								(Mt) to	(Mt)
K1	14.6	16.9	19.2	0.5	28.1	6.8	62.8	0.7	5,528	1.9	6.2	4.9
K2	14.5	9.1	10.1	0.5	28.5	6.9	64.0	0.5	5,495	1.6	2.4	1.9
Total	29.1	26.0	29.3	0.5	28.3	6.8	63.3	0.6	5,515	1.8	8.6	6.9

Total	62.7	35.2	39.0	0.6	27.2	7.3	63.5	1.0	5,712	3.1	23.7	19.0

Table 37: Reserve and Resource estimates for BGG's deposits as at 31 July, 2016.

ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

At the date of the Report, the mining operations at two mines were ongoing. Points under continual review include:

- Rock Collapses:

After freshly mined rock is exposed to the air, oxidation of some of the rock minerals may produce unstable rock conditions. All previously mined areas that are need to be accessed to gain entry to new mining areas are carefully checked and any unstable areas remedied before mining continues.

- Contamination of groundwater:

Since coal seams at the Projects are quite shallow, cracks and land subsidence may occur in mined-out areas. Groundwater may pass through these openings, react with the rock minerals, especially sulphides, and contaminate aquifers. In addition, lowering of groundwater aquifers during mining could affect the soil fertility and have an effect on the local agricultural industry.

- Soil Erosion:

Clearing the mine area of vegetation for infrastructure and laying impermeable roads and working areas may increase local erosion increasing the risk of landslides and mud debris flows, especially in the wet seasons.

- Environmental Pollution

Disposal of industrial, domestic waste and mining waste from the Project is monitored to ensure environmental pollution is minimised and meets government standards. Also, mine transportation and mining produces dust, steam, noise and other chemical air pollutants, like sulphur dioxide that may pollute the air so these pollutants are monitored to ensure that all air pollution is minimised and meets government standards.

- Gas Explosions

Gas levels are relatively high in Seam, 8 at Changhong. All the necessary measures to minimise, disperse and monitor coal gases are in place before mining commences to eliminate the possibility of gas explosions.

To mitigate the above issues, the following remedies are used by the Company.

- Construction of sufficient safety pillars under industrial areas and residential areas in the mining area

- Frequent monitoring of any cracks that develop on mountains near the Projects to prevent any uncontrolled landslides and land subsidence

- Vegetation is monitored in the mining area to reduce soil erosion, noise and dust emissions

- Stabilisation measures, like building retaining walls to slopes which have potential landslide risks are used

- Advanced sewage and drainage treatment technology is used to reduce toxic chemicals leaking to the environment

- Mine waste is used as much as possible for road construction and maintenance and for building construction

OPERATING COSTS ("Opex")

The current Opex for the Company's projects are summarised in Table 38, for the period from 1 November 2015 to 31 July 2016.

	Caotang		Heiwan	
	RMB	A$	RMB	A$
Raw material consumed	452,559	94,087	119,374	24,818
Salaries	4,630,601	962,702	7,834,064	1,628,702
Depreciation of property, plant and equipment	9,771,015	2,031,394	4,058,880	843,841
Amortisation of land use rights	2,888	600	-	-
Amortisation of IA	92,248	19,178	46,230	9,611
Amortisation of mine development	5,763,878	1,198,310	2,509,875	521,803
Amortisation of restoration cost	43,847	9,116	17,811	3,703
Electricity and water	317,258	65,958	128,303	26,674
Maintenance	29,853	6,206	2,760	574
Labour protection fee	1,168	243	-	-
Labour insurance	441,925	91,876	9,192	1,911
Rent	-	-	40,426	8,405
Misc expenses	2,956	614	320	67
Total	21,550,196	4,480,284	14,767,235	3,070,109

Average rate for 9 months to 31 July 2016 0.2079

Table 38: Summary of Opex estimates for Company's projects.
(Costs provided by Company)

Overall, AM&A considers that the estimated Opex for the Projects are reasonable and within the range typical for this style of operation in the districts. However, actual OPEX costs for Baolong may vary significantly from estimates due to unplanned geological and operating conditions encountered over the project life. Thus, AM&A recommends that upon commencement of production; the Opex cost estimates should be monitored by competent auditors and if required adjusted for future budgets in order to reflect the actual operating costs. No Opex disclosure is present in Table 38 for Baolong or for Changhong because Baolong and Changhong are not in production.

ECONOMIC ANALYSIS

China Thermal Coal Prices

The Chinese coal price for standard thermal coal has risen from a trough at the beginning of 2016 of Rmb325/t ($AU69/t) to about Rmb650/t ($AU126/t) at the end of September. Figure 33.

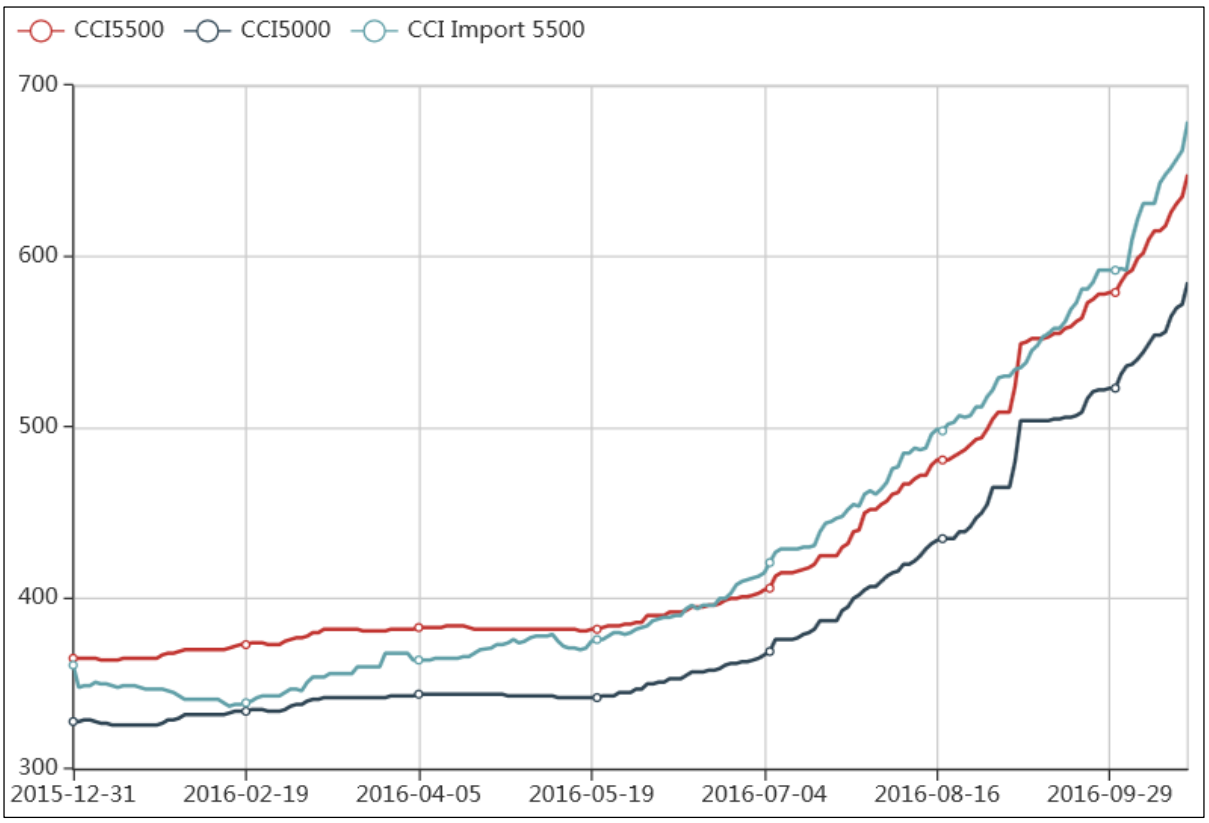


Figure 33: Thermal Coal price (Rmb/t) for 2016 to date.
(http://www.sxcoal.com/site/index?lang=en)

Thermal Coal in China

Being one of the major fuels used to produce energy, coal demand has experienced a rapid continuous growth in China since the 1980s. The most significant uses are in electricity generation, steel production and cement manufacture with coal fuelling about 40% of the world's electricity generation.

China is both the largest consumer and producer of coal in the world. China has abundant coal reserves placed with the third-largest in the world with about 13% of the world's total reserves.

There are 27 provinces in China that produce coal. Northern China, especially Shanxi and the Inner Mongolia Provinces contain most of China's easily accessible coal deposits. China's coal industry has traditionally been fragmented among large state-owned coal mines, local state-owned collieries, and thousands of town and village coal mines. The top three state-owned coal companies produce less than 15% of China's domestic coal.

China is becoming increasingly open to foreign investment in the coal sector, particularly in an effort to modernise existing large-scale mines and introduce new technologies into China's coal industry. These include coal liquefaction, coal bed methane production, and slurry pipeline transportation projects.

Supply and Demand Chongqing

Chongqing serves as the economic centre of the upstream Yangtze basin and is a major manufacturing centre and transportation hub becoming one of China's "13 emerging megacities".

Historically, the difficulties of transporting coal over the mountains from the north have forced Chongqing to rely primarily on its own coal production, despite the limited size, complex geology, high recovery costs, and mediocre quality of the municipality's high sulphur anthracite deposits. Starting from 2008, Chongqing became a progressively larger net coal importer as its own production plateaued. Chongqing serves as the economic centre of the upstream Yangtze basin and is a major manufacturing centre and transportation hub becoming one of China's "13 emerging megacities".

Most incoming coal originated in Shaanxi Province to the north, with the remainder coming from Guizhou to the south.

Economic growth in Chongqing, as in most of China, has decelerated since 2012.

The most explosive phase of Chongqing's urbanization is over, and the city will likely grow close to the nationally projected average of 7 – 8.5 percent. If, as the central government projects, the focus of economic growth shifts towards consumption, the demand for coal will grow at a somewhat slower rate due to increased energy efficiencies.

Given the limited volume and poor quality of Chongqing's reserves, the central government has planned that high quality coal from the north will gradually displace coal mined in Chongqing. This will be a gradual process taking place over some years.

Perhaps 50-75 percent of the thermal coal consumed in Chongqing's large power plants and steel mills comes from Chongqing Energy Investment Company (owned by the municipal government) coal mines, the remainder of which is met by spot purchase from smaller local mines including BGC or from mines outside the province.

Chongqing municipality recently shifted its focus to production capacity reduction, aiming to reduce overcapacity of the steel and coal industries. Chongqing government has stated that it will close around 340 local coal mines with combined capacity of 23 Mtpa by 2018, thus reducing the number of coal mines to below 70 and cutting capacity to 20 Mtpa.

Last year, the city closed 210 coal mines with an outdated capacity of 12.63 Mt, coupled with eliminating 1.26 Mt of outdated capacity through upgrading of 18 mines.

Chongqing aims to maintain a stable annual steel production of 8 million tonnes by the end of 2017.

Conclusions

Regional work by geologists from a China Geology Brigade has provided an understanding of the geology and coal deposits of Blackgold's projects. Blackgold and AM&A have sampled and mapped multiple coal seams of Permian to Triassic age on the Company's properties.

Blackgold has provided AM&A with historical data, current technical information, and business plans. AM&A's review focused on exploration data, coal resources and reserves, mining operations and

planning, costs, business forecasts, environmental management, and permitting. The primary objective was to update the Company's Resource/Reserve statements compliant with the JORC Code (2012).

AM&A has concluded that the coal resource estimate database, data density, procedures, and parameters applied to the Blackgold Mines are reasonable and acceptable and the geologic and mining factors applied by Behre Dolbear (BD) in 2015, except for a revised recovery factor for Caotang Probable Reserves, were adequate.
AM&A has concluded that, as of 31 July 2016, the in situ coal tonnages for Blackgold Mines comprise approximately 88.7 Mt of Measured, 45.6 Mt of Indicated, and 39.0 Mt of Inferred coal resources, conforming to the definitions in the JORC Code 2012 Edition.

AM&A has also concluded that, as of 31 July 2016, the Blackgold Mines, inclusive of the coal resources, held approximately 62.7 Mt of Proved and 35.2 Mt of Probable coal reserve, conforming to the definitions in the JORC Code 2012 Edition.

Recommendations

The exploration targets on Blackgold's four coal properties have potential to contain additional resource tonnages of similar quality coal to that currently being mined, i.e. high ash and sulphur anthracite. There are also 39.0 Mt of Inferred coal resources from Baolong and Changhong Mines. Further exploration in the target areas might define more Inferred Resource tonnages. It might also allow conversion of some Inferred Resource tonnages into the Measured and/or Indicated Resource categories.

Each of the mines have Exploration Targets that will be tested and drill sampled in future exploration programs.

- At Caotang seam K3 is the main Exploration Target, however since there is some 21 million tonnes of existing reserves of better quality coal in the other seams this Exploration Target will be drilled at an appropriate density to define a reserve once these existing reserves are nearly depleted.
- At Changhong parts of seams M5, M6 and M12 are the main Exploration Targets, however since there is some 18 million tonnes of existing reserves and 10 million tonnes of existing resources at this mine, these Exploration Targets will be drilled at an appropriate density to define a reserve once these existing reserves and resources are nearly depleted.
- At Heiwan seams K4 and K5 are the main Exploration Targets, however since there is some 3 million tonnes of existing reserves at this mine, these Exploration Targets will be drilled at an appropriate density to define a reserve once these existing reserves are nearly depleted.

At Baolong parts of seams K1 and K2 are the main Exploration Targets, however since there is some 55 million tonnes of existing reserves and 29 million tonnes of existing resources at this mine, these Exploration Targets will be drilled at an appropriate density to define a reserve once these existing reserves and resources are nearly depleted.
An ongoing thorough review of mining methods and practices as well as the structural and geotechnical geology is highly recommended to identify ways of cutting costs and reducing safety risks to be more competitive with coal imported from neighbouring provinces. The Chongqing and Central Beijing governments have stated that they will progressively close all mines producing poor quality coal, especially high sulphur coals that impact adversely on the local environment. To overcome this threat of mine closure, AM&A strongly recommends that a feasibility study is initiated on coal washing to upgrade the coal produced in the BGC mines to remove impurities and deleterious minerals like pyrite containing sulphur that significantly devalue the Company's coal.

Project Risks

This Section identifies the areas that AM&A regards as the major risks associated with the Company's coal projects.

The main risks pertaining to the projects are as follows:

- Resource risk due to changes in geological interpretation, assumed mining and processing parameters and new geological information and or sampling data;
- Commodity prices and exchange rates are constantly changing;
- Risks inherent in exploration and mining include, among other things, successful exploration and identification of ore reserves, satisfactory performance of mining operations if a mineable deposit is discovered and competent management;
- Risks associated with obtaining renewal of tenements upon expiry of their current term, including the grant of subsequent titles where applied for over the same ground. The grant or refusal of tenements is subject to ministerial discretion and there is no certainty that the renewal of tenements will be granted.
- The risk of material adverse changes in the government policies or legislation of China that may affect the level and practicality of mining activities;
- Environmental management issues with which the Company may be required to comply from time to time. There are very substantive legislative and regulatory regimes with which the Company needs to comply for land access and mining which can lead to significant delays.
- Poor weather conditions over a prolonged period, earthquakes or other natural events which might adversely affect mining and exploration activities and the timing of earning revenues;
- Unforeseen major failures, breakdowns or repairs required to key items of mining and processing equipment, mining plant and equipment or mine structure resulting in significant delays, notwithstanding regular programs of repair, maintenance and upkeep;

This is not an exhaustive list. Further clarification of the major risks follow:

Resource Risk (Low to Medium)

All resource and reserve estimates are based on limited sampling to represent a much larger quantity of coal contained within a deposit. Therefore all resource and reserve estimates carry a level of unreliability due to geological variability and limited sampling. The JORC (2012) Code ranks resource and reserve estimates according to reliability of the estimates. Only Measured Resources carry relatively small geological risks. Only 51% of the estimated total resources for the Company's projects are classified as Measured with the remainder Indicated (26%) and Inferred (23%).

