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ASTON RESOURCES

ASTON RESOURCES LIMITED

ABN 91 129 361 208

SCHEME BOOKLET

FOR A SCHEME OF ARRANGEMENT BETWEEN ASTON AND THE HOLDERS OF ASTON SHARES IN RELATION TO THE PROPOSED MERGER OF ASTON RESOURCES LIMITED AND WHITEHAVEN COAL LIMITED



VOTE YES

THE ASTON DIRECTORS UNANIMOUSLY RECOMMEND THAT YOU VOTE IN FAVOUR OF THE SCHEME, IN THE ABSENCE OF A SUPERIOR PROPOSAL

THE INDEPENDENT EXPERT HAS ALSO CONCLUDED THAT THE SCHEME IS IN THE BEST INTERESTS OF ASTON SHAREHOLDERS

CREDIT SUISSE

UBS

Joint Financial Advisers

Freehills

Legal Adviser

This is an important document and requires your immediate attention. You should read it in its entirety before deciding whether or not to vote in favour of the Scheme. If you are in any doubt about how to deal with this Scheme Booklet, you should contact your broker, financial adviser or legal adviser immediately.

IMPORTANT NOTICES

Nature of this document

This Scheme Booklet provides shareholders of Aston Resources Limited (ABN 91 129 361 208) (**Aston**) with information about the proposed Merger of Aston and Whitehaven Coal Limited (ABN 68 124 425 396) (**Whitehaven**).

If you have sold all of your Aston Shares, please ignore this Scheme Booklet.

Defined terms

A number of defined terms are used in this Scheme Booklet. These terms are explained in Section 15 of this Scheme Booklet.

No investment advice

The information contained in this Scheme Booklet does not constitute financial product advice and has been prepared without reference to your own investment objectives, financial situation, taxation position and particular needs. It is important that you read this Scheme Booklet in its entirety before making any investment decision and any decision as to whether or not to vote in favour of the Scheme. If you are in any doubt in relation to these matters, you should consult your financial, legal, taxation or other professional adviser.

Regulatory information

This Scheme Booklet is the explanatory statement for the Scheme of Arrangement between Aston and the holders of its fully paid ordinary shares as at the Scheme Record Date for the purposes of section 412(1) of the Corporations Act. A copy of the proposed Scheme is included in this Scheme Booklet as Annexure A.

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 Aston Shareholders.

ASIC has been requested to provide a statement, in accordance with section 411(17)(b) of the Corporations Act, 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 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 the Corporations Act

The fact that under 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 the meeting does not mean that the Court:

- 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
- has prepared, or is responsible for, the content of the explanatory statement.

Disclaimer as to forward-looking statements

This Scheme Booklet contains both historical and forward-looking statements. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements.

All forward-looking statements in this Scheme Booklet reflect views only as at the date of this Scheme Booklet, and generally may be identified by the use of forward-looking words such as "believe", "aim", "expect", "anticipate", "intending", "foreseeing", "likely", "should", "planned", "may", "estimate", "potential", or other similar words. Similarly, statements that describe Aston's, Whitehaven's or Boardwalk's objectives, plans, goals or expectations are or may be forward-looking statements.

The statements contained in this Scheme Booklet about the impact that the Scheme may have on the results of Aston's operations and the advantages and disadvantages anticipated to result from the Scheme, are also forward-looking statements.

These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to differ materially from the anticipated results, performance or achievements, expressed, projected or implied by these forward-looking statements.

The operations and financial performance of Aston are subject to various risks that are summarised in this Scheme Booklet and which may be beyond the control of Aston and/or Whitehaven. Aston Shareholders should note that the historical financial performance of Aston is no assurance of future financial performance of Aston (whether the Scheme is implemented or not). Those risks and uncertainties include factors and risks specific to the industry in which Aston operates as well as general economic conditions, prevailing coal prices, exchange rates and interest rates and conditions in the financial markets. As a result, the actual results of operations and earnings of Aston or the Merged Group following implementation of the Scheme, as well as the actual advantages of the Scheme, may differ significantly from those that are anticipated in respect of timing, amount or nature and may never be achieved.

The forward-looking statements included in this Scheme Booklet are made only as of the date of this Scheme Booklet.

Any forward-looking statements included in the Aston Information have been made on reasonable grounds. Although Aston believes that the views reflected in any forward-looking statements included in the Aston Information have been made on a reasonable basis, no assurance can be given that such views will prove to have been correct.

Any forward-looking statements included in the Whitehaven Information have been made on reasonable grounds. Although Whitehaven believes that the views reflected in any forward-looking statements included in the Whitehaven Information have been made on a reasonable basis, no assurance can be given that such views will prove to have been correct.

None of Aston, Whitehaven, Boardwalk Resources Limited (ACN 130 433 617) (**Boardwalk**), Aston's officers, Whitehaven's officers, Boardwalk's officers, any persons named in this Scheme Booklet with their consent or any person involved in the preparation of this Scheme Booklet makes any representation or warranty (express or implied) as to the likelihood of fulfilment of any forward-looking statement, or any events or results expressed or implied in any forward-looking statement, except to the extent required by law. You are cautioned not to place undue reliance on any forward-looking statement in this Scheme Booklet.

You should review all of the information in this Scheme Booklet carefully. Section 3.2 sets out the reasons why you should vote in favour of the Scheme and Section 3.3 sets out the disadvantages and risks of the Scheme.

All subsequent written and oral forward-looking statements attributable to Aston or Whitehaven or any person acting on their behalf are qualified by this cautionary statement.

Subject to any continuing obligations under relevant laws or the listing rules of a relevant exchange, Aston and Whitehaven do not give any undertaking to update or revise any such statements after the date of this Scheme Booklet, to reflect any change in expectations in relation thereto or any change in events, conditions or circumstances on which any such statement is based.

Responsibility statement

Aston has been solely responsible for preparing the Aston Information. The information concerning Aston and the intentions, views and opinions of Aston and the Aston Directors contained in this Scheme Booklet has been prepared by Aston and the Aston Directors and is the responsibility of Aston. Whitehaven and Whitehaven's Directors and officers do not assume any responsibility for the accuracy or completeness of any such Aston information.

Whitehaven has been solely responsible for preparing the Whitehaven Information (other than the Boardwalk Information, which has been prepared by Boardwalk). The information concerning Whitehaven and the intentions, views and opinions of Whitehaven contained in this Scheme Booklet has been prepared by Whitehaven and is the responsibility of Whitehaven. Aston and Aston's Directors and officers do not assume any responsibility for the accuracy or completeness of any such Whitehaven Information.

AME Group has prepared the Independent Industry Expert's Report in relation to the Scheme and takes responsibility for that report. The Independent Industry Expert's Report is set out in Section 10.

Boardwalk has been solely responsible for preparing the Boardwalk Information. The information concerning Boardwalk and the intentions, views and opinions of Boardwalk contained in Section 5.8 of this Scheme Booklet has been prepared by Boardwalk and is the responsibility of Boardwalk. Aston and Aston's Directors and officers do not assume any responsibility for the accuracy or completeness of any such Boardwalk Information.

Computershare Investor Services Pty Ltd has had no involvement in the preparation of any part of this Scheme Booklet other than being named as the Aston Registry. Computershare Investor Services Pty Ltd has not authorised or caused the issue of, and expressly disclaims and takes no responsibility for, any part of this Scheme Booklet.

Ernst & Young has prepared the Investigating Accountant's Report in relation to the Scheme and takes responsibility for that report. The Investigating Accountant's Report is set out in Section 11.

Greenwoods & Freehills Pty Ltd has prepared the summary of the tax implications of the Scheme and takes responsibility for that summary. The summary is set out in Section 12.

Minarco Mine-Consult has prepared the Independent Technical Expert's Report in relation to the Scheme and takes responsibility for that report. The Independent Technical Expert's Report is set out in Section 9.

PricewaterhouseCoopers Securities Limited has prepared the Independent Expert's Report in relation to the Scheme and takes responsibility for that report. The Independent Expert's Report is set out in Section 8.

Foreign Shareholders

This Scheme Booklet and the Scheme are subject to Australian disclosure requirements which may be different from those applicable in other jurisdictions. This Scheme Booklet and the Scheme do not in any way constitute an offer of securities in any place in which, or to any person to whom, it would not be lawful to make such an offer.

Foreign Shareholders, being Aston Shareholders in jurisdictions outside Australia and its external territories and New Zealand, should refer to Section 2.12 of this Scheme Booklet to determine whether they are Ineligible Foreign Shareholders.

Aston Shareholders that are considered to be Ineligible Foreign Shareholders will not be able to receive New Whitehaven Shares. New Whitehaven Shares that would otherwise be issued to these shareholders in connection with the Scheme will be issued to the Sale Agent (or their nominees) to be sold

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on ASX, with the net proceeds of such sale to be paid to Ineligible Foreign Shareholders.

Aston Shareholders resident outside Australia for tax purposes should seek specific taxation advice in relation to the Australian and overseas taxation implications of the Scheme.

Important Notice to U.S. shareholders

The New Whitehaven Shares to be issued pursuant to the Scheme of Arrangement have not been, and will not be, registered under the *U.S. Securities Act of 1933* (**Securities Act**), or the securities laws of any other jurisdiction, and may not be offered or sold in the U.S. or to "U.S. Persons" (as defined in Regulation S under the Securities Act) unless the securities are registered under the Securities Act, or an exemption from the registration requirements of the Securities Act is available.

Any New Whitehaven Shares issued pursuant to the Scheme of Arrangement will be issued in reliance on the exemption from the registration requirements of the Securities Act provided in section 3(a)(10) of the Securities Act based on the approval of the Scheme of Arrangement by the Court.

Whitehaven Shares received pursuant to the Scheme of Arrangement by any person who may be deemed to be an "affiliate" of Whitehaven under Rule 145 under the Securities Act, including, without limitation, directors and certain executive officers, may not be resold in the United States or to a U.S. Person except in accordance with the provisions of Rule 144 under the Securities Act, outside of the United States in reliance upon Regulation S under the Securities Act, or as otherwise permitted by the Securities Act.

U.S. shareholders should note that this offer is made for the securities of an Australian company in accordance with the laws of Australia and ASX Listing Rules. The Scheme is subject to disclosure requirements of Australia that are different from those of the United States. For example, the financial information included in this Scheme Booklet has been prepared in accordance with Australian Accounting Standards and Australian equivalents to International Financial Reporting Standards (**A-IFRS**). There are differences between Australian Accounting Standards and U.S. generally accepted accounting principles (**U.S. GAAP**) that may be material to such financial information.

U.S. shareholders should also be aware that certain financial information included in this Scheme Booklet are "non-GAAP financial measures" under Regulation G under the U.S. *Securities and Exchange Act of 1934*. The disclosure of such non-GAAP financial measures in the manner included in this Scheme Booklet may not be permissible in a registration statement under the Securities Act. Aston believes these non-GAAP financial measures provide useful information to investors in measuring its financial performance and condition. Non-GAAP financial measures in this Scheme Booklet include the Pro Forma Financial Information (Section 6.7) and the disclosure of significant items in the Whitehaven statement of financial performance (Section 5.5). These non-GAAP financial measures do not have a standardised meaning prescribed by A-IFRS and, therefore, may not be comparable to similarly titled measures presented by other entities, nor should they be construed as an alternative to other financial measures determined in accordance with A-IFRS. Investors are cautioned, therefore, not to place undue reliance on any non-GAAP financial measures included in this Scheme Booklet.

Additionally, the Merged Group pro forma financial information included in this Scheme Booklet may not comply with Article 11 of Regulation S-X of the Rules and Regulations of the U.S. Securities and Exchange Commission (**SEC**). The rules and regulations related to the preparation of financial information in the United States or other jurisdictions may vary significantly from the requirements applicable in Australia.

The enforcement by U.S. shareholders of civil liabilities under U.S. securities laws may be affected adversely by the fact that Aston is a corporation existing and governed under the laws of Australia, and that some or all of its directors, officers and the experts named in this Scheme Booklet are not residents of the United States and that all or a substantial portion of their respective assets may be located outside the United States. As a result, it may be difficult for U.S. shareholders to effect service of process in the United States upon Aston, its officers and directors or the experts named herein, or to enforce against them upon judgments of courts of the United States predicated upon the civil liability of such persons under the federal securities laws of the United States.

NEITHER THE FACT THAT A REGISTRATION STATEMENT OR AN APPLICATION FOR A LICENCE HAS BEEN FILED UNDER CHAPTER 421-B OF THE NEW HAMPSHIRE REVISED STATUTES ANNOTATED, 1955, AS AMENDED, OR "RSA," WITH THE STATE OF NEW HAMPSHIRE NOR THE FACT THAT A SECURITY IS EFFECTIVELY REGISTERED OR A PERSON IS LICENSED IN THE STATE OF NEW HAMPSHIRE CONSTITUTES A FINDING BY THE SECRETARY OF STATE THAT ANY DOCUMENT FILED UNDER RSA 421-B IS TRUE, COMPLETE AND NOT MISLEADING. NEITHER ANY SUCH FACT NOR THE FACT THAT AN EXEMPTION OR EXCEPTION IS AVAILABLE FOR A SECURITY OR A TRANSACTION MEANS THAT THE SECRETARY OF STATE HAS PASSED IN ANY WAY UPON THE MERITS OR QUALIFICATIONS OF, OR RECOMMENDED OR GIVEN APPROVAL TO, ANY PERSON, SECURITY OR TRANSACTION. IT IS UNLAWFUL TO MAKE, OR CAUSE TO BE MADE, TO ANY PROSPECTIVE PURCHASER, CUSTOMER OR CLIENT ANY REPRESENTATION INCONSISTENT WITH THE PROVISIONS OF THIS PARAGRAPH.

You should be aware that Whitehaven may purchase securities otherwise than under the Scheme, such as in the open market or by privately negotiated purchases.

This Scheme Booklet has not been filed with or reviewed by the SEC or any state securities authority and none of them has passed upon or endorsed the merits of the Scheme or the accuracy, adequacy or completeness of this Scheme Booklet.

Important Notice to Singapore shareholders

This Scheme Booklet has not been lodged or registered as a prospectus with the Monetary Authority of Singapore (the **MAS**) and is not made in or accompanied by a prospectus that is lodged or registered with the MAS. Accordingly, this Scheme Booklet and any other document or material in connection with the offer, or sale, or invitation for subscription or purchase, of the New Whitehaven Shares may not be circulated or distributed, nor may the New Whitehaven Shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to any person in Singapore other than pursuant to the exemptions in Subdivision (4), Division 1, Part XIII of the Securities and Futures Act, Chapter 289 of Singapore (the **SFA**), or otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Cautionary note regarding Reserves, Resources and exploration information

You should be aware that as Australian companies with securities listed on ASX, each of Whitehaven and Aston is required to report Reserves and Resources in Australia in accordance with the Australasian Code for Reporting of Exploration Results, Resources and Reserves (The JORC Code 2004 Edition) (**JORC Code**). Mining companies in other countries may be required to report their mineral reserves and/or resources in accordance with other guidelines (for example, SEC Industry Guide 7 in the United States). You should note that while Whitehaven's and Aston's Reserve and Resource estimates comply with the JORC Code, they may not comply with the relevant guidelines in other countries, and do not comply with SEC Industry Guide 7, which governs disclosures of mineral reserves in registration statements and certain reports filed with the SEC. In particular, SEC Industry Guide 7 does not recognise classifications other than proven and probable reserves, and, as a result, the SEC generally does not permit mining companies to disclose their Resources in SEC registration statements. You should not assume that quantities reported as Resources will be converted to Reserves under the JORC Code or any other reporting regime or that the Merged Group will be able to legally and economically extract them.

Furthermore, there are a number of differences in the way reserves must be calculated under SEC Industry Guide 7 compared to the JORC Code. These differences result from the fact that SEC Industry Guide 7 requires that a reserve be legally and economically recoverable "at the time of the reserve determination", while the JORC Code permits the use of "realistically assumed" modifying factors. As interpreted by the Staff of the SEC, the main difference that is relevant to the reserves estimated in this Scheme Booklet is that SEC Industry Guide 7 generally requires a mining company to possess all necessary mining titles or leases and regulatory permits to conduct mining operations before declaring a reserve. As a result of this difference, Aston would not be able to declare a reserve under SEC Industry Guide 7.

In addition, this Scheme Booklet refers to Boardwalk's Exploration Target of 99 – 453Mt of PCI coal, semi-soft coking coal and thermal coal at Ferndale, 82 – 462Mt of PCI coal and thermal coal at Dingo, 14 – 565Mt of hard coking coal, PCI coal and thermal coal at Sienna and 0 – 1,832Mt of thermal coal at Monto. This exploration potential has insufficient sampling at this time to be defined as a Resource that would satisfy the JORC Code. The potential quantity and quality of these potential coal Resources is conceptual in nature since there has been insufficient work completed to define them beyond Exploration Targets and it is uncertain if further exploration will result in the determination of a Resource.

Although the JORC Code permits mining companies to disclose Exploration Targets in certain circumstances, such a disclosure would not be permitted in an SEC registration statement. While Aston understands that Boardwalk has set its Exploration Targets based on its understanding to date of the geology of the projects and the number and type of Exploration Targets it has identified, mineral exploration is an inherently uncertain activity, and there can be no assurance that further exploration of those targets will be successful, or lead to the estimation of additional Resources (or Reserves) of the quantity indicated by its Exploration Targets, or at all.

Privacy

Aston and Whitehaven may collect personal information in the process of implementing the Scheme. Such information may include the name, contact details and shareholdings of Aston Shareholders and the name of persons appointed by those persons 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 Aston and Whitehaven to conduct the Scheme Meeting and implement the Scheme. Personal information of the type described above may be disclosed to the Aston Registry, print and mail service providers, authorised securities brokers, Related Bodies Corporate of Aston and Whitehaven, and Aston and Whitehaven's advisers and service providers. Aston Shareholders have certain rights to access personal information that has been collected. Aston Shareholders should contact the Aston Registry in the first instance, if they wish to access their personal information. Aston Shareholders who appoint a named person to act as their proxy, attorney or corporate representative should ensure that they inform that person of these matters.

Date of this Scheme Booklet

This Scheme Booklet is dated Friday, 9 March 2012.

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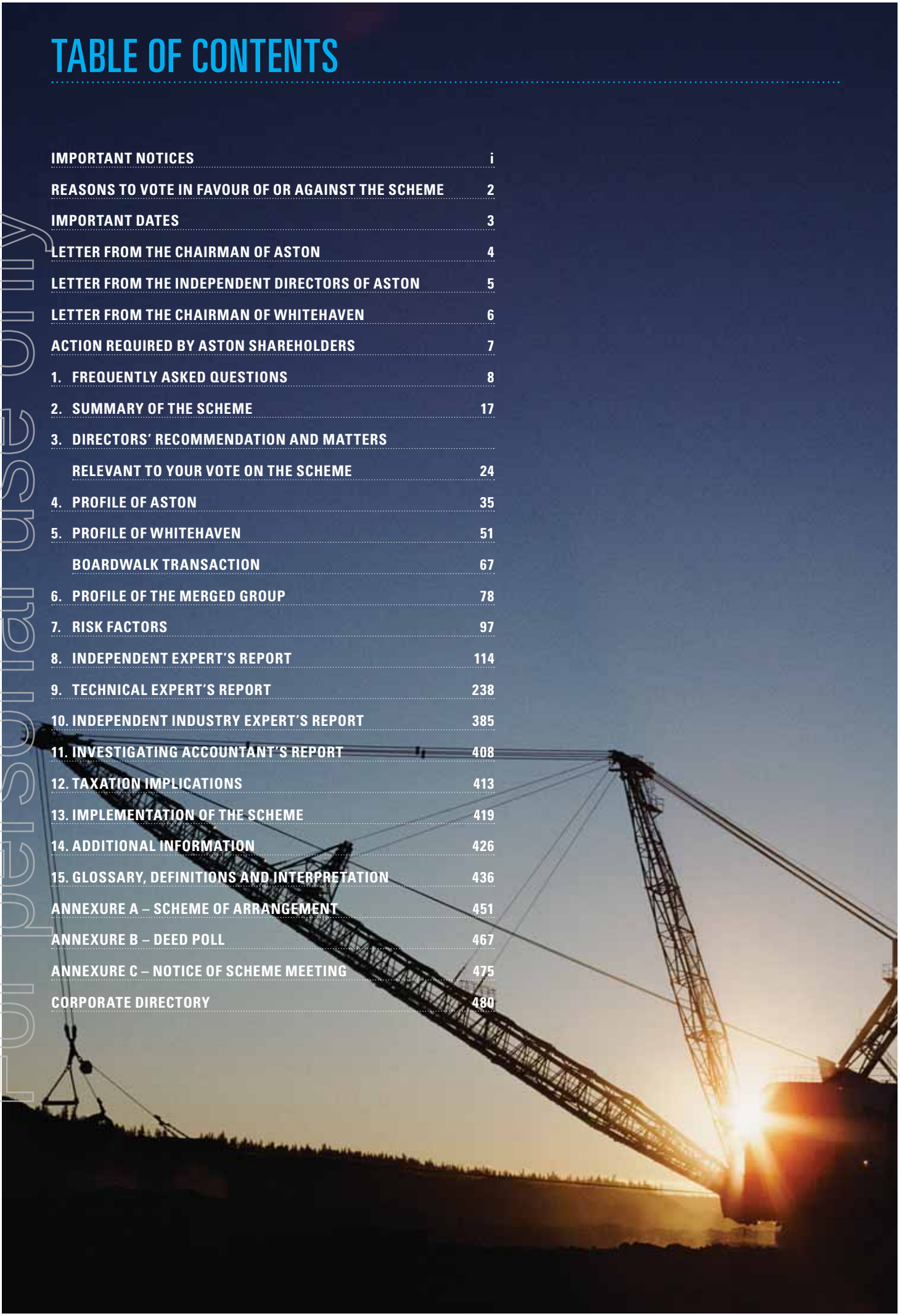
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REASONS TO VOTE IN FAVOUR OF OR AGAINST THE SCHEME

REASONS TO VOTE IN FAVOUR OF THE SCHEME[1]

- Creates a large scale, leading ASX listed coal producer with a substantial Resource and Reserve base supplying an attractive mix of premium metallurgical and thermal coals
- Improves the risk profile, diversifying from a single coal asset development company to an attractive portfolio of producing, development and exploration coal assets, enhancing the capability for growth
- Creates a major global supplier of semi-soft coking and PCI coals with the potential to maximise margins and access a broader customer base
- Strengthens and consolidates a strategic position in port and rail infrastructure
- Generates significant synergies resulting from the consolidation of the Gunnedah Basin mining operations
- Combines capable and experienced boards and management teams with a proven track record
- The Independent Expert has concluded that the Scheme is in the best interests of Aston Shareholders[2]
- All of the directors of Aston, including the Independent Directors, have unanimously recommended that you vote in favour of the Scheme in the absence of a Superior Proposal

POSSIBLE REASONS NOT TO VOTE IN FAVOUR OF THE SCHEME[3]

- The risk profile and risk of investment for Aston Shareholders will change and you may consider the risk profile and risk of investment of the Merged Group to be a disadvantage relative to that of Aston as a standalone entity;
- The investment profile for Aston Shareholders will change and you may consider the investment profile of the Merged Group to be inferior to that of Aston as a standalone entity;
- You may consider that there is the potential for a Superior Proposal to be made to Aston in the foreseeable future;
- There are risks in integrating the respective businesses of Aston and Whitehaven;
- The exact value of the Scheme Consideration is not certain and will depend on the price at which Whitehaven Shares trade on ASX after the Implementation Date;
- Following implementation of the Scheme, the Merged Group's share price may change and there is no guarantee that the implied value of the Scheme Consideration will be realised;
- The Merged Group will likely experience higher depreciation and amortisation charges resulting from the uplift in Aston assets, which will lower the earnings of the Merged Group; or
- The tax consequences of transferring your Aston Shares if the Scheme becomes Effective may not be suitable to your financial position.

You should read this Scheme Booklet in full before deciding how to vote and seek professional advice on your particular circumstances, as appropriate.

1 Further details of the reasons why you should vote in favour of the Scheme are set out in Section 3.2 of this Scheme Booklet.
2 The Independent Expert has stated that its estimate of the implied value of the Scheme Consideration on a controlling interest basis is in the range of A$11.50 to A$16.29 per Aston Share as a result of the Scheme. If the Boardwalk Transaction is completed, the Independent Expert has stated that its estimate of the implied value of consideration per share is in the range of A$10.70 to A$15.25 per Aston Share. This compares with the Independent Expert's valuation of each Aston Share (on a fully diluted, controlling interest basis) of A$10.48 to A$14.92. The Independent Expert's Report is set out in Section 8.
3 Further details of the reasons why you may consider voting against the Scheme are set out in Section 3.3 of this Scheme Booklet.

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IMPORTANT DATES

Date of this **Scheme Booklet**	Friday, 9 March 2012
Time and date for determining eligibility to vote at the Scheme Meeting	10:00am (Brisbane time) on Saturday, 14 April 2012
Latest date and time for receipt of direct votes, proxy forms or powers of attorney for the Scheme Meeting	10:00am (Brisbane time) on Saturday, 14 April 2012
Scheme Meeting to be held at the The Hilton, Level 8, 190 Elizabeth Street, Brisbane, QLD, 4000	10:00am (Brisbane time) on Monday, 16 April 2012

If the Scheme is agreed to by Aston Shareholders

Second Court Date for approval of the Scheme	Wednesday, 18 April 2012
Effective Date Court order lodged with ASIC and announcement to ASX Last day of trading in Aston Shares – Aston Shares suspended from trading on ASX from close of trading on ASX	Thursday, 19 April 2012
Scheme Record Date for Scheme Consideration	7:00pm (Brisbane time) on Friday, 27 April 2012
Implementation Date Issue of Scheme Consideration to Scheme Shareholders	Wednesday, 2 May 2012

All dates following the date of the Scheme Meeting are indicative only and, among other things, are subject to all necessary approvals from the Court and any other Governmental Agency. Any changes to the above timetable (which may include an earlier or later date for the Second Court Hearing) will be announced through ASX and notified on Aston's website at www.astonresources.com.

All references to time in this Scheme Booklet are references to Brisbane time unless otherwise stated. Any obligation to do an act by a specified time in an Australian time zone must be done at the corresponding time in any other jurisdiction.

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LETTER FROM THE CHAIRMAN OF ASTON

9 March 2012

Dear Aston Shareholder,

I am pleased to present to you this exciting proposal for the Merger of Aston and Whitehaven. A meeting of Aston Shareholders is to be held to vote on a scheme to implement the proposal on Monday, 16 April 2012.

The Independent Directors of Aston have considered the Merger with Whitehaven and have unanimously recommended that Aston Shareholders vote in favour of the Scheme in the absence of a Superior Proposal. Mr Philip Christensen and I, as representatives of the Tinkler Group and noting our interests in the Boardwalk Transaction, also recommend Aston Shareholders vote in favour of the Scheme in the absence of a Superior Proposal.