Coal mining using the conventional retreat mining method works most efficiently in seams that have stable walls and are not displaced by faulting or folding. The mapping and drilling carried out on the properties to date has not identified significant faults or folding that displaces the coal seams. If it is found that a significant number of faults or folds were missed by these investigations and the coal seams are found to be more fragmented than indicated by current geological interpretations the economics of mining these seams may be adversely impacted.

Geotechnical Risk (Low to Medium)

During the wet season water from the surface and groundwater from other areas including accumulated water in abandoned previously mined stopes and open cuts could flow into the operating underground workings through faults and cracks risking flooding of the workings and also over time affect the stability of the wall rocks. Based on experience gained while mining to date, these risks are not

considered to be exceptional for the Company's Projects compared to most other underground coal mines although mining near old mining stopes and below any surface streams still need to monitored carefully.

Coal Price Risk (Low to Medium)

The world economy is currently unstable resulting in widely fluctuating prices for all types of coal. Current prices for coals are generally high, although off recent peaks, but no-one can confidently predict future coal prices and how these changes will impact the project. It is noted however that the project is within China which is a major consumer of the type of coals mined at the projects and it is government policy to become self-sufficient in coal. The market for the coal types mined at the Company's mines is in very high demand with continual construction of electric power plants fuelled by coal so it is expected that all the thermal coal produced by Company's mines will be readily sold.

If pollution control laws are strengthened and the high ash and sulphur content coal produced in the Company's larger mines become un-saleable the coal may require washing to reduce the ash and sulphur content of the coals below acceptable limits.

Sovereign Risk (Low to Medium)

The Chinese mining regulations and laws have changed considerably over recent years and are expected to continue to evolve. Most of the changes have made mining regulations more transparent and assist foreign investment. The extent and direction of further changes to the mining regulations and laws and their impact on these projects cannot be estimated, however it is not expected that any changes in the government regulations will pose exceptional risk to the project.

Contamination of Local Water System Risk (Low to Medium)

The Projects produces significant water as in-flow and groundwater into the underground mine workings that exits to the surface and water is also used extensively around the site for domestic purposes, at the workshops and for dust suppression. The quantity and quality of water produced at the Projects could cause problems in the local environment leading to possible litigation by local residents and the government if the Project's water management does not meet the conditions set out in the government approved Environmental Impact Statement that forms part of the mining licence conditions. The likelihood of contamination problems would increase should the Company be required to wash their coal prior to marketing.

Contamination of the local water system is possible from other mine activities such as leaching of contaminants from mine waste dumps, industrial waste from workshops and domestic waste.

AM&A considers that due to the isolated location of the projects, the risk of serious water contamination that could adversely affect local residents or contravene government regulations is low to medium.

Underestimation of the Operation Costs Risk (Low to Medium)

The operating cost estimates used in the report that are the basis of AM&A's reserve estimates are based on a number of assumptions. AM&A considers that there is a low to medium risk that operating costs may exceed the assumed estimates due to unforeseen increases of operating costs including fuel, labour and general inflation that could adversely affect the profitability of the projects.

Spontaneous Combustion and Gas Explosion Risk (Moderate to High)

The coal seams in the Company's projects have low to moderate tendency of spontaneous combustion due to their volatility and friability with the coal at Changhong being of most concern. The Company makes every effort to eliminate this risk by minimising the time that broken coal underground is exposed to the air after blasting and all possible sources of ignition such as electrical arcing are eliminated or protected.

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To prevent volatile gases such as methane and dust generated by the coal from igniting, the atmosphere in the mine workings are strictly monitored and ventilation maximised.

Natural Disasters (Low)

Since the Company's projects are located in a low seismic region, infrastructure damage and disruption to mine production due to a large earthquake is unlikely.

The Project area is within a relatively dry mild climatic region however rare storms and floods are possible.

AM&A considers that the possibility of a major natural disaster is low.

Summary of Risks

A summary of the main Project risks are included, summarised and ranked by their importance as follows in Table 39: Project risk assessment.:

Risk Issue Likelihood Consequence	Likelihood	Consequence Rating	Risk
Geological			
Resource/Reserve tonnes and grades significantly not achieved beyond the limits implied by the JORC classifications	Unlikely	Major	Medium
Mine workings collapse	Unlikely	Major	Medium
Significant unexpected faulting or folding	Unlikely	Minor	Low
Unexpected groundwater ingress	Possible	Moderate	Medium
Adverse Economic Conditions			
Coal price	Possible	Moderate	Medium
Inflation increases	Possible	Minor	Low
Change in Interest Rates	Possible	Minor	Low
Loss of demand	Unlikely	Major	Medium
Industrial disruption	Possible	Minor	Low
Sovereign risk	Possible	Moderate	Medium
Environmental Damage or Event			
Significant Unpredicted Surface Subsidence	Possible	Moderate	Medium
Ecological Damage	Unlikely	Minor	Low
Extra costs for environment restoration	Possible	Minor	Low
Contamination of local water system	Possible	Moderate	Medium
Flooding	Possible	Moderate	Medium
Significant seismic event	Possible	Moderate	Medium
Capital and Operating Costs			
Project timing delays	Possible	Minor	Low
Capital cost increase	Possible	Moderate	Medium
Operating costs underestimated significantly	Unlikely	Major	Medium
Licensing and permitting	Possible	Moderate	Medium
Operational Risk			
Underperformance of plant and machinery	Possible	Moderate	Medium
Adverse weather condition	Unlikely	Moderate	Low
Other natural hazards	Unlikely	Moderate	Low
Lack of working force	Unlikely	Moderate	Low
Spontaneous combustion	Possible	Major	High
Gas Explosion	Possible	Major	High

Table 39: Project risk assessment.

References

ASX, 1 December 2013, ASX Listing Rules Chapter 5; Additional reporting on Mining, Oil and Gas Production and Exploration Activities http://www.asx.com.au/documents/rules/Chapter05.pdf

ASX, 1 December 2013, ASX Listing Rules Guidance Note 31 Reporting on Mining Activities http://www.asx.com.au/documents/rules/gn31_reporting_on_mining_activities.pdf

AusIMM, 2011, Field Geologists' Manual (Fifth Edition), Monograph 9, The Australasian Institute of Mining and Metallurgy; Carlton, Victoria 3053, Australia.

AusIMM, 2014, Monograph 30 Mineral Resource and Ore Reserve Estimation – The AusIMM Guide to Good Practice (second edition), (The Australasian Institute of Mining and Metallurgy; Carlton, Victoria 3053, Australia).

Guo, Y, Cooper, DK, 2015, Independent Qualified Person's Report on Four Coal Mining Properties Blackgold International Holdings Limited in Chongqing Municipality People's Republic Of China, Behre Dolbear, Prepared for Blackgold International Holdings Limited, dated 23 October 2015 (effective date 30 April 2015)

JORC Code (2012 Edition)Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves:, The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC)

Guidelines Review Committee, 2014, Australian Guidelines for the Estimation and Classification of Coal Resources 2014 Edition, on behalf of the Coalfields Geology Council of New South Wales and the Queensland Resources Council

Bucci, Louis A., Paul F. Hodkiewicz, Phil Jankowski, Daniel Guibal, and Xinyu (Scott) Song. "*JORC and the Chinese Resource Classification Scheme –an SRK view*", July/August 2006

"Chinese Traditional Resource Estimation method", internal unpublished company report. May 2007.

Caotang Coal Mine Coal Resource Survey Report issued by the Chongqing 136th Geological Brigade on 8 October 2003.

Heiwan Coal Mine Coal Resource Survey Report issued by Feng Jie County Guo Xing Land Resources Development Consultancy Services Co. Ltd. in December 2007.

Chongqing Heijin Industrial Co Ltd (12 May 2011): Feasibility Study Report for the integration Project of Acquisition of Quijiang County Changhong Coal Industry Co Ltd.

Chongqing No136 Geological Team (December 2007): Coal Resources – General Investigation Geologic Report – Chongqing Wushan County – Baolong Maojiawan Ore Block.

Maynard, A.J., Varndell, B.J., 2014. Independent Geological Report for a Resource and Reserve Update Reported in Accordance with the JORC Code (2012), Al Maynard & Associates, Prepared for Blackgold International Holdings Limited

Maynard, A.J., Varndell, B.J., 2016. Independent Geological Report for a Resource and Reserve Update Reported in Accordance with the JORC Code (2012), Al Maynard & Associates, Prepared for Blackgold

International Holdings Limited, dated 18 January 2017 and released by Blackgold to the ASX on 20 January 2017

USGS Seismic Hazard Map http://pubs.usgs.gov/of/2010/1083/j/

Abbreviations

g	gram	m^3	cubic metre
kg	kilogram	mm	millimetre
km	kilometre	M	million
km^2	square kilometre	t	tonne
m	metre		
m^2	square metre		

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• Most samples used for resource estimation are channel samples collected from underground workings by trained personnel following Chinese Sampling Standard GB/T 482-2008 "National Standards of the People's Republic of China Sampling of coal seams". The quality of this sampling has been confirmed by the CP during site visits as being reliable and unbiased and suitable for resource modelling reported in accordance with the JORC Code. • Seam thicknesses were measured perpendicular from the mapped hangingwall to the footwall of the seams exposed at regular intervals in working mine development drives. • Samples were collected from cleaned faces in channels 10 cm wide and 5 cm deep. • Where drill sampling used, these samples were collected from diamond drill holes where the core recovery in the seams exceeded 85%.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other	• Where drill sampling used, these samples were collected from diamond drill holes. • All core is NQ recovered with standard conventional tube equipment.

Criteria	JORC Code explanation	Commentary
	type, whether core is oriented and if so, by what method, etc).	
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • 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.	• Drill core sample recoveries in the seams sampled exceeded 85% in all holes. • All samples collected following Chinese standard procedures. • Since all core samples exceeded 85% recovery and proper channel sampling procedures were followed no sample bias is expected. More likely coal rather than partings is lost so any bias is likely to have a slightly negative impact on assays.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	• All diamond drill core was logged by a qualified geologist with the seam limits accurately marked prior to sampling. • All underground samples were collected by trained personnel with the seam limits determined by a qualified geologist prior to sampling. • All the samples collected for analysis were taken between qualitative logged coal seam boundaries.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	• All drill core and underground samples were taken of the entire seam, including any partings where they occur, from the logged/mapped hangingwall to the logged/mapped footwall. • All the drill core, i.e. no core splitting or sub-sampling was done, was dispatched for laboratory analysis. • All the samples collected from underground were sent for laboratory analysis without sub-sampling or splitting. • All sample splitting done at the laboratory was after fine crushing. • The sample collection and sample preparation techniques meet international standards for coal

Criteria	JORC Code explanation	Commentary
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	sampling. • Since the drilling and underground sample locations are determined by regular sample spacing the sampling is considered to be representative of the seams where sampled and not biased by selective sampling. • The sample sizes are appropriate for the grainsize/coal bedding thicknesses of the coal being sampled.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • 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.	• All the laboratory analyses were performed by nationally accredited laboratories using standard techniques and properly calibrated equipment.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• No verification samples were collected by the CP. However the sample analysis results from operating mines used in the resource modeling match the referee quality samples analyses taken at the ROM by the purchaser. • All the sampling data has been properly recorded on Excel spreadsheets by the geological staff at each mine. • No adjustments to the quality data or seam thicknesses were required.
Location of data points	• 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. • Specification of the grid system used. • Quality and adequacy of topographic control.	• All the drill collars were surveyed by licensed surveyors. • All underground samples were accurately located using surveyed station points on the mine development backs. • All surveys use the GAUSS-KRUGER Xi'an 1980 grid

Criteria	JORC Code explanation	Commentary
		datum. • All the mine sites have been covered by adequate topographic surveys and the underground workings surveyed to a standard suitable for the resource modeling.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied.	• Almost all the drilling used for resource modeling is spaced on a nominal 500 m spaced grid. • Most of the underground samples were collected at nominal 50 m intervals along the mine development. • The spacing of the drilling and underground sampling, after considering the geology of the seams and any structural complexities, is appropriate for the resource categories reported. • Sample compositing was not required as all the samples were collected across the entire seam being sampled.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • 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.	• Since the seams are horizontal or only very shallowly dipping and the drilling and underground samples were taken vertically, the sampled seam thicknesses are essentially true seam widths. • There is no sample bias due to the orientation of the samples.
Sample security	• The measures taken to ensure sample security.	• All samples dispatched for laboratory analysis were sent in sealed, secure plastic bags to prevent drying and oxidation of the samples and spillages. • All the samples were all transported to the laboratories for analysis in secure transport.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• The CP has thoroughly reviewed the entire sampling stream and found that all the sampling properly followed the Chinese standards which in turn meet

Criteria	JORC Code explanation	Commentary
		international and JORC Code (2012) standards. • The data used in the resource estimates has been checked for accuracy against primary sources where available. All sample locations were checked against mine development plans to confirm that they are recorded as being located in the development where they were taken. All errors found were corrected.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• 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. • 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.	• All tenements included in this report are owned 100% by the Company or its 100% owned subsidiaries. • All tenements are in good standing with the relevant authorities. • There are no extraordinary impediments to maintaining current operating licences at all the mines reported. All the important standard conditions for operating each of the mines according to Chinese Mining Law are described in the text of the report.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• All data used in this report was provided by the Company or obtained from publicly available sources and, where appropriate, listed in the References section of this report.
Geology	• Deposit type, geological setting and style of mineralisation.	• The genesis and style of coal described in this report is typical of Triassic age coal seams throughout the world where they occur.
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: ○ easting and northing of the drill hole collar	• Maps showing the locations of all the drill holes and underground samples used in the reported resource estimates are included in the main body of this report. • No data supplied to the CP was excluded because it was considered not Material from the resource

Criteria	JORC Code explanation	Commentary
	○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the AM&A should clearly explain why this is the case.	modelling.
Data aggregation methods	• 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. • 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.	• Data aggregation was not required in the resource modelling. All the sampling measurements and qualities used in the resource modelling were of whole seams.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• Since the seams are horizontal or only very shallowly dipping and the drilling and underground samples were taken vertically, the sampled seam thicknesses are essentially true seam widths.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole	• Maps showing the local geology, mine workings and typical cross sections for each of the deposits are included in the main body of this report.

Criteria	JORC Code explanation	Commentary
	collar locations and appropriate sectional views.	
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 practiced to avoid misleading reporting of Exploration Results.	• All the sampling data collected by the Company was included in the modelling of the coal seams and reported in the resource estimates.
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.	• No substantive exploration work, that has not been included in this report, has been carried out.
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Since the deposits are operating mines, no further surface drilling is planned. Sampling and measurements of the coal seams will continue at regular intervals along the mine development drives as they advance.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
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.	• The data used in the resource estimates has been checked for accuracy against primary sources where available. All sample locations were checked against mine development plans to confirm that they are located in the development where they were taken. All errors found were corrected.
Site visits	• Comment on any site visits undertaken by the AM&A	• The CP (Brian Varndell) has made four site visits,

Criteria	JORC Code explanation	Commentary
	and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	most recently in September 2016, and sampling, mining and beneficiation processes were verified along with data compilation, input methods and data integrity checked.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• The coal seams, at all the mines reported, have very simple geology and predictable continuity of seam qualities and widths, with very little folding and faulting offsetting the seams. The density of the coal seam thickness and coal quality data available for each of the seams modelled provides a sound understanding of the geology for the resource categories reported. • No special assumptions were required to model the seam geology and continuity. • The resource models are all constrained in all three dimensions by the geology.
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.	• The flat dipping coal seams all extend well beyond the limits of the tenements and resource models described in this report.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products.	• All the seams were modelled by extrapolating the coal seam data, including the coal seam thicknesses and coal qualities, using an Inverse Distance Squared (ID^2) algorithm into gridded cells. • Since the seams vary little in thickness and qualities within the modelled areas this modelling method is appropriate for resource estimation. • No check resource models/estimates were considered but actual mine production figures, where available, tally well with the resource models and estimates. • No by-products are considered as part of the resource estimates.

Criteria	JORC Code explanation	Commentary
	• Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• The coal produced from the mines, sometimes blended with coal purchased from other sources, is readily sold under long term contracts with no penalties paid for deleterious elements such as sulphur. • The cells in the block models are considered by the CP as being appropriate for the sample spacing and dimensions of the resources. Full details of model parameters for each model are included in the report. • The resource model is confined by the mapped outcrop of the coal seams where appropriate and by the tenement boundaries. All the mapped shear zones were also considered in the modelling and appropriate pillars of unmined coal left for mine workings stability. • Grade cutting is not considered appropriate for the coal seams modelled since variations in the qualities and thicknesses within the individual seams was small with no significant outliers. • All resource models were colour coded and checked visually with the sample points.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• All tonnages are based on air dried bulk densities. • Moisture contents were measured in samples using Chinese standard equipment and techniques that also conform to JORC Code (2012) standards.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• Cut-off grades/qualities are not considered in the resource estimates.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic	• All mining parameters used for estimating reserves from resources, including mining dilution and recoveries, are based on actual mining experience in the relevant deposits.

Criteria	JORC Code explanation	Commentary
	extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• All the coals included in the resource estimates could be beneficiated by washing and the Company has initiated washing tests with the results of these test still pending at the effective date of this report. To date all the mined coal has been sold without beneficiation with the customer either washing the coal or blending it to produce an acceptable product for the intended end use.
Environmen-tal factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• All the operating mines are operating within the current environmental guidelines determined by the relevant government authorities. • All waste is being stockpiled in a manner consistent with the government regulations. No contamination of the environment by mine waste or deleterious minerals exceeding government guidelines has been reported.
Bulk density	• Whether assumed or determined. If assumed, the	• The bulk densities used in the resource estimates for

Criteria	JORC Code explanation	Commentary
	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. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Baolong are based on measurements taken of representative samples. The bulk densities for all the other seams are based on historical mine measurements and sales data.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the AM&A's view of the deposit.	• The coal resource estimates are classified according to the minimum search distance between the resource model blocks and the nearest sample point. The resources that have been sampled or drilled at least six points and within 500 m of a sample point were considered to be Measured, between 500 m and 1000 m Indicated, between 1000 m and 2000 m Inferred and beyond 2000 m Exploration Target. If the seam was sampled at two to six points, the coal within 500 m of a sample point was considered as Indicated and 500 m to 1000 m as Inferred and beyond 1000 m Exploration Target. Exploration Target estimates are NOT included in the resource inventory. • The confidence in the geological interpretations and quality of the sampling were all considered when deciding on these search distances. • The resource modelling appropriately reflects the CP's view of the deposit.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• No independent audits or reviews of the resource estimates have been undertaken although the

Criteria	JORC Code explanation	Commentary
		reconciliation between actual mine production and resource and reserve estimates in the seams currently being mined are good.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the AM&A. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and 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.	• The CP believes that the relative accuracy of the resource estimates are properly indicated by the implied accuracy of the JORC Code (2012) categories used. Only small changes to the tonnages and qualities of future resource estimates, after allowances for mined out tonnages are made, are expected as more sampling is carried out from the underground workings as mining progresses. • All resource estimates in this report are of the entire area covered by coal seams within the tenements with allowances for any coal already extracted by mining. • Reconciliation between actual mine production and resource and reserve estimates in the seams currently being mined are considered by the CP to be good.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• The resource estimates quoted in this report have, after appropriate modifying factors such as mining dilution and mining losses have been applied, been converted to reserve estimates and so are inclusive of the reserve estimates quoted in this report.
Site visits	• Comment on any site visits undertaken by the AM&A	• The CP has made four site visits, most recently in

Criteria	JORC Code explanation	Commentary
	and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	September 2016, and sampling, mining and beneficiation processes were verified along with data compilation along with checking input methods and data integrity.
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. • The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	• The modifying factors such as mining dilution and mining losses that have been applied to convert the resource estimates to reserve estimates are based on actual mining experience at the relevant mining operations and standard Chinese mining recovery rates.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	• Since the mining method is labour intensive allowing careful selective mining, no minimum cut-off grades/qualities were applied.
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). • The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. • The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used.	• Since all the modelled coal seams included in this report are at operating mines, no Feasibility Study is required to determine the Modifying Factors required to convert the Resources to Reserves. • The modifying factors such as mining dilution and mining losses that have been applied to convert the resource estimates to reserve estimates are based on Chinese regulatory standards and confirmed by actual mining experience at the relevant mining operations. • The current underground mine workings at all the mines are not affected by geotechnical factors such as folding and faulting that could influence mining recoveries and dilution. • The underground mining method used to extract the coal at all the mines is called conventional retreat mining which is a typical mining method for similar

Criteria	JORC Code explanation	Commentary
	• The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	coal seams over the world. • Since the mining method is labour intensive allowing careful selective mining, no mining dilution factors were applied. • The recovery factors assumed by AM&A for converting the resources to reserves, except for the Probable Caotang, are the same as those used by Behre Dolbear (BD) in the Company's last resource/reserve update in 2015 which were in turn based on the life-of-mine designs created by China Coal International Engineering Chongqing Coalmine Design Institute. AM&A considered that the recovery factor of 113% used by BD for the Caotang Probable Reserve was not consistent with the actual mining recovery for this reserve so the mining recovery factor BD used for the much larger Proved Reserve, i.e. 72%, was used instead. • Only Measured and Indicated resources were converted to Reserves. • All the coal seams modelled exceed the minimum mining width. • No major additional infrastructure will be required to mine the reported reserves than has already considered in current Company budget projections.
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. • Whether the metallurgical process is well-tested technology or novel in nature. • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the	• All the coals would produce higher quality products, with lower ash and sulphur contents and higher calorific values, if they were beneficiated by washing, however no metallurgical test work results have been provided to the CP to be assessed. • No metallurgical recovery factors have been applied to the resource and reserve estimates since all the coal is currently sold without beneficiation or washing.

Criteria	JORC Code explanation	Commentary
	corresponding metallurgical recovery factors applied. • Any assumptions or allowances made for deleterious elements. • The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. • For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	• None of the modelled coals have deleterious elements that have to date caused problems with the sale of the mined coal or waste disposal. Where the mined coal does not meet customer specifications it is blended with "above spec" coals purchased from other operators to produce a blended product that meets customer specifications.
Environmen-tal	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• All the operating mines are operating within the current environmental guidelines determined by the relevant government authorities. • All waste is being stockpiled in a manner consistent with the government regulations. No contamination of the environment by mine waste or deleterious minerals exceeding government guidelines has been reported. • The current tenements include sufficient sites with capacity for future safe disposal of all planned mine waste.
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	• All the mines and exploration projects are well serviced by existing infrastructure such as roads, railways, river ports, electric power, water and access to labour, sufficient for any current or planned future mining. • The current tenements include sufficient sites to meet any future requirements for mining infrastructure including offices, workshops, accommodation for staff, processing plants and for waste disposal.
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study. • The methodology used to estimate operating costs.	• All assumptions on operating, transportation and capital costs are based on the current mining operations that are currently profitable.

Criteria	JORC Code explanation	Commentary
	• Allowances made for the content of deleterious elements. • The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products. • The source of exchange rates used in the study. • Derivation of transportation charges. • The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. • The allowances made for royalties payable, both Government and private.	• Where the mined coal does not meet customer specifications it is blended with "above spec" coals purchased from other operators to produce a blended product that meets customer specifications so no allowance for these deleterious elements is necessary. • Current contract prices for the coal being produced were supplied by the client. • All assumed current and forecasted operating and capital costs as well as sales are in Chinese Renminbi (RB). • Assumed operating costs include all the relevant government royalties.
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. • The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	• All assumptions on revenues are based on current mined coal sale contracts.
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. • A customer and competitor analysis along with the identification of likely market windows for the product. • Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	• The coal currently being mined is in high demand as thermal coal and no sale problems are expected for the mine products into the future. • If stricter government air pollution regulations are enacted the high sulphur coal at Changhong may become unsaleable without further blending with other low sulphur coals or will require washing. • Price and volume forecasts are based on the Company's local market experience. • All coal sales require "umpire" analyses of

Criteria	JORC Code explanation	Commentary
		representative samples collected from each shipment to ensure customer specifications are met. Penalties apply for "out of spec" shipments.
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. • NPV ranges and sensitivity to variations in the significant assumptions and inputs.	• The operating mines at Heiwan and Caotang are currently profitable.
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	• No social problems with the local communities have been experienced to date at the operating mines. • No social problems are expected at the other projects where mining is yet to commence since all the projects are located in existing mining districts with a long history of coal mining and the local communities rely heavily on coal mining for employment and business revenues.
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party	• The operating mines maintain good safety records with no serious injuries or fatalities occurring since the Company took over the mining operations. The coal seams are subject to the risk of dust explosions, spontaneous combustion and roof collapse like all coal mines however they are not considered especially a reason for concern. • If stricter government air pollution regulations are enacted the high sulphur coal at Changhong may become unsaleable without further blending with other low sulphur coals or will require washing. • All the required governmental agreements and approvals are in place for the continued operation of the active mines and no impediments can be foreseen why these approvals should not continue for the

Criteria	JORC Code explanation	Commentary
	on which extraction of the reserve is contingent.	remaining life of these mines or should not be granted for any new mines. • Modern monitoring equipment and trained safety personnel are monitoring all the risks and appropriate remedial action is taken to ensure accidents will be kept to a minimum. • All operating mines exceed the minimum safety and environmental requirements set by the relevant government authorities.
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the AM&A's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• The coal reserve estimates are classified according to the minimum search distance between the resource model blocks and the nearest sample point. If the resources have been sampled or drilled by at least six points and within 500 m of a sample point were considered to be Proved and between 500 m and 1000 m or if the seam was sampled at two to six points, the coal within 500 m of a sample, is categorised as Probable after modifying factors applied Measured resource > Proved reserve and Indicated resource > Probable reserve. • No Measured resources were converted to Probable reserves. • The confidence in the geological interpretations and quality of the sampling were all considered when deciding on these search distances. • The reported reserve categories appropriately reflects the CP's view of the deposit.
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• No independent audits or reviews of the reserve estimates have been undertaken although the reconciliation between actual mine production and reserve estimates in the seams currently being mined are good.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the AM&A. 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. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• The CP believes that the relative accuracy of the resource estimates are properly indicated by the implied accuracy of the JORC Code (2012) categories used. Only small changes to the tonnages and qualities of future reserve estimates, after allowances for mined out tonnages are made, are expected as more sampling is carried out from the underground workings as mining progresses. • All the modifying factors used to convert the resource estimates to reserve estimates are based on current mining experience. At Caotang and Heiwan there is currently mining in the main seams modelled. • The quoted reserve estimates in this report are of the entire area covered by coal seams within the tenements, within the stated ranges of sample points, with allowances for any coal already extracted by mining. • The quoted reserve estimates are inclusive of the resource estimates. • Reconciliation between actual mine production and resource and reserve estimates in the seams currently being mined are good.

Table 40: JORC Code Table 1.

Appendix 1.

ICS 73.040
D 21

National Standards of the People's Republic of China
GB/T 482-2008
Replacing GB 482-1995

Sampling of coal seams

Published on July 29 2008 Implemented on May 1 2009
Published by

General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China

Standardization Administration of the People's Republic of China
GB/T 482-2008

Introduction

This standard replaces GB 482-1995 *Sampling of Coal Seams.*

Compared with GB 482-1995, the major changes in this standard include the following:

- "Items" added;
- "Introduction" added;
- "Terms and definitions" added (Chapter 3 in this version);
- Revision of the structure in chapter 3 of the previous standard (chapter 3 in the previous version being chapter 4 in the current one);
- Correction of the errors in ruler and tape sizes (see 5.5);
- Splitting chapter 6 in the previous standard (chapter 6 in the previous version split into chapters 7, 8 and 9 in the current one);
- Correction of the errors in 6.6 of the previous version (6.6 in the previous version being 8.2 in this version).

Appendix C in this standard is regulatory while appendices A and B are informative.

This standard is proposed by the China Coal Industry Association.

Administration of this standard is the responsibility of the National Coal Standardization and Technical Committee.

This standard is drafted by the following entities: Coal Analysis Laboratory Of Coal Science Institute, Jixi Coal Industry (Group) Company, Hebi Coal Industry (Group) Company and Huaibei Coaling (Group) Company.

This standard is drafted by the following persons: Sun Gang, Wu Yinghua, Wu Hongkuan, Gong Xinglu, Tian Xinhua and Pan Minguang.

The publication history of the previous standard replaced by this one is as follows:

GB 482-1964, GB 482-1979, GB 482-1995.

GB/T 482-2008
Sampling of coal seams in Mines
1. Scope
This standard provides the method for sampling coal seams.
This standard is applicable to sampling brown coal, bituminite, and anthracite coal seams.

2. Referenced regulatory documents
The clauses in the documents listed below are incorporated into this standard by reference. All the revision lists (excluding the corrections) or amendments subsequent to any dated reference document are not applicable to this standard; however, the parties who reach an agreement based on this standard are encouraged to study if the latest updates of these documents can be used. The latest updates of any undated reference document are applicable to this standard.
GB/T 212 Industrial Coal Analysis Method (GB/T 212-2008, ISO 11722:1999, ISO 1171:1997, ISO 562: 1998, NEQ)
GB/T 217 Method for determining the true relative density of coal
GB 474 Method for preparing coal samples (GB 474-1996, eqv ISO 1988: 1975)
Coalmining Safety Rules 2006 version by National Coalmining Safety Inspection Bureau

3. Terms and Definitions
The following terms and definitions apply to this standard.
3.1 Coal seam sample
Samples collected from one seam when digging working faces, exploratory development or adits in accordance with regulations.
3.2 Stratified seam sample
Samples collected from each natural stratum in coal seams and waste partings in accordance with regulations.
3.3 Workable seam sample
All the samples of the regulation thicknesses should be collected (including samples from coal strata and waste partings).
3.4 Coal part of all stratified seam samples
Stratified seam samples collected of coal only in accordance with regulations and their overall qualities are obtained by qualitative weighted averages of the relevant stratified seam strata.
3.5 Workable part of all stratified seam samples
Stratified seam samples collected of coal strata and waste partings corresponding to the workable seam thickness in accordance with regulations and their overall qualities are obtained by qualitative weighted averages of the relevant stratified seam strata.

4 General rules
4.1 Composition of coal seam samples
Coal seam samples include stratified samples and workable samples.
4.2 Stratified samples
4.2.1 Stratified samples are collected to analyse the nature of each coal stratum and waste partings and verify the representativeness of workable samples.
GB/T 482-2008
4.2.2 Stratified samples are collected from each natural stratum in coal and waste parting. When the waste parting thickness is greater than 3 cm, it should be treated as a separate stratum for sampling.