On 12 December 2011, Aston and Whitehaven announced that they had entered into a binding agreement to implement a transaction that would result in the creation of a leading independent Australian coal producer through an all-scrip merger of equals. Under the terms of the agreement with Whitehaven, if the Scheme is implemented you will receive 1.89 Whitehaven Shares for each Aston Share you hold.[4]

In separate agreements, Whitehaven has agreed to acquire all of the issued securities in unlisted coal explorer Boardwalk. Boardwalk Securityholders, including affiliates of the Tinkler Group and Farallon Funds, will be issued 85.89 million Whitehaven Shares as consideration for the acquisition of Boardwalk by Whitehaven.[5]

The transaction is an important milestone for Aston Shareholders. The Merger is expected to provide Aston Shareholders with enhanced capability for continued growth and value creation.

The directors of both Aston and Whitehaven are strongly supportive of the proposed Merger. The Merged Group will have a more diversified portfolio of producing, development and exploration coal assets, with a market capitalisation of approximately A$5.1 billion[6] and projected saleable production of 25Mt by 2016. The Merged Group will become one of the major global suppliers of semi-soft coking and PCI coals with the potential to maximise margins and access a broader customer base and will hold a unique strategic infrastructure position. Moreover, the Aston and Whitehaven directors expect the combination of the two businesses will generate significant synergies with a present value estimated at **A$575 – 775 million** through consolidation of the Gunnedah Basin mining operations.

As your Chairman, and largest shareholder in Aston, I strongly support the Merger. I am excited to become a shareholder in the Merged Group and share in the benefits and synergies associated with the combination of Aston and Whitehaven. However, noting our interests in the Boardwalk Transaction, I along with Mr Philip Christensen and Farallon Funds and our respective affiliates, have decided that it is appropriate that we do not vote any Aston Shares that we control on the Scheme at the Scheme Meeting. I do encourage you as an Aston Shareholder to vote in favour of the Scheme. Furthermore, each of the Independent Directors intend to vote any Aston Shares controlled by them in favour of the Scheme,[7] in the absence of a Superior Proposal.

Please read this Scheme Booklet carefully as it contains important information in relation to the Scheme, including the reasons for your directors' recommendation and the Independent Expert's Report prepared by PricewaterhouseCoopers Securities.

Your vote is important regardless of how many Aston Shares you own. If you are unable to attend the Scheme Meeting in person, I encourage you to vote by completing your personalised proxy form which is enclosed with this Scheme Booklet and returning it in accordance with the directions on the form so it is received by 10:00am (Brisbane time) on Saturday, 14 April 2012. If you are in any doubt as to what action you should take in relation to the Scheme, you should consult your professional adviser without delay.

Please call the Aston Information Line on 1300 554 725 (for callers within Australia) or +61 3 9415 4350 (for callers outside Australia) if you require further information regarding the Scheme.

Yours sincerely,



Nathan Tinkler

Nathan Tinkler
Chairman, Aston Resources Limited

4 Whitehaven intends to distribute a fully franked Special Dividend of A$0.50 per share to existing Whitehaven Shareholders, conditional on the Scheme proceeding. Aston Shareholders will not be eligible to receive this Special Dividend. The 1.89 to one share exchange ratio has been determined after adjusting the Whitehaven share price for the payment of this Special Dividend.

5 Boardwalk Securityholders will also receive up to 34.02 million additional Whitehaven Shares as consideration if certain milestones are reached. Whitehaven's acquisition of Boardwalk is conditional on its Merger with Aston. However, Whitehaven's Merger with Aston is not conditional on the completion of the Boardwalk Transaction.

6 Subject to the Scheme being approved and the Boardwalk Transaction completing. Market capitalisation based on undiluted shares on issue and closing prices as at 9 December 2011 (trading day prior to the announcement of the Merger); includes value attributed to Boardwalk.

7 As at the date of this Scheme Booklet, The Hon. Mark Vaile is the only Independent Director who controls Aston Shares. See Section 14.1.

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LETTER FROM THE INDEPENDENT DIRECTORS OF ASTON

9 March 2012

Dear Aston Shareholder,

We are pleased to present to you this exciting proposal for the Merger of Aston and Whitehaven. A meeting of Aston Shareholders is to be held to vote on the Scheme to implement the proposal on Monday, 16 April 2012.

We, the Independent Directors of Aston, have considered the Merger with Whitehaven and have unanimously recommended that Aston Shareholders vote in favour of the Scheme in the absence of a Superior Proposal. Mr Nathan Tinkler, your Chairman, and Mr Philip Christensen, as representatives of the Tinkler Group and noting their interests in the Boardwalk Transaction, also recommend Aston Shareholders vote in favour of the Scheme in the absence of a Superior Proposal.

In forming our unanimous recommendation, we have carefully considered the following:

- the opportunity for Aston Shareholders to exchange their Aston Shares for shares in a larger, more diversified company with strong growth prospects while retaining ongoing exposure to the tier one Maules Creek Project;
- the benefits to Aston Shareholders resulting from an improved risk profile, becoming a major supplier of semi-soft coking and PCI coals with the potential to maximise margins and access a broader customer base and holding a strategic infrastructure position;
- the significant synergies expected to be realised from the combination of the Aston and Whitehaven assets;
- the substantial skill and expertise of the Merged Group's Board and management teams, and their track record of project delivery and value creation for shareholders; and
- the opinion of the Independent Expert that the Scheme is in the best interests of Aston Shareholders.[8]

We believe that these factors significantly outweigh the potential disadvantages, risks and other considerations in relation to the Scheme (further details of which are set out in Sections 3 and 7 of this Scheme Booklet).

We strongly support the Merger and intend to vote any Aston Shares controlled by us in favour of the Scheme at the Scheme Meeting, in the absence of a Superior Proposal.[9]

Please read this Scheme Booklet carefully as it contains important information in relation to the Scheme, including the reasons for your directors' recommendation and the Independent Expert's Report prepared by PricewaterhouseCoopers Securities. Your vote is important regardless of how many Aston Shares you own. If you are unable to attend the Scheme Meeting in person, we encourage you to vote by completing your personalised proxy form which is enclosed with this Scheme Booklet and returning it in accordance with the directions on the form so it is received by 10:00am (Brisbane time) on Saturday, 14 April 2012. If you are in any doubt as to what action you should take in relation to the Scheme, you should consult your professional adviser without delay.

Please call the Aston Information Line on 1300 554 725 (for callers within Australia) or +61 3 9415 4350 (for callers outside Australia) if you require further information regarding the Scheme.

Yours sincerely,



The Hon. Mark Vaile
Independent
Chairman



Rick Gazzard
Independent
Non-Executive
Director



David Ryan AO
Independent
Non-Executive
Director

8 The Independent Expert has stated that its estimate of the implied value of the Scheme Consideration on a controlling interest basis is in the range of A$11.50 to A$16.29 per Aston Share as a result of the Scheme. If the Boardwalk Transaction is completed, the Independent Expert has stated that its estimate of the implied value of consideration per share is in the range of A$10.70 to A$15.25 per Aston Share. This compares with the Independent Expert's valuation of each Aston Share (on a fully diluted, controlling interest basis) of A$10.48 to A$14.92. The Independent Expert's Report is set out in Section 8.

9 As at the date of this Scheme Booklet, The Hon. Mark Vaile is the only Independent Director who controls Aston Shares. See Section 14.1.

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LETTER FROM THE CHAIRMAN OF WHITEHAVEN

9 March 2012

Dear Aston Shareholder,

The Whitehaven Board is pleased to provide Aston Shareholders with the opportunity to participate in a merger of equals between Aston and Whitehaven and the separate acquisition of Boardwalk by Whitehaven. The transaction brings together highly complementary and growth focused groups, creating a leading independent Australian coal company.

Whitehaven is the largest coal producer in the Gunnedah Basin and currently operates a number of mines in the region – Rocglen (open-cut), Sunnyside (open-cut), Tarrawonga (open-cut), Werris Creek (open-cut) and Narrabri (underground). Whitehaven is also developing the Vickery project, a proposed open-cut mine that is expected to commence production in the second half of calendar year 2013. Following completion of the Boardwalk Transaction, Whitehaven will also hold a portfolio of coal exploration assets within New South Wales and Queensland's established mining regions and a 19.9% indirect interest in Coalworks Limited.

The Whitehaven Board believes that the Merger is highly compelling and provides a number of benefits to both Aston and Whitehaven Shareholders that are detailed in this Scheme Booklet. The transaction will create a Merged Group with a strong production and profit base from five competitive producing mines, a substantial growth pipeline, including two advanced projects, a suite of high quality exploration assets and significant synergies resulting from the combination of the Gunnedah Basin mining operations.

The Independent Directors of Aston have unanimously recommended that Aston Shareholders vote in favour of the Scheme in the absence of a Superior Proposal and the Independent Expert has concluded that the Scheme is in the best interests of Aston Shareholders.[10]

The Whitehaven Board also unanimously supports the Merger.

As an Aston Shareholder, your vote is extremely important in order to ensure that the Scheme is implemented so that the benefits associated with the Scheme can be delivered for both Aston and Whitehaven Shareholders.

This Scheme Booklet provides important information in relation to the transaction. On behalf of the Whitehaven Board, I encourage you to read it carefully and vote in favour of the Scheme at the Scheme Meeting to be held on Monday, 16 April 2012.

I look forward to welcoming you as a shareholder of Whitehaven following the successful implementation of the Merger.

Yours sincerely,



John C Conde AO
Chairman, Whitehaven Coal Limited

10 The Independent Expert has stated that its estimate of the implied value of the Scheme Consideration on a controlling interest basis is in the range of A$11.50 to A$16.29 per Aston Share as a result of the Scheme. If the Boardwalk Transaction is completed, the Independent Expert has stated that its estimate of the implied value of consideration per share is in the range of A$10.70 to A$15.25 per Aston Share. This compares with the Independent Expert's valuation of each Aston Share (on a fully diluted, controlling interest basis) of A$10.48 to A$14.92. The Independent Expert's Report is set out in Section 8.

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ACTION REQUIRED BY ASTON SHAREHOLDERS

Your vote is important

For the Scheme to proceed, it is necessary that sufficient Aston Shareholders vote in favour of the Scheme.[11] If you are registered as an Aston Shareholder at 10:00am (Brisbane time) on Saturday, 14 April 2012, you will be entitled to vote on the Scheme Resolution.

Notice of Meeting

The Scheme will be voted on by Aston Shareholders at a Scheme Meeting to be held at the The Hilton, Level 8, 190 Elizabeth Street, Brisbane, QLD, 4000 on Monday, 16 April 2012, commencing at 10:00am (Brisbane time).

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

Procedure

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

Further information on the method of voting is contained in the Notice of Scheme Meeting set out in Annexure C.

The Scheme will not proceed unless the Scheme is approved by Aston Shareholders.

(a) Voting in person

To vote in person at the Scheme Meeting, you must attend the meeting (see above). An Aston Shareholder who wishes to attend and vote in person will be admitted to the meeting and given a voting card at the point of entry to the meeting on disclosing their name and address.

(b) Voting if you are not attending the meeting

To lodge a direct vote or appoint a proxy to vote on your behalf in respect of the Scheme, you may complete the enclosed personalised Proxy/Voting Form in accordance with the instructions and return it in the reply paid envelope enclosed or by facsimile.

If your direct vote or proxy is signed by an attorney, please also enclose the authority under which the direct vote or proxy is signed (or a certified copy of the authority).

Proxy/Voting Forms and powers of attorney must be received by the Registry (whether in person, by mail or facsimile) by no later than 10:00am (Brisbane time) on Saturday, 14 April 2012 (or if the Scheme Meeting is adjourned, at least 48 hours before the resumption of the Scheme Meeting). Proxy/Voting Forms and powers of attorney received after this time will not be effective.

You may also lodge a direct vote or appoint a proxy online by visiting www.investorvote.com.au and following the online instructions. You will need your shareholder registration details. Your online vote needs to be received by no later than 10:00am (Brisbane time) on Saturday, 14 April 2012.

Information setting out how you may vote by direct vote, or appointment of a proxy or attorney is contained in the Notice of Scheme Meeting set out in Annexure C.

Voting entitlement

Each Aston Shareholder who is registered on the Register at 10:00am (Brisbane time) on Saturday, 14 April 2012 is entitled to attend and vote at the Scheme Meeting, in person or by proxy or attorney or, in the case of a corporation which is an Aston Shareholder, by its representative appointed in accordance with the Corporations Act. Accordingly, registrable transmission applications or transfers registered after this time will be disregarded in determining entitlements to vote at the Scheme Meeting.

Voting is not compulsory.

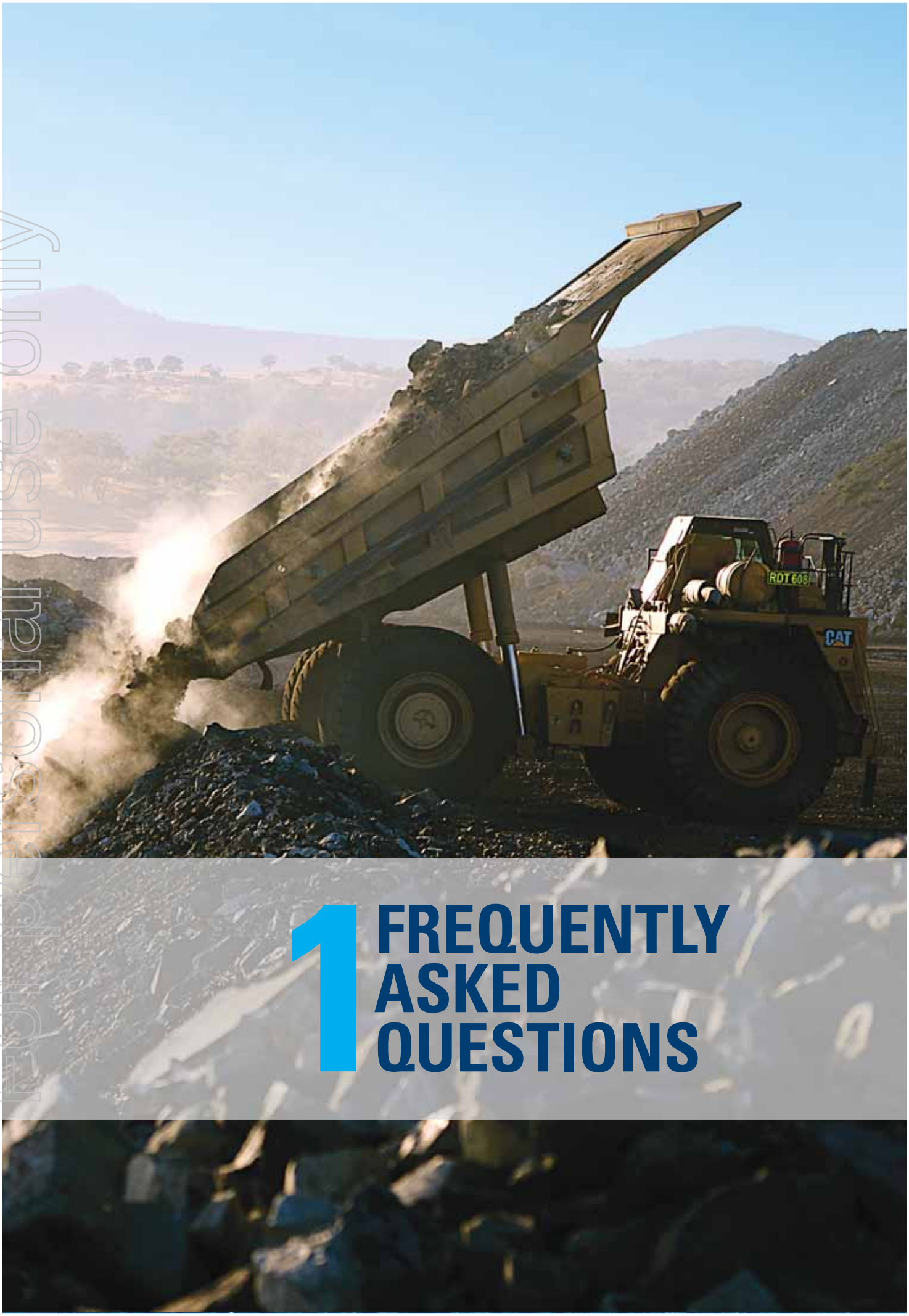
In the case of Aston Shares held by joint holders, only one of the joint shareholders is entitled to vote. If more than one shareholder votes in respect of jointly held Aston Shares, only the vote of the Aston Shareholder whose name appears first in the Register will be counted.

For further information, you can call the Aston Information Line on 1300 554 725 (within Australia) or +61 3 9415 4350 (outside Australia).

11 For the Scheme to proceed, the Scheme Resolution must be passed by a majority in number of Aston Shareholders who vote on the Scheme Resolution, and at least 75% of the votes cast on the Scheme Resolution. The Court has the discretion to waive the first of these two requirements if it considers it appropriate to do so.

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1 FREQUENTLY ASKED QUESTIONS

1. FREQUENTLY ASKED QUESTIONS

QUESTION	ANSWER	MORE INFORMATION
GENERAL QUESTIONS		
What are Aston Shareholders being asked to consider?	On 12 December 2011, Aston and Whitehaven announced a proposal to create a leading independent Australian coal producer. The Merger will be implemented by way of Scheme of Arrangement between Aston and its Shareholders. Aston Shareholders will own approximately 40% of the Merged Group.[12]	See Section 2.1
Why has the transaction been structured as a merger of equals?	The primary objective of the Merger is to bring together two high quality and complementary coal companies for the benefit of all shareholders. Although Aston Shareholders will hold less than 50% of the Merged Group following implementation of the Merger, neither party is considered to be taking control of the other party as the board and management control of the Merged Group will be shared between Aston and Whitehaven. In addition, no individual shareholder will have the ability to exert significant influence over the Merged Group.[12] Aston Shareholders will still have an opportunity to realise a control premium in the event of any future change of control transaction for the Merged Group. The Independent Expert has evaluated the transaction on the basis of a merger of equals rather than a control transaction, having regard to the aforementioned factors.	
What consideration will I receive?	You will receive 1.89 New Whitehaven Shares for each Aston Share you own.	See Section 2.2
What if I am a Foreign Shareholder?	Certain Aston Shareholders with registered addresses outside Australia will not be issued with New Whitehaven Shares. Instead, the New Whitehaven Shares that would otherwise have been issued to them will be sold via a sale facility and they will receive the net sale proceeds.	See Section 2.12
Will I have to pay brokerage fees or stamp duty in respect of Scheme Consideration?	No brokerage or stamp duty will be payable by Scheme Shareholders on the transfer of their Scheme Shares to Whitehaven under the Scheme or the issue by Whitehaven to them of the New Whitehaven Shares as the Scheme Consideration.	See Section 2.10
Can I sell my Aston Shares on ASX?	You can sell your Aston Shares on ASX prior to (and on) the Effective Date. However, you will not be able to do so after the Effective Date. If you sell your Aston Shares on ASX: • you may pay brokerage on the sale; • you will not share in any potential ongoing benefits of owning shares in the Merged Group; and • there may be different tax consequences for you compared to those that would arise under the implementation of the Merger.	

12 See Section 6.6 for further details of the expected Merged Group ownership structure post implementation of the Scheme and the Boardwalk Transaction.

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QUESTION	ANSWER	MORE INFORMATION
Will I be able to trade the New Whitehaven Shares on ASX?	Whitehaven Shares currently trade on ASX (ASX:WHC), and the New Whitehaven Shares will trade on ASX if the Merger is implemented. It is expected that you will be able to trade the New Whitehaven Shares on a deferred settlement basis commencing on the Business Day after the Effective Date. It is expected that the New Whitehaven Shares will trade on a normal settlement basis (T+3) from the fourth Business Day after the Implementation Date.	
What are the tax implications of the transaction?	While many of the Scheme Shareholders are expected to be eligible for scrip-for-scrip capital gains tax (**CGT**) roll-over relief, the transfer of your Aston Shares pursuant to the Scheme may be a taxable transaction for you. You should seek your own professional advice regarding the individual tax consequences applicable to you. A summary of relevant taxation implications for Australian residents is contained in Section 12 of this Scheme Booklet.	See Section 12
Will shareholders be entitled to scrip-for-scrip capital gains tax roll-over relief as part of the transaction?	Based on the summary of taxation implications included in Section 12 of this Scheme Booklet, Australian-resident Aston Shareholders who hold Aston Shares on capital account should be entitled to scrip-for-scrip CGT roll-over relief to the extent they would otherwise make a capital gain. You are urged to seek professional taxation advice in relation to your own personal circumstances.	See Section 12
DIRECTORS' RECOMMENDATION AND OPINION OF THE INDEPENDENT EXPERT		
What do the Aston Directors recommend?	All of the directors of Aston, including the Independent Directors, unanimously recommend that you vote in favour of the Scheme.[13]	See Section 3
What is the opinion of the Independent Expert?	The Independent Expert has concluded that the Scheme is in the best interests of Aston Shareholders. The Independent Expert considers that the underlying value to Aston Shareholders will be enhanced both in the event of the completion of the Scheme and in the event of both the Scheme and the Boardwalk Transaction completing. However, the Independent Expert also notes that the completion of the Boardwalk Transaction is dilutive to Aston Shareholders, when compared to the Scheme without the Boardwalk Transaction. The Independent Expert has stated that its estimate of the implied value of the Scheme Consideration on a controlling interest basis is in the range of A$11.50 to A$16.29 per Aston Share as a result of the Scheme. If the Boardwalk Transaction is completed, the Independent Expert has stated that its estimate of the implied value of consideration per share is in the range of A$10.70 to A$15.25 per Aston Share. This compares with the Independent Expert's valuation of each Aston Share (on a fully diluted, controlling interest basis) of A$10.48 to A$14.92. The Independent Expert's Report is set out in Section 8.	See Section 8

13 Nathan Tinkler and Philip Christensen, directors with shareholding interests in Aston, are Associated with the Tinkler Group and have an interest in the Boardwalk Transaction. The Tinkler Group is expected to be the largest shareholder in the Merged Group post implementation of the Scheme and the Boardwalk Transaction, with an expected shareholding of 21.6% (including Milestone Shares).

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QUESTION	ANSWER	MORE INFORMATION
TRANSACTION DETAILS		
Who is Whitehaven?	Whitehaven is an ASX listed company (ASX:WHC) which has a market capitalisation of approximately A$2.9 billion.[14] It is the largest coal producer in the Gunnedah Basin and employs more than 500 people in north-west New South Wales. Whitehaven currently operates five competitive producing mines in the Gunnedah region – Narrabri (underground), Rocglen (open-cut), Sunnyside (open-cut), Tarrawonga (open-cut) and Werris Creek (open-cut) and is progressing the development of its Vickery open-cut mine. It has an 11% interest in the Newcastle Coal Infrastructure Group (NCIG), which operates the Port of Newcastle's second dedicated coal terminal. Whitehaven produces semi-soft coking and PCI coal for export markets and thermal coal for export and domestic markets. Whitehaven's saleable production is expected to grow from 5.8Mtpa in FY2012 to approximately 14.7Mtpa by FY2016.[15] Further information in relation to Whitehaven is set out in Section 5.	See Section 5
What is the Scheme?	The Scheme is a Scheme of Arrangement between Aston and Aston Shareholders at the Scheme Record Date. The Scheme will effect the Merger of Aston and Whitehaven. If the Scheme is approved and implemented, Aston Shareholders will receive 1.89 New Whitehaven Shares for each Aston Share they hold. A Scheme of Arrangement is a statutory procedure that is commonly used to enable one company to acquire another company.	See Section 2
Why has the transaction been structured as a scheme?	Both Aston and Whitehaven Directors consider that the Merger is in the interests of their respective shareholders, in the absence of a Superior Proposal. Effecting the transaction via a scheme is believed to be the most efficient structure to implement the Merger as it seeks to minimise the need for any third party approvals and also reflects the co-operative nature of the Merger. Furthermore, the significant synergies expected to be realised from this proposal can only be realised to their fullest extent where 100% of Aston is acquired by Whitehaven. Structuring the transaction as a scheme provides greater certainty that in the event that the transaction is approved by Aston Shareholders and the Court, 100% of Aston will be acquired by Whitehaven. It should also ensure scrip-for-scrip CGT roll-over relief is available for those Scheme Shareholders who can benefit from it.	
What is the timetable of the transaction?	The Scheme Meeting is currently scheduled to be held on Monday, 16 April 2012. If Aston Shareholders approve the Scheme and Court approval is obtained, the Merger will be implemented on Wednesday, 2 May 2012. This is based on the current scheduled timetable of key dates as set out on page 3, which is subject to possible change.	See the Important Dates on page 3

14 Market capitalisation information as at 9 December 2011 (trading day prior to the announcement of the Merger).
15 Production figures are shown on a 100% managed basis.