4.3 Workable samples
4.3.1 Workable seam samples are collected to determine all the coal strata that should be exploited and the average qualities includes the waste partings.

4.3.2 The sampling range in the workable samples includes all the strata that should be exploited including the waste partings less than 30 cm thick. For the thick coal seams which are exploited in strata, samples of the mined stratum thickness should be collected.
Samples of waste partings greater than 30 cm in thickness should be collected separately; if the waste partings cannot be mined separately, bulk workable samples may be collected provided that this is clarified in the report.

4.3.3 For open cast mines, this standard applies to the coal seams with a working bench which is less than 3.00 m in height and if it is indeed difficult to apply the method provided herein for a working bench higher than 3.00 m, coal cores may be extracted by rotary drilling rig as workable samples.

4.4 Sampling requirements
4.4.1 Coal seam samples should be collected from access development and the stope faces.

4.4.2 Representative coal seam samples should be collected at locations with normal geological structures; however, other samples should also be taken at locations where geological structures cause extensive damage to the coal seam to represent these anomalous areas.

4.4.3 Stratified and workable samples should be taken simultaneously.

4.4.4 The oxidised layer on the surface of the coal seam should be removed before taking samples.

4.4.5 Taking coal seam samples is the responsibility of the coal quality management department and the exact locations where samples are taken should be specified per this standard; under special circumstances, such locations can be determined together with the geological department.

4.4.6 Coal mining safety regulations should be strictly followed during sampling operations so that safety of personnel can be guaranteed.

4.5 Sampling intervals
At least one coal seam sample should be taken after advancing 100 to 500 m from working faces along main roadways. Stoping faces should be sampled at least once every quarter and the number of samples taken should be determined on the basis of the length of the stoping face; one to be taken if shorter than 100 m, two for 100-200 m and three for a stoping face longer than 200 m. More coal seam samples should be taken at locations where coal seam structure is complicated and coal nature varies extensively.

5. Sampling tools

5.1 Pickaxes with flattened heads and tips or applicable sampling machinery.

5.2 Hammers.

5.3 Spades.

5.4 Goggles.
5.5 Measuring tapes: steel tapes no shorter than 2 m and rulers no shorter than 1.5m with the minimum division unit being one millimetre.

5.6 Blanket: compact, solid and waterproof with an area of at least 2.5 m².

5.7 Bags for holding seam samples: strong and waterproof with a tie at the top.

5.8 Notes and necessary stationery.

5.9 Tool kit.

5.10 Labels.
Labels of the following format should be printed:
a) Sampling location:
b) Number of working face:
c) Seam sample number:
d) Samples taken by:
e) Samples taken on MM DD YY.
The properly filled-in labels should be put into plastic bags.

GB/T 482-2008

6. Sampling procedures

6.1 Preparation

The oxidized layer on the surface of coal seams should first be removed, the surface of the coal seam should be flattened carefully and perpendicular to the top and bottom bedding planes; then on the flattened seam surface, draw four straight lines from top to bottom which are perpendicular to the top and bottom bedding planes where the distance between the lines is 0.10 m when the seam thickness is >1.30 m, and 0.15 m when the thickness is <1.30 m. If the seam is soft and friable, the distance between the second and third lines can be widened if necessary. The stratified samples are taken between the first and second lines and workable seam samples are taken between the third and fourth lines with the sampling channel depth being 5 cm.

6.2 Collection of stratified samples

Mark each natural stratum of coal and waste parting between the first and second lines, measure the thickness of each stratum and their total depth and record the rock characteristics, thickness of each stratum and other matters related to seams.

Put a blanket below the sampling point so the samples drop onto the blanket and can be collected cleanly for each natural strata; all the samples from each sampled natural stratum are to be securely bagged and correctly labelled; the blanket must be cleaned before collecting the next natural stratum. Samples collected from waste partings less than 3 cm thick should be included with a neighbouring coal sample. Samples from the coal and waste partings should be collected only within the marked lines.

Numbered labels, as prescribed herein, should be attached to each sample bag.

Numbering each stratum sample: x – stratum-x.

Example: 2-stratum-4 indicates samples from the fourth stratum in the second seam.

6.3 Collection of the workable seam samples

Put a blanket below the sampling point so that the chiselled samples cleanly drop onto the blanket; samples from the stratification and waste parting should be taken together; all the collected materials should be bagged with correctly filled in labels as prescribed herein attached. Samples from the coal and waste partings should only come from within the marked lines.

Numbering each stratum sample: x – workable-1, 2, 3…

Example: 2-workable-1, 2, 3… indicates workable samples from the second seam which includes 1,2,3…strata.

7 Preparation of samples and verification of workable seam samples

7.1 Preparation of samples

When the sampling is completed, seam samples should be sent to the sample preparation room for preparation per standard GB 474. Stratified samples are prepared for general analysis according to the requirements of the analyses being carried out, usually separate splits are taken and prepared for total moisture and general analysis. Preparation of seam samples at the sampling location is prohibited.

7.2 Weighted average ash content of the stratified samples

Moisture, ash content and true relative density of each stratified seam sample are determined per standards GB/T 212 and GB/T 217. Based on the results from the determinations, the weighted average ash content of all the stratified samples, seam stratification samples and exploitable seam samples is calculated respectively per equation (1):

$$\overline{A}_d = \frac{A_{d1} \cdot t_1 \cdot \mathrm{TRD}_1 + A_{d2} \cdot t_2 \cdot \mathrm{TRD}_2 + \cdots + A_{dn} \cdot t_n \cdot \mathrm{TRD}_n}{t_1 \cdot \mathrm{TRD}_1 + t_2 \cdot \mathrm{TRD}_2 + \cdots + t_n \cdot \mathrm{TRD}_n} \quad \cdots\cdots\cdots\cdots\cdots (1)$$

In the equation:

$\overline{A}_d$- mass fraction of the weighted average ash content in the dried samples, %;
$A_{d1}, A_{d2}, \cdots, A_{dn}$- mass fraction of the dried samples in 1,2,…n strata or waste partings, %;
$t_1, t_2, \cdots, t_n$- thickness of 1,2,…n strata or waste partings in metres (m) ;
$TRD_1, TRD_2, \cdots, TRD_n$ true relative density of 1,2,…n strata or waste partings

7.3 Verification of the representativeness of workable samples
Moisture and ash content of the workable seam samples are determined per standard GB/T212. If the relative difference, ⊿, of the weighted average ash content of the exploitable stratified samples and workable samples is less than 10%, the workable samples meets the requirements for representativeness. If the relative distance is greater than 10% they should be discarded and the seams resampled due to the lack of representativeness.

The relative difference ⊿(%) is calculated per equation (2):

$$\Delta = \frac{\overline{A}_{d,开} - A_{d,可}}{\frac{\overline{A}_{d,开} + A_{d,可}}{2}} \times 100 \qquad \cdots\cdots(2)$$

In the equation:
$\overline{A}_{d,开}$ = mass fraction of the weighted average ash content of the dried samples in the sampled strata, %
$A_{d,可}$ = mass fraction of the ash content in the dried workable samples, %.

Calculation examples are given in appendix A.

8. Chemical analysis of the seam samples
8.1 The moisture, ash content and true relative density (TRD) of the stratified samples should be determined.

8.2 Workable seam samples, when they are verified as meeting representativeness requirements, are then subject to industrial analysis, and such determinations as total moisture, total sulfur, calorific value and TRD etc. are made.

8.3 At least two representative seam samples are to be collected from each worked seam annually and then prepared into raw coal and floating coal specimens per standard GB 474 based on actual needs and subject to relevant analyses.

8.4 The reported results from the measurement of thickness and the determination of ash content and TRD are rounded up to two decimal places.

9 Reporting results
Coal seam reports should be prepared with reference to appendix B and should include:
a) Report number;
b) Sampling date and the date the report is compiled;
c) Names of personnel who took samples, completed, verified and approved the report;
d) Description of the seam;
e) Location where samples were taken;
f) Location of the work face;
g) Thicknesses and ash contents of all the individual strata, the exploitable strata and the whole seam;
h) Numbers of the workable seam samples and their analytical results;

i) Graphic log of the seam samples with analytical results and stratigraphic logs.

The graphic log in the coal seam report should be prepared using the legend provided in appendix C.

Appendix A

(Informative)
Calculation examples

A.1 Experimental data
In table A.1, assuming the total thickness of the seam is 1.62 m, it comprises three coal beds and two waste partings, and Table A.1 indicates the thickness, ash content and TRD of each stratum and waste parting in the seam; the ash content of the dried sample in the workable seam samples is 19.37%.
Table A.1 Experimental data

Coal seam structure	Thickness/m	Ash content A_d/%	True relative density TRD_d
First bed (coal)	0.30	10.00	1.31
Second bed (waste parting collected separately)	0.30	80.00	2.15
Third bed (coal)	0.40	8.00	1.30
Fourth bed (waste parting)	0.12	85.00	2.20
Fifth bed (coal)	0.50	12.00	1.32

A.2 Weighted average ash content of the all the stratified coal samples
[(10.00X0.30X1.31)+(80.00X0.30X2.15)+(8.00X0.40X1.30)+(85.00X0.12X2.20)+(12.00X0.50X1.32)] ÷[(0.30X1.31)+(0.30X2.15)+(0.40X1.30)+(0.12X2.20)+(0.50X1.32)] = 36.28%

A.3 Weighted average ash content of exploitable stratified samples
[(10.00X0.30X1.31)+(8.00X0.40X1.30)+(85.00X0.12X2.20)+(12.00X0.50X1.32)]÷[(0.30X1.31)+(0.40 X1.30)+(0.12X2.20)+(0.50X1.32)] = 20.93%

A.4 Weighted average ash content of stratified coal seams
[(10.00X0.30X1.31)+(8.00X0.40X1.30)+(12.00X0.50X1.32)]÷[(0.30X1.31)+(0.40X1.30)+(0.50X1.32)] = 10.18%

A.5 Verification of representativeness of the workable seam samples
The relative difference⊿ between the weighted average ash content of the exploitable stratified coal seams and workable coal seams:

$$\Delta=\frac{20.93-19.37}{\frac{20.93+19.37}{2}}\times 100\%=7.74\%$$

⊿ value is less than 10%, which indicates the sample meets the requirements for representativeness.

Appendix B

(Informative)
Coal seam sample report

Number Sampling date: MM DD YY
Filling date: MM DD YY
1. Mining authority: Mine Shaft Seam
2. Sampling location:
3. Situation on the work face (top, bottom and middle):
4. Seam thickness and ash content:
(1) Total seam thickness__m, ash content $\overline{A}_d$:__ %
(2) Thickness of the exploitable seam__m, ash content $\overline{A}_d$:__ %
(3) Coal thickness __m, ash content $\overline{A}_d$: __%
5. Number of the workable seam samples: workable
6. Results from the analytical experiments on the workable samples (see table B.1)

Table B.1 Results from the analytical experiments on the workable samples

Items	M_t/ %	M_{ad} /%	A_d/ %	V_{daf}/ %	Char residue characteristics	FC_d/ %	$S_{t,d}$/ %	$Q_{gr,d}$/(MJ/ kg)				… …
Raw coal												
Float coal												

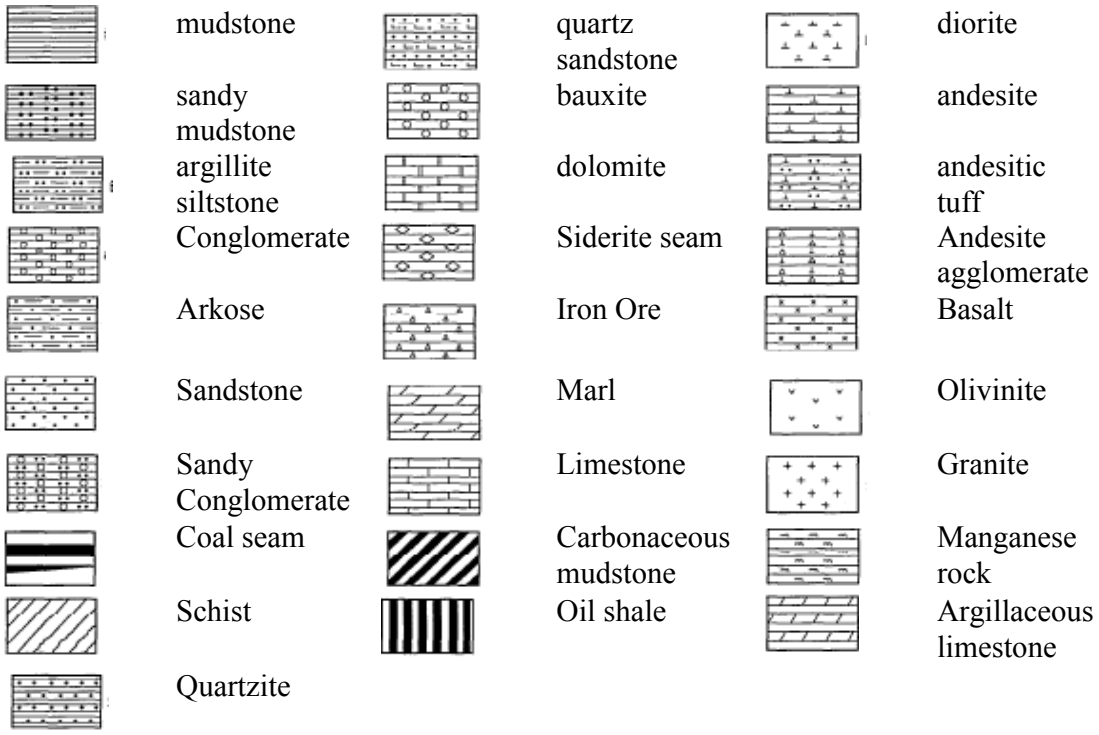
7. Seam graphic log and analytical results with the stratified samples (see table B.2)

Table B.2 Seam graphic log and analytical results with the stratified samples

Order	Graphic log and percentage			Seam name and characteristics	Stratum thickness t/m	True relative density TRD_d	Ash content A_d/%	4 x 5 columns	6x 7 columns	Notes
1	2			3	4	5	6	7	8	9
Top plate										
1										
2										
……										
n-1										
n										
Bottom plate										
Total strata										
Exploitable strata										
Coal strata										

Sampled by: ____Compiled by:
Checked by: _____Approved by:

Appendix C
(Regulatory)
Bar graph legends



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Appendix 2

ICS 73.040
D 21
National Standard of the People's Republic of China
GB/T 212-2008
To replace and supercede GB/T 212-2001, GB/T 15334-1994 and GB/T 18856.7-2002
Proximate Analysis of Coal
(ISO 11772: 1999, Solid mineral matter fuels – Hard coal – Determination of moisture in the general analysis test sample by drying in nitrogen;
ISO 1171: 1997, Solid mineral matter fuels – Determination of ash;
ISO 562: 1998, Hard coal and coke – Determination of volatile matter, NEQ)

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Standardization Administration of the PRC

Preface

This Standard corresponds to the following international standards: ISO 11772: 1999, Solid mineral matter fuels – Hard coal – Determination of moisture in the general analysis test sample by drying in nitrogen; ISO 1171: 1997, Solid mineral matter fuels – Determination of ash; and ISO 562: 1998, Hard coal and coke – Determination of volatile matter, NEQ, is different in that:

- - a proximate analysis method for inherent moisture in coal is included;
- - an air drying method for determining moisture content is incorporated;
- - a quick ashing method is incorporated;
- - the standard temperature and time for determining volatile matter is specified as 900±10℃ and 3min; and
- - a standard microwave drying method for moisture is incorporated as an annex.

This Standard shall replace and supersede

- GB/T 212-1001 Proximate analysis of Coal,
- GB/T 15334-1994 Determination of moisture in coal – Microwave drying method, and
- GB/T 18856.7-2002 Test method for inherent moisture in coal, Part 7.

This Standard is different from GB/T 212-2001 in that:

- proximate analysis of coal water mixture is incorporated; and
- "Determination of moisture in coal – Microwave drying method" is incorporated (as annex A hereto).

Annex A and Annex B hereto are normative annexes.
This Standard is proposed by China National Coal Association.

This Standard falls under the jurisdiction of National Technical Committee on Coal Standardization Administration of China.
This Standard is drafted by Coal Analysis Laboratory of China Coal Research Institute and No 143 Brigade of Yunnan Coalfield Geological Survey Co., Ltd.
This Standard is drafted by Han Liting, Lin Yujia and Chen Kequan.
Revisions of the standards to be replaced and superseded by this Standard include:

- GB 212-1963, GB 212-1977, GB/T 212-1991 and GB/T 212-2001;
- GB/T 15334-1994;
- GB/T 18856.7-2002.

Proximate Analysis of Coal

1. Scope

This Standard covers the determination of total and inherent moisture, ash and volatile matter and fixed carbon in coal samples.
This Standard shall apply to brown coal, bituminous coal, anthracite and coal seams.

2. Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this Standard. For dated references, all subsequent modifications (excluding corrigenda) or revisions thereto shall not apply to this Standard. Parties to agreements based on this Standard are encouraged to investigate the possibility of applying the most recent edition of the normative references indicated below. For dated references, the latest edition shall apply.

- GB/T 218 Determination of carbon dioxide content in the mineral carbonates associated with coal (GB/T 218-1996, eqv ISO 925: 1980)
- GB/T 7560 Determination of mineral matter in coal (GB/T 7560-2001, eqv ISO 602: 1983)
- GB/T 18510 Guideline for the validation of alternative methods of analysis for coal and coke
- GB/T 18856.1 Test methods for quality of inherent water in coal – Part 1: Sampling
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3. Determination of moisture

This Section covers the three methods for determining moisture in coal. Method A applies to all coals; Method B applies to lignite and anthracite; microwave drying method (as described in Annex A) applies to the quick determination of moisture in brown coal and lignite.
Where the coal sample to be tested is used for a referee analysis or basis conversion, Method A is used to determine the moisture content of the test sample.

3.1 Method A (drying in nitrogen)

3.1.1 Outline

Weigh the coal sample to be tested, place it in a drying oven at 105~110℃ and dry it in dry nitrogen flow until its mass remains constant. Calculate the moisture content of the sample using to the mass lost by the dried coal sample.

3.1.2 Reagents

3.1.2.1 Nitrogen: 99.9% purity; oxygen content less than 0.01%.

3.1.2.2 Anhydrous calcium chloride (HGB 3208): chemically pure; granular.

3.1.2.3 Allochroic silica gel: industrial product.

3.1.3 Instrumentation

3.1.3.1 Small volume dryer: airtight box with limited free space, furnished with a gas inlet and outlet as well as automatic thermostat that maintains the temperature within (105~110)℃.

3.1.3.2 Glass weighing flask: 40 mm in diameter, 25 mm tall, with an airtight ground cap (as illustrated in Fig 1).

In mm

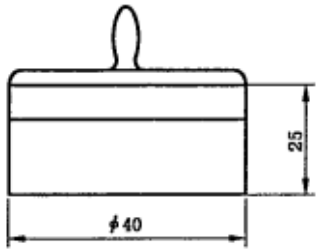

Fig 1 Glass weighing flask

3.1.3.3 Dryer: contains allochroic gel or granular anhydrous calcium chloride.

3.1.3.4 Drying tower: 250 ml capacity, with drying agent inside.

3.1.3.5 Flowmeter: ranges (100~1,000) mL/min.

3.1.3.6 Analysis balance: 0.1mg sensitivity.

3.1.4 Testing procedure

3.1.4.1 Add 1g±0.1 g of general-analysis coal sample, ground to <0.2 mm, to a pre-dried and weighed weighing flask and weigh the sample to the accuracy of ±0.0002 g after spreading the sample evenly over the base of the weighing flask.

3.1.4.2 Place the uncapped weighing flask into the drying oven that has been flooded with nitrogen and pre-heated to 105~110℃. The sample should be dried for 1.5 hour for lignite or for 2 hours for anthracite. Commence flooding the oven with nitrogen 10 minutes before placing the weighing flask into the oven at least at the rate of 15 volume changes per hour.

3.1.4.3 Cap the weighing flask immediately after removing it from the oven, place it in the dryer, and weigh the flask and contents after it has cooled down to room temperature (after approximately 20 minutes).

3.1.4.4 Continue drying for 30 min periods until the dried sample mass varies by no more than 0.0010 g for two consecutive dries or when the mass of the dried sample increases, in which case the mass weighed at the time before the mass increase shall be used for the calculations. However, no inspective drying will be needed when the moisture content is <2.00%.

3.2 Method B (air drying method)

3.2.1 Outline

Weigh the general-analysis coal sample to be tested, place it in a 105~110℃ forced-air drying oven and dry it until the mass of the dried sample remains constant. Calculate the moisture content of the sample using to the mass lost by the dried coal sample.

3.2.2 Instrumentation

3.2.2.1 Forced-air drying oven: furnished with a thermostat that maintains the oven temperature within the temperature range 105~110℃.

3.2.2.2 Glass weighing flask: as described in Subsection 3.1.3.2.

3.2.2.3 Dryer: as described in Subsection 3.1.3.3.

3.2.2.4 Analysis balance: as described in Subsection 3.1.3.6.

3.2.3 Testing procedure

3.2.3.1 Add 1g±0.1 g of general-analysis coal sample, ground to <0.2 mm, to a pre-dried and weighed weighing flask and weigh the sample to the accuracy of ±0.0002 g after spreading the sample evenly over the base of the weighing flask.

3.2.3.2 Place the uncapped weighing flask into the drying oven that has been flooded with nitrogen and pre-heated to 105~110℃ (3.2.2.1) and, ensuring that aeration is present all the time, dry it for 1.0 hour for lignite or for 1.5 hours for anthracite.

A uniform temperature is required in the oven so the fan should be turned on 2~5 minutes before the weighing flask containing the coal sample is placed in the drying oven.

3.2.3.3 Cap the weighing flask immediately after removing it from the oven, place it in the dryer, and weigh the flask and contents after it has cooled down to room temperature (after approximately 20 minutes).

3.2.3.4 Continue drying for 30 min periods until the dried sample mass varies by no more than 0.0010 g for two consecutive dries or when the mass of the dried sample increases, in which case the mass weighed at the time before the mass increase shall be used for the calculations. However, no inspective drying will be needed when the moisture content is <2.00%.

3.3 Calculation of results

Moisture in the general-analysis coal sample tested is calculated using equation (1):

$$M_{ad} = \frac{m_1}{m} \times 100 \qquad \cdots\cdots (1)$$

Where:

M_{ad} – Moisture content of coal sample, expressed as a mass fraction, %;

m – mass of the coal sample tested, expressed in grams;

m_1 – mass lost when the coal sample is dried, expressed in grams.

3.4 Precision of moisture Determination

The precision to which moisture shall be determined is provided in Table 1.

Table 1 Repeatability limits for moisture determination

Moisture content (M_{ad}), %	Repeatability limit, %
＜5.00	0.20
5.00~10.00	0.30
＞10.00	0.40

4. Determination of ash

This Section covers two methods for determining ash in coal – quick ashing method and slow ashing method. The former is used for referee samples.

4.1 Slow ashing method

4.1.1 Outline

Weigh the sample of coal to be tested, heat it in a Muffle furnace set at 815±10℃ and continue to combust until the mass of ash remains constant. The residual ash mass divided by the original sample mass shall be taken as the ash content of the sample.

4.1.2 Instrumentation

4.1.2.1 Muffle furnace: the furnace chamber large enough for the sample to be maintained at a constant 815±10℃, a chimney diameter of 25~30 mm through the upper part of the furnace wall, a small hole in the lower part of the furnace wall 20~30 mm above the oven floor for inserting a thermocouple, and an air vent 20 mm in diameter in the furnace door.

The constant temperature zone of the Muffle furnace shall be tested with the door closed at least annually. The pyrometer (including the milivoltmeter and the thermocouple) shall be calibrated at least annually.

4.1.2.2 Ash tray: ceramic, rectangular, with base 45 mm x 22 mm and height 14 mm (as illustrated in Fig 2).

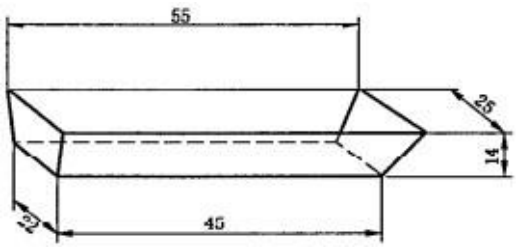

Fig 2 Ash tray, dimensions shown in millimetres

4.1.2.3 Dryer: as described in Subsection 3.1.3.3.

4.1.2.4 Analytical balance: as described in Subsection 3.1.3.6.

4.1.2.5 Heat-resistant ceramic plate or asbestos board.

4.1.3 Testing procedure

4.1.3.1 Weigh 1.0g±0.1 g of coal to be tested, ground to <0.2 mm, on a pre-weighed heat resistant tray to ±0.0002 g and spread the coal over the ash tray so that the mass per square centimeter is <0.15 g.

4.1.3.2 Place the tray and sample in the constant temperature zone of the Muffle furnace where the temperature is 100 max, close the door maintaining an approximate 15 mm gap, gradually raise the temperature of the furnace to 500 within 30 minutes and maintain for a minimum 30 minutes at this

temperature. Continue to heat the furnace to 815±10 and allow the burning to continue for 1 hour at this temperature.
4.1.3.3 Take the tray out of the furnace, place it on a heat-resistant ceramic plate or asbestos board and let it air cool for approximately 5 minutes. Place the tray in the dryer, and weigh the tray and contents after it has cooled down to room temperature (after approximately 20 minutes).
4.1.3.4 Continue the ashing at 815±10℃ for 20 min cycles until the mass variation is <0.0010 g for two consecutive burns. The mass after the last burn shall be used for the calculation of ash content. No continuing burning would be required if the ash content is less than 15.00%.
4.2 Quick ashing
This Section covers two quick ashing methods: Method A and Method B.
4.2.1 Method A
4.2.1.1 Outline
Place the tray containing the coal sample on the belt conveyor of the quick ash content tester pre-heated to 815±10℃. The sample is automatically passes through the instrument. The residual mass shall be taken as the ash content of the sample.
4.2.1.2 Special instrument: quick ash content tester (as illustrated in Fig b.1 of Annex B).
4.2.1.3 Testing procedure
Preheat the quick ash content tester to 815±10℃.
Start the belt conveyor and adjust its speed to around 17mm/minute or other speed as appropriate.
Note: For a new quick ash content tester, it is necessary to conduct comparison tests on different coals against the manual ashing method and the speed of the belt adjusted according to the test results.
Weigh 0.5g±0.01 g of coal to be tested, ground to <0.2 mm, on a pre-weighed heat resistant tray to ±0.0002 g and spread the coal over the ash tray so that the mass per square centimeter is <0.08 g. Place the tray containing the coal sample on the belt conveyor of the quick ash content tester and the tray with sample will be automatically delivered into the furnace.
When the ash tray is delivered out of the furnace, place it on a heat-resistant ceramic plate or asbestos board and let it air cool for around 5 minutes. Place the tray in the dryer, and weigh the tray and contents after it has cooled down to room temperature (after approximately 20 minutes).
4.2.2 Method B
4.2.2.1 Outline
Insert the tray containing the coal sample to be tested gradually into a Muffle furnace, preheated to 815±10 , creating ash, but without combustion, until the mass of the ash remains constant.
4.2.2.2 Instrumentation: as described in Subsection 4.1.2.
4.2.2.3 Testing procedure
Weigh 1.0g±0.1 g of coal to be tested, ground to <0.2 mm, on a pre-weighed heat resistant tray to ±0.0002 g and spread the coal over the ash tray so that the mass per square centimeter is <0.08 g. Place the trays containing the coal samples to be tested in discrete rows on a heat-resistant ceramic plate or asbestos board.
Pre-heat the Muffle furnace to 850, open the door, progressively push the heat-resistant ceramic plate or asbestos board carrying the coal samples slowly into the Muffle furnace to ash the coal sample in the each row separately for 5~10 minutes or when the coal does not smoke any longer, then progressively push the remaining rows of ash trays in sequence into the burning portion of the furnace. Note that this test will be invalid if the coal sample catches fire and combusts.
Close the door but leaving an approximately 15 mm gap, and burn the sample for 40 min at 815±10. Take the trays holding the ash samples out of the furnace, place them on a heat-resistant ceramic plate or asbestos board and let them air cool for approximately 5 minutes. Then place the trays in the dryer, and individually weigh the trays and contents after they have cooled down to room temperature (after approximately 20 minutes).
Continue the ashing at 815±10 for 20 min cycles until the mass variation is <0.0010 g for two consecutive burns. The mass after the last burn shall be used for the calculation of ash content. Where the mass measurements of the repeated ashing cycles are unstable, the sample must be retested by the slow ashing method. No continuing burning would be required if the ash content is less than 15.00%.
4.3 Calculation of the result
The air dry basis ash content is calculated using equation (2):

$$A_{ad} = \frac{m_1}{m} \times 100 \quad \cdots\cdots (2)$$

Where:

A_{ad} – the air dried basis ash content, expressed as a mass fraction, %;

m – mass of the air dried coal sample tested, expressed in grams;

m_1 – mass of the residual ash after burning, expressed in grams.

4.4 Precision of ash determination

The precision to which ash content shall be determined is provided in Table 2.

Table 2 Precision of ash determination

Ash content, %	Repeatability limit, A_{ad}, %	Reproducibility critical difference, A_d, %
＜15.00	0.20	0.30
15.00~30.00	0.30	0.50
＞30.00	0.50	0.70

5. Determination of volatile matter

5.1 Outline

Weigh the sample of coal to be tested, place it in an sealed airtight ceramic crucible and heat for 7 minutes at 900±10℃, and the volatile matter of the coal sample shall be the reduced mass of the original total sample, less the moisture content of the sample.

5.2 Instrumentation

5.2.1 Volatile matter crucible: a heat resistant crucible with an airtight cover and dimensions as illustrated in Fig 3. The total mass of the crucible is 15~20 g.