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QUESTION	ANSWER	MORE INFORMATION
When will I receive New Whitehaven Shares?	The issue of the New Whitehaven Shares as Scheme Consideration will occur on the Implementation Date, expected to be Wednesday, 2 May 2012.	See Section 2.2
Under what scenarios can Aston or Whitehaven terminate the transaction?	The Scheme Implementation Agreement provides for situations where either Aston or Whitehaven have the right to terminate the agreement and the Merger. These include the Scheme not being approved by the required majorities of Aston Shareholders, the Court refusing to approve the Scheme (or various other situations relating to restraining orders and similar restraints), the Independent Expert concluding that the Scheme is not in the best interests of Aston Shareholders, the Effective Date for the Scheme not occurring by the End Date, material breach by the other party (subject to certain provisions regarding notice and remedy of the breach) and situations relating to failure to satisfy Conditions Precedent or the occurrence of an Insolvency Event. The parties also have termination rights in various situations relating to changes by Aston Directors of their recommendation of the Scheme or recommendation of other proposals.	See Sections 2.7, 13.2 and 13.5
BOARDWALK TRANSACTION		
What is the Boardwalk Transaction?	On 11 December 2011, Whitehaven entered into separate agreements to acquire all of the shares and other issued securities in unlisted coal explorer Boardwalk. As consideration for the acquisition of Boardwalk by Whitehaven, holders of Boardwalk securities (Boardwalk Securityholders), including BRI and Farallon Funds, will be issued 85.89 million Whitehaven Shares and a further 34.02 million Whitehaven Shares with rights restricted in accordance with the terms of the restriction deeds as described in Section 5.8.1 (the 34.02 million Whitehaven Shares are referred to as the Milestone Shares). The Boardwalk Transaction is conditional on the Merger between Aston and Whitehaven being approved at the Second Court Hearing, Whitehaven Shareholders in general meeting approving the issue of Whitehaven Shares to Boardwalk Securityholders as consideration for the Boardwalk Transaction under ASX Listing Rule 7.1 and other customary conditions. The Whitehaven Board has considered the Boardwalk assets, their quality, location and proximity to existing mines and infrastructure and the overall benefits of adding a portfolio of exploration assets to the expanded Merged Group. The Whitehaven Directors believe that the consideration payable for Boardwalk represents fair value. Accordingly, the Whitehaven Directors have unanimously recommended that Whitehaven Shareholders vote in favour of the ASX Listing Rule 7.1 resolution. Whitehaven Shareholders (including the directors) representing approximately 43% of total Whitehaven Shares on issue have indicated that they intend to vote in favour of the resolution.	See Section 5.8

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QUESTION	ANSWER	MORE INFORMATION
Will Aston Shareholders vote on the Boardwalk Transaction?	No, Aston Shareholders will not have the opportunity to vote separately on the Boardwalk Transaction and have no control over whether the Boardwalk Transaction is completed. Aston Shareholders are being given the opportunity to vote on whether the Merger between Aston and Whitehaven should proceed. Whitehaven Shareholders are separately being given the opportunity to vote on the issue of Whitehaven Shares to Boardwalk Securityholders as consideration for the Boardwalk Transaction. If Aston Shareholders approve the Scheme and Whitehaven Shareholders approve the issue of Whitehaven Shares to Boardwalk Securityholders as consideration for the Boardwalk Transaction and the other conditions to the Boardwalk Transaction are satisfied, then the Whitehaven Shares will be issued as consideration to Boardwalk Securityholders and Boardwalk will form part of the Merged Group.	See Section 5.8
What happens if the Boardwalk Transaction is approved by Whitehaven Shareholders?	If the issue of Whitehaven Shares as part of the Boardwalk Transaction is approved by Whitehaven Shareholders, Boardwalk Securityholders will be issued 85.89 million Whitehaven Shares, and 34.02 million Milestone Shares which will be subject to restrictions until certain conditions are met. In this case, if the Scheme is implemented, Aston Shareholders will receive shares in a Merged Group which includes the Boardwalk assets. The implied value of the consideration payable by Whitehaven to Boardwalk exceeds the valuation of Boardwalk determined by the Independent Expert. The value of the consideration payable by Whitehaven for Boardwalk excluding the Milestone Shares is A$393 million and including the Milestone Shares is A$491 million. The value of the consideration payable exceeds the valuation of Boardwalk determined by the Independent Expert of between A$200 million and A$330 million (as stated in the Independent Expert's Report set out in Section 8). However, the Whitehaven Directors believe that the consideration payable for Boardwalk represents fair value for Whitehaven Shareholders. The Whitehaven Board has taken a commercial view of the tenements and the likelihood of their successful development under the Merged Group's ownership. The Whitehaven Board has considered the Boardwalk assets, their quality, location and proximity to existing mines and infrastructure and the overall benefits to Whitehaven Shareholders of adding a portfolio of exploration assets to the expanded Merged Group. The Independent Expert considers that the underlying value to Aston Shareholders will be enhanced both in the event of the completion of the Scheme and in the event of both the Scheme and the Boardwalk Transaction completing. The Independent Expert has concluded that the transaction is in the best interests of Aston Shareholders. However, the Independent Expert notes that the completion of the Boardwalk Transaction is dilutive to Aston Shareholders, when compared to the Scheme without the Boardwalk Transaction. The Independent Expert has stated that the estimated implied value of the Scheme Consideration on a controlling interest basis is in the range of A$11.50 to A$16.29 per	See Sections 5.8 and 8

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QUESTION	ANSWER	MORE INFORMATION
What happens if the Boardwalk Transaction is approved by Whitehaven Shareholders? (cont.)	Aston Share as a result of the Scheme. If the Boardwalk Transaction is completed, the Independent Expert has stated that its estimated implied value of consideration per share is in the range of A$10.70 to A$15.25 per Aston Share. This compares with the Independent Expert's valuation of each Aston Share (on a fully diluted, controlling interest basis) of A$10.48 to A$14.92. The Independent Expert's Report is set out in Section 8.	See Sections 5.8 and 8
What happens if the Boardwalk Transaction is not approved by Whitehaven Shareholders?	If the Scheme is approved by Aston Shareholders, the Merger between Aston and Whitehaven will proceed. However, the Boardwalk assets will not be acquired by Whitehaven, Whitehaven Shares will not be issued as consideration to Boardwalk Securityholders and Boardwalk will not form part of the Merged Group.	See Sections 5.8 and 7.5
SCHEME DETAILS AND VOTING		
When and where will the Scheme Meeting be held?	The Scheme Meeting will be held at the The Hilton, Level 8, 190 Elizabeth Street, Brisbane QLD, 4000 on Monday, 16 April 2012 at 10:00am (Brisbane time).	See Annexure C
Am I entitled to vote?	Each Aston Shareholder who is registered on the Aston Register at 10:00am (Brisbane time) on Saturday, 14 April 2012 is entitled to attend and vote at the Scheme Meeting. However, Mr Nathan Tinkler, Mr Philip Christensen and Farallon Funds and their respective affiliates have decided that they will not vote any Aston Shares that they control on the Scheme at the Scheme Meeting, because of the benefits that they will receive in the Boardwalk Transaction.	See Annexure C
How do I vote?	Details of how to vote are set out on page 7 and are also included in the Notice of Scheme Meeting in Annexure C of this Scheme Booklet.	See Annexure C
What happens if I don't vote or if I vote against the Scheme?	If the Scheme becomes Effective and you are an Aston Shareholder as at the Scheme Record Date, then all of your Aston Shares will be transferred to Whitehaven and you will receive the Scheme Consideration in accordance with the Scheme (and no further action will be required by you). This will apply to all such shareholders, including those who may have voted against the Scheme or not at all.	See Annexure C
How do I vote if I am not able to attend the meeting?	You may complete the enclosed personalised Proxy/Voting Form in accordance with the instructions and return it in the reply paid envelope enclosed or by facsimile. You may also lodge a direct vote or appoint a proxy online by visiting www.investorvote.com.au and following the online instructions. You will need your shareholder registration details. The deadline for lodging your Proxy/Voting Form or voting online is 10:00am (Brisbane time) on Saturday, 14 April 2012.	See Annexure C

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QUESTION	ANSWER	MORE INFORMATION
What vote is required to approve the Scheme?	For the Scheme to proceed, the Scheme Resolution must be passed by: • a majority in number of Aston Shareholders who vote on the Scheme Resolution; and • at least 75% of the votes cast on the Scheme Resolution. The Court has the discretion to waive the first of these two requirements if it considers it appropriate to do so.	See Annexure C
How do your Directors intend to vote?	Each of your Independent Directors intend to vote any Aston Shares controlled by them in favour of the Scheme,[16] in the absence of a Superior Proposal. However, Mr Nathan Tinkler and Mr Philip Christensen and their respective affiliates have decided that they will not vote any Aston Shares that they control on the Scheme at the Scheme Meeting, because of the benefits that they will receive in the Boardwalk Transaction.	See Section 2.3
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 meeting and will be announced to ASX when available. Even if the Scheme Resolution is passed by the Scheme Meeting, the Scheme is subject to the approval of the Court.	
What happens if the Scheme is not approved?	If the Scheme is not approved by Aston Shareholders, the Scheme will not be implemented, the Merger will not proceed and Aston Shareholders will not receive the Scheme Consideration. Aston Shareholders will continue to hold their Aston Shares and Aston will continue to operate as a standalone entity.	See Section 2.8
Are there any other conditions to be satisfied with respect to the Scheme?	The Scheme must be approved by the required shareholder majorities and the Court (and there must be no restraining order or similar restraint in place). The Scheme is also subject to a number of conditions discussed at Sections 2.7 and 13.2 of this Scheme Booklet which include approval by the Foreign Investment Review Board (**FIRB**) and by the Minister (to the extent the Minister's approval is required under or in connection with Authorisation Number 346), and no Aston Material Adverse Change, Whitehaven Material Adverse Change, Aston Material Transaction or Whitehaven Material Transaction having occurred. These conditions must be satisfied or waived for the Scheme to proceed. The conditions precedent relating to FIRB approval and Ministerial approval in connection with Authorisation No. 346 have been satisfied.	See Sections 2.7 and 13.2
What if I want to make a formal objection?	If you wish to object to the Scheme at the Court hearing for the approval of the Scheme, or to make a complaint to ASIC about the Scheme, you should seek legal advice and note that the Court hearing for the approval of the Scheme is scheduled for Wednesday, 18 April 2012.	

16 As at the date of this Scheme Booklet, The Hon. Mark Vaile is the only Independent Director who controls Aston Shares. See Section 14.1.

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QUESTION	ANSWER	MORE INFORMATION
THE MERGED GROUP		
What are the benefits of merging Aston and Whitehaven to form the Merged Group?	See Section 3.2 for the reasons why the Aston Directors recommend that you vote in favour of the Scheme, which includes a summary of the benefits of merging Aston and Whitehaven to form the Merged Group, and Section 6 for a profile of the Merged Group, including Section 6.2 which outlines the potential synergies the Merged Group may be able to achieve.	See Sections 3.2 and 6, especially 6.2
What will be the strategy of the Merged Group?	See Sections 3.2, 6.2 and 6.3 in relation to the Merged Group's intentions regarding its strategy and business operations.	See Sections 3.2, 6.2 and 6.3
What will the Merged Group be called?	The Merged Group will operate under the name of Whitehaven Coal Limited.	See Section 6.3
Who will be the Chairman of the Merged Group?	Aston's current Independent Deputy-Chairman, The Hon. Mark Vaile, will be the Chairman of the Merged Group.	See Section 6.4
Who will be on the Merged Group's Board?	The Merged Group's Board will comprise the individuals outlined in Section 6.4.	See Section 6.4
Who will be CEO of the Merged Group?	Whitehaven's CEO and Managing Director, Mr Tony Haggarty, will be the CEO and Managing Director of the Merged Group.	See Sections 6.4 and 6.5
What role will the current CEO of Aston have within the Merged Group?	Aston's interim CEO, Mr Peter Kane, will be the Chief Operating Officer – Aston and Boardwalk Operations of the Merged Group.	See Section 6.5
Are there expected to be any interim redundancies as a result of the Merger?	The Merger is expected to enhance the ability of the companies to create job opportunities, particularly in the Gunnedah Basin. From a geographic and operational perspective, given the stage and status of the Maules Creek Project compared to Whitehaven's portfolio, Aston and Whitehaven have no plans for reductions in the number of employees in regional areas as a result of the Merger.	See Section 6.3
What will the dividend policy of the Merged Group be?	The board of the Merged Group will review the amount of any future dividends to be paid to shareholders from time to time, having regard to the company's profits, the Merged Group's financial position and the board's assessment of the capital required to grow the Merged Group's businesses.	See Section 6.3

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2 SUMMARY OF THE SCHEME

2. SUMMARY OF THE SCHEME

2.1. Background

On 12 December 2011, Aston and Whitehaven announced a proposal for the Merger of Aston and Whitehaven by way of a Scheme of Arrangement between Aston and its shareholders. If the Scheme proceeds:

- all Aston Shares will be transferred to Whitehaven;
- all Aston Shareholders as at the Scheme Record Date (whether or not they voted for or against the Scheme), other than Ineligible Foreign Shareholders, will receive the Scheme Consideration, being shares in Whitehaven; and
- Aston will be de-listed from ASX and will become a Wholly-Owned Subsidiary of Whitehaven.

This Scheme Booklet contains important information that the Aston Board believes Aston Shareholders should consider in deciding whether or not to vote in favour of the Scheme.

2.2. What you will receive

If the Scheme is approved and implemented, Aston Shareholders will receive 1.89 New Whitehaven Shares for each Aston Share they hold.

Holding statements detailing your holding of New Whitehaven Shares are expected to be dispatched to you two Business Days after the Implementation Date, being by Friday, 4 May 2012.

Ineligible Foreign Shareholders should refer to Sections 2.12 and 2.13 for further details about the timing for payment of the consideration they will receive.

2.3. Recommendation and voting intentions of Aston Directors[17]

For the reasons set out in Section 3, the Aston Directors, including the Independent Directors, unanimously recommend that, in the absence of a Superior Proposal, Aston Shareholders vote in favour of the Scheme at the Scheme Meeting.

The interests of Aston Directors are disclosed in Sections 14.1 and 14.2 of this Scheme Booklet.

If a Superior Proposal emerges, this will be announced to ASX and the Aston Directors will carefully reconsider the Scheme and advise you of their recommendation.

Each of your Independent Directors intend to vote any Aston Shares controlled by them in favour of the Scheme,[18] in the absence of a Superior Proposal. However, Mr Nathan Tinkler and Mr Philip Christensen and their respective affiliates have decided that they will not vote any Aston Shares that they control on the Scheme at the Scheme Meeting, because of the benefits that they will receive in the Boardwalk Transaction.

2.4 Voting by certain Boardwalk Securityholders

As a result of the Boardwalk Transaction, certain Boardwalk Securityholders who are also Aston Shareholders, including Mr Nathan Tinkler, Mr Philip Christensen, Farallon Funds or their respective affiliates, will receive Whitehaven Shares should the Boardwalk Transaction be approved by Whitehaven Shareholders.

In these circumstances, Mr Nathan Tinkler, Mr Philip Christensen and Farallon Funds and their respective affiliates have decided that they will not vote on the Scheme at the Scheme Meeting.

It should be noted that the Boardwalk Transaction has been negotiated between Boardwalk and Whitehaven on an arms length basis.

The Whitehaven Board has considered the Boardwalk assets, their quality, location and proximity to existing mines and infrastructure and the overall benefits of adding a portfolio of exploration assets to the expanded Merged Group. The Whitehaven Directors believe that the consideration payable for Boardwalk represents fair value. Accordingly, the Whitehaven Directors have unanimously recommended that Whitehaven Shareholders vote in favour of the ASX Listing Rule 7.1 resolution.

All Aston Directors, including the Independent Directors, have unanimously recommended the Scheme to Aston Shareholders in the absence of a Superior Proposal, whether or not the Boardwalk Transaction proceeds.

17 Nathan Tinkler and Philip Christensen, directors with shareholding interests in Aston, are Associated with the Tinkler Group and have an interest in the Boardwalk Transaction. The Tinkler Group will be the largest shareholder in the Merged Group post implementation of the Scheme and the Boardwalk Transaction, with an expected shareholding of 21.6% (including any Milestone Shares). Further information about the Boardwalk Transaction is disclosed in Section 5.8 of this Scheme Booklet.

18 As at the date of this Scheme Booklet, The Hon. Mark Vaile is the only Independent Director who controls Aston Shares. See Section 14.1.

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2.5. Independent Expert's conclusions

The Aston Directors commissioned the Independent Expert, PricewaterhouseCoopers Securities Limited, to prepare a report on the Scheme on whether the transaction contemplated by the Scheme is in the best interests of Scheme Shareholders.

The Independent Expert has concluded that the Scheme is in the best interests of Aston Shareholders.

The Independent Expert considers that the underlying value to Aston Shareholders will be enhanced both in the event of the completion of the Scheme and in the event of both the Scheme and the Boardwalk Transaction completing. However, the Independent Expert also notes that the completion of the Boardwalk Transaction is dilutive to Aston Shareholders, when compared to the Scheme without the Boardwalk Transaction. The Independent Expert has stated that its estimate of the implied value of the Scheme Consideration on a controlling interest basis is in the range of A$11.50 to A$16.29 per Aston Share as a result of the Scheme. If the Boardwalk Transaction is completed, the Independent Expert has stated that its estimate of the implied value of consideration per share is in the range of A$10.70 to A$15.25 per Aston Share. This compares with the Independent Expert's valuation of each Aston Share (on a fully diluted, controlling interest basis) of A$10.48 to A$14.92. The Independent Expert's Report is set out in Section 8.

2.6. Other alternatives considered

Whilst Aston engaged in discussions of an incomplete nature with a number of parties, Aston did not formally consider any alternative proposals prior to entering into the Scheme Implementation Agreement with Whitehaven. Since the Scheme was announced, no alternative proposal has emerged. Given the time that has elapsed since the announcement of the Scheme on 12 December 2011, it is the view of the Aston Directors that a Superior Proposal is unlikely to emerge prior to the Scheme Meeting. Moreover, since the Scheme was announced, the Aston Share price has traded in line with the Merger exchange ratio (after taking into account the Whitehaven Special Dividend) which would appear to indicate that the market is not pricing in any prospect of a Superior Proposal.

2.7. Conditions of the Scheme

The Scheme is subject to a number of Conditions Precedent in addition to shareholder approval, including but not limited to:

- Before 8:00am (Sydney time) on the Second Court Date, Whitehaven receiving approval of the acquisition of Aston Shares for the purposes of the *Foreign Acquisitions and Takeovers Act 1975* (Cth) (that is FIRB approval).
- The Court approving the Scheme.
- Before 8:00am (Sydney time) on the Second Court Date, the Minister administering the *Mining Act 1992* (NSW) giving consent to the Scheme, to the extent required under or in connection with Authorisation No. 346.
- No temporary restraining order, preliminary or permanent injunction or other order preventing the Scheme being in effect at 8:00am (Sydney time) on the Second Court Date.
- No Aston Material Adverse Change or Whitehaven Material Adverse Change occurring.
- No Aston Material Transaction or Whitehaven Material Transaction occurring.

The Scheme will not proceed unless all the conditions are satisfied or waived in accordance with the Scheme Implementation Agreement. As stated in Section 14.6, the conditions precedent relating to Authorisation No. 346 and FIRB approval have been satisfied. Further information regarding these conditions and other conditions to the Scheme are set out in Section 13.2.

As at the date of this Scheme Booklet, Aston and Whitehaven are not aware of any circumstances which would cause the conditions of the Scheme referred to above and set out in more detail in Section 13.2 not to be satisfied or waived.

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2.8. If the Scheme does not proceed

If the Scheme does not proceed, Aston Shareholders will continue to hold Aston Shares.

In the absence of any alternative or Competing Proposal to the Scheme, Aston will continue as a standalone entity. Aston Shareholders will be exposed to the risks relating to Aston's business set out in Section 7.

Depending on the reasons why the Scheme does not proceed, Aston may be liable to pay a Break Fee of A$20.6 million (exclusive of GST) to Whitehaven and the Call Option over Aston Shares as outlined in Section 14.5 may be triggered. The Aston Directors consider the Break Fee to be reasonable and appropriate in amount, structure and effect. The Break Fee is not payable if the Scheme does not proceed merely because Aston Shareholders do not vote in favour of the Scheme in sufficient numbers to meet the legal tests. Further information in relation to the Break Fee is set out in Section 13.4.

Prior to the Scheme Meeting, transaction costs of approximately A$4.5 million (exclusive of GST) will have been incurred, or will be committed, by Aston in relation to the Scheme. Those transaction costs have either already been paid, or will be payable by Aston regardless of whether or not the Scheme is implemented. If the Scheme does proceed, additional costs will be incurred.

2.9. Tax implications

While many of the Scheme Shareholders are expected to be eligible for scrip-for-scrip CGT roll-over relief, the transfer of your Aston Shares pursuant to the Scheme may be a taxable transaction for you. You should seek your own professional advice regarding the individual tax consequences applicable to you. A summary of relevant taxation implications for Australian residents is contained in Section 12 of this Scheme Booklet.

2.10. No brokerage or stamp duty

No brokerage or stamp duty will be payable by Scheme Shareholders on the transfer of their Scheme Shares to Whitehaven under the Scheme or the issue by Whitehaven to them of the New Whitehaven Shares as the Scheme Consideration.

2.11. Warranties by Aston Shareholders

The Scheme provides that each Scheme Shareholder is taken to have warranted to Aston and Whitehaven, and appointed and authorised Aston as its attorney and agent to warrant to Whitehaven, that all their Aston Shares (including any 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 interests and interests of third parties of any kind, whether legal or otherwise, and restrictions on transfer of any kind, and that they have full power and capacity to sell and to transfer their Aston Shares to Whitehaven together with any rights attaching to those shares.

2.12. Foreign Shareholders

An Aston Shareholder whose address shown in the Aston Registry is a place outside Australia and its external territories and New Zealand is a Foreign Shareholder under the Scheme.

A Foreign Shareholder is not an Ineligible Foreign Shareholder if the Foreign Shareholder's address is a place in the USA or Singapore. Remaining Foreign Shareholders are Ineligible Foreign Shareholders unless Aston and Whitehaven are reasonably satisfied that the issue of New Whitehaven Shares to the Foreign Shareholder in that jurisdiction is neither prohibited by law nor unduly onerous. Whitehaven is not obliged to issue New Whitehaven Shares to an Ineligible Foreign Shareholder. The New Whitehaven Shares that would otherwise have been issued to an Ineligible Foreign Shareholder will be issued to the Sale Agent (and/or to a nominee of the Sale Agent) on the Implementation Date and dealt with in the manner described in Section 2.13.

The New Whitehaven Shares to be issued pursuant to the Scheme of Arrangement have not been, and will not be, registered under the Securities Act, or the securities laws of any other jurisdiction, and may not be offered or sold in the U.S. or to U.S. Persons unless the securities are registered under the Securities Act, or an exemption from the registration requirements of the Securities Act is available.

2.13. Sale of New Whitehaven Shares by the Sale Agent

Ineligible Foreign Shareholders will not receive New Whitehaven Shares under the Scheme. Instead, the New Whitehaven Shares that would otherwise have been issued to Ineligible Foreign Shareholders will be issued to the Sale Agent (and/or to a nominee of the Sale Agent) on the Implementation Date.

Whitehaven will:

- procure that the Sale Agent sells or procures the sale of all the New Whitehaven Shares issued to the Sale Agent within 15 Business Days (or, subject to obtaining any necessary ASIC exemptions or modifications, such longer period of time which the Sale Agent and Whitehaven determine) after the Implementation Date; and
- remit to the Ineligible Foreign Shareholders their proportion of the net sale proceeds. Receipt of this amount will satisfy in full the rights of each Ineligible Foreign Shareholder to the Scheme Consideration.

For each New Whitehaven Share to which an Ineligible Foreign Shareholder is entitled, the shareholder will receive an amount equivalent to the average price per New Whitehaven Share obtained by the Sale Agent.

Fees, taxes and charges (other than broker fees and stamp duty) will be deducted from the proceeds payable to Ineligible Foreign Shareholders.

The New Whitehaven Shares will be sold on behalf of the Ineligible Foreign Shareholders in such manner and at such price and on such other terms as the Sale Agent determines in good faith (and at the risk of the Ineligible Foreign Shareholder).

Aston, Whitehaven and the Sale Agent give no assurance as to the price that will be achieved for the sale of New Whitehaven Shares described above. The proceeds that Ineligible Foreign Shareholders will receive may be more or less than the current market value of Whitehaven Shares.

The sale of the New Whitehaven Shares by the Sale Agent may result in a number of New Whitehaven Shares being offered for sale at the same time. Although the quantum of shares being sold is not expected to be material, this may have the effect of depressing the sale price of those shares.

The proceeds of the sale of the New Whitehaven Shares will be paid to each relevant shareholder by making a deposit into an account with an Australian bank nominated by the shareholder with the Aston Registry as at the Scheme Record Date.

If the relevant shareholder does not have a nominated Australian bank account with the Aston Share Registry as at the Scheme Record Date, the shareholder will be sent a cheque drawn on an Australian bank in Australian currency for the proceeds of the sale of the New Whitehaven Shares. If the relevant shareholder's whereabouts are unknown as at the Scheme Record Date, Whitehaven will apply the proceeds in accordance with the applicable laws dealing with unclaimed money.

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2.14. Treatment of Aston options and performance rights

Aston operates a Long Term Incentive Plan (**LTIP**) which was approved by Aston Shareholders and established upon listing of Aston on ASX in August 2010. The LTIP is an equity-based incentive plan designed to provide executives and other nominated senior management personnel with the incentive to deliver long-term growth in Aston Shareholder value. Senior management nominated by the Aston Board are eligible to participate in the LTIP. LTIP awards can be in the form of options or performance rights. Each option or performance right entitles the holder to one ordinary fully paid share in Aston. A performance right or option will vest and (if applicable) become exercisable to the extent that the applicable performance conditions and service conditions specified at the time of grant are satisfied. The Aston Board exercised its discretion under the LTIP to establish the terms on which it offers performance rights and options under the LTIP, including the performance and service conditions and waiver of any terms or conditions. The key terms of the LTIP are outlined in Aston's 2011 Annual Report on pages 15 to 18.

In addition to the LTIP, Aston made a one-off grant of options and, in one case, performance rights, to Non-Executive Directors on the date Aston was listed on ASX. The key terms of the grants were detailed on page 217 of Aston's Prospectus, a copy of which is available from ASX website at www.asx.com.au.

Performance rights

It is proposed that the Aston Board will exercise its discretion under the terms of issue, to vest all performance rights following final Court approval of the Scheme. This means that holders of performance rights do not have to satisfy the performance or service conditions applicable to the vesting of their performance rights.

Upon vesting of any performance rights, each holder will be issued with Aston Shares. These Aston Shares will be issued before the Scheme Record Date and, if the Scheme becomes Effective, will be acquired by Whitehaven from the holder for the Scheme Consideration.

The Aston Board may determine that the resulting Aston Shares will be subject to a six month holding restriction in accordance with the original terms of issue of the Aston performance rights. This holding restriction period will continue to apply to any New Whitehaven Shares received as Scheme Consideration. Holders may notify the Aston Board whether or not they wish the Aston Board to exercise its discretion in this way.

Options

It is proposed that the Aston Board will exercise its discretion under the terms of issue to vest all options following final Court approval of the Scheme. This means that holders of options do not have to satisfy the performance or service conditions applicable to the vesting of their options before they can be exercised.

For options that vest and become exercisable, the holders have three choices.

(i) Exercise their vested Aston options before the Scheme Record Date by paying the relevant exercise price and be issued with Aston Shares. These Aston Shares will be issued before the Scheme Record Date and, if the Scheme becomes Effective, will be acquired by Whitehaven from the holder for the Scheme Consideration. The Aston Board may determine that the resulting Aston Shares will be subject to a six month holding restriction in accordance with the original terms of issue of the Aston options. This holding restriction period will continue to apply to any New Whitehaven Shares received as Scheme Consideration. Holders may notify the Aston Board whether or not they wish the Aston Board to exercise its discretion in this way.

(ii) Enter into arrangements (conditional on the final Court approval of the Scheme) for the cancellation of their vested Aston options in exchange for vested Whitehaven options with equivalent value and otherwise on equivalent terms, adjusted for the impacts of the Scheme (including a 6 month trading restriction applying to any Whitehaven Shares received upon exercise of their Whitehaven options). Under these arrangements, on the Implementation Date Whitehaven will grant 1.89 Whitehaven options as consideration for the cancellation of each Aston option with an exercise price equivalent to the exercise price for the Aston option divided by 1.89 (with fractional entitlements rounded up).

For example: if a holder held 40,000 Aston options with an exercise price of A$5.96, they would receive 75,600 Whitehaven options with an exercise price of A$3.15.

(iii) Enter into arrangements (conditional on the final Court approval of the Scheme) to cancel their Aston options in exchange for Aston Shares. The number of Aston Shares that will be issued as consideration for the cancellation of the Aston options will take into account the exercise price that would have been payable if the options were exercised. Under these arrangements, the value of Aston Shares issued as consideration for the cancellation of each Aston option will be equivalent to the "market value" of an Aston Share less the exercise price of the option, with the "market value" being the 20 day volume weighted average price for the period up to and including the Effective Date (with fractional entitlements rounded up). These shares will be issued on or before the Scheme Record Date and, if the Scheme becomes Effective, will be acquired by Whitehaven from the holder for the Scheme Consideration.

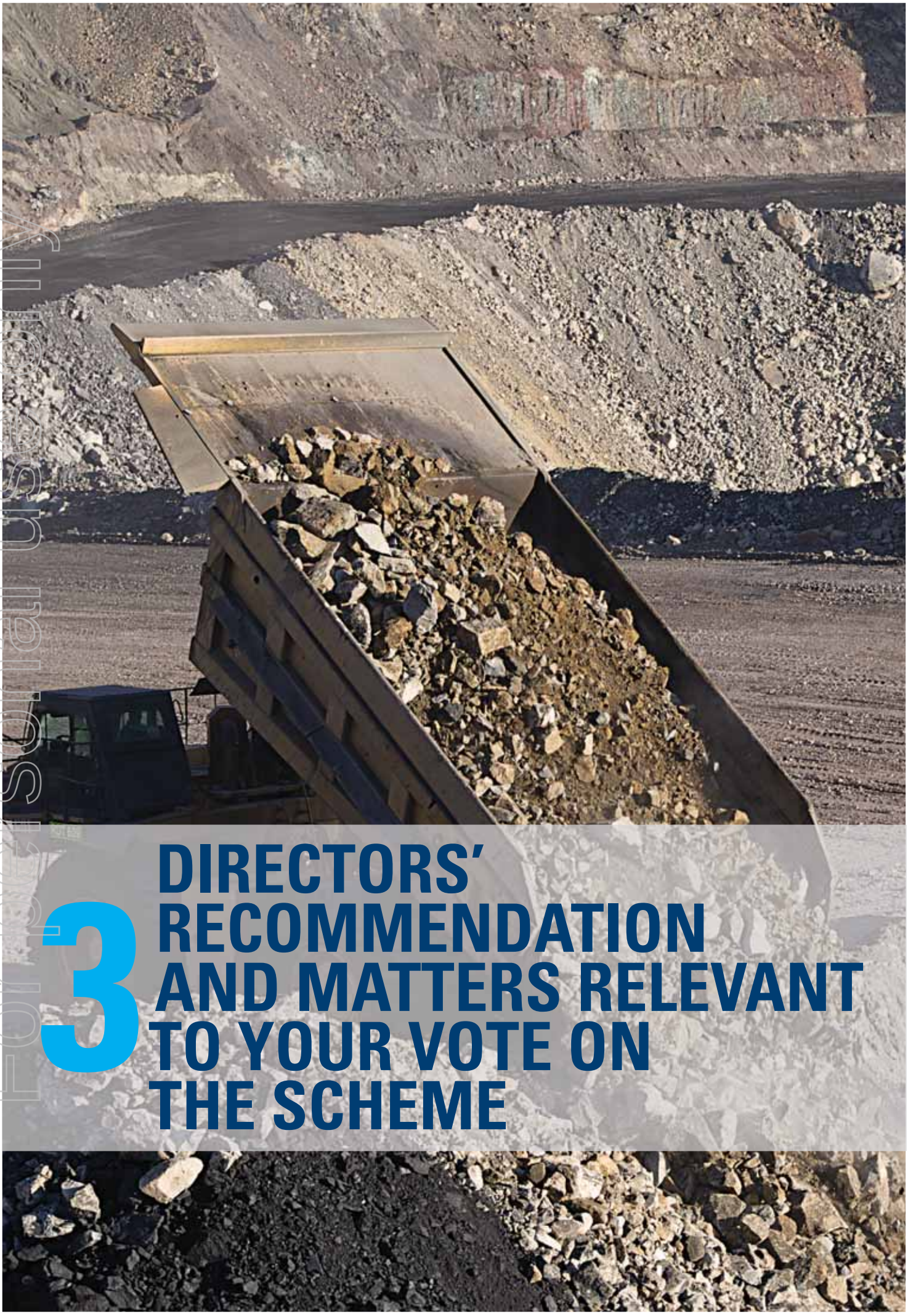
For example: if a holder held 40,000 Aston options with an exercise price of A$5.96 and the "market value" of Aston Shares was A$9.39, they would receive Aston Shares to the value of A$137,200. Based on a "market value" of A$9.39 per Aston Share, this is equivalent to 14,612 Aston Shares (with fractional entitlements rounded up).

The Aston Board intends to exercise its discretion under the terms of the Aston options to truncate the option exercise period, such that any vested Aston options which have not been exercised or cancelled by the Scheme Record Date will lapse.

Aston has been granted a waiver from ASX Listing Rules 6.23.2 and 10.11, to permit the cancellation of Aston options for consideration under the Scheme without the requirement for Aston Shareholder approval. Further information in relation to the waiver application is set out in Section 14.7.

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3 DIRECTORS' RECOMMENDATION AND MATTERS RELEVANT TO YOUR VOTE ON THE SCHEME

3. DIRECTORS' RECOMMENDATION AND MATTERS RELEVANT TO YOUR VOTE ON THE SCHEME

3.1. The Aston Directors unanimously recommend you vote in favour of the Scheme

The Aston Directors, including the Independent Directors, unanimously recommend that, in the absence of a Superior Proposal, Aston Shareholders vote in favour of the Scheme at the Scheme Meeting.

Each Independent Director who holds or controls Aston Shares intends to vote in favour of the Scheme, subject to there being no Superior Proposal.

However, Mr Nathan Tinkler and Mr Philip Christensen and their respective affiliates have decided that they will not vote any Aston Shares that they control on the Scheme at the Scheme Meeting, because of the benefits that they will receive in the Boardwalk Transaction.

In making their recommendation and determining how to vote on the Scheme, the Aston Directors have considered the advantages and disadvantages of the Scheme, in particular, the following:

- the reasons for Aston Shareholders to vote in favour of the Scheme, as set out in Section 3.2;
- the potential disadvantages of the Scheme, as set out in Section 3.3;
- the risks associated with Aston's and the Merged Group's business, as set out in Section 7; and
- the report of the Independent Expert, as set out in Section 8.

In considering whether to vote in favour of the Scheme, the Aston Directors encourage you to:

- read the whole of this Scheme Booklet (including this Section 3, the risks outlined in Section 7 and the concise version of the Independent Expert's Report in Section 8);
- have regard to your individual risk profile, portfolio strategy, tax position and financial circumstances;
- obtain financial advice from your broker or financial adviser on the Scheme and obtain taxation advice on the effect of the Scheme becoming Effective;
- consider current trading prices of Aston Shares and Whitehaven Shares on ASX; and
- consider the potential trading price of Aston Shares if the Scheme is not approved by Aston Shareholders and the Scheme is not subsequently implemented.

The interests of Aston Directors are disclosed in Section 14 of this Scheme Booklet.[19]

3.2. Why you should vote in favour of the Scheme

The Aston Directors, including the Independent Directors, have unanimously formed the conclusion that the Scheme is in the best interests of Aston Shareholders and recommend that Aston Shareholders vote in favour of the Scheme, in the absence of a Superior Proposal, for the reasons set out below.

1.	Creates a large scale, leading ASX listed coal producer with a substantial Resource and Reserve base supplying an attractive mix of premium metallurgical and thermal coals
2.	Improves the risk profile, diversifying from a single coal asset development company to an attractive portfolio of producing, development and exploration coal assets, enhancing the capability for growth
3.	Creates a major global supplier of semi-soft coking and PCI coals with the potential to maximise margins and access a broader customer base
4.	Strengthens and consolidates a strategic position in port and rail infrastructure
5.	Generates significant synergies resulting from the consolidation of the Gunnedah Basin mining operations
6.	Combines capable and experienced boards and management teams with a proven track record

19 Nathan Tinkler and Philip Christensen, directors with shareholding interests in Aston, are Associated with the Tinkler Group and have an interest in the Boardwalk Transaction. The Tinkler Group will be the largest shareholder in the Merged Group post implementation of the Scheme and the Boardwalk Transaction, with an expected shareholding of 21.6% (including Milestone Shares). Further information about the Boardwalk Transaction is disclosed in Section 5.8 of this Scheme Booklet.

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7.	The Independent Expert has concluded that the Scheme is in the best interests of Aston Shareholders[20]
8.	All of the directors of Aston, including the Independent Directors, have unanimously recommended that you vote in favour of the Scheme in the absence of a Superior Proposal

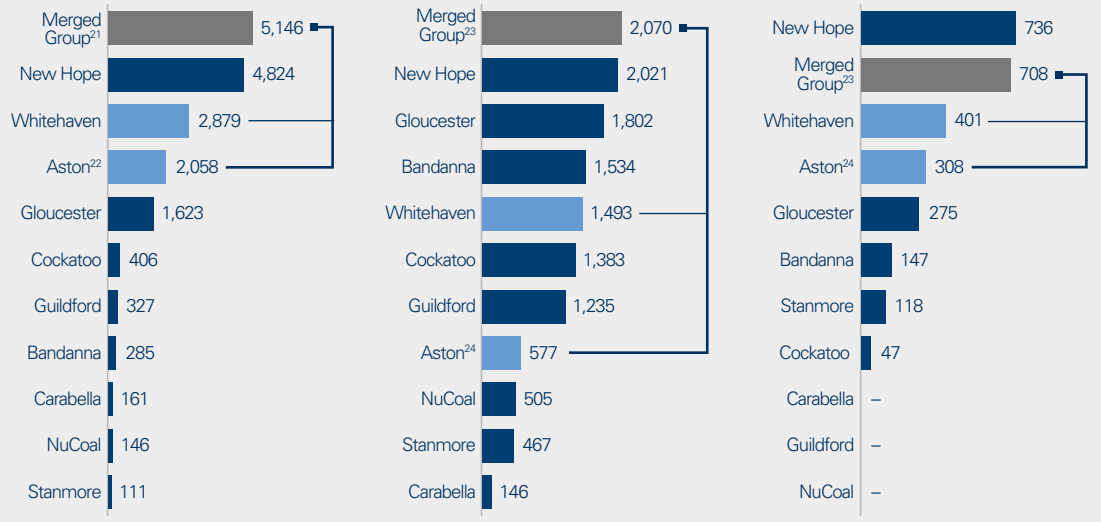
The Scheme has a number of advantages, disadvantages and risks, which may affect Aston Shareholders in different ways depending on their individual circumstances. Aston Shareholders should seek professional advice on their particular circumstances, as appropriate. You should read this Scheme Booklet in full before deciding how to vote.

3.2.1. Creates a large scale, leading ASX listed coal producer with a substantial Resource and Reserve base supplying an attractive mix of premium metallurgical and thermal coals

The Merger will create a leading Australian listed coal company supplying an attractive mix of premium metallurgical and thermal coals with significantly enhanced scale, market capitalisation, financial strength and liquidity.

With the successful implementation of the Merger, the Merged Group will become one of the largest Australian listed coal companies by market capitalisation, Reserves, Resources and production.

The Merged Group would have a market capitalisation of approximately A$5.1 billion (based on closing share prices as at 9 December 2011 immediately prior to the announcement of the Merger), Resources of approximately 2.1 billion tonnes and Recoverable Reserves of approximately 0.7 billion tonnes.



Source: Company filings, IRESS.

Note: Market capitalisation based on undiluted shares on issue and closing prices as at 9 December 2011. Reserves presented on a recoverable basis. Numbers may not add due to rounding. Gloucester excludes the impact of the proposed transaction with Yancoal Australia. Resources and Reserves as at 9 December 2011. Cockatoo Reserves based on Marketable Reserves given Recoverable Reserves are not disclosed.

20 The Independent Expert has stated that its estimate of the implied value of the Scheme Consideration on a controlling interest basis is in the range of A$11.50 to A$16.29 per Aston Share as a result of the Scheme. If the Boardwalk Transaction is completed, the Independent Expert has stated that its estimate of the implied value of consideration per share is in the range of A$10.70 to A$15.25 per Aston Share. This compares with the Independent Expert's valuation of each Aston Share (on a fully diluted, controlling interest basis) of A$10.48 to A$14.92. The Independent Expert's Report is set out in Section 8.

21 Market capitalisation including value attributed to Boardwalk and adjusted for the Special Dividend of A$0.50 paid to Whitehaven Shareholders.

22 Market capitalisation based on the Whitehaven offer value.

23 Includes only Aston and Whitehaven assets as Boardwalk has not delineated any Resources and Reserves for the Boardwalk assets.

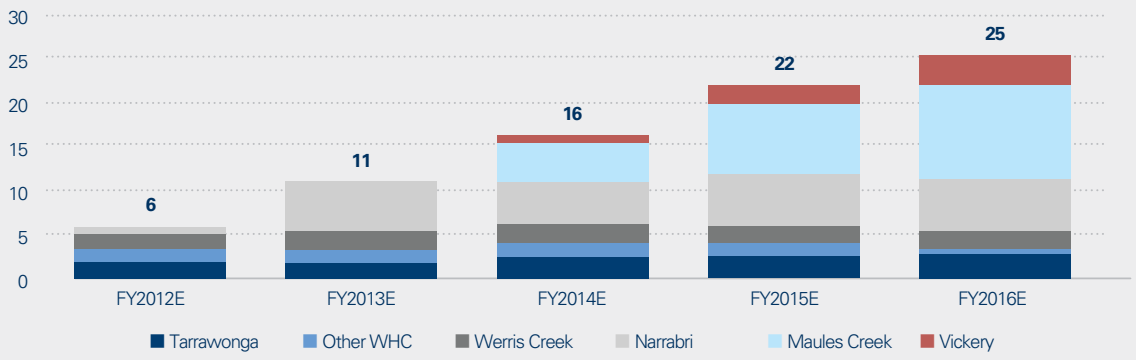
24 Aston has entered into an agreement to sell a 10% interest in the Maules Creek Project to J-Power. This agreement is conditional on (amongst other things) the consent of Aston's existing joint venture partner ITOCHU. As at the date of this Scheme Booklet, ITOCHU's consent and waiver of its pre-emptive rights has been obtained, subject to the asset sale completing in its current form on or before 30 June 2012 or such later date as is agreed by the parties. If the transaction completes, Aston's interest in the Maules Creek Project will be reduced from 85% to a 75% interest. Aston's Resources and Reserves are shown on a pre J-Power basis.

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The Merged Group will have a solid production and profit base from five competitive producing mines. The Merged Group will be one of Australia's largest listed coal producers based on saleable production, with metallurgical and thermal coal production of approximately 15Mt and 10Mt respectively for the financial year ended 2016. Substantial growth in production is expected to be driven by:

- Narrabri – expected to commence longwall production in April 2012;
- Maules Creek – ramping up from the second half of 2013 to approximately 10.8Mtpa by 2016; and
- Vickery – expected to ramp up from the second half of 2013 to approximately 4Mtpa by FY2016.

Saleable production forecasts (Mt, 100% basis)[25]



Note: Data shown for year ending 30 June. These estimates relate to planned future events and expectations and as such involve known and unknown risks and uncertainties. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions. The production profile is based on assumed coal quality characterisation.

The Merged Group will be one of the few large-cap diversified coal companies listed on ASX, providing an attractive investment opportunity for investors seeking exposure to the Australian coal sector and will likely facilitate increased liquidity in the after market for the Merged Group's shares.

A greater level of interest from potential investors and stakeholders, combined with stronger balance sheet capabilities, is likely to enhance opportunities for the Merged Group to access capital markets.

3.2.2. Improves the risk profile, diversifying from a single coal asset development company to an attractive portfolio of producing, development and exploration coal assets, enhancing the capability for growth

Aston Shareholders are currently exposed to the risks associated with an investment in a company with a single development stage asset. The development of Maules Creek is subject to various uncertainties including, but not limited to, receipt of environmental approvals, cost and timing of mine construction, availability of sufficient rail capacity to achieve projected production volumes and timely expansion of port capacity at the port of Newcastle.

The Merger provides a valuable opportunity for Aston Shareholders to substantially diversify and reduce the risk of their investment through exposure to a more diversified portfolio of coal assets whilst maintaining an interest in the high quality Maules Creek Project.

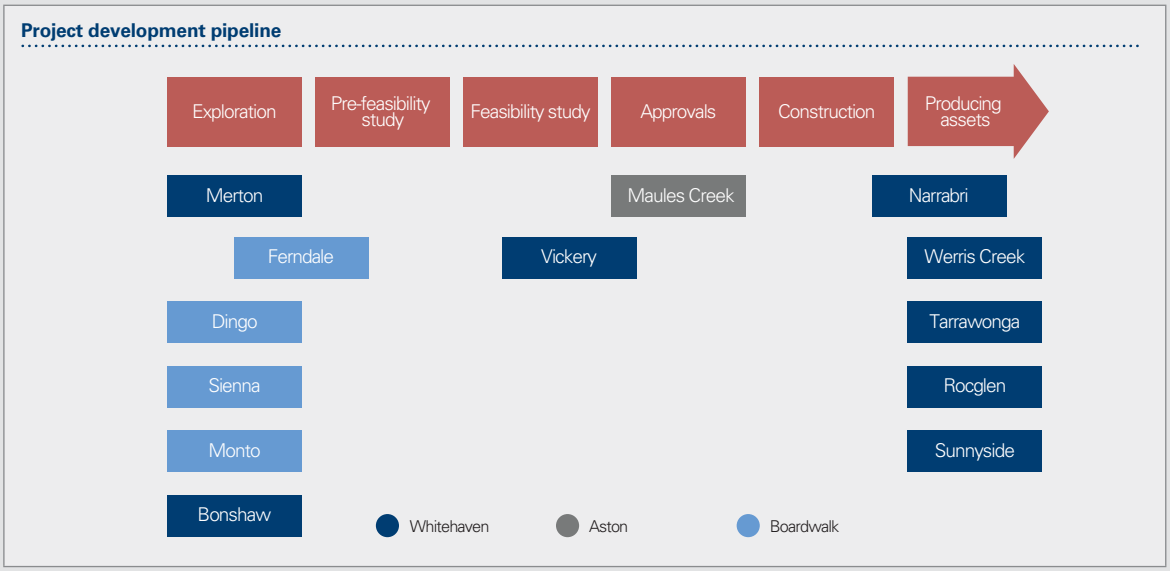
The Merged Group will have a high quality set of coal assets, including a substantial number of lower risk producing mines, that would otherwise be more difficult and time consuming to match through organic growth and acquisitions. If the Merger is not approved, the Aston Directors believe that the process involved in creating an equivalent portfolio of coal assets of similar quantum and quality could take a number of years. In addition, an alternative growth path may involve considerably more exploration, development and operating risk.

Aston, Whitehaven and Boardwalk have significant positions in various geographic regions, across varying qualities of coal and in projects at different stages of development. As such, the Merged Group, through diversification, will be more resilient and better placed to manage the risks facing companies operating in the Australian coal sector.

25 Includes only Aston and Whitehaven as Boardwalk has not delineated any Resources or Reserves for the Boardwalk assets.

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The Merged Group's portfolio of coal assets will incorporate five competitive producing mines, two large scale development projects and a suite of exploration assets that over time are expected to add significant growth and value for shareholders. The Merged Group is expected to reach managed saleable production of approximately 25Mtpa by FY2016.



3.2.3. Creates a major global supplier of semi-soft coking and PCI coals with the potential to maximise margins and access a broader customer base

The Merged Group will have a significant Reserve and Resource position in premium quality semi-soft coking and PCI coals, and is expected to become a major global supplier with the potential to maximise margins and access a broader customer base. Metallurgical coal production is expected to grow to represent up to 60% of the Merged Group's managed saleable production by FY2016, driven primarily by:

- Narrabri which is expected to produce up to 40% PCI coal;
- Vickery which is likely to produce up to 55% semi-soft coking and PCI coal; and
- Maules Creek which is capable of producing up to 84% semi-soft coking coal.[26]

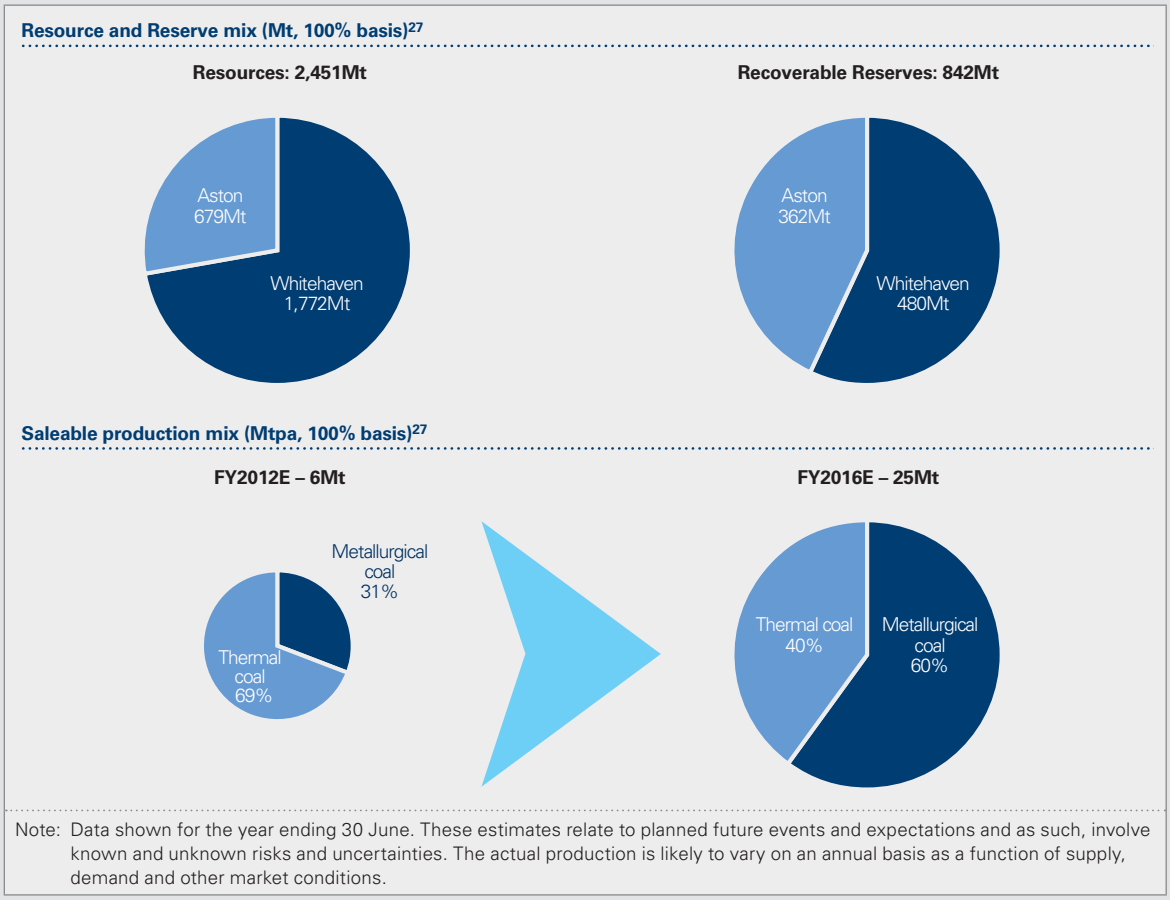
In addition, the Merged Group will have a substantial position in high quality thermal coal, providing diversification benefits, potential blending synergies and alternative end-markets for the Merged Group's production. The following key assets form the foundation for the Merged Group's export thermal coal position:

- existing Whitehaven open-cut operations, Narrabri and the Vickery development project; and
- Maules Creek which is expected to produce premium low-ash, high energy thermal coal.

The Aston and Whitehaven Directors also believe that in time an independent Gunnedah Basin thermal coal benchmark could be established to maximise the value from the high energy and low ash content of these coals.

26 Aston currently plans to market up to 80% metallurgical coal given the off-take commitments with Noble and J-Power (if completed). However, the DFS stated that there was the potential for 84% metallurgical coal to be produced over the first 20 years of production. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions.

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Note: Data shown for the year ending 30 June. These estimates relate to planned future events and expectations and as such, involve known and unknown risks and uncertainties. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions.

3.2.4. Strengthens and consolidates a strategic position in port and rail infrastructure

The Merged Group will have a valuable strategic port and rail infrastructure position which will support the production growth plans of the combined operations. Extensive port capacity agreements are in place to meet the future production plans of the Merged Group through three key terminals. Whitehaven's strategic 11% shareholding in NCIG complements the Merged Group's existing PWCS capacity, additional short and medium-term third party tonnages and PWCS Terminal 4 allocation from FY2015–2016. Additional medium and longer term capacity is expected to be secured by accessing surplus capacity from other producers and additional PWCS Terminal 4 allocations.[28]

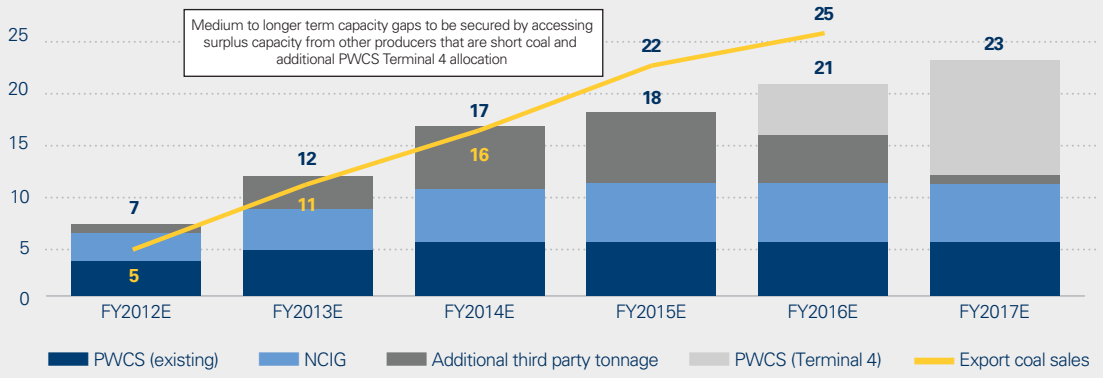
Rail infrastructure is also expected to be available to support the Merged Group's production plans given:

- Whitehaven has long-term track access agreements with the Australian Rail Track Corporation (**ARTC**) and a long-term haulage agreement with Pacific National;
- Aston has already secured 5Mtpa of rail capacity from 2013 and is in negotiations in regards to its remaining requirements; and
- ARTC has identified track upgrades to increase rail capacity to approximately 60Mtpa from the Gunnedah Basin.[29]

27 Includes only Aston and Whitehaven assets as Boardwalk has not delineated any Resources or Reserves for the Boardwalk assets.
28 The Terminal 4 project is awaiting key environmental approvals which are required for the project to proceed.
29 Operational risks associated with the expansion of the ARTC track upgrades and the ability to enter into future commitments for below rail are discussed in Section 7.1.