In mm

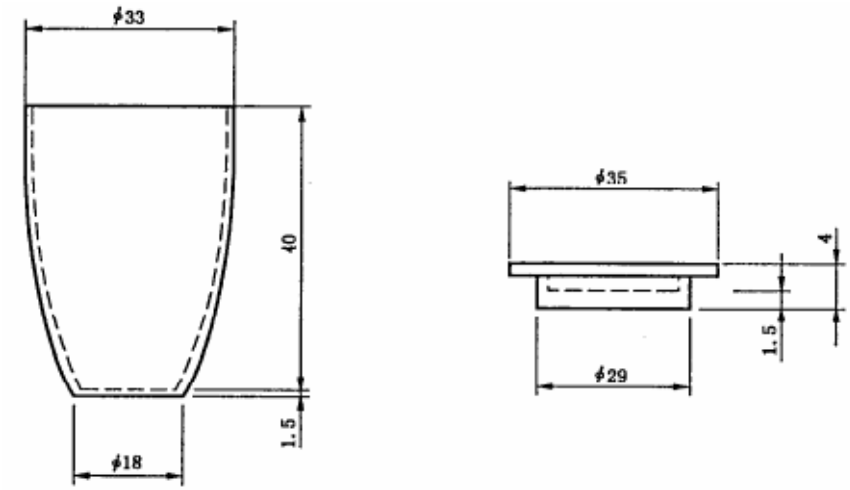

Fig 3 Volatile matter crucible, dimensions shown in millimetres

5.2.2 Muffle furnace: a furnace of sufficient volume to hold the crucibles and equipped with a pyrometer and thermostat to maintain the temperature at a constant 900±10. The thermal capacity of the furnace shall be sufficient to restore the temperature to 900±10 within 3 minutes after the door is closed when a crucible holder and several crucibles at room temperature are placed in the furnace. An air vent and a suitable sized hole for inserting a thermocouple are required in the furnace wall and located so that the thermal contact of the thermocouple is between the crucible bottom and the furnace bottom.

The constant temperature zone of the Muffle furnace and the pyrometer (including the milivoltmeter and the thermocouple) shall be calibrated at least annually.

5.2.3 Crucible holder: fabricated of nickel-chrome wire or other heat-resistant metal wire of sufficient size to hold all the crucibles in the constant temperature zone of the Muffle furnace and the crucible bottom is close to the upper part of the thermal contact of the thermocouple (as illustrated in Fig 4).

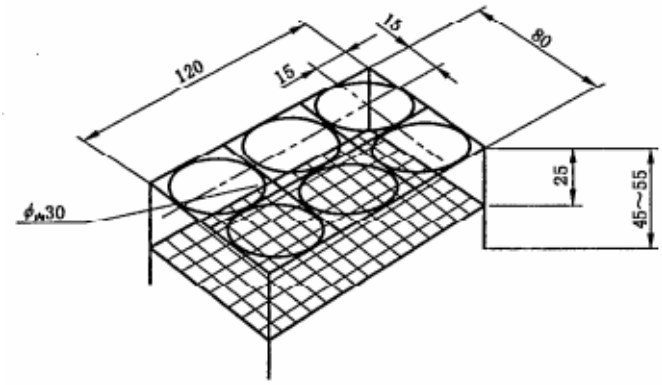

Fig 4 Crucible holder

5.2.4 Crucible holder tongs (as illustrated in Fig 5).

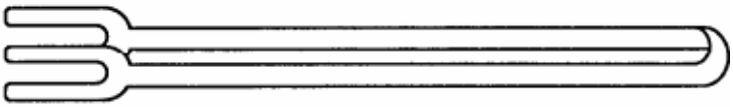

Fig 5 Crucible holder tongs

5.2.5 Dryer: As described in Subsection 3.1.3.3.

5.2.6 Analytical balance: As described in Subsection 3.1.3.6.

5.2.7 Cake press: A spiral or lever cake press that presses coal cakes approximately 10mm in diameter.

5.2.8 Stopwatch.

5.3 Testing procedure

5.3.1 Weigh 1.0 g±0.1 g of coal to be tested, ground to <0.2mm, in a pre-weighed heat resistant crucible to ±0.0002 g and then vibrate the crucible gently until the sample is flat. Cover the crucible and place it in the crucible holder.

Lignite or anthracite shall be caked and cut into small pieces approximately 3 mm in advance.

5.3.2 Preheat the Muffle furnace to around 920. Open the door, place the crucible holder carrying the crucibles into the constant temperature zone, close the door and record the time to ensure it is heated for exactly 7 minutes. The test will be invalid unless the furnace returns to 900±10 within 3 minutes after the crucible and the crucible holder are put into the furnace and remains at 900±10 thereafter. The heating time shall include temperature recovery.

Note: The preheating temperature for the Muffle furnace may be adjusted specific to the furnace used so that it will return to 900±10℃ within 3 minutes after the crucible and the crucible holder are placed in the furnace.

5.3.3 Take the crucibles out of the furnace, let them air cool for approximately 5 minutes before moving onto the cooling racks. The crucibles can be weighed once they have cooled to room temperature (after approximately 20 minutes).

5.4 Classification of coke button

Classify the features of the coke button obtained after the determination of volatile matter under the following principles:

1. Powdered (type 1): Consists fully of powder without particles adhering to each other;
2. Adhered (type 2): Becomes mostly powder after slight finger touch;
3. Weakly bonded (type 3): Becomes small pieces after slight finger touch;
4. No-fusion bonded (type 4): Becomes small pieces only after heavy finger touch; the coke button is dull on the upper surface with light silvery white luster on the lower surface;
5. Non-expansive fusion bonded (Type 5): The coke button comprises a flat cake with indistinguishable coal particles, noticeable silvery white metal luster on the upper surface and more noticeable silvery white luster on the lower surface;
6. Slightly expansive fusion bonded (type 6): Does not break under finger pressure, with silvery white metallic luster on both the upper and lower surfaces of the coke button, and minimal or small expansion bubbles on the surface;
7. Expansive fusion bonded (type 7): The coke button exhibits a silvery white metallic luster on both the upper and lower surfaces and has noticeably expanded but is not more than 15mm high;

8. Highly expansive fusion bonded (type 8): The coke button exhibits a silvery white metallic luster on the upper and lower surfaces and is more than 15 mm high.

To make it easier, the sequence numbers above are used as the code to classify the individual features of the coke button.

5.5 Calculation of the result

The air dry basis volatile matter of the coal sample in calculated using equation (3):

$$V_{ad} = \frac{m_1}{m} \times 100 - M_{ad} \quad \cdots\cdots (3)$$

Where:

V_{ad} – volatile matter air dry basis, expressed as a mass fraction, %;

m – mass of the air dried coal sample tested, expressed in g;

m_1 – reduction in mass of the coal sample tested after heating, expressed in grams;

M_{ad} – moisture content of the coal sample tested, expressed as a mass fraction, %.

5.6 Precision of volatile matter determination

The precision to which volatile matter shall be determined is provided in Table 3.

Table 3 Precision of volatile matter determination

Ash content, %	Repeatability limit, V_{ad}, %	Reproducibility critical difference, V_d, %
＜20.00	0.30	0.50
20.00~40.00	0.50	1.00
＞30.00	0.80	1.50

6. Calculation of fixed carbon

The air dry basis fixed carbon content is calculated using equation (4):

$$FC_{ad} = 100 - (M_{ad} + A_{ad} + V_{ad}) \quad \cdots\cdots (4)$$

Where:

FC_{ad} – air dry basis fixed carbon content, %;

M_{ad} – air dry basis moisture content of coal sample tested, expressed as a mass fraction, %;

A_{ad} – air dry basis ash content, expressed as a mass fraction, %;

V_{ad} – air dry basis volatile matter, expressed as a mass fraction, %.

7. Conversion of air dry basis volatile matter into dry ash-free basis volatile matter and dry mineral matter-free basis volatile matter

7.1 Dry ash-free basis volatile matter is converted in equation (5) ~ equation (7):

The dried ash-free volatile matter is converted in equation (5) ~ equation (7):

$$V_{daf} = \frac{V_{ad}}{100 - M_{ad} - A_{ad}} \times 100 \quad \cdots\cdots (5)$$

When the carbon dioxide content as carbonate in the coal sample tested is (2~12%), then:

$$V_{daf} = \frac{V_{ad} - (CO_2)_{ad}}{100 - M_{ad} - A_{ad}} \times 100 \quad \cdots\cdots (6)$$

When the carbon dioxide content as carbonate in the coal sample tested is more than 12%, then:

$$V_{daf} = \frac{V_{ad} - [(CO_2)_{ad} - (CO_2)_{ad(焦饼)}]}{100 - M_{ad} - A_{ad}} \times 100 \quad \cdots\cdots (7)$$

Where:

V_{ad} – air dried basis volatile matter content, %;

$(CO_2)_{ad}$ – air dried basis carbon dioxide content as carbonate in the coal sample tested (per GB 218) , expressed as a mass fraction, %

$(CO_2)_{ad\ (coke\ button)}$ – air dried basis carbon dioxide content expressed as a mass fraction in the coke button in relation to the quantity of the coal sample.

7.2 Dry mineral matter-free basis volatile matter is converted in equation (8) ~ equation (10):

$$V_{dmmf} = \frac{V_{ad}}{100 - (M_{ad} + MM_{ad})} \times 100 \quad \cdots\cdots (8)$$

When the air dried basis carbon dioxide content as carbonate in the coal sample tested is 2~12%, then:

$$V_{dmmf} = \frac{V_{ad} - (CO_2)_{ad}}{100 - (M_{ad} + MM_{ad})} \times 100 \quad \cdots\cdots (9)$$

When the air dried basis carbon dioxide content as carbonate in the coal sample tested is >12%, then:

$$V_{dmmf} = \frac{V_{ad} - [(CO_2)_{ad} - (CO_2)_{ad(焦渣)}]}{100 - (M_{ad} + MM_{ad})} \times 100 \quad \cdots\cdots (10)$$

Where:

V_{dmmf} – dry mineral matter-free basis volatile matter content, expressed as a mass fraction, %

MM_{ad} – air dry basis mineral matter content of the coal sample tested (per GB/T 7560) , expressed as a mass fraction, %.

8. Proximate analysis of coal water slurry

8.1 Preparation of analysis sample

8.1.1 Preparation of coal water mixture sample

Stir the water coal slurry sample before the test so that it is uniform without hardness differences.

8.1.2 Preparation of dry coal water mixture sample

Prepare a dry sample of water coal slurry as provided in GB/T 18856.1.

8.2 Determination of moisture in coal water slurry

8.2.1 Outline

Weigh the uniformly mixed coal water slurry sample, place it in a 105~110 drying oven and dry it until its dried mass remains constant. Then calculate the moisture content of the coal water slurry according to the mass lost.

8.2.2 Instrumentation

As described in Subsection 3.2.2.

8.2.3 Testing procedure

8.2.3.1 Add 1.2~1.5 g of well mixed test sample of coal water slurry into a dry weighing flask whose weight is already known, spreading it evenly over the bottom of the flask, cap it quickly and weigh it to within 0.0004 g.

8.2.3.2 Uncap the weighing flask containing the coal water slurry described above in a drying oven pre-heated to 105~110 and dry it under aeration for 1 hour.

8.2.3.3 Take the weighing bottle out of the drying oven, cap it immediately and place it on a cooling rack. Weigh it when it has cooled to room temperature after approximately 20 minutes.

8.2.4 Calculation of the result

Calculate the moisture in the coal water mixture using equation (11):

$$M_{cwm} = \frac{m - m_1}{m} \times 100 \quad \cdots\cdots (11)$$

Where:

M_{cwm} – Moisture content of the water coal slurry, expressed as a mass fraction, %;

m – mass of the coal water slurry sample, expressed in grams;

m_1 – mass of the dried coal slurry, expressed in grams.

8.2.5 Precision of moisture determination

The repeatability limit to which the moisture in the coal water mixture shall be determined is provided in Table 4.

Table 4 Precision of moisture determination in coal water slurries

Moisture in coal water slurry	Repeatability limit, %
M_{cwm}	0.40

8.3 Determination of moisture in dry coal water mixture sample

The moisture in the coal water slurry shall be determined as provided in Section 3 of this Standard.

8.4 Determination of ash in coal water mixture sample

8.4.1 Determination of ash in dry coal water mixture sample

The air dry basis ash content in the dried coal water slurry sample shall be determined as provided in Section 4 of this Standard.

8.4.2 Calculation of ash in coal water mixture

The ash content in the coal water slurry is calculated using equation (12):

$$A_{cwm} = A_{ad} \times \frac{100 - M_{cwm}}{100 - M_{ad}} \quad \cdots\cdots (12)$$

Where:

A_{cwm} – ash content of the coal water mixture, expressed as a mass fraction, %;

A_{ad} – air dry basis ash content in the dried coal water slurry sample, expressed as the mass fraction, %;

M_{ad} –moisture content of the dried coal water slurry sample, expressed as a mass fraction, %;

M_{cwm} –moisture content in the coal water slurry, expressed as a mass fraction, %.

8.5 Determination of volatile matter in coal water slurries

8.5.1 Determination of volatile matter in dry coal water mixture sample

The volatile matter in the coal water slurries is calculated as provided in Section 5 of this Standard.

8.5.2 Calculation of volatile matter in coal water mixture

The volatile matter in the coal water mixture is calculated using equation (13):

$$V_{cwm} = V_{ad} \times \frac{100 - M_{cwm}}{100 - M_{ad}} \quad \cdots\cdots (13)$$

Where:

V_{cwm} – volatile matter in the coal water slurry, expressed as a mass fraction, %;

V_{ad} – air dry basis volatile matter in the dried coal water slurry sample, expressed as a mass fraction, %

M_{ad} – moisture content of the air dried coal water slurry sample, expressed as a mass fraction, %;

M_{cwm} – moisture content of the coal water slurry sample, expressed as a mass fraction, %.

8.6 Calculation of fixed carbon in coal water mixture

The fixed carbon content of the coal water slurry is calculated using equation (14):

$$FC_{cwm} = 100 - (M_{cwm} + A_{cwm} + V_{cwm}) \quad \cdots\cdots (14)$$

Where:

FC_{cwm} – fixed carbon content of the coal water slurry, expressed as a mass fraction, %;

M_{cwm} – moisture content of the coal water slurry sample, expressed as a mass fraction, %.

A_{cwm} – ash content of the coal water mixture, expressed as a mass fraction, %;

V_{cwm} – volatile matter in the coal water slurry, expressed as a mass fraction, %;

Annex A

(Normative annex)

Determination of moisture in coal – Microwave drying method

A.1 Scope

This Annex covers the quick determination of moisture content in coal samples using a microwave drying method.

This method applies to the quick determination of moisture in lignite and anthracite.

A.2 Outline

Weigh the coal sample to be tested and place it in a microwave moisture tester, where the magnetron inside the oven transmits non-ionizing microwaves that cause the water molecules to vibrate at ultra-high speed producing friction heat causing the moisture in the coal to be quickly evaporated. The mass lost by the coal sample is the moisture content.

A.3 Instrumentation

A.3.1 Microwave moisture tester ("moisture tester"): has a programmable controller, with input power of approximately 1,000W. The instrument is furnished with a rotary mini-crystal glass plate inside onto which is placed an asbestos mat approximately 2 mm thick with a marking ring.

A.3.2 Glass weighing flask: as described in Subsection 3.1.3.2.

A.3.3 Dryer: as described in Subsection 3.1.3.3.

A.3.4 Analytical balance: as described in Subsection 3.1.3.6.

A.3.5 Beaker: approximately 250mL capacity.

A.4 Testing procedure

A.4.1 Add 1±0.1 g of the coal sample to be tested, ground to <0.2 mm, into a dry flask of known weight ensuring it is evenly spread in the flask and weigh the sample to ±0.0002 g accuracy.

A.4.2 Place a 250 mL capacity beaker containing approximately 80 mL distilled water on the rotary plate of the moisture tester, heat it for 10 minutes under the preheating program and take out the breaker. If more than one measurement is expected on continuous basis, preheat the breaker only before the first measurement.

A.4.3 Uncap the weighing flask containing the coal sample, place the flask on the rotary plate of the moisture tester within and touching the marked ring on the asbestos mat. After a complete rotation of the plate, surplus weighing flasks may be closely packed within the weighing flasks with samples. Place a covered 250 mL breaker containing distilled water in the middle of the rotary plate (the water volume shall be as recommended by the moisture tester manufacturer) and close the door of the moisture tester.