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Port capacity and export coal sales (Mt, 100% basis)[30]



Note: Data shown for year ending 30 June. These estimates relate to planned future events and expectations and as such involve known and unknown risks and uncertainties. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions.

These estimates are subject to, amongst other things, the timing of delivery of Terminal 4 and the operation of the Capacity Framework Arrangements.

3.2.5. Generates significant synergies resulting from the consolidation of the Gunnedah Basin mining operations

The Aston and Whitehaven Directors believe that the Merger will provide Aston Shareholders with access to significant synergies particularly as a result of combining their coal operations in the Gunnedah Basin. The Merged Group is expected to be able to unlock material value in the key areas of infrastructure efficiency and optimisation, coal blending and marketing opportunities, operational cost savings and a reduction in corporate costs. This value would otherwise not be available to Aston on a standalone basis. The Aston and Whitehaven Directors believe that the Merged Group may be able to achieve synergies with a net present value of **A$575 – 775 million,**[31] which is broadly consistent with the range of A$510 – 680 million of readily quantifiable synergies assessed by the Independent Expert. The Independent Expert notes that its assessment of infrastructure savings and efficiencies and operational cost synergies, two of the key categories of the expected synergy benefits, are regarded as conservative, which is a view shared by the Aston and Whitehaven Directors.

The Merger will enable Aston and Whitehaven to optimise production by leveraging a larger infrastructure base. The Merged Group will be able to prioritise the output of higher margin coals, particularly during periods of port and/or rail constraints, reducing the risk profile compared to that of Aston on a standalone basis. In addition, the Merged Group will have a more co-ordinated haulage schedule with additional trains and load points reducing the potential for lost train paths and thus take or pay charges. Similarly, the larger group is expected to also benefit from more efficient negotiation with infrastructure and other service providers.

The broad range of coals in the Merged Group's portfolio will provide greater opportunity for blending coals which should enhance the value of the portfolio. Furthermore, the Merged Group will have enhanced marketing opportunities available through access to a broader range of products, customers and end-markets.

Economies of scale and the stronger bargaining position of the Merged Group with suppliers is expected to generate material operating cost savings across the Merged Group's consumables. The Merged Group is also expected to realise additional benefits from the sharing of resources and technical expertise between the mines.

The Merger is expected to eliminate various duplicate corporate overheads across the Aston and Whitehaven businesses and negate the need for Aston to significantly expand corporate overheads as Maules Creek ramps up production. The Aston and Whitehaven Directors also understand that the taxation value of Aston and Boardwalk should be reset enabling the Merged Group to claim additional tax depreciation.

30 Includes only Aston and Whitehaven assets as Boardwalk has not delineated any Resources or Reserves for the Boardwalk assets.
31 Refer to Section 6.2 for further details regarding the assumptions and synergies included in this amount.

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The Merged Group is expected to be better positioned to fund and develop organic growth opportunities and selective acquisition opportunities than Aston would be on a standalone basis. As the global and Australian mining industry continues to consolidate, companies with the required financial, technical and human resources are expected to have an advantage in capitalising on industry consolidation opportunities. Aston and Whitehaven believe that the Merged Group will be in a strong position to participate in such opportunities as they arise to further enhance shareholder value. As part of this, the Merged Group is expected to have improved access to debt financing at a lower cost than either Whitehaven or Aston on a standalone basis, which will provide for an optimal capital structure.

3.2.6. Combines capable and experienced boards and management teams with a proven track record

The Merger will combine the significant board and management teams' expertise and technical, industry, commercial, development and operating skills, to successfully deliver the Merged Group's production plan, realise the potential synergies and to take full advantage of the available opportunities in the resources sector for the benefit of all shareholders.

Both Aston and Whitehaven have management with extensive mining, development and exploration experience and a successful track record of generating value for shareholders. Senior management will benefit from the collective skills and experience of the Merged Group workforce, enabling the deployment of the best qualified personnel and operational and technical skills across the two companies' portfolio of coal assets, which is particularly important in an environment with skilled labour shortages.

The Merged Group will also be able to build on the abilities of numerous employees and contractors and will be well positioned to retain and attract quality people during a period of high demand for skilled mining personnel.

Further detail on the composition of the Merged Group's Board and management team can be found in Section 6.4.

3.2.7. The Independent Expert has concluded that the Scheme is in the best interests of Aston Shareholders

The Independent Expert has concluded that the Merger terms are in the best interests of Aston Shareholders.

The Independent Expert's view is that the Merger is value accretive, and will result in investment characteristics superior to Aston on a standalone basis.

The Independent Expert's Report is set out in Section 8. Aston Shareholders are encouraged to read the report in full.

The Independent Expert considers that the underlying value to Aston Shareholders will be enhanced both in the event of the completion of the Scheme and in the event of both the Scheme and the Boardwalk Transaction completing. However, the Independent Expert also notes that the completion of the Boardwalk Transaction is dilutive to Aston Shareholders, when compared to the Scheme without the Boardwalk Transaction. The Independent Expert has stated that its estimate of the implied value of the Scheme Consideration on a controlling interest basis is in the range of A$11.50 to A$16.29 per Aston Share as a result of the Scheme. If the Boardwalk Transaction is completed, the Independent Expert has stated that its estimate of the implied value of consideration per share is in the range of A$10.70 to A$15.25 per Aston Share. This compares with the Independent Expert's valuation of each Aston Share (on a fully diluted, controlling interest basis) of A$10.48 to A$14.92. The Independent Expert's Report is set out in Section 8.

3.2.8. All of the directors of Aston, including the Independent Directors, have unanimously recommended that you vote in favour of the Scheme in the absence of a Superior Proposal

The Merger of Aston and Whitehaven will combine the assets, Resources, Reserves, operations and people of two high quality and complementary companies that should enable the Merged Group to grow and generate shareholder value on a superior basis than is currently available to Aston in isolation.

The Independent Directors of Aston have considered the Merger with Whitehaven and have unanimously recommended that Aston Shareholders vote in favour of the Scheme in the absence of a Superior Proposal. In addition, Mr Nathan Tinkler and Mr Philip Christensen also recommend Aston Shareholders vote in favour of the Scheme in the absence of a Superior Proposal.

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All the Aston Directors have formed their conclusion and made their recommendation based on the matters outlined in this Section. The Aston Directors have also had regard to the risks associated with the Scheme which are further outlined in Section 7.

Each Independent Director who holds Aston Shares, or on whose behalf Aston Shares are held, intends to vote those shares in favour of the Scheme, in the absence of any Superior Proposal. However, Mr Nathan Tinkler and Mr Philip Christensen and their respective affiliates have decided that they will not vote any Aston Shares that they control on the Scheme at the Scheme Meeting, because of the benefits that they will receive in the Boardwalk Transaction.

3.3. Potential disadvantages or risks associated with the Scheme

The Scheme has a number of potential disadvantages and risks that Aston Shareholders should consider in deciding whether or not to vote in favour of the Scheme.

While the Aston Board is of the opinion that these disadvantages and risks are outweighed by the Scheme's advantages, and that the Scheme is in the best interests of Aston Shareholders in the absence of a Superior Proposal, Aston Shareholders should consider their individual circumstances in determining how to vote in relation to the Scheme.

3.3.1. Change in risk profile and risks of investment in the Merged Group

If the Scheme is implemented, there will be a change in the risk profile to which Aston Shareholders are exposed.

Aston Shareholders are currently exposed to various risks as a result of their investment in Aston. These risks are described in Section 7.

If the Scheme is approved, Aston will merge its business with that of Whitehaven and Aston Shareholders will receive New Whitehaven Shares. As a consequence, Aston Shareholders will be exposed to risk factors relating to Whitehaven, and to certain additional risks relating to the Merged Group and the integration of the two companies. These include risks relating to the operation of a broader suite of coal assets than Aston currently holds. In a number of cases, those risks are different from or additional to those currently faced by Aston Shareholders. The change in risk profile may be seen to be a disadvantage by some Aston Shareholders.

Section 7 discusses the risk factors relating to Aston, Whitehaven and the Merged Group. Aston Shareholders are encouraged to read that section in its entirety.

It is also important to note that certain risks will apply if the Scheme does not proceed. These are also discussed in Section 7.

3.3.2. The investment profile for Aston Shareholders will change

Whilst the nature of Aston's operations, its exposure to coal markets and the location of operations, are the same or similar to that of Whitehaven, the operational profile, capital structure, size and geography of the Merged Group will be different to that of Aston on a standalone basis. In particular, Maules Creek is predominantly a semi-soft coking coal project with a small portion of high quality thermal coal, while the Merged Group will comprise a higher portion of high quality thermal coal.

It is possible that certain Aston Shareholders may wish to maintain an interest in Aston as a standalone entity because they are seeking an investment in a publicly listed company with the specific characteristics of Aston (such as the development growth offered by Maules Creek). The change in investment profile under the Merger may be a disadvantage to such shareholders.

3.3.3. A Superior Proposal for Aston may yet emerge

It is possible that a Superior Proposal for Aston, which is more attractive for Aston Shareholders than the Merger, may materialise in the future.[32] The implementation of the Merger would mean that Aston Shareholders would not obtain the benefit of any such proposal.

32 Pursuant to the Scheme Implementation Agreement between Aston and Whitehaven (SIA), Aston will incur a Break Fee of A$20.6 million (exclusive of GST) if between the time the SIA is entered into and the Effective Date (or termination of the SIA), the Aston Directors publicly recommend, promote or endorse an alternative proposal; or if an alternative proposal is announced within this period and is completed within a year of the date of the SIA. Further details of the Break Fee payable under the SIA are set out in Section 13.4. Pursuant to the Call Option Agreement, if an alternative proposal emerges, it may trigger the provisions in the Call Option Agreement requiring Aston Resources Investments Pty Limited to transfer part of its shareholding (representing 19.99% of the issued capital of Aston) to Whitehaven. Further details on the Call Option Agreement are set out in Section 14.5.

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The Aston Board is not currently aware of any such proposal and notes that since Aston and Whitehaven announced the Merger, there has been a significant period of time and ample opportunity for an alternative proposal for Aston to emerge.

As described in Section 2.6, whilst Aston engaged in certain discussions of an incomplete nature with a number of parties, Aston did not formally consider any alternative proposals prior to entering into the Scheme Implementation Agreement with Whitehaven. Since the Scheme was announced, no alternative proposal has emerged, and the Aston Directors, including the Independent Directors, have determined that the Merger is the best option available to Aston Shareholders at the date of this Scheme Booklet. In addition, shareholders in the Merged Group will still have an opportunity to realise a control premium in the event of any future change of control transaction for the Merged Group.

3.3.4. Integration risk

The long-term success of the Merged Group will depend, amongst other things, on the success of management in integrating the respective businesses and the strength of management of the Merged Group. There is no guarantee that the businesses of the Merged Group will be able to be integrated successfully or integrate over the expected time period. There are risks that any integration of the businesses of Aston and Whitehaven may take longer than expected and that anticipated efficiencies and benefits of that integration may be less than estimated. These risks include possible differences in the management culture of the two groups, inability to achieve synergy benefits and cost savings, and the potential loss of key personnel.

Any failure by the Merged Group to ensure implementation costs remain below those anticipated may have a material adverse effect on the financial performance and position, and future prospects of the Merged Group.

3.3.5. The exact value of the Scheme Consideration is not certain

Under the terms of the Merger, Aston Shareholders will receive 1.89 New Whitehaven Shares for each Aston Share they hold. The exact value of this Scheme Consideration that would be realised by individual Aston Shareholders will be dependent on the price at which the New Whitehaven Shares trade on ASX after the Implementation Date.

In addition, the Sale Agent will be issued New Whitehaven Shares attributable to certain Ineligible Foreign Aston Shareholders and will sell them on market as soon as reasonably practicable after the Implementation Date (see Section 2.13). Although the quantum of these sales is expected to be limited, it is possible that such sales may exert downward pressure on the Merged Group's share price during the applicable period.

3.3.6. Following implementation of the Merger, the Merged Group's share price might change

Following the implementation of the Merger, the Merged Group's share price may rise or fall based on market conditions and the Merged Group's financial and operational performance. If the Merged Group's share price falls, the value of the New Whitehaven Shares received by Aston Shareholders as Scheme Consideration will decline in value. Accordingly, there is no guarantee that Aston Shareholders will actually realise the implied value of the Scheme Consideration to be received under the Merger.

3.3.7. Increased depreciation and amortisation (D&A) expenses resulting from uplift in fair value of assets

The Merger terms have been structured to be a merger of equals, with the Merged Group Board and management control shared between Aston and Whitehaven and with no individual shareholder having the ability to exert significant influence over the Merged Group.[33] However, accounting standards require that one company is deemed to be the acquirer of the other, based on certain criteria. On application of these criteria, Aston and Whitehaven have agreed that, for accounting purposes, Whitehaven will be deemed to be the acquirer of Aston. The acquisition price will be determined at the date of the transaction, based on the share price of Whitehaven at that date, and the price will be allocated to the

33 See Section 6.6 for further details of the expected Merged Group ownership structure post implementation of the Scheme and the Boardwalk Transaction.

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underlying net assets of Aston. To the extent that the consideration increases the fair value of Aston, this will likely result in a mark-up of the value of Aston's assets. These increased asset values, excluding any goodwill that may be recognised, will need to be depreciated in accordance with the relevant accounting standards. This will result in depreciation and amortisation charges being greater than the depreciation and amortisation charges of Aston and Whitehaven as separate businesses, significantly reducing reported future earnings.

3.4. Other relevant considerations

3.4.1. Transaction and other costs

Transaction and other costs incurred (or which are expected to be incurred) by Aston in relation to the implementation of the Merger are currently estimated at A$32 million (exclusive of GST), comprising adviser, legal, accounting and expert fees, employee costs (including termination rights, bonuses, long-term incentive options and insurance), and various other costs. This amount does not include transaction costs that may be incurred by Whitehaven in relation to the Merger.

For further information, refer to the Pro Forma Financial Information that has been prepared for the Merged Group contained within Section 6.7.

3.4.2. Implications for Aston if the Merger is not implemented

If the Merger is not implemented, Aston will continue to operate its current business as a standalone entity. Each Aston Shareholder will retain their Aston Shares and will not receive any New Whitehaven Shares. Aston will still incur a relative proportion of the transaction and other costs referred to above, as outlined in Section 2.8.

In those circumstances, the Aston Board and management will seek to continue to develop the tier one Maules Creek Project and maximise shareholder value.

Aston Shares may trade below their current market price (or the value attributed by the Independent Expert) if the Merger is not implemented. This may occur if, for example, investors consider the growth prospects of Aston's standalone business are lower in the absence of the Merger.

3.4.3. Rights, obligations and Break Fee under the Scheme Implementation Agreement

Under the Scheme Implementation Agreement entered into between Aston and Whitehaven, a liquidated amount (or Break Fee) of approximately A$20.6 million (exclusive of GST) may become payable by Aston to Whitehaven, including in certain circumstances if the Scheme is not approved. The Scheme Implementation Agreement also sets out various other rights and obligations of Aston and Whitehaven in relation to the Merger. See Section 13.4 for further details.

3.4.4. Tax consequences for Scheme Shareholders

If the Scheme proceeds, there may be tax consequences for Aston Shareholders which may include tax payable on any gain on the disposal of their Aston Shares. Further information on the relevant tax consequences for Australian resident shareholders is included in Section 12. However, Aston Shareholders should seek their own professional advice regarding the individual tax consequences applicable to them.

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4 PROFILE OF ASTON

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4. PROFILE OF ASTON

4.1. Introduction

Aston is an independent Australian listed public company (ASX:AZT) that is in the process of developing the Maules Creek Project in which it currently has an 85% interest.[34] Aston's registered address is in Brisbane and it has offices located in Sydney and Brisbane, while its mine office for the Maules Creek Project is located in the Gunnedah Basin in New South Wales.

Aston listed on ASX in August 2010 and as at the close of trading on 9 December 2011, had a market capitalisation of approximately A$2.1 billion. The table below sets out the key milestones in Aston's history:

DATE	DESCRIPTION
Jan-2008	Aston established as a proprietary limited company (Aston became a public company on 25 June 2010)
Nov-2009 – Feb-2010	Acquisition of Maules Creek tenements CL375 and A346 from Coal and Allied for A$480 million
Aug-2010	IPO of Aston raising A$400 million at A$5.96 per share
Dec-2010	Signed agreement for the sale of 15% of Maules Creek Project to ITOCHU Corporation for A$345 million
Dec-2010	Acceptance of take or pay port allocation from PWCS for 1.7Mtpa from 2013 ramping up to 5Mtpa from the later of 2015 or the delivery of Terminal 4
Feb-2011	Lodgement of environmental application for project approval
May-2011	Completion of sale of 15% of Maules Creek Project to ITOCHU and formation of Maules Creek Coal Joint Venture ITOCHU appointed exclusive marketing agent for Maules Creek coal sold into Japan and granted an option to purchase up to 15% of coal produced from the project annually which option has been novated to Aston Coal 3 Pty Ltd
Jul-2011	Definitive feasibility study for the Maules Creek Project completed
Jul-2011	A$350 million revolving credit facilities secured[35]
Aug-2011	Access Holder Agreement signed with ARTC for 2Mtpa below rail capacity from Q2 2013, ramping up to 5Mtpa from Q3 2013
Sep-2011	Entered into agreement for 7.1Mt of port capacity for the period from July 2013 to June 2016 via NCIG Substitute Shipper Agreement (**NCIG SSA**)
Sep-2011	Entered into conditional agreement for proposed sale of 10% stake in Maules Creek Coal Joint Venture to Electric Power Development Co. Limited (**J-Power**) for A$370 million[35] along with a proposed off-take agreement for a period of 10 years with an initial commitment of 150ktpa in 2014 ramping up to 900ktpa by 2019
Nov-2011	Board and senior management changes announced
Dec-2011	Proposed Merger with Whitehaven announced
Dec-2011	Entered into the rail spur and infrastructure joint venture with Boggabri Coal Pty Ltd

34 Aston has entered into an agreement to sell a 10% interest in the Maules Creek Project to J-Power. This agreement is conditional on (amongst other things) the consent of Aston's existing joint venture partner ITOCHU. As at the date of this Scheme Booklet, ITOCHU's consent and waiver of its pre-emptive rights has been obtained, subject to the asset sale completing in its current form on or before 30 June 2012 or such later date as is agreed by the parties. If the transaction completes, Aston's interest in the Maules Creek Project will be reduced from 85% to a 75% interest.

35 Aston currently has a corporate loan facility of A$175 million and a bank guarantee facility of A$60 million. These facilities can be increased to A$250 million and A$100 million respectively subject to satisfaction of further conditions precedent, primarily receipt of Part 3A approval for the Maules Creek Project. Of these facilities only A$41.5 million in bank guarantees have been drawn to date.

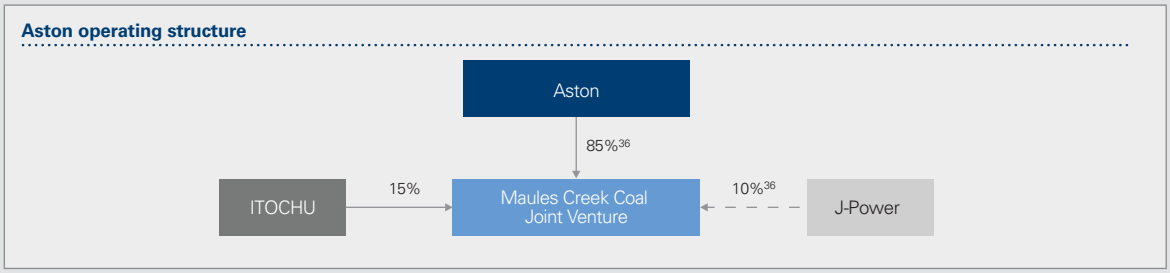
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DATE	DESCRIPTION
Mar-2012	Aston Coal 3 Pty Ltd agreed to acquire ITOCHU's option to purchase up to 15% of coal produced from the project annually for a consideration of A$20,340,000 payable by 26 March 2012. The Aston Directors are of the view that the option is a valuable right that will provide the Merged Group with access to coal that can be blended to unlock synergies between Merged Group assets

Further information in relation to the above events can be viewed on ASX website at www.asx.com.au or on the "investors" section of the Aston website at www.astonresources.com.

Group structure

A simplified operating structure of Aston is set out in the following diagram.



4.2. Overview of Maules Creek

The Maules Creek Project is considered to be one of only a few remaining tier 1 undeveloped coal assets in Australia. Maules Creek is located in the Gunnedah Basin of New South Wales, approximately 360km north-west of Newcastle and contains a large delineated Resource of 679Mt, capable of supporting a large-scale open-cut mining operation for more than 30 years. With 362Mt of Recoverable Reserves, Maules Creek is one of the largest coal deposits in Australia.

In July 2011, Aston completed a Definitive Feasibility Study (**DFS**) for the Maules Creek Project, confirming an upwardly revised metallurgical coal production split, capital expenditure requirement, life of mine operating costs and a revised project schedule. The latest comprehensive coal quality drilling program and analysis confirmed that Maules Creek has the capacity to produce approximately 84% metallurgical coal over the first 20 years of production.[37] Due to the high quality and versatility of its raw coal, Aston will be able to optimise its product mix to respond to changing market demands. Maules Creek is expected to produce 10.8Mtpa by 2016 with a production mix comprising largely semi-soft coking coal and some premium quality export thermal coal. Aston plans to sell the coal produced at Maules Creek into the export market, but has the flexibility to sell a portion of the coal to Australian-based companies seeking high quality coal for blending purposes.

Maules Creek has rail capacity for saleable production ramping up to 5Mtpa from Q3 2013 and sufficient port capacity for saleable production of approximately 5Mtpa by FY2014 and 8.5Mtpa by FY2017 and is in negotiations to satisfy its remaining infrastructure capacity requirements.

36 Aston has entered into an agreement to sell a 10% interest in the Maules Creek Project to J-Power. This agreement is conditional on (amongst other things) the consent of Aston's existing joint venture partner ITOCHU. As at the date of this Scheme Booklet, ITOCHU's consent and waiver of its pre-emptive rights has been obtained, subject to the asset sale completing in its current form on or before 30 June 2012 or such later date as is agreed by the parties. If the transaction completes, Aston's interest in the Maules Creek Project will be reduced from 85% to a 75% interest.

37 Aston currently plans to market up to 80% metallurgical coal given the off-take commitments with Noble and J-Power (if completed). However, the DFS stated that there was the potential for 84% metallurgical coal to be produced over the first 20 years of production. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions.

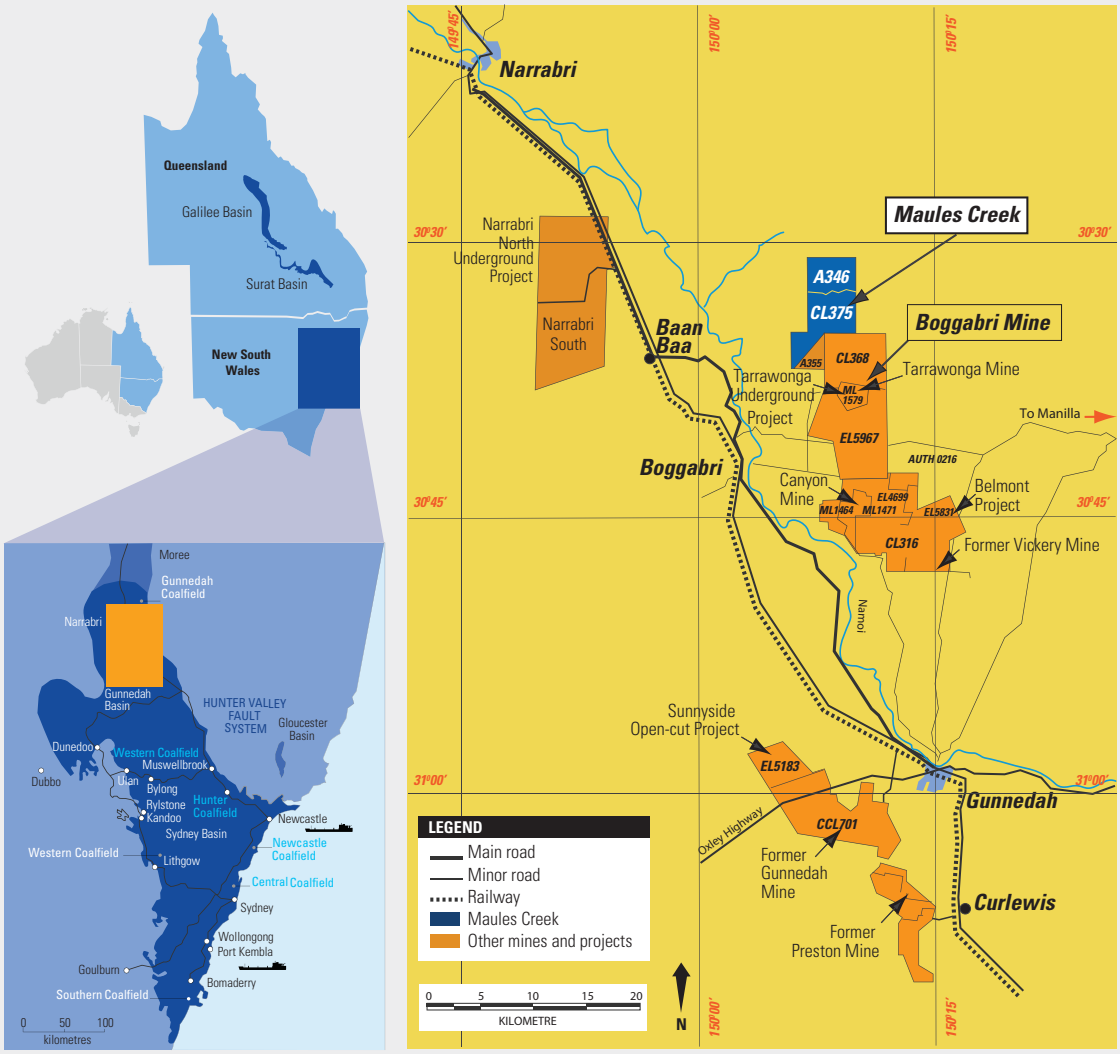
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Location

Maules Creek is located in the heart of the Gunnedah Basin and is within close proximity of critical infrastructure, being situated only 16km from the main railway line servicing the coal terminals at the Port of Newcastle, which is 360km south-east of the project.

Maules Creek location



Source: Reproduced with permission of Industry & Investment NSW, MMC Technical Report.

Resources and Reserves

Aston has a large semi-soft coking coal and high quality thermal coal inventory totalling 679Mt in Resources (100% basis), 362Mt in Recoverable Reserves (100% basis) and 329Mt in Marketable Reserves.



Note: Resources are reported inclusive of Reserves (that is, Reserves are not additional to Resources). Numbers may not add due to rounding.

Statement of Reserves and Resources

Maules Creek Resources (Mar-11)

Mt	Resources
Measured	197
Indicated	244
Inferred	237
Total	679

Maules Creek Reserves (Apr-11)

Mt	Recoverable Reserves	Marketable Reserves
Proved	171	141
Probable	191	188
Total	362	329

Note: Resources are reported inclusive of Reserves (that is, Reserves are not additional to Resources). Numbers may not add due to rounding.

Competent Persons statement

The Reserves and Resources quoted in this Scheme Booklet are supported by the following Competent Persons statements.

The information in this Scheme Booklet that relates to Resources is based on information compiled by Mr Phillip Sides, a Senior Geologist and employee of JB Mining Services Pty Ltd, based on geological data provided electronically by Rio Tinto Coal Australia and more recently Aston. Mr Sides is a qualified geologist with over 20 years experience in coal geology and over 15 years experience in resource evaluation. Mr Sides is a member of The Australian Institute of Geoscientists and has the relevant experience in relation to the mineralisation being reported to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code 2004 Edition)".

The information in this Scheme Booklet that relates to Reserves is based on reserve estimates compiled by Mr Doug Sillar, BE (Mining, Hons) MAusIMM. Mr Sillar is a full-time employee of Runge Limited and has sufficient experience which is relevant to the style and type of deposit under consideration and to the activity undertaken to qualify him as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code 2004 Edition)".

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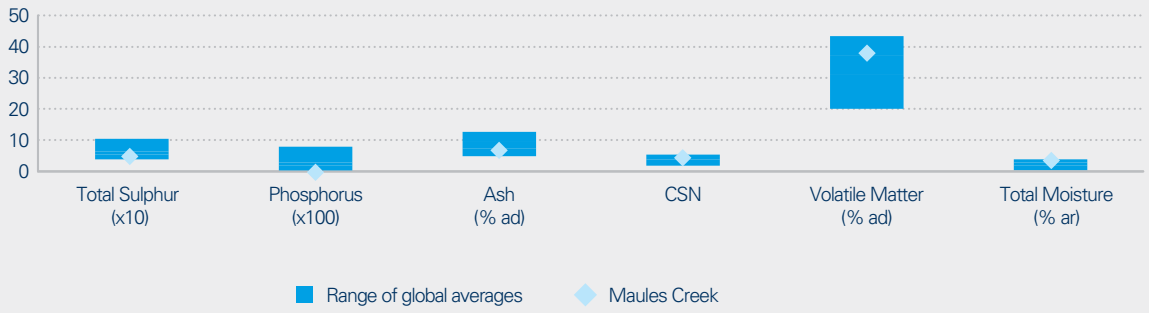
Coal quality

In 2010, Aston completed a comprehensive drilling program consisting of 106 new holes including a combination of large diameter holes and HQ cored holes. Following completion, Aston undertook a comprehensive seam-by-seam, ply-by-ply coal quality testing program to provide further data regarding the coal quality parameters of Maules Creek coal. This data was then analysed and independently verified.

The coal quality results confirm that Maules Creek will produce a high quality, low ash, low sulphur and low phosphorus semi-soft coking coal. The results of the drilling program and analysis also confirmed that the project over the first 20 years has the capacity to produce approximately 84% metallurgical coal subject to global supply and demand dynamics.[38]

The balance of production will be premium low ash, high energy thermal coal that should sell at a premium to the Newcastle benchmark price. The low in-situ ash content drives the competitive 86% overall production yield which is significantly above the 73% average for Hunter Valley coal operations.[39]

Semi-soft coking and PCI coal quality parameters



Source: AME Group. Maules Creek Project quality based on information provided by Aston.

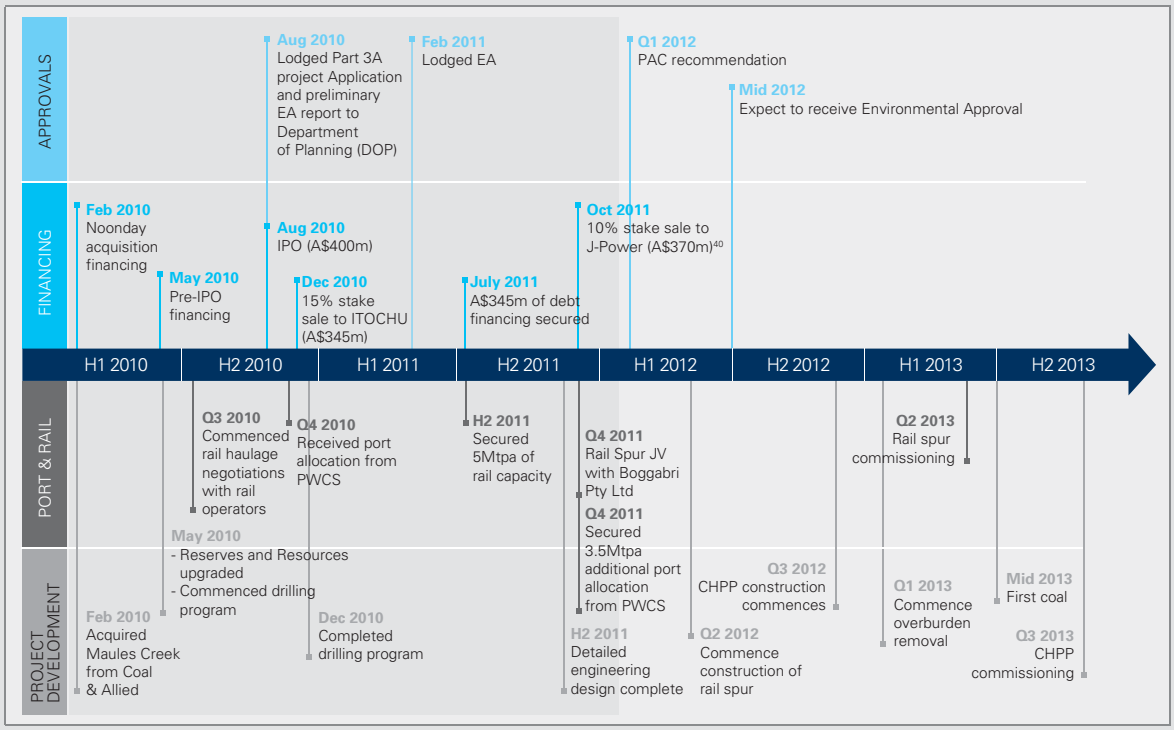
Note: "Ranges of global averages" reflect country averages and is estimated based on a sample of operating and proposed coal projects sourced from limited published information.

38 Aston currently plans to market up to 80% metallurgical coal given the off-take commitments with Noble and J-Power (if completed). However, the DFS stated that there was the potential for 84% metallurgical coal to be produced over the first 20 years of production. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions.

39 Data for Hunter Valley operations based on FY2008 data as sourced from NSW Department of Primary Industries – 2009 NSW Coal Industry Profile. Saleable mine yield is calculated as saleable production divided by ROM production. The Hunter Valley yield is based on the FY2008 weighted average, in terms of saleable production.

Development plan timeline

Key milestones of the Maules Creek development contemplated by the mine plan are outlined in the diagram below.



The detailed mine production scheduling has been completed by Aston in conjunction with Third Party consultants. The mine plan assumes timely delivery of all government approvals and is subject to certain risks. See Section 7 for further detail on risk factors.

Approval process

In February 2011, Aston lodged an application under Part 3A of the *Environmental Planning and Assessment Act 1979* (NSW) for the Maules Creek Project. The Part 3A "Repeal Act" was passed in June 2011 and the Maules Creek application will progress under the transitional arrangements. The Maules Creek application has been referred to the Planning Assessment Commission for review. The Committee has requested and been granted an extension to the deadline to provide its report. The report was due to be delivered to the Department of Planning and Infrastructure on 24 February 2012. The report has not yet been delivered and Aston understands that, primarily due to the Commission's resources, it may be delayed by a couple of weeks although no specific revised date has been provided. Assuming the Committee's report is issued in early March, first coal is still expected in mid-calendar year 2013 – ramping up to approximately 10.8Mtpa by 2016.

40 Aston has entered into an agreement to sell a 10% interest in the Maules Creek Project to J-Power. This agreement is conditional on (amongst other things) the consent of Aston's existing joint venture partner ITOCHU. As at the date of this Scheme Booklet, ITOCHU's consent and waiver of its pre-emptive rights has been obtained, subject to the asset sale completing in its current form on or before 30 June 2012 or such later date as is agreed by the parties. If the transaction completes, Aston's interest in the Maules Creek Project will be reduced from 85% to a 75% interest.

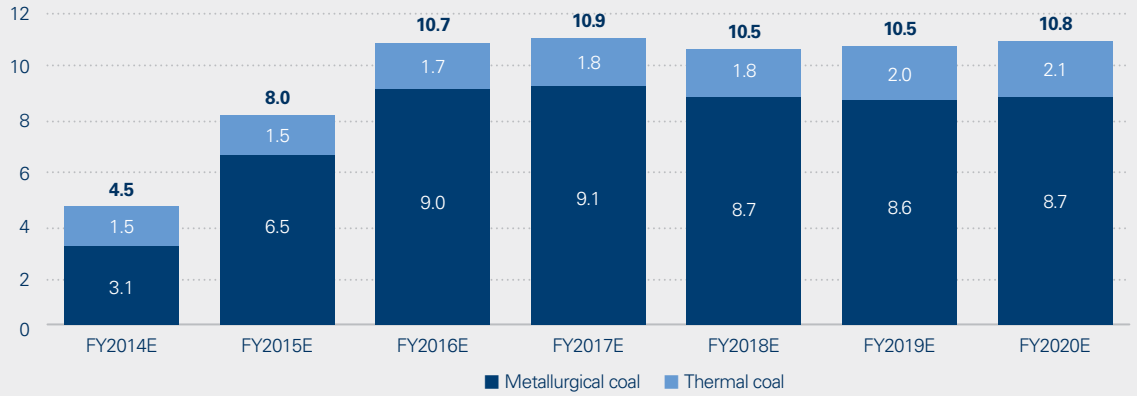
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Production schedule

Maules Creek's current Resources are expected to support a large open-cut mining operation for in excess of 30 years at an average saleable coal production rate of approximately 10.8Mtpa. Subject to the timely delivery of all necessary approvals, Aston expects that Maules Creek will be commissioned and first coal production will commence in mid calendar year 2013, with saleable production exceeding 10Mtpa from FY2016 onwards.

Managed saleable production forecasts (Mt, 100% basis)



Note: Data shown for year ending 30 June. These estimates relate to planned future events and expectations and as such involve known and unknown risks and uncertainties. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions.

Operating expenditure

The DFS completed in July 2011 estimated operating expenditure for Maules Creek to be approximately A$62.9/FOBt (excluding royalties) for the first 20 years of operations. This relatively low operating cost estimate was primarily driven by the following factors:

- Low Strip Ratio: Maules Creek will have a relatively consistent low average Strip Ratio of 6.4:1 over the first 20 years of production;
- Simplicity of operations: Maules Creek will involve open-cut mining operations consisting of simple truck and shovel methods; and
- High yield: due to the high quality of the coal, Maules Creek will be able to realise a higher product yield of approximately 86%.

Forecast operating costs (excluding royalties)

	A$/t	
Mining	37.5	12Mtpa ROM from truck and shovel operation Strip Ratio of 6.4:1 over first 20 years
Coal processing	4.4	86% product yield
Transportation	20.2	Rail (access and haulage), port and demurrage
Other	0.8	Administration and overheads
Total FOB	**62.9**	**First quartile cost position**

This cost estimate places the Maules Creek mine in the first quartile of Australian metallurgical coal producers with further improvement in competitiveness expected as a result of a relatively constant Strip Ratio over the first 20 years of production.

Capital expenditure

Aston's share of the development capital expenditure, including escalation and contingencies prepared as at the time of the DFS, was estimated to be approximately A$553 million, with the CHPP and the rail spur expected to be the largest capital outlays. The DFS and estimates were completed with the input of Third Party consultants who formed the view that they were of reasonable accuracy given the stage of the planning process.

Maules Creek capital expenditure from July 2011 to expected first coal[41]

	A$m
CHPP	211
Surface infrastructure	101
Rail	139
Land acquisitions	27
Other	68
Escalation	31
Total (excl. contingency)	577
Contingency	74
Total (incl. contingency)	651
Aston share (85% incl. contingency)	**553**
Pre-strip	31
Other operational working capital	37
Total working capital	68
Aston share (85%)	**58**

Detailed design is nearing completion for the CHPP and surface infrastructure and was materially complete by the end of calendar year 2011. Tendering of design and construction of surface infrastructure facilities and bulk earthworks occurred during the second half of 2011, and is expected to be completed early in 2012.

The design of the rail spur has been completed, the construction works tendered and final negotiations with preferred contractors is nearing completion.

Aston intends to complete all design and tendering works before the commencement of contractor mobilisation in mid-calendar year 2012. Following the two month delay in the timing of the recommendation of the PAC and the outcomes of recent tenders, management have instituted a further review of the capex budget. This process will take several months as the results and negotiations of tenders received become available. It would be expected that cost increases arising from the delay, changes in scope identified from detailed design work and increasing costs being experienced generally in the resource sector in the region will see some or all of the amounts set aside for escalation and contingency applied in this review.

During the second half of calendar year 2011, Aston finalised the commercial terms of the key land acquisitions. These acquisitions have included additional properties not originally identified in the DFS which have been made to secure additional water licences for the mine site.

Aston management have developed the operating mine plans on the assumption of "contracting-out" the mine and rail operations. However, to be prudent they are assessing alternate operating models to determine whether there are cost benefits in acquiring mobile mining fleet and or rail locomotives and rolling stock. No firm recommendations or decisions in these areas have been made to date except to commit to letters of intent to lock in manufacturing slots for items on the critical path assessment. If decisions are made to proceed to acquire equipment then it will impact future cash flows as currently these costs are spread within operating expenditure forecasts rather than in upfront capital acquisition plans.

41 Capex estimates exclude mobile mining fleet.

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Aston intends to fund its share of capital expenditure through its existing cash balance, proceeds from the pending sale of 10% of Maules Creek[42] to J-Power and undrawn debt facilities.[43] In the event that the J-Power transaction does not complete, Aston would intend to continue to explore options to secure any remaining funding requirements, which may include other minority sell-downs or accessing international debt markets.

Infrastructure capacity

Aston is well progressed in terms of meeting its infrastructure requirements to support the Maules Creek development and remains confident that it will secure all rail and port access required for full production ramp-up.[44]

Rail

In August 2011, Aston secured below rail capacity of 5Mtpa from 2013 for the Maules Creek Joint Venture. Aston is now working with ARTC to identify and progress the additional rail expansion projects necessary to deliver the balance of its required rail capacity, and is targeting contracting this capacity in early 2012.

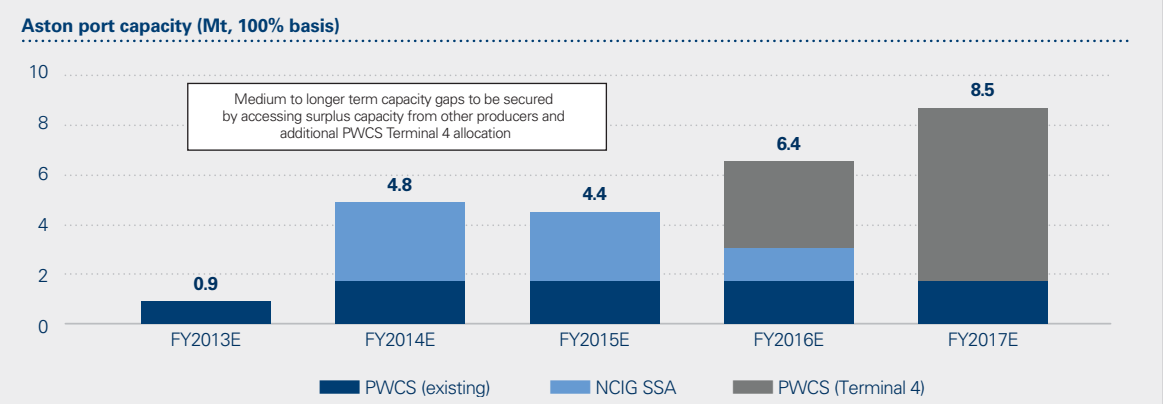
Port

In September 2011, on behalf of the Maules Creek Joint Venture, Aston signed an NCIG SSA with an existing Newcastle coal shipper. Under this agreement, Maules Creek has secured up to 7.1Mt of port capacity over the period from July 2013 to June 2016.

This NCIG capacity was in addition to Maules Creek's then existing PWCS allocation of 1.7Mtpa from 2013 which ramps up to 5Mtpa from the later of 2015 or the delivery of Terminal 4.

In December 2011, Aston also announced that it had accepted a further allocation from PWCS of 3.5Mtpa from 2015. This allocation will be sourced from PWCS' planned Terminal 4 expansion.[45]

Aston's existing committed port allocations are outlined in the following chart.



Note: Data shown for year ending 30 June. These estimates relate to planned future events and expectations and as such involve known and unknown risks and uncertainties. These estimates are subject to, amongst other things, the timing of delivery of Terminal 4 and the operation of the Capacity Framework Arrangements. Capacity under the NCIG SSA may be reduced if actual annual capacity at NCIG is lower than stated in NCIG's budget or business plan.

Aston remains confident that there will be sufficient excess port capacity available in the short to medium term to meet Aston's expected production pending delivery of Terminal 4 and intends to nominate for further tranches of Terminal 4 capacity to satisfy its longer term requirements.

42 Aston has entered into an agreement to sell a 10% interest in the Maules Creek Project to J-Power. This agreement is conditional on (amongst other things) the consent of Aston's existing joint venture partner ITOCHU. As at the date of this Scheme Booklet, ITOCHU's consent and waiver of its pre-emptive rights has been obtained, subject to the asset sale completing in its current form on or before 30 June 2012 or such later date as is agreed by the parties. If the transaction completes, Aston's interest in the Maules Creek Project will be reduced from 85% to a 75% interest.

43 Aston currently has a corporate loan facility of A$175 million and a bank guarantee facility of A$60 million. These facilities can be increased to A$250 million and A$100 million respectively subject to satisfaction of further conditions precedent, primarily receipt of Part 3A approval for the Maules Creek Project. Of these facilities only A$41.5 million in bank guarantees have been drawn to date.

44 Operational risks associated with the expansion of the port infrastructure, the ARTC track upgrades and the ability to enter into future commitments for both above and below rail are discussed in Section 7.1.

45 The Terminal 4 project is awaiting key environmental approvals which are required for the project to proceed.

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Marketing

Aston has focused its initial Maules Creek marketing efforts on existing and proposed joint venture partners and off-takers, and plans to commence a formal marketing campaign beginning in 2012. In terms of metallurgical coal, Aston's focus is expected to be on steel mills based in Asia, including those located in China, Japan and South Korea. Given the low ash content of Maules Creek's thermal coal and power generators' preference for premium quality and high calorific thermal coal, marketing of Maules Creek thermal coal has been and will continue to be focused on the large private and public power generators in selected countries across the Asia-Pacific region, including China, Japan, Korea and Taiwan.

The low ash properties of Maules Creek's coal also make it suitable for blending with higher ash Australian Hunter Valley coals. The wide range of blending opportunities provides another marketing option which Aston continues to explore. Aston may also market semi-soft coking, high volatile PCI and thermal coal through marketing agents and off-take agreements with other coal industry participants.

Aston has entered into an off-take with Noble pursuant to which Noble has agreed to buy 1.5Mtpa of coal from Aston for 10 years commencing in 2013.

As part of the formation of the Maules Creek Coal Joint Venture in May 2011, ITOCHU was appointed exclusive marketing agent for Maules Creek coal sold into Japan. ITOCHU has agreed to novate in favour of Aston Coal 3 Pty Ltd an option to purchase up to 15% of coal produced from the Joint Venture on an annual basis for a consideration of A$20,340,000 payable by 26 March 2012.

As part of the proposed sale of a 10% interest in the Maules Creek Joint Venture to J-Power, Aston agreed terms for a 10 year off-take agreement with J-Power for 150ktpa from April 2014, increasing by 150ktpa to 900ktpa by 2019.[46] The pricing of this off-take agreement is linked to the Newcastle benchmark price plus premiums for the higher energy and lower ash content of Maules Creek coal. The agreement also includes an option for a further nine year extension by mutual agreement. Execution of this agreement is conditional on approval from Aston's joint venture partner, ITOCHU. As at the date of this Scheme Booklet, ITOCHU's consent and waiver of its pre-emptive rights has been obtained, subject to the asset sale completing in its current form on or before 30 June 2012 or such later date as is agreed by the parties.

Aston business prior to the Effective Date

Aston proposes to carry on business as usual after the date of this Scheme Booklet, subject to obtaining Whitehaven consent where required under the Scheme Implementation Agreement to enter into any Aston Material Transaction. Aston will continue to take all steps to develop the Maules Creek Project in accordance with its budget and mine plan.

In particular, Aston anticipates that prior to the Effective Date, it:

- may sign services and other construction agreements for the Maules Creek Project; and
- may receive a report from the Planning Assessment Commission following its review of the Maules Creek Project. Aston will continue to disclose to the market via the ASX any developments that would be expected to materially affect Aston's share price, in accordance with ASX disclosure requirements.

4.3. Board of directors

As at the date of this Scheme Booklet, the board of Aston comprised:

- Mr Nathan Tinkler (Non-Executive Chairman)
- The Hon. Mark Vaile (Independent Non-Executive Deputy Chairman)
- Mr David Ryan AO (Independent Director)
- Mr Rick Gazzard (Independent Director)
- Mr Philip Christensen (Non-Executive Director)

Profiles of the Aston Board members that will continue as directors of the Merged Group if the Scheme is implemented, The Hon. Mark Vaile, Mr Rick Gazzard and Mr Philip Christensen, are set out in Section 6.4.

46 Aston has entered into an agreement to sell a 10% interest in the Maules Creek Project to J-Power. This agreement is conditional on (amongst other things) the consent of Aston's existing joint venture partner ITOCHU. As at the date of this Scheme Booklet, ITOCHU's consent and waiver of its pre-emptive rights has been obtained, subject to the asset sale completing in its current form on or before 30 June 2012 or such later date as is agreed by the parties. If the transaction completes, Aston's interest in the Maules Creek Project will be reduced from 85% to a 75% interest.

4.4. Aston securities and substantial shareholders

Aston's issued securities

As at 8 March 2012, Aston has the following securities on issue:

(a) 204,668,861 Aston Shares

(b) 665,292 performance rights of the following tranches

Exercise price	Expiry date	Number of Aston performance rights	Vested
Nil	16-Nov-14	215,292	No
Nil	17-Aug-15	450,000	No

(c) 9,750,503 options of the following tranches

Exercise price	Expiry date	Number of Aston Shares which options cumulatively convert into	Vested
A$5.96	17-Aug-15	4,360,464	Yes
A$5.96	17-Aug-15	925,000	No
A$6.29	10-Nov-15	104,575	No
A$8.94	17-Aug-16	4,360,464	Yes

The Aston Board has exercised its discretion under the LTIP to establish the terms on which it offers performance rights and options under the LTIP, including the performance and service conditions and waiver of any terms or conditions. It is proposed that the Aston Board will exercise its discretion under the terms of the issue to vest all options and performance rights following final Court approval of the Scheme. See Section 2.14 for further detail.

Substantial shareholders

Based on an analysis of the underlying beneficial holdings of the Register as at 17 February 2012, the substantial shareholders of Aston are:

Name	Number of fully paid ordinary shares held	% held of issued ordinary capital
Aston Resources Investments Pty Limited and Associates	64,845,799	31.7%
Farallon Capital Management, L.L.C.	19,371,047	9.5%
JCP Partners	17,306,881	8.5%
Burlingham International	13,555,154	6.6%
Kuok Group (Corporate Group)	11,246,652	5.5%

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Performance rights and option holders

As at 8 March 2012, the holders of the performance rights and options were:

	Performance rights		Options		
	Nov-14	Aug-15	Aug-15	Nov-15	Aug-16
Mark Vaile	–	–	100,000	–	–
Philip Christensen	–	100,000	100,000	–	–
Todd Hannigan	–	–	2,180,232	–	2,180,232
Tom Todd	–	–	2,180,232	–	2,180,232
Others	215,292	350,000	725,000	104,575	–

At the date of this Scheme Booklet Aston is not aware of how these individual holders of performance rights and options will decide to deal with these securities. The three options available to the holders of performance rights and options are set out in Section 2.14. Further information regarding the security holdings of Aston Directors are outlined in Section 14.

4.5. Historical financial information

The following selected financial information for Aston is extracted from the audited consolidated financial statements of Aston for the year ended 30 June 2011 and the reviewed consolidated financial statements of Aston for the six months ended 31 December 2011. The financial information has been prepared in accordance with the recognition and measurement requirements of Australian Accounting Standards (including Australian Accounting Interpretations) adopted by the Australian Accounting Standards Board (**AASB**) and the Corporations Act. The financial information also complies with the recognition and measurement requirements of International Financial Reporting Standards and interpretations issued by the International Accounting Standards Board. The audit and review opinions in these financial statements were issued by Ernst & Young and were unqualified.

The financial information presented in the tables below does not represent complete financial statements and should therefore be read in conjunction with the financial statements for the respective periods, including the description of accounting policies contained in those financial statements and the notes to those financial statements. Where appropriate, adjustments have been made to headings and classifications of historical data to provide a consistent basis of presentation.

In the interval between the end of the half year to 31 December 2011 and the date of this Scheme Booklet, there has not arisen any item, transaction or event of a material and unusual nature likely, in the opinion of the directors of Aston, to significantly affect the operations of the consolidated entity, the results of those operations, or the state of affairs of the consolidated entity, in future financial years other than as disclosed in the 31 December 2011 half year financial statements and subsequent filings on ASX.

Aston Shareholders may view complete copies of the audited financial statements of Aston for the year ended 30 June 2011 on ASX's website at www.asx.com.au or on the "investors" section of the Aston website at www.astonresources.com.