Note 1: The evaporation of moisture relates to the distribution of the microwave electAM&Agnetic field, so it is important that the weighing flasks are within the uniform field intensity zone.

Note 2: The heating of the water contained in the beaker is related to the power of the microwave magnetron, so only sufficient water should be added the beaker so that there is a little water left in the beaker after it has been heated.

Note 3: The microwave moisture tester manufacturer is expected to make sure that the distribution of the microwave electAM&Agnetic field agrees with the zone for moisture measurement and mark this zone (i.e. provide a marking ring), and determine the appropriate amount of water.

A.4.4 Heat the coal sample following the procedure recommended by the manufacturer.

A.4.5 After the weighing flask is heated for the recommended period, take it out of the moisture tester, cap it immediately and place it in the dryer. Weigh it when it has cooled to room temperature after approximately 20 minutes.

Note: Other types of microwave moisture testers are also acceptable provided that they have been tested and meet the precision and accuracy standards detailed in GB/T 18510.

A.5 Calculation of the result

The air dry basis moisture in the coal sample is calculated using equation (A.1):

$$M_{ad} = \frac{m_1}{m} \times 100 \qquad \cdots\cdots (A.1)$$

Where:

M_{ad} – air dry basis moisture content of the coal sample tested, expressed as a mass fraction, %;

m – mass of the coal sample tested, expressed in grams;
m_1 – mass lost from the coal sample tested after it has been dried, expressed in grams.

A.6 Precision

As described in Subsection 3.4.

Annex B

(Normative annex)

Quick ashing apparatus

B.1 Figure B.1 is a schematic example of a quick ash tester comprised of a U-shaped electric tube furnace, a belt conveyor and a controller as described below:

a) U-shaped electric tube furnace: the chamber is about 700 mm long, 75 mm tall, open at both ends, axially inclined around 5°, with constant temperature zones approximately 140mm long at 815±10 and approximately 270 mm long at 750 ~825, with the temperature at the outlet not more than 100.

b) Automatic chain-type conveyor ("belt conveyor"): fabricated from high temperature resistant metal with adjustable conveying speed; does not deform or peel at temperatures <1,000.

c) Controller: temperature and a conveyor belt speed controller. The temperature controller automatically maintains the furnace temperature at 815±10; the conveyor belt controller manages the conveyor speed at15~50 mm/min.

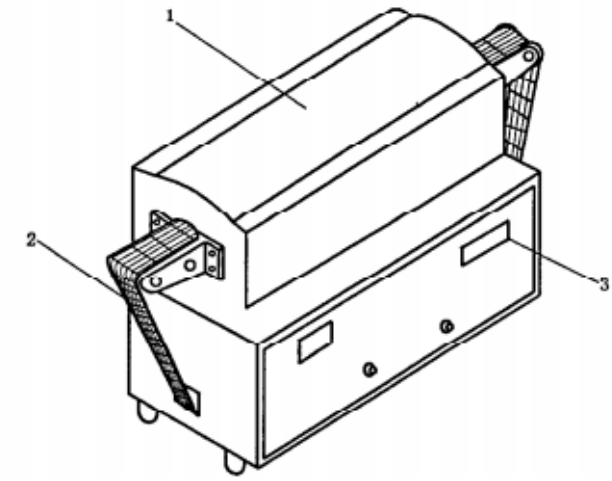

Fig B.1 Quick ash tester

1 – electric tube furnace;

2 – belt conveyor;

3 – controller.

B.2 Any other form of quick ash tester will be acceptable provided that:

a) The high temperature furnace can be heated to 815±10

b) The furnace provides enough air inside it for complete burning the coal sample;

c) The coal sample has long enough residence time inside the furnace to complete the ashing process; and

d) The tester is designed to prevent or limit the oxidation of sulphur and carbonate decomposition.

Appendix 7 – Resource Multiple Comparable Companies

A brief synopsis of the comparable companies used in our assessment of a resource multiple to be applied to Blackgold's inferred resource is set out below:

Company Name	Description
Acacia Coal Limited	Acacia Coal Limited engages in the exploration and development of coal tenements in Australia. Its primary asset is the 100% interest owned Comet Ridge Project located in the Bowen Basin in Central Queensland.
Coalbank Limited	Coalbank Limited engages in coal exploration business in Australia. It primarily explores for coal and oil and gas deposits. The company holds interests in western Surat and Eromanga Basins tenements covering an area located in the Tambo and Blackall region in Queensland and oil and gas permits that are located in southeast Queensland, Australia. The company was formerly known as Lodestone Energy Limited and changed its name to Coalbank Limited in June 2011. Coalbank Limited was founded in 1996 and is based in Brisbane, Australia.
East Energy Resources Limited	East Energy Resources Limited operates as a coal exploration and development company in Australia. The company primarily explores for thermal coal. It owns a 100% interest in the Blackall project consisting of three main coal resource areas in three tenements located in the eastern Eromanga Basin in central western Queensland. The company is based in Perth, Australia.
Ikwezi Mining Limited	Ikwezi Mining Limited engages in the acquisition, exploration, and development of coal projects in South Africa. The company holds a 70% interest in the Ntendeka Colliery project as well as a 60% interest in the Dundee project. It also holds a 60% interest in the Acorn project located in the Gauteng Province; and the Assegai project located in Mpumalanga Province. The company was incorporated in 2011 and is based in Johannesburg, South Africa.
Kaili Resources Limited	Kaili Resources Limited engages in the exploration of coal and other minerals in Australia. The company primarily explores for coal, gold and iron ore deposits. It holds interests in four mineral tenements in Western Australia and Queensland. The company was formerly known as Omnitech Holdings Limited and changed its name to Kaili Resources Limited in August 2014. Kaili Resources Limited is based in Darlinghurst, Australia.

Company Name	Description
Malabar Coal Limited	Malabar Coal Limited engages in the development of coal projects in Australia. It holds a 100% interest in the Spur Hill Underground Coking Coal project located in the Upper Hunter Valley of New South Wales. The company was founded in 2011 and is based in Sydney, Australia.
Moreton Resources Ltd	Moreton Resources Limited identifies and develops conventional coal projects in Australia. It also explores for copper, silver, zinc, lead, and gold deposits. The company has interests in the Mackenzie coal project located in Bowen Basin, central Queensland; Tarong Basin thermal coal project located in the Tarong Basin in southeastern Queensland; and Wandoan project located in Surat Basin, southern Queensland. It also owns interests in the Granite Belt project in Southern Queensland. The company was formerly known as Cougar Energy Limited and changed its name to Moreton Resources Limited in October 2013. Moreton Resources Limited was founded in 1993 and is based in Spring Hill, Australia.
Pan Asia Corporation Limited	Pan Asia Corporation Limited explores for and develops coal projects. It owns a 75% interest in its flagship CV thermal coal project, the PT Transcoal Minergy project located in South Kalimantan, Indonesia. The company was formerly known as Sam's Seafood Holdings Limited and changed its name to Pan Asia Corporation Limited in November 2009. Pan Asia Corporation Limited is based in Subiaco, Australia.
Paringa Resources Limited	Paringa Resources Limited engages in the exploration and development of resource projects, particularly coal. The company holds interests in the Poplar Grove Mine, the Cypress Mine, and the Buck Creek coal mining complex located in the Illinois coal basin in western Kentucky. It also holds interests in the Arkoma coal basin in Arkansas. The company was incorporated in 2012 and is headquartered in Evansville, Indiana.
Rey Resources Limited	Rey Resources Limited engages in exploring and developing energy resources in Australia. The company primarily explores for bituminous thermal coal deposits in the Duchess Paradise coal project located in Canning Basin, north Western Australia. It also holds interests in the petroleum permits, including a 25% interest in the Fitzroy Blocks; and a 50% interest in the Derby Block located in Canning Basin, Western Australia, as well as a 43.47% interest in the exploration permit 437 located in Perth Basin, Western Australia. Rey Resources Limited is based in Sydney, Australia.

Annexure B – The Scheme of Arrangement

The Scheme of Arrangement

This scheme of arrangement is made under Section 411 of the Corporations Act 2001 (Cth) between:

Blackgold International Holdings Limited (ACN 145 095 478) of Unit 5, Ground Floor, 1 Centro Avenue, Subiaco, Western Australia, 6005, Australia ("**Blackgold**")

and

Each person who is a Blackgold Shareholder as at the Scheme Record Date, other than as an Excluded Shareholder ("**Scheme Shareholder**")

1. Definitions, Interpretation and Effect

1.1 Definitions

Blackgold Shareholder means a holder of shares in the share capital of Blackgold.

Business Day means a day other than a Saturday, Sunday or public holiday in Western Australia.

Corporations Act means the Corporations Act 2001 (Cth).

Effective Date means the date on which this Scheme become effective.

Excluded Shareholder means any Blackgold shareholder who is Vibrant or a Related Body Corporate of Vibrant.

Implementation Date means the fifth Business Day following the Scheme Record Date or such other date as is agreed by Blackgold and Vibrant.

Related Body Corporate has the meaning given to the term "related body corporate" in section 9 of the Corporations Act.

Scheme means this scheme of arrangement.

Scheme Consideration means 4.5 cents per Scheme Share (Australian cents).

Scheme Implementation Deed means the scheme implementation deed between Blackgold and Vibrant dated 28 October 2016.

Scheme Meeting means the meeting of Blackgold Shareholders, ordered by the Court to be convened pursuant to Section 411(1) of the Corporations Act, at which Blackgold Shareholders will vote whether to approve the Scheme.

Scheme Record Date means 7pm Perth time on the fifth Business Day after the Effective Date, or such other date after the Effective Date as Blackgold and Vibrant agree.

Scheme Shares means all Blackgold shares held by Scheme Shareholders as at the Scheme Record Date.

Scheme Shareholders means each person who is a Blackgold shareholder as at the Scheme Record Date other than an Excluded Shareholder.

Vibrant means Vibrant Group Limited, company number 198600061G of 51 Penjuru Road, #04-00, Freight Links Express Logisticentre, Singapore, 609143.

1.2 Binding Effect of Scheme

The Scheme binds Blackgold and all of the Scheme Shareholders (including those who did not attend the Scheme Meeting, those who did not vote at the Scheme Meeting and those who voted against the Scheme at the Scheme Meeting).

2. The Scheme of Arrangement

2.1 Transfer of Scheme Shares

Vibrant must, by no later than two Business Days before the Implementation Date, deposit (or procure the deposit of) in cleared funds an amount equal to the aggregate amount of the Scheme Consideration payable to each Scheme Shareholder for all Scheme Shares, into a trust account operated by Blackgold as trustee for the Scheme Shareholders. Details of the trust account must be provided by Blackgold to Vibrant on or before the date which is 5 Business Days before the Implementation Date.

The trust account will be an Australian dollar denominated trust account and will bear no interest.

On the Implementation Date:

(a) subject to the funds having first been deposited in the trust account referred to above and to the obligation to provide the Scheme Consideration to Scheme Shareholders in accordance with clause 3 below, the Scheme Shares (together with all rights and entitlements attached to them at the Implementation Date) will be transferred to Vibrant, without the need for any further act by a Scheme Shareholder, by:

    (1) Blackgold delivering to Vibrant a duly completed share transfer form or forms, executed on behalf of the Scheme Shareholders by Blackgold, for registration; and

    (2) Vibrant duly executing the share transfer form or forms and delivering to Blackgold for registration; and

(b) as soon as practicable after receipt of the share transfer form or forms Blackgold must enter the name of Vibrant in the Blackgold share register in respect of all of the Scheme Shares.

2.2 Entitlement to Scheme Consideration

On the Implementation Date, in consideration for the transfer of the Scheme Shares to Vibrant, each Scheme Shareholder will be entitled to receive the Scheme Consideration in respect of each of their Scheme Shares.

3. The Scheme Consideration

3.1 Provision of Scheme Consideration

On the Implementation Date, subject to the funds having been deposited in the trust account in accordance with clause 2 above and all conditions of the Scheme Implementation Deed being satisfied or waived, Blackgold must pay, or procure the payment by Blackgold's share registry, from the trust account of an amount equal to the Scheme Consideration for each Scheme Share transferred to Vibrant in the Implementation Date by the Scheme Shareholder, in the manner set out below.

All payments to Scheme Shareholders will be made by way of bank to bank electronic transfer (on the Implementation Date) if Blackgold's share registry holds on the Scheme Record Date full and valid details of the Scheme Shareholder's Australian bank account, or if not, then by way of an Australian cheque posted (on the Implementation Date) to the postal address shown in the Blackgold share register on the Scheme Record Date.

The cheque will be drawn in the name of the Scheme Shareholder as the name is shown in the share register as at the Scheme Record Date, or in the case of joint holders then in accordance with clause 3.2 below.

3.2 Joint Holders

In the case of Scheme Shares held in joint names:

(a) any cheque required to be sent under the Scheme will be made payable in the names of the joint holders and sent to the holder whose name appears first in the share register as at the Scheme Record Date; and

(b) any other document required to be sent under the Scheme will be sent to the holder whose name appears first in the share register as at the Scheme Record Date.

3.3 Unclaimed Monies

Blackgold (or its representative) may cancel a cheque issued under clause 3.1 above if the cheque:

(a) is returned to Blackgold (or its representative); or

(b) has not been presented for payment within 6 months after the date of the cheque.

During the period of 1 year commencing on the Implementation Date, on request from a Scheme Shareholder, Blackgold (or its representative) must re-issue a cheque that was previously cancelled under this clause.

The *Unclaimed Money Act* 1990 (WA) will apply to any Scheme Consideration which becomes "unclaimed money" as defined in the *Unclaimed Money Act* 1990 (WA), together with the legislation in any other State or Territory of Australia relating to unclaimed monies if that particular legislation is applicable to the Scheme Consideration in the circumstances.

4. Dealings in Blackgold Shares

4.1 Determination of Scheme Shareholders

To establish the identity of Scheme Shareholders, dealings in Blackgold Shares will only be recognised if:

(a) in the case of dealings of the type to be effected using CHESS, the transferee is registered in the Blackgold share register as the holder of the relevant Blackgold Shares on or before the Scheme Record Date; and

(b) in all other cases, registrable transfer applications or transmission applications in respect of those dealings are received on or before the Scheme Record Date at the place where the share register is kept.

4.2 Register

Blackgold must register registrable transfer applications or transmission applications of the Scheme Shares under clause 4.1 above on or before 5pm Perth time on the Scheme Record Date.

If the Scheme becomes Effective, a holder of Scheme Shares must not dispose of, or purport to dispose of, any Scheme Shares or any interest in them after 5pm on the Scheme Record Date and any such disposal or purported disposal will be void and have no legal effect.

For the purpose of determining entitlements to the Scheme Consideration, Blackgold must maintain the Blackgold share register in accordance with the provisions of this clause until the Scheme Consideration has been provided to the Scheme Shareholders. The share register in this form will solely determine entitlements to the Scheme Consideration.

As soon as possible on or after the Scheme Record Date, and in any event by 5pm on the first Business Day after the Scheme Record Date, Blackgold will ensure that the details of the names, registered addresses and holdings of Scheme Shares for each Scheme Shareholder as shown on Blackgold's share register are available to Vibrant in the form Vibrant reasonably requires.

5. Implementation of Scheme

5.1 ASIC lodgement

Blackgold will lodge with ASIC, in accordance with Section 411(10) of the Corporations Act, an office copy of the Court order approving the Scheme as soon as possible, and in any event, by 5pm Perth time on the first Business Day after the day on which the Court approves the Scheme.