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Consolidated statement of financial performance

AUD ($'000)	2011 (Audited)	HY12 (Reviewed)
Gain on sale (note 1)	253,940	–
Other income	6,896	3,811
Operating expenses	(10,402)	(23,727)
Depreciation and amortisation expense	(146)	(13)
Foreign exchange gains/(losses)	81,983	(82)
Finance costs	(41)	(2)
Other expenses	(3,893)	(2,462)
Profit/(loss) before income tax	**328,337**	**(22,474)**
Income tax expense	(85,455)	515
Profit/(loss) for the period	**242,883**	**(21,960)**

Note 1: Gain resulting from the sale of a 15% interest in the Maules Creek Project to ITOCHU for A$345 million.

Consolidated statement of financial position

AUD ($'000)	2011 (Audited)	HY12 (Reviewed)
Assets		
Cash and cash equivalents	341,859	122,573
Trade and other receivables	3,395	6,141
Total current assets	**345,254**	**128,714**
Trade and other receivables	–	3,582
Property, plant and equipment	574,996	602,462
Intangible assets	2,908	2,911
Total non-current assets	**577,904**	**608,955**
Total assets	**923,158**	**737,669**
Liabilities		
Trade and other payables	10,984	13,600
Interest-bearing loans and borrowings	36	37
Employee benefits	342	519
Current tax payable	40,332	43,849
Total current liabilities	**51,693**	**58,005**
Trade and other payables	7,372	1,275
Interest-bearing loans and borrowings	180,146	83
Deferred tax liabilities	38,488	34,455
Provisions	357	–
Total non-current liabilities	**226,363**	**35,814**
Total liabilities	**278,056**	**93,819**
Net assets	**645,102**	**643,851**
Equity		
Issued capital	543,206	543,206
Share-based payments reserve	7,206	27,914
Retained earnings	94,691	72,731
Total equity attributable to equity holders of the parent	**645,102**	**643,851**

Consolidated statement of cash flows

AUD ($'000)	2011 (Audited)	HY12 (Reviewed)
Cash flows from operating activities		
Cash receipts from customers	455	309
Cash paid to suppliers and employees	(6,971)	(7,728)
Interest paid	6,225	3,183
Interest received	(35)	(2)
Net cash from/(used in) operating activities	**(326)**	**(4,238)**
Cash flows from investing activities		
Proceeds from sale of mining investments	345,000	–
Acquisition of property, plant and equipment and intangible assets	(48,229)	(24,604)
Net cash used in investing activities	**296,771**	**(24,604)**
Cash flows from financing activities		
Proceeds from the issue of share capital (net of costs)	377,881	–
Repayment of borrowings	(338,312)	(190,379)
Payment of finance lease liabilities	(32)	(17)
Net cash from/(used in) financing activities	**39,537**	**(190,396)**
Net increase in cash and cash equivalents	335,982	(219,239)
Net foreign exchange differences	2,722	(48)
Cash and cash equivalents at beginning of period	3,156	341,859
Cash and cash equivalents at period end	**341,859**	**122,573**

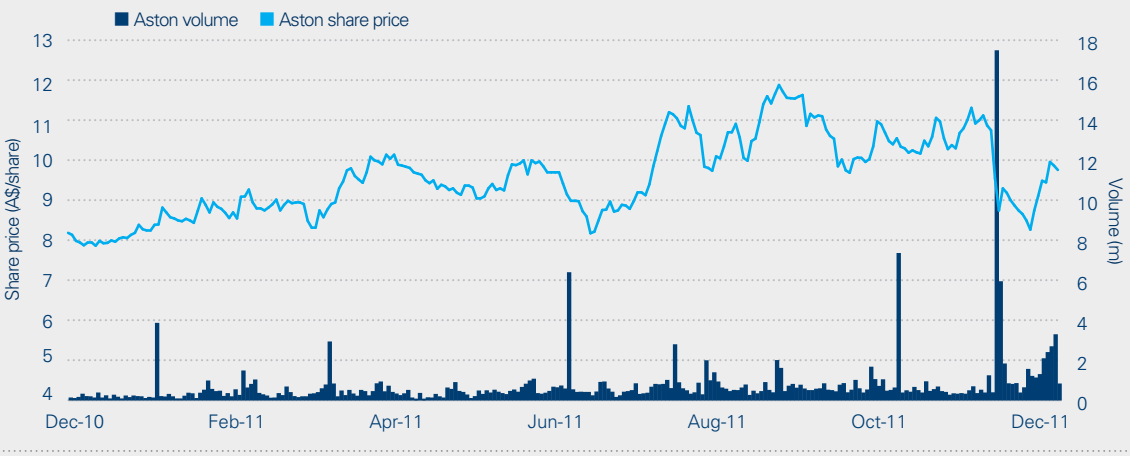
4.6. Risk factors

Risk factors relating to Aston and its business are discussed in Section 7.

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4.7. Recent Aston share price performance

The graph below shows the Aston share price performance and volume of shares traded from 10 December 2010 to 9 December 2011.



Source: IRESS Market Technology. Please note that IRESS Market Technology has not consented to data and information attributed to it in this Scheme Booklet. This data and information has been accurately reproduced and, so far as Aston is aware, and so far as it is able to ascertain from information published by IRESS Market Technology, no facts have been omitted which would render the reproduced data and information inaccurate or misleading.

The highest recorded trading price of an Aston Share on ASX in the 12 months before the announcement of the Merger was A$12.22 on 1 September 2011.

The lowest recorded trading price of an Aston Share on ASX in the last 12 months before the announcement of the Merger was A$7.65 on 15 December 2010.

The latest recorded trading price of Aston Shares on ASX before the announcement of the Merger was A$9.76.

The trading price range of Aston Shares since the announcement of the Merger to 7 March 2012 was A$8.97 to A$10.30.

The latest recorded trading price of Aston Shares on ASX on 7 March 2012 was A$9.15.

4.8. Further information

As a company listed on ASX and a disclosing entity under the Corporations Act, Aston is subject to regular reporting and disclosure obligations. Broadly, these require Aston to announce price sensitive information as soon as it becomes aware of the information, subject to exceptions for certain confidential information. Aston's recent announcements are available from www.asx.com.au. Further announcements concerning Aston will continue to be made available on this website after the date of this Scheme Booklet.

Aston is required to prepare and lodge with ASIC and ASX both annual and half year financial statements accompanied by a statement and report from Aston Directors and an audit or review report. Aston also lodges quarterly activity reports with ASX. Copies of these and other documents lodged with ASIC and ASX may be obtained from an ASIC office and are accessible from ASX's website at www.asx.com.au. Copies of these documents will also be made available free of charge on a request in writing at any time before 10:00am (Brisbane time) on Monday, 16 April 2012 to Aston's Company Secretary at info@astonresources.com.

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5 PROFILE OF WHITEHAVEN



5. PROFILE OF WHITEHAVEN

The information contained in this Section has been prepared by Whitehaven. The information concerning Whitehaven and the intentions, views and opinions contained in this Section are the responsibility of Whitehaven. Aston and Aston Directors and officers do not assume any responsibility for the accuracy or completeness of this information.

5.1. Introduction

Whitehaven is a New South Wales based coal producer with operations and development projects located in the Gunnedah Basin. It produces semi-soft coking and PCI coal for export markets and thermal coal for export and domestic markets.

Whitehaven was formed in February 1999 by directors and senior managers of AMCI (USA) and AMCI (Australia) to acquire an exploration licence and develop the Canyon open-cut coal mine in the Gunnedah Basin. Since that time, Whitehaven has become a leading coal producer and developer in the Gunnedah Basin with five competitive producing mines and a substantial growth pipeline. Whitehaven's saleable production is expected to grow from 5.8Mtpa in FY2012 to approximately 14.7Mtpa by FY2016.[47]

Whitehaven listed on ASX in June 2007 (ASX:WHC) and as at close of trading on 9 December 2011 had a market capitalisation of approximately A$2.9 billion. The table below sets out the key milestones in Whitehaven's history:

DATE	DESCRIPTION
Feb-1999	Established
Sep-2000 – Jun-2006	Mining commenced at Canyon, Werris Creek and Tarrawonga open-cut mines
Oct-2006	Joint venture agreement for Tarrawonga open-cut mine entered into, with Idemitsu having a 30% interest[48]
Jun-2007	ASX listing
Nov-2007	Project approval for Stage 1 of Narrabri
Nov-2007	Acquisition of remaining 60% interest in Werris Creek
Jan-2008	Narrabri Mining Lease granted
Feb-2008	Sale of a 7.5% interest in Narrabri to China's Yudean Group for A$67.5 million
Aug-2008	Sale of a 7.5% interest in Narrabri to J-Power for A$125 million and a 7.5% interest to EDF Trading for US$120 million. Sale completed in December 2008
Nov-2008	Mining commenced at Rocglen open-cut mine
Dec-2008	Mining commenced at Sunnyside open-cut mine
Aug-2009	Sale of a 7.5% interest in Narrabri for A$125 million to a Korean consortium comprising Daewoo International Corporation (**Daewoo**) and Korea Resources Corporation (**KORES**). Sales completed in November 2009
Sep-2009	Longwall purchase contract signed with Bucyrus for 300 metre longwall for Narrabri Stage 2
Feb-2010	Purchase of the Vickery Project from Coal & Allied
Jun-2010	Mining commenced at Stage 1 of Narrabri
Jul-2010	Project approval for Stage 2 of Narrabri
May-2011	Heads of Agreement entered into with Boggabri Coal Pty Limited (wholly owned by Idemitsu Australia) extending the Tarrawonga Joint Venture
Aug-2011	Long-term arrangements entered into with ARTC for rail track access between Whitehaven's mines and the Port of Newcastle
Oct-2011	Approval received for Werris Creek mine extension
Dec-2011	Proposed Merger with Aston and acquisition of Boardwalk announced

47 Production figures are shown on a 100% managed basis.
48 Whitehaven has a 70% interest in Tarrawonga open-cut and a 100% interest in Tarrawonga underground.

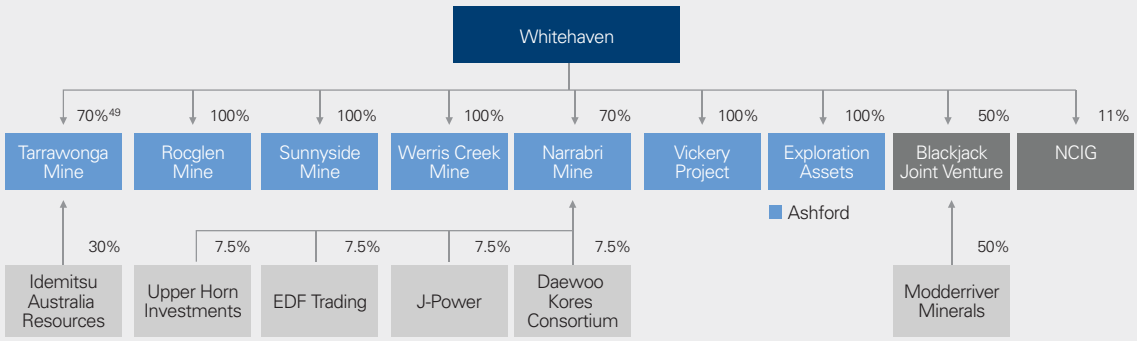
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5.2. Overview of operations

Group structure

Whitehaven has a number of subsidiaries through which it conducts its operations. A simplified operating structure of Whitehaven is set out below.

Whitehaven operating structure



Description of assets

Whitehaven assets location

Whitehaven has four open-cut mines: Tarrawonga, Rocglen, Sunnyside and Werris Creek. In addition, last coal was produced from the Canyon mine in July 2009 and the mine site is currently undergoing rehabilitation. Whitehaven has recently developed a new mine, the Narrabri underground longwall mine. Mining has commenced at the site with the longwall due to be commissioned in April 2012. Whitehaven is currently developing the Vickery Project, an open-cut mine located to the south of Tarrawonga.

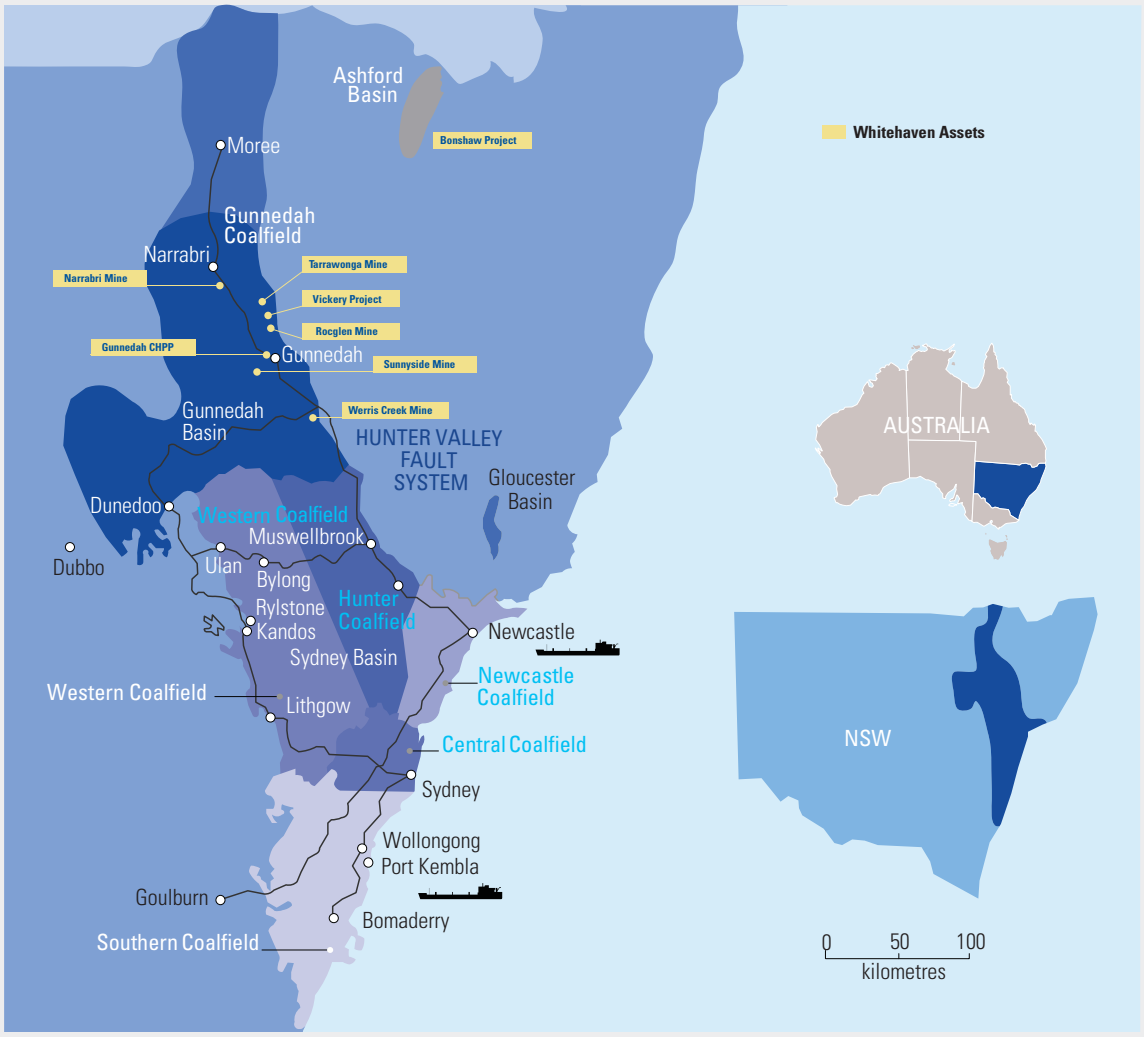
All of Whitehaven's mines and projects are located in the Gunnedah Basin, in New South Wales. The Gunnedah operations include the Tarrawonga joint venture (70% owned by Whitehaven), Rocglen (100% owned by Whitehaven), and Sunnyside (100% owned by Whitehaven) open-cut mines and the Gunnedah coal handling and preparation plant and train load-out facility (**Gunnedah CHPP**) (100% owned by Whitehaven). Whitehaven also wholly owns the Werris Creek mine, which has its own processing and rail load-out facilities. Whitehaven has a 50% interest in the Blackjack Joint Venture, which operates a facility that produces retort coke on Kooragang Island in Newcastle. Whitehaven is the exclusive coal supplier to the Blackjack Joint Venture.

49 Whitehaven has a 70% interest in Tarrawonga open-cut and a 100% interest in Tarrawonga underground.

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Gunnedah Basin



Tarrawonga mine

Production at Tarrawonga commenced in June 2006 with the mine currently producing a mix of low ash, low sulphur, low phosphorus, medium to high volatile PCI/semi-soft coking coal and export thermal coal (long-term average coal mix expected to be approximately 80% PCI/semi-soft coking coal). Resources currently support a mine life of 20 years at a ROM production rate of 3Mtpa. The approvals process has commenced to extend mining consents out to this defined Resources limit.

In May 2011, Whitehaven entered into a Heads of Agreement with Idemitsu in relation to the extension of the Tarrawonga Joint Venture. The expansion arrangements were formalised between the parties in August 2011 and include:

- the development of a rail spur and a CHPP (**Boggabri CHPP**) to service the coal processing and transport needs of both joint venture participants, including tolling arrangements for both parties;
- a restructuring of the tenement ownership within the expanded joint venture area to ensure Whitehaven and Idemitsu continue to have a 70% and 30% interest respectively in each tenement within the project area; and
- Idemitsu sourcing port capacity for its 30% share of tonnage from the Tarrawonga mine which will free up port capacity of up to 0.8Mtpa for Whitehaven in future periods.

It is expected that Whitehaven and Idemitsu will receive improved economic benefits from the better utilisation of the proposed Boggabri CHPP and rail loading facilities. In addition, the arrangements will free-up existing Gunnedah CHPP and rail loading capacity for use by other Whitehaven mines, including the proposed Vickery Project.

Whitehaven has received confirmation from the New South Wales Government that the Environmental Assessment has been received and deemed adequate. The Environmental Assessment was placed on display in January 2012.

Rocglen mine

Production at Rocglen commenced in November 2008. The mine has a ROM production rate of approximately 1.2Mtpa (permitted to 1.5Mtpa) and produces medium to high ash, low sulphur, low phosphorus, medium to high volatile export thermal coal. Rocglen has Reserves in place to support a mine life of approximately eight to ten years.[50] In the quarter ended September 2011, New South Wales Government approval for extension of Rocglen was received to modify the Rocglen Project Approval to take account of modified geological information and mine planning.

Sunnyside mine

Production at Sunnyside commenced in December 2008. The mine has a ROM production rate of approximately 0.5Mtpa (permitted to 1.0Mtpa) and produces medium to high ash, low sulphur, low phosphorus, medium to high volatile export thermal coal. The mine has an expected remaining life of three years under current port availability but could be operated for longer if port capacity becomes available.

Werris Creek mine

Production at Werris Creek commenced in September 2005 with the mine's saleable production capacity currently at 2.0Mtpa. Werris Creek is 100% owned by Whitehaven and produced approximately 16% PCI and 84% thermal coal in the June 2011 financial year (long-term average coal mix expected to be 22% PCI and 78% export thermal). Coal quality is typically low to medium ash, low sulphur, low phosphorus and medium to high volatile PCI and thermal coal. Current Reserves in place support a mine life of 15 to 20 years. In the quarter ended September 2011, New South Wales Government approval for extension of Werris Creek was received. The new approval allows production of up to 2.5Mtpa for 20 years.

Whitehaven's open-cut mines and Gunnedah CHPP have recently undergone significant expansion to enable production at an annualised rate of approximately 5.5Mtpa of saleable coal (100% basis).

Narrabri mine

In the financial year ended June 2011, the Narrabri underground mine delivered its first full year of development production. The mine now has four continuous miners operating underground. Whitehaven expects longwall mining at Narrabri to produce at an annualised rate of approximately 6.0Mtpa of ROM coal. An additional 0.5Mtpa of ROM coal will be available until 2025 from mains and gates development.

Development of Stage 2 of the Narrabri mine is proceeding, with longwall due to be commissioned in April 2012. The Narrabri CHPP plant is complete and being commissioned, as are the upgraded ventilation fans and new shaft. The total capital expenditure estimate for this second stage of Narrabri's development remains on budget at approximately A$300 million (100% basis), of which Whitehaven's share is approximately A$225 million. All major components of the work for Stage 2 have been tendered and as at 1 January 2012, only approximately A$40 million (100% basis) of Narrabri's Stage 2 capital expenditure remained. It is expected that Whitehaven will fund its share of this remaining Stage 2 capital expenditure using its cash reserves and/or cash generated from its mining operations.

Narrabri is currently producing high energy export thermal coal. In the longer term the coal mix is anticipated to be up to 40% low ash, low sulphur, low phosphorus, mid volatile PCI coal and 60% high energy export thermal coal.

Development of the main gate and tail gate roads of the first longwall panel is on the critical path for commencement of longwall mining. Mining conditions underground are excellent and development rates have improved as skills and experience have grown and as development has moved away from pit-bottom setup into normal main road and longwall gate road development.

50 Due to the development of Vickery and the availability of port allocation, production from Rocglen is anticipated to complete in FY2016.

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Vickery project

Whitehaven is currently progressing the development of its wholly owned Vickery project, located approximately 22 kilometres north of Gunnedah, and approximately 18 kilometres south-east of Boggabri.

To date, open-cut Resources of 460Mt have been defined in the combined Vickery area (Vickery, Merton, Bluevale and Canyon Extended). Current mine planning has defined an open-cut Recoverable Reserve of approximately 139Mt. The current work program at Vickery is focused on further defining and extending Reserves to support the mine development plan.

Work is well advanced to define an open-cut mine plan for the Vickery project. Whitehaven expects this work to produce an open-cut mine plan for Vickery of approximately 4.5Mtpa ROM for at least 25 years with a stripping ratio of approximately 10:1. However, at this stage, a DFS has not been completed to enable a capital expenditure budget for Vickery to be established.

Analysis of Vickery coal quality indicates that, if all ROM coal is washed, saleable coal yield would be more than 80% consisting of predominantly low ash, low sulphur, low phosphorus semi-soft coking and PCI coal, along with a component of low ash, low sulphur, high energy thermal coal. The base plan, however, is currently 55% semi-soft coking and PCI coal and 45% thermal coal.

This saleable coal yield can be increased significantly through by-passing a proportion of low ash ROM coal, as is currently done with Whitehaven's Tarrawonga coal. This will provide the Vickery project with a high degree of flexibility in producing either metallurgical or premium thermal coal, depending on market conditions.

Whitehaven currently plans to lodge an application for Project Approval for Vickery open-cut in the first half of calendar 2012, with the aim of obtaining approval and being in a position to commence mine production in the second half of calendar year 2013.

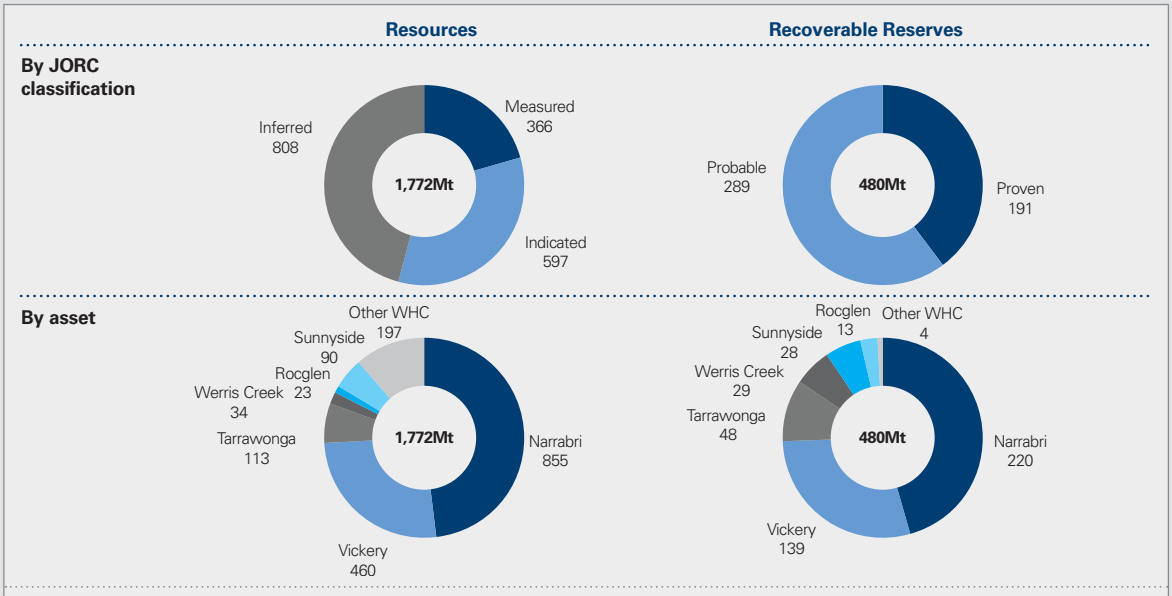
Whitehaven intends to fund the development of the Vickery project using cash reserves, free cashflow generated from its existing mining operations and debt facilities.

Ashford project (Bonshaw)

Whitehaven holds exploration tenements over two modest tonnage, coking coal Resources near Ashford. The Brunt Deposit comprises a fault repeated coal seam with cumulative coal intercepts of up to 60 metres. Feasibility studies for the Brunt Deposit indicate a low ratio open-cut with good recoveries of coking coal fraction.

Resources and Reserves

Whitehaven has a thermal and metallurgical coal inventory totalling 1,772Mt in Resources (100% basis) and 480Mt in Recoverable Reserves (100% basis).



Note: Numbers may not add due to rounding. Vickery comprises Bluevale open-cut, Vickery open-cut, Vickery underground, Merton open-cut and Canyon extended. Resources are reported inclusive of Reserves (that is, Reserves are not additional to Resources).