5.2 Delisting of Blackgold

Blackgold must apply to the ASX to suspend trading on the ASX in Blackgold shares with effect from the close of trading on the Effective Date.

On a date after the Implementation Date to be determined by Vibrant, Blackgold must apply:

(a) for termination of the official quotation of Blackgold's shares on the ASX; and

(b) to have itself removed from the official list of the ASX.

6. General Scheme Provisions

6.1 Scheme Shareholder agreements and warranties

Each Scheme Shareholder:

(a) agrees to the transfer of their Blackgold Shares together with all rights and entitlements attached to their Blackgold Shares in accordance with the Scheme; and

(b) agrees to the variation, cancellation or modification of the rights attached to their Blackgold Shares resulting from the Scheme; and

(c) acknowledges and agrees that the Scheme binds Blackgold and all Scheme Shareholders (including those who do not attend the Scheme Meeting and those who do not vote, or who vote against the Scheme, at the Scheme Meeting); and

(d) is taken to have warranted to Blackgold and Vibrant on the Implementation Date, and appointed and authorised Blackgold at its attorney and agent to warrant to Vibrant on the Implementation Date, that:

(i) all their Scheme Shares (including rights and entitlements attaching to those shares) which are transferred under the Scheme will, at the date of transfer, be fully paid and free from all mortgages, charges, liens, encumbrances, pledges, security interest (including any "security interests" within the meaning of section 12 of the *Personal Property Securities Act* 2009 (Cth)) and interests of third parties of any kind, whether legal or otherwise, and restrictions on transfer, of any kind; and

(ii) they have full power and capacity to transfer their Scheme Shares to Vibrant together with any rights and entitlements attaching to those shares,

and Blackgold undertakes that it will provide such warranty to Vibrant as agent and attorney of each Scheme Shareholder.

6.2 Title to, and interest in, Scheme Shares

Immediately after the provision of the Scheme Consideration under clause 2 and 3 above in cleared and available funds, Vibrant will be beneficially entitled to the Scheme Shares to be transferred to it under the Scheme.

For the avoidance of doubt, Vibrant has no title, interest or right in (or over) the Scheme Shares, whether legal, beneficial or otherwise, until after the Scheme Consideration has been provided in accordance with clause 2 and 3 above.

6.3 Appointment of Sole Proxy

Immediately upon the provision of the Scheme Consideration under clause 2 and 3 above, and until Blackgold registers Vibrant as the holder of all Scheme Shares in the share register, each Scheme Shareholder:

(a) appoints, and is deemed to have appointed, Vibrant as its sole proxy to attend Blackgold shareholder meetings and to exercise the votes attaching to the Scheme Shares; and

(b) undertakes not to attend any Blackgold shareholder meetings or vote at them.

7. General Provisions

7.1 Governing Law

The Scheme is governed by the laws of Western Australia.

7.2 Further action

Blackgold must do all things, and execute all documents, necessary to give full effect to the Scheme and the transactions completed by it.

7.3 Scheme Shareholder Consents to Further Action

Each Scheme Shareholder consents to Blackgold doing all things, and executing all documents, necessary to give full effect to the Scheme and the transactions completed by it.

Annexure C – Deed Poll

Deed Poll

Date **2017**

This deed poll is made by
Vibrant Group Limited
company number 198600061G
of 51 Penjuru Road, #04-00,
Freight Links Express Logisticentre, Singapore, 609143

("**Vibrant**")

in favour of each person who is a Blackgold Shareholder as the Scheme Record Date, other than an Excluded Shareholder.

Recitals

A. Vibrant and Blackgold International Holdings Limited ("**Blackgold**") entered into a scheme implementation deed on 28 October 2016 ("**Scheme Implementation Deed**").

B. In the Scheme Implementation Deed, Vibrant agreed to make this deed poll.

C. Vibrant is making this deed poll for the purpose of covenanting in favour of the Scheme Shareholders to perform its obligations under the Scheme Implementation Deed and the Scheme.

This Deed Poll provides as follows:

1. Definitions and interpretation

1.1 Definitions

Scheme means the scheme of arrangement between Blackgold and Scheme Shareholders pursuant to which all Scheme Shares will be transferred to Vibrant in accordance with Part 5.1 of the Corporations Act 2001 (Cth), being the scheme in the form of (or substantially in the form of) **Annexure B** to the Scheme Booklet, together with any amendment or modification made to the scheme of arrangement pursuant to Section 411(6) of the Corporations Act.

Scheme Booklet means the Explanatory Memorandum relating to the Scheme.

Scheme Implementation Deed means the deed dated 28 October 2016 between Blackgold and Vibrant relating to the Scheme.

1.2 Interpretation

Unless otherwise stated, terms defined in the Scheme have the same meaning when used in this deed poll.

Clause 1 of the Scheme Implementation Deed applies to the interpretation of this deed poll, except that references to “this Deed” are to be read as references to “this deed poll”.

1.3 Nature and enforcement of Deed Poll

Vibrant acknowledges that:

(a) this deed poll may be relied upon and enforced by any Scheme Shareholder in accordance with its terms, even though the Scheme Shareholder is not a party to it; and

(b) under the Scheme, each Scheme Shareholder irrevocably appoints Blackgold and each of its directors, officers and secretaries (jointly and each of them severally) as its agent and attorney to enforce this deed poll against Vibrant.

2. Conditions of obligations

2.1 Conditions

The obligations of Vibrant under this deed poll are subject to, and condition upon, the Scheme becoming Effective.

2.2 Automatic termination of obligations

The obligations of Vibrant under this deed poll will automatically terminate and the terms of this deed poll will be of no force or effect if:

(a) the Scheme Implementation Deed is validly and lawfully terminated in accordance with its terms; or

(b) the Scheme is not Effective by the End Date,

unless otherwise agreed by Vibrant and Blackgold in writing.

2.3 Consequences of termination

If this deed poll terminates under clause 2.2, in addition and without prejudice to any other rights, powers or remedies available to it:

(a) Vibrant is released from its obligations to further perform this deed poll; and

(b) each Scheme Shareholder retains the rights they have against Vibrant in respect of any breach of this deed poll which occurred before it was terminated.

3. Scheme obligations

3.1 Undertaking to provide Scheme Consideration

Subject to clause 2, Vibrant undertakes in favour of each Scheme Shareholder to:

(a) comply with Vibrant's obligations under the Scheme; and

(b) comply with Vibrant's obligations under the Scheme Implementation Deed; and

(c) do all things reasonably necessary on Vibrant's part to give full effect to the Scheme; and

(d) undertake and perform all other actions attributed to Vibrant under the Scheme,

subject to and in accordance with the terms of the Scheme and the Scheme Implementation Deed.

3.2 Interest in Scheme Shares

Immediately after the provision of the Scheme Consideration under clause 3.1 above in cleared and available funds, Vibrant will be beneficially entitled to the Scheme Shares to be transferred to it under this Scheme, pending registration in the share register. For the avoidance of doubt, Vibrant has no title, interest or right in (or over) the Scheme Shares, whether legal, beneficial or otherwise, until after the Scheme Consideration has been provided in accordance with clause 3.1.

4. Continuing Obligations

This deed poll is irrevocable and subject to clause 2, remains in full force and effect until:

(a) Vibrant has fully performed its obligations under this deed poll; or

(b) the earlier termination of this deed poll under clause 2 above.

5. General

5.1 Notices

Clause 16 (Notices) of the Scheme Implementation Deed applies to this deed poll in respect of notices or other communications in respect of this deed poll.

5.2 Waiver

(a) Vibrant may not rely on the words or conduct of any Scheme Shareholder as a waiver of any right unless the waiver is in writing and signed by the Scheme Shareholder granting the waiver.

(b) No Scheme Shareholder may rely on words or conduct of Vibrant as a waiver of any right unless the waiver is in writing and signed by Vibrant.

5.3 Variation

A provision of this deed poll may not be varied unless:

(a) if before the First Court Date, the variation is agreed to by Blackgold; or

(b) if on or after the First Court Date, the variation is agreed to by Blackgold and the Court indicates that the variation would not of itself preclude approval of the Scheme,

in which event Vibrant will enter into a further deed poll in favour of the Scheme Shareholders giving effect to the variation.

5.4 Assignment

(a) The rights created by this deed poll are personal to Vibrant and each Scheme Shareholder and must not be dealt with at law or in equity without the prior written consent of Vibrant.

(b) Any purported dealing in contravention of clause 5.4(a) is invalid.

5.5 Governing law and arbitration

This deed poll is governed by the laws of Western Australia.

Any dispute arising out of, or in connection with, this deed poll, including any question regarding its existence, validity or termination, shall be referred to and finally resolved by arbitration administered by the *Singapore International Arbitration Centre* ("**SIAC**") in accordance with the Arbitration Rules of the Singapore International Arbitration Centre ("**SIAC Rules**") for the time being in force, which rules are deemed to be incorporated by reference in this clause.

The seat of the arbitration shall be Singapore.

The Tribunal shall consist of 3 (three) arbitrators.

The language of the arbitration shall be English.

5.6 Cumulative rights

The rights, powers and remedies of Vibrant and the Scheme Shareholders under this deed poll are cumulative and do not exclude any other rights, powers or remedies provided by law independently of this deed poll.

EXECUTED AS A DEED POLL

The common seal of
Vibrant Group Limited
was hereunto affixed by:

Director:

Name (please print):

Director / Company Secretary:

Name (please print):

Annexure D – Notice of Scheme Meeting

Blackgold International Holdings Limited
(ACN 145 095 478)

("Blackgold")

NOTICE IS HEREBY GIVEN THAT, by order of the Federal Court pursuant to Section 411(1) of the Corporations Act 2001 (Cth), a meeting of Blackgold Shareholders (other than Vibrant Group Limited and its related bodies corporate as Blackgold Shareholders) will be held on 26 June 2017 at 11am Perth time at 38 Station Street, Subiaco, Perth, Western Australia.

Purpose of the Scheme Meeting

The purpose of the Scheme Meeting is to consider and, if thought fit, to approve a Scheme of Arrangement (with or without amendment or any alterations or conditions required by the Court) proposed to be made between Blackgold and Blackgold shareholders (other than Vibrant Group Limited and its related bodies corporate as Blackgold Shareholders) (the "**Scheme**").

A copy of the Scheme and a copy of the explanatory statement which is required by Section 412 of the Corporations Act in relation to the Scheme are contained in the Scheme Booklet, of which this notice of meeting forms part.

Shareholders Resolution

The Scheme Meeting will be asked to consider, and if thought fit, pass the following shareholders resolution (with or without amendments):

> "That pursuant to, and in accordance with, the provisions of Section 411 of the Corporations Act 2001 (Cth), the scheme of arrangement proposed between Blackgold International Holdings Limited and the holders of its ordinary shares, as contained in and described in the scheme booklet of which the Notice of Meeting convening this meeting forms part, is approved (with or without amendment or any alterations or conditions required by the Court)."

Chairman of the Scheme Meeting

The Court has directed that Dr Chi Ho (James) Tong is to act as chairman of the Scheme Meeting (and that if Dr Tong is unable or unwilling to attend, then Mr It Phong Tin to act as chairman of the Scheme Meeting), and has directed that the chairman report the result of the Resolution to the Court.

Explanatory Notes

Blackgold Shareholders are referred to the explanatory notes which accompany this Notice of Meeting.

By Order of the Court and of the Blackgold Board

Nicholas Ong
Company Secretary
26 May 2017

Explanatory Notes to the Notice of Meeting

1. General

This notice of meeting relates to a scheme of arrangement. It should be read in conjunction with the Scheme Booklet, of which this notice of meeting forms part. The Scheme Booklet contains important information to assist you in determining how to vote on the Resolution.

The scheme of arrangement is set out in **Annexure B** of the Scheme Booklet.

2. Shareholder Approval

For the proposed Scheme to be binding in accordance with Section 411 of the Corporations Act, the resolution must be passed by Blackgold Shareholders by:

(a) a majority in number (more than 50%) of Blackgold Shareholders present and voting on the Scheme Resolution at the Scheme Meeting (either in person or by proxy);

and

(b) at least 75% of the total number of votes cast on the Scheme Resolution at the Scheme Meeting by Blackgold Shareholders present and voting at the Scheme Meeting (either in person or by proxy).

The Court has the discretion to waive the first of these two requirements if it considers it appropriate to do so.

Vibrant and its associates (as the term “associate” is defined in Sections 10 to 16 inclusive of Corporations Act 2001) will not vote at the Scheme Meeting any Blackgold shares which they own or control.

3. Court Approval

If the Resolution is approved by the Requisite Majorities then Blackgold intends to apply to the Court for the necessary orders to give effect to the Scheme. In order for the Scheme to become Effective, it must be approved by the Court and then an office copy of the orders of the Court must be lodged with ASIC.

4. Entitlement to Vote and Voting Restrictions

The date and time for determining eligibility of Blackgold Shareholders to vote at the Scheme Meeting is 24 June 2017 at 5pm Perth time.

Vibrant and its associates (as the term "**associate**" is defined in Sections 10 to 16 inclusive of Corporations Act 2001) will not vote at the Scheme Meeting any Blackgold shares which they own or control.

The Directors of Blackgold intend to vote at the Scheme Meeting the Blackgold Shares which they own or control. Each Director of Blackgold intends to vote the Blackgold Shares which they own or control in favour of the Scheme, in the absence of a Superior Proposal.

5. How to Vote

Voting on the Resolution will be conduct by way of a poll.

If you are a Blackgold Shareholder who is entitled to vote at the Scheme Meeting, then you may vote by:

(a) attending and voting in person; or

(b) appointing a proxy to attend and vote on your behalf, using the proxy form that accompanies the Scheme Booklet; or

(c) in the case of a body corporate, appointing a representative to attend the meeting and vote on your behalf, using a valid certificate of appointment of corporate representative.

6. Attendance

If you, or your proxy or representative, plan to attend the Scheme Meeting, then please arrive at the venue at least 30 minutes before the scheduled time for commencement, so that your shareholding can be checked against the Blackgold share register.

7. Jointly Held Securities

If you hold Blackgold Shares jointly with another person or people, then only one of you may vote. If more than one of you purports to vote in person at the Scheme Meeting, then only the vote of the holder whose name appears first in the share register will be counted.

8. Voting

8.1 Voting in Person

To vote in person, you must attend the Scheme Meeting.

8.2 Voting by Proxy

You may appoint a proxy. Your proxy need not be another Blackgold shareholder. Each proxy will have the right to vote on the poll and also to speak at the Scheme Meeting.

To appoint a proxy, you should complete and return the proxy form that accompanied the Scheme Booklet, in accordance with the written instructions on that proxy form.

You must deliver the completed and signed proxy form:

(a) to the registry by the date and time specified in the proxy form; and

(b) using the delivery method and addresses set out in the proxy form.

The Chairman intends to vote all valid un-directed proxies (ie. open proxies), which appoint the Chairman as proxy, in favour of the Resolution, in the absence of a Superior Proposal.

8.3 Voting by Corporate Representative

If you are a body corporate, then you may appoint an individual to act as your representative at the Scheme Meeting. The appointment must comply with Section 250D of the Corporations Act. This means that Blackgold will require a certificate of appointment of corporate representative to be executed by you in accordance with the Corporations Act.

A form of the certificate of appointment of corporate representative may be obtained from Blackgold's share registry, Link Market Services, on their website www.linkmarketservices.com.au (under Investor Services and Forms) or by calling telephone: (+61) 1300 554 474 (toll free within Australia) between the hours of 8:30am to 7:30pm Sydney time Monday to Friday (excluding public holidays).

The representative must bring the original signed and completed certificate of appointment of corporate representative to the Scheme Meeting.

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