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Statement of Resources

(Mt)

Tenement		Ownership	Measured Resource	Indicated Resource	Inferred Resource	Total Resources	Competent Person	Report date
Bluevale open-cut	EL4699/ CL316	100%	8.79	5.66	1.1	15.5	1	Sep-09
Vickery open-cut	CL316	100%	46.87	165.00	95.0	306.9	2	Jul-11
Vickery underground	CL316	100%	–	–	21.0	21.0	2	Jul-11
Merton open-cut	ML1471/ EL4699	100%	–	–	111.7	111.7	1	Feb-11
Canyon extended	CL316/ EL4699/ ML1471	100%	–	–	5.1	5.1	1	Feb-11
Rocglen open-cut	ML1620	100%	11.66	6.10	1.5	19.2	1	Mar-11
Rocglen underground	ML1620	100%	–	2.24	1.6	3.8	1	Mar-11
Tarrawonga open-cut[51]	EL5967/ ML1579	70%	30.66	28.00	14.3	73.0	1	Jun-10 & Mar-11
Tarrawonga underground	EL5967/ ML1579	100%	10.88	13.87	14.8	39.6	1	
Sunnyside open-cut	ML1624/ EL5183	100%	19.60	47.40	22.9	89.9	1	Mar-11
EL5183 underground	EL5183	100%	–	7.20	32.2	39.4	1	May-09
BLOCK 7 open-cut	CCL701	100%	–	–	1.4	1.4	1	Jan-09
BLOCK 7 underground	CCL701	100%	–	12.90	2.5	15.4	1	Jan-09
Other Gunnedah Resources	CCL701	100%	–	13.00	123.2	136.2	3	Mar-10
Total Gunnedah Operations			**128.46**	**301.37**	**448.3**	**878.1**		
Total Werris Creek[52]	ML1563/ EL5993/ EL7422		**23.35**	**8.25**	**2.6**	**34.2**	**1**	**Mar-11**
Narrabri North underground	ML1609	70%	169.40	171.00	135.0	475.4	4	Aug-10
Narrabri South underground	EL6243	70%	45.20	114.00	220.0	379.2	4	Aug-10
Total Narrabri[53]			**214.60**	**285.00**	**355.0**	**854.6**		
Brunt Deposit open-cut	EL6450	100%	–	2.60	0.3	2.9	3	Sep-09
Arthurs Seat open-cut	EL6587	100%	–	–	1.7	1.7	3	Nov-09
Total Ashford			–	**2.60**	**2.0**	**4.6**		
Total Resources			**366.41**	**597.22**	**807.9**	**1,771.5**		

Notes: 1. Colin Coxhead, 2. Greg Jones, 3. Tom Bradbury, 4. Chris Turvey.
The Resources for active mining areas are current to the pit surface as at the report date.
Numbers may not add due to rounding.

51 Tarrawonga Joint Venture – Whitehaven owns 70% share of ML1579. Combined Resources for Tarrawonga Mining Lease and Exploration Licence.
52 Combined Resources for Werris Creek Mining Lease and Exploration Licences.
53 Narrabri Joint Venture – Whitehaven owns 70% share.

Statement of Reserves

(Mt)

Tenement		Ownership	Recoverable Reserves			Marketable Reserves			Competent Person	Report date
			Proved	Probable	Total	Proved	Probable	Total		
Bluevale open-cut	EL4699/ CL316	100%	3.33	6.42	9.75	3.09	5.98	9.07	1	Jun-10
Vickery open-cut	CL316	100%	37.90	91.10	129.00	30.20	74.30	104.50	2	Aug-11
Rocglen open-cut	ML1620	100%	9.20	3.80	13.00	7.60	3.10	10.70	1	Mar-11
Tarrawonga open-cut[54]	EL5967/ ML1579	70%	21.70	22.20	43.90	20.30	20.70	41.00	1	Mar-11
Tarrawonga underground	EL5967/ ML1579	100%	–	3.70	3.70	–	3.10	3.10	3	May-09
Sunnyside open-cut	ML1624/ EL5183	100%	6.60	21.10	27.70	5.80	18.90	24.70	1	Mar-11
BLOCK 7 underground	CCL701	100%	–	4.00	4.00	–	4.00	4.00	3	May-09
Total Gunnedah Operations			**78.73**	**152.32**	**231.05**	**66.99**	**130.08**	**197.07**		
Total Werris Creek[55]	ML1564/ EL5993/ EL7422		**21.50**	**7.60**	**29.10**	**21.50**	**7.60**	**29.10**	**1**	**Mar-11**
Narrabri North underground	ML1609	70%	66.00	67.40	133.40	66.00	67.40	133.40	3	Jan-10
Narrabri South underground	EL6243	70%	24.70	61.50	86.20	19.40	47.10	66.50	3	Jan-10
Total Narrabri[56]			**90.70**	**128.90**	**219.60**	**85.40**	**114.50**	**199.90**		
Brunt Deposit open-cut	EL6450	100%	–	–	–	–	–	–		
Arthurs Seat open-cut	EL6587	100%	–	–	–	–	–	–		
Total Ashford			–	–	–	–	–	–		
Total Reserves			**190.93**	**288.82**	**479.75**	**173.89**	**252.18**	**426.07**		

Notes: 1. Doug Sillar, 2. William Dean, 3. Graeme Rigg.

The Reserves for active mining areas are current as at the report date.
Resources are reported inclusive of Reserves (that is, Reserves are not additional to Resources).
Marketable Reserves are based on geological modelling of the anticipated yield from Recoverable Reserves.

Numbers may not add due to rounding.

Competent Persons Statement

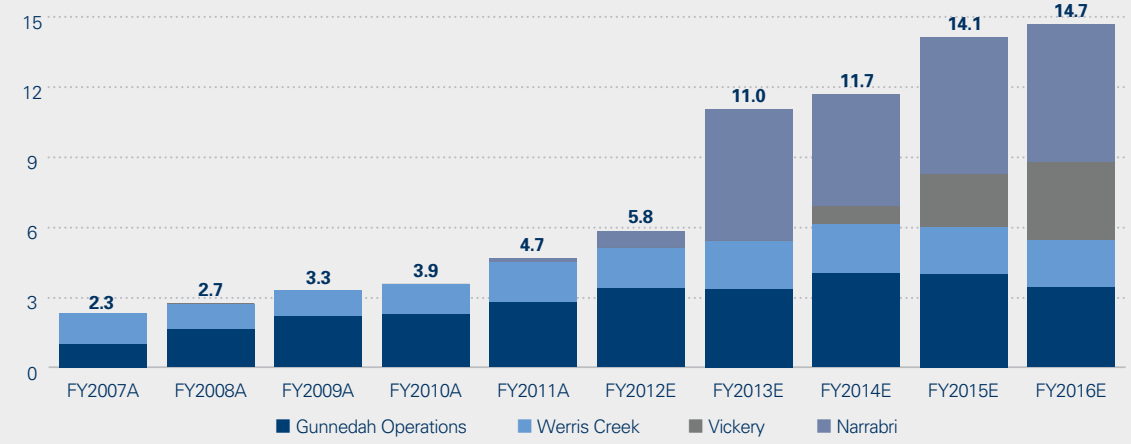
The information in this release that relates to Resources and Reserves is based on and accurately reflects reports prepared by the Competent Person named beside the respective information. All these persons are consultants for Whitehaven Coal Limited. Mr Colin Coxhead is a private consultant. Mr Greg Jones is a principal consultant with JB Mining Services. Mr Tom Bradbury is a full-time employee of Geos Mining. Mr Chris Turvey is a private consultant. Mr Graeme Rigg is a full-time employee of Runge Limited. Mr Doug Sillar is a full-time employee of Runge Limited. Mr William Dean is a full-time employee of UGM Australia. Named Competent Persons consent to the inclusion of material in the form and context in which it appears. The Resources and Reserves tables were compiled by Mr Mark Dawson, Group Geologist, Whitehaven Coal Limited. All Competent Persons named are Members of the Australian Institute of Mining and Metallurgy and/or The Australian Institute of Geoscientists and have the relevant experience in relation to the mineralisation being reported on by them to qualify as Competent Persons as defined in the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004 Edition).

54 Tarrawonga Joint Venture – Whitehaven owns 70% share of ML1579. Combined Reserves for Tarrawonga Mining Lease and Exploration Licence.
55 Combined Reserves for Werris Creek Mining Lease and Exploration Licences.
56 Narrabri Joint Venture – Whitehaven owns 70% share.

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Production schedule

Whitehaven's production is expected to grow substantially as Narrabri reaches full production and Vickery is developed with total saleable production reaching approximately 15Mtpa in FY2016 (100% basis). Overall, Whitehaven's metallurgical coal production is expected to grow from around 25% in FY2012 to approximately 43% of total saleable production by FY2016.



Note: Data shown for year ending 30 June. These estimates relate to planned future events and expectations and as such involve known and unknown risks and uncertainties. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions.

Operating expenditure

Whitehaven's operating expenditure across its mines and handling and processing infrastructure is relatively low, due to a number of factors including:

- relatively low stripping ratios and simplicity of operations across Whitehaven's open-cut mines;
- high yields (average saleable coal yield of over 90% compared to an average of approximately 73% for Hunter Valley coals);[57]
- close proximity of mining operations to each other in the Gunnedah Basin and to rail infrastructure (lower haulage costs);
- the scale of operations including Whitehaven's two owned coal handling and processing plants; and
- Whitehaven reported its average cash cost of sales of A$60.5/FOBt (excluding royalties) for FY2011 (A$61.8/FOBt for FY2010).

57 Data for Hunter Valley operations based on FY2008 data as sourced from NSW Department of Primary Industries – 2009 NSW Coal Industry Profile. Saleable mine yield is calculated as saleable production divided by ROM production. The Hunter Valley yield is based on the FY2008 weighted average, in terms of saleable production.

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Infrastructure capacity

Rail and train

Whitehaven has entered into a long-term track access agreement with ARTC which is expected to provide rail capacity to meet Whitehaven's planned future production.

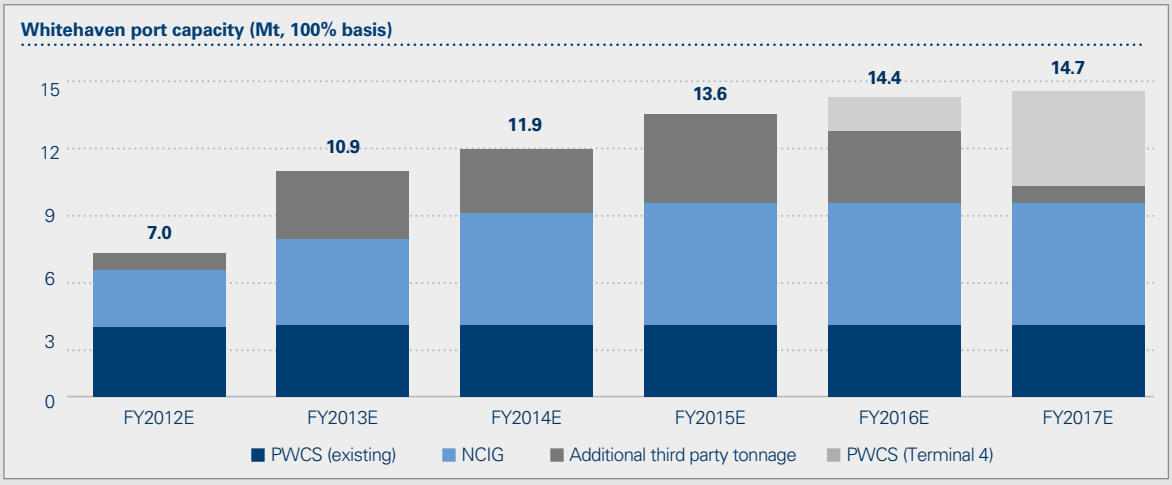
Whitehaven has in place a long-term haulage agreement with Pacific National for the haulage of coal from Whitehaven's mines to Newcastle Port. Under that agreement, Pacific National hauls the coal using both its own fleet and a train purchased by Whitehaven in FY2010. The agreement allows for Pacific National to provide additional trains as required to accommodate Whitehaven's production growth.

Whitehaven commissioned two new coal trains in FY2010 and FY2011, and a third new train was provided by Pacific National in October 2011. When combined with track capacity entitlements, the arrangement with Pacific National is expected to provide for rail capacity to meet Whitehaven's existing growth plans and port capacity.

Port

Whitehaven has secured access to port capacity to meet its growth requirements in the short to medium term. Whitehaven has existing entitlements to port capacity through PWCS and has been allocated additional capacity of 2.4Mtpa at PWCS' proposed Terminal 4 terminal once it is operational.[58] This additional PWCS port capacity was awarded as part of the PWCS annual nominations process and reflects Whitehaven's nomination and is directly linked to the completion timing of the new PWCS Terminal 4 facility. PWCS has stated that it will continue to explore opportunities for expediting the delivery of capacity from each expansion. In addition, it has an 11% interest in NCIG, the Port of Newcastle's rapidly expanding second dedicated coal terminal. In September 2011, Whitehaven entered into an agreement with a Third Party coal producer which increased its capacity through NCIG by 8.4Mt over the period May 2012 to June 2016.

The chart below sets out Whitehaven's current and expected port capacity through the Port of Newcastle:



58 The Terminal 4 project is awaiting key environmental approvals which are required for the project to proceed.

5.3. Board of directors

As at the date of this Scheme Booklet, the Board of Whitehaven comprised:

- Mr John C Conde AO (Chairman, Independent Non-Executive Director)
- Mr Tony Haggarty (Managing Director)
- Mr Neil Chatfield (Independent Non-Executive Director)
- Mr Alex Krueger (Non-Executive Director)
- Mr Hans Mende (Non-Executive Director)
- Mr Allan Davies (Executive Director)
- Mr Andy Plummer (Executive Director)

Profiles of the Whitehaven Board members that will continue as directors of the Merged Group if the Scheme is implemented, Mr John C Conde AO, Mr Tony Haggarty, Mr Hans Mende and Mr Allan Davies, are set out in Section 6.4.

5.4. Whitehaven securities and substantial shareholders

Whitehaven's issued securities

As at 8 March 2012, Whitehaven has the following securities on issue:

(a) 496,245,083 Whitehaven Shares

(b) Executive performance share rights, which on vesting, require the issue of a maximum of 1,323,321 unissued Whitehaven Shares. The tranches of these executive performance share rights are as follows:

Exercise price	Expiry date	Number of Whitehaven share rights	Vesting dates
Nil	1 July 2012	658,340	1 July 2011/1 July 2012
Nil	1 July 2013	424,996	1 July 2012/1 July 2013
Nil	1 July 2014	239,985	1 July 2013/1 July 2014

The share rights vest subject to achieving a total shareholder return (**TSR**) as follows:

- TSR over vesting period above 75th percentile – 100% vest;
- TSR over vesting period below the 50th percentile – 0% vest; and
- TSR over vesting period between 50th and 75th percentile – sliding scale of vesting between 50% and 100%.

Under the terms of issue of the Senior Executive Performance Share Rights, approximately 79% of the rights have vested because the performance hurdles attached to those Senior Executive Performance Share Rights have been achieved and a change of control event occurred as a result of the announcement of the Merger on 12 December 2011. The Whitehaven Board has resolved to exercise its discretion under the terms of issue of the Senior Executive Performance Share Rights to declare that all remaining non-vested Senior Executive Performance Share Rights will vest on the Scheme becoming Effective.

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(c) Executive and employee options exercisable over a maximum of 6,423,334 unissued Whitehaven Shares. The tranches of these executive and employee options are as follows:

Exercise price	Expiry date	Number of Whitehaven Shares which options cumulatively convert into	Vested
A$1.00	30 June 2012	33,334	Yes
A$2.50	22 October 2012	1,390,000	Yes
A$1.70	31 October 2013	5,000,000	Yes

Substantial shareholders

As at 16 February 2012, the registered substantial shareholders in Whitehaven were:

Name	Number of fully paid ordinary shares held	% held of issued ordinary capital
FRC Whitehaven Holdings BV	72,650,000	14.6%
AMCI WH L.L.C.	47,951,500	9.7%
Ranamok Pty Ltd	33,514,254	6.8%
Anthony Haggarty and HFTT Pty Ltd	33,479,897	6.7%

5.5. Historical financial information

The following selected financial information for Whitehaven is extracted from the audited consolidated financial statements of Whitehaven for the year ended 30 June 2011 and the reviewed consolidated financial statements of Whitehaven for the six months ended 31 December 2011. The financial information has been prepared in accordance with the recognition and measurement requirements of Australian Accounting Standards (including Australian Accounting Interpretations) adopted by the AASB and the Corporations Act. The financial information also complies with the recognition and measurement requirements of International Financial Reporting Standards and interpretations issued by the International Accounting Standards Board. The audit and review opinions in these financial statements were issued by Ernst & Young and were unqualified.

The financial information presented in the tables below does not represent complete financial statements and should therefore be read in conjunction with the financial statements for the respective periods, including the description of accounting policies contained in those financial statements and the notes to those financial statements. Where appropriate, adjustments have been made to headings and classifications of historical data to provide a consistent basis of presentation.

In the interval between the end of the half year to 31 December 2011 and the date of this Scheme Booklet, there has not arisen any item, transaction or event of a material and unusual nature likely, in the opinion of the directors of Whitehaven, to significantly affect the operations of the consolidated entity, the results of those operations, or the state of affairs of the consolidated entity, in future financial years other than as disclosed in the 31 December 2011 half year financial statements and subsequent filings on ASX.

Aston Shareholders may view complete copies of the audited financial statements of Whitehaven for the year ended 30 June 2011 on ASX's website at www.asx.com.au or on the "investors" section of the Whitehaven website at www.whitehavencoal.com.au.

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Consolidated statement of financial performance

AUD ($'000)	2011 (Audited)	HY12 (Reviewed)
Revenue	622,186	340,380
Other income	23,511	9,438
Operating expenses	(491,503)	(260,048)
Loss on coal trading for legacy contracts (note 1)	(65,405)	(28,725)
Depreciation and amortisation expense	(40,938)	(18,525)
Foreign exchange gains/(losses)	(2,602)	1,319
Finance costs	(14,326)	(11,166)
Net finance income/(costs) on EDF receivables (note 2)	(16,320)	2,342
Other expenses	(5,778)	(4,778)
Profit/(loss) before income tax	**8,825**	**30,237**
Income tax expense	1,121	(10,356)
Profit/(loss) for the period	**9,946**	**19,881**
Other comprehensive income		
Effective portion of changes in fair value of cash flow hedges	136,440	(412)
Change in fair value of cash flow hedges transferred to profit and loss	(92,244)	(35,759)
Income tax on items of other comprehensive income	(13,259)	10,851
Other comprehensive income for the period, net of tax	30,937	(25,320)
Total comprehensive income for the period	**40,883**	**(5,439)**

Note 1

During the year ended 30 June 2011, Whitehaven reported a pre-tax loss relating to coal purchased to fulfil legacy contracts of A$22.3 million and a pre-tax loss on legacy contract financial settlements of A$39.8 million. In addition, a provision of A$3.3 million was raised for future losses on sales in to legacy contracts.

During the half-year ended 31 December 2011, Whitehaven has incurred pre-tax losses on coal purchased to fulfil legacy contracts of A$7.7 million, and pre-tax losses on legacy contract financial settlements of A$24.4 million.

Note 2

A receivable arising on a previous sell down of the Narrabri North Project is denominated in US$ and has been discounted on initial recognition. At the reporting date the receivable has been retranslated to Australian dollars at current exchange rates, and the discount partially unwound.

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Consolidated statement of financial position

AUD ($'000)	2011 (Audited)	HY12 (Reviewed)
Assets		
Cash and cash equivalents	207,602	103,523
Trade and other receivables	92,365	61,790
Inventories	25,886	33,280
Investments	14,866	17,534
Current tax receivable	9,957	21,910
Deferred stripping	55,619	78,208
Derivative financial instruments	55,998	15,183
Total current assets	**462,293**	**331,428**
Trade and other receivables	2,702	6,361
Investments	1,210	1,210
Property, plant and equipment	936,987	1,023,870
Exploration and evaluation	9,422	12,457
Intangible assets	49,781	51,423
Total non-current assets	**1,000,102**	**1,095,321**
Total assets	**1,462,395**	**1,426,749**
Liabilities		
Trade and other payables	154,264	73,461
Interest-bearing loans and borrowings	49,436	49,572
Employee benefits	8,789	10,018
Deferred income	355	607
Provisions	4,932	1,395
Derivative financial instruments	7,208	3,102
Total current liabilities	**224,984**	**138,155**
Interest-bearing loans and borrowings	129,157	197,794
Deferred tax liabilities	38,621	38,122
Provisions	29,097	35,526
Total non-current liabilities	**196,875**	**271,442**
Total liabilities	**421,859**	**409,597**
Net assets	**1,040,536**	**1,017,152**
Equity		
Issued capital	591,339	591,596
Share-based payments reserve	24,358	26,429
Hedge reserve	33,776	8,456
Retained earnings	391,063	390,671
Total equity attributable to equity holders of the parent	**1,040,536**	**1,017,152**

Consolidated statement of cash flows

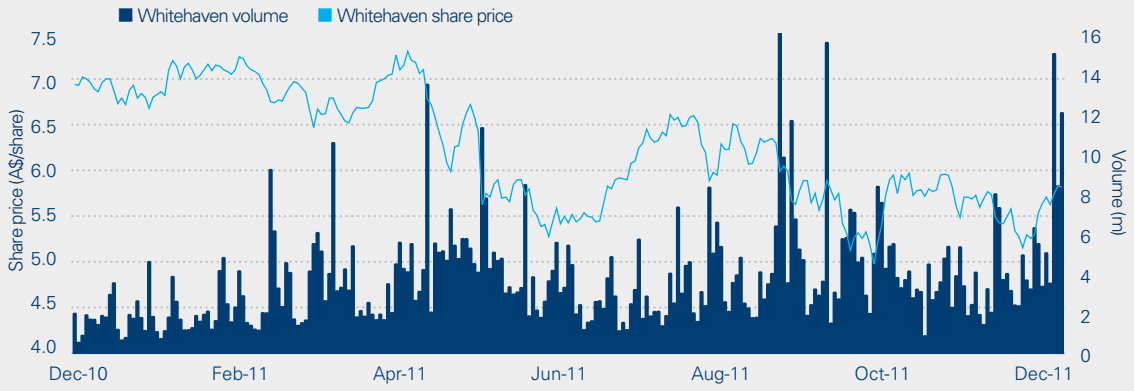
AUD ($'000)	2011 (Audited)	HY12 (Reviewed)
Cash flows from operating activities		
Cash receipts from customers	656,836	332,881
Cash paid to suppliers and employees	(536,510)	(365,137)
Interest paid	(14,891)	(12,260)
Interest received	7,009	2,663
Income taxes paid	(33,075)	(11,954)
Net cash from/(used in) operating activities	**79,369**	**(53,807)**
Cash flows from investing activities		
Proceeds from sale of mining investments	190,866	44,130
Proceeds from sale of property, plant and equipment	949	78
Acquisition of property, plant and equipment and intangible assets	(233,391)	(136,523)
Acquisition of investments	(37,365)	(17,534)
Proceeds from sale of investments	22,499	15,186
Exploration and evaluation expenditure	(4,078)	(3,035)
Proceeds from repayments of loans advanced	8,707	3,328
Loans advanced	(1,693)	(1,364)
Net cash used in investing activities	**(53,506)**	**(95,734)**
Cash flows from financing activities		
Proceeds from the issue of share capital (net of costs)	(6)	(14)
Proceeds from the exercise of share options	167	267
Proceeds from borrowings	90,677	76,947
Repayment of borrowings	(2,207)	(873)
Payment of finance lease liabilities	(17,824)	(10,592)
Dividends paid	(30,117)	(20,273)
Net cash from/(used in) financing activities	**40,690**	**45,462**
Net increase in cash and cash equivalents	66,553	(104,079)
Cash and cash equivalents at beginning of period	**141,049**	**207,602**
Cash and cash equivalents at year end	**207,602**	**103,523**

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5.6. Recent Whitehaven share price performance

The graph below shows the Whitehaven share price performance and volume of shares traded from 10 December 2010 to 9 December 2011.

Share price performance – last 12 months



Source: IRESS Market Technology. Please note that IRESS Market Technology has not consented to data and information attributed to it in this Scheme Booklet. This data and information has been accurately reproduced and, so far as Whitehaven is aware, and so far as it is able to ascertain from information published by IRESS Market Technology, no facts have been omitted which would render the reproduced data and information inaccurate or misleading.

Note: Whitehaven volume adjusted for block trade on 31 August 2011 whereby First Reserve Corporation and AMCI sold a total of 65 million Whitehaven Shares. Refer to Whitehaven ASX announcement on 31 August 2011.

The highest recorded trading price of a Whitehaven Share on ASX in the 12 months before the announcement of the Merger was A$7.35 on 19 January 2011.

The lowest recorded trading price of a Whitehaven Share on ASX in the last 12 months before the announcement of the Merger was A$4.85 on 4 October 2011.

The highest recorded trading price of a Whitehaven Share on ASX in the 3 months before 7 March 2012 was A$5.95 on 12 December 2011.

The lowest recorded trading price of a Whitehaven Share on ASX in the 3 months before 7 March 2012 was A$5.21 on 29 November 2011 and 29 December 2011.

The latest recorded trading price of Whitehaven Shares on ASX before the announcement of the Merger was A$5.82.

The trading price range of Whitehaven Shares since the announcement of the Merger to 7 March 2012 was A$5.21 to A$5.95.

The latest recorded trading price of Whitehaven Shares on ASX on 7 March 2012 was A$5.31.

5.7. Option over Aston Shares

Whitehaven has entered into the Call Option Agreement with the Tinkler Group in relation to 19.99% of Aston Shares on issue. A copy of the Call Option Agreement has been lodged with ASX which is summarised in Section 14.5.

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5.8. Boardwalk Transaction

5.8.1. Boardwalk Transaction summary

On 11 December 2011, Whitehaven entered into separate agreements to acquire all of the shares and other issued securities in unlisted coal explorer Boardwalk.

As consideration for the acquisition of Boardwalk by Whitehaven, holders of Boardwalk securities (**Boardwalk Securityholders**), including BRI and Farallon Funds, will be issued 85.89 million Whitehaven Shares and a further 34.02 million Whitehaven Shares with rights restricted in accordance with the terms of the restriction deeds as described below (the 34.02 million Whitehaven Shares are referred to as the Milestone Shares).

The restrictions attaching to the Milestone Shares will cease to apply upon the occurrence of certain trigger events including the grant of mining leases and environmental approvals at any two of the Dingo Project, Ferndale Project, Sienna Project, Monto Project (the **Boardwalk Projects**) and Oaklands North which is a project of Coalworks[59] (17.01 million of the 34.02 million Whitehaven Shares will be released from the restriction arrangements upon the grant of approvals for any one project).

During the period between execution of the Boardwalk Transaction Documents and 31 March 2012, BRI will make loans to Boardwalk to assist with funding of Boardwalk's operations. Existing Boardwalk Securityholders will contribute A$150 million cash to Boardwalk if the Scheme becomes Effective, which will be used for the ongoing development of its assets including repayment of existing debt. This amount will include the amount of any loans made to Boardwalk by BRI after 11 December 2011 to assist in funding Boardwalk's operations.

5.8.2. Boardwalk Transaction benefits and risks

The acquisition of Boardwalk provides Whitehaven with a portfolio of coal exploration assets within New South Wales and Queensland's established mining regions and a strategic 19.9% interest in Coalworks Limited. Whitehaven believes that Boardwalk's portfolio of assets will provide the expanded Whitehaven group with future development options and a platform for growth in the medium to longer term.

In addition, Whitehaven expects that there will be synergies and cost saving benefits over the longer term from incorporating the Boardwalk assets within the Whitehaven group including coal blending opportunities (e.g. from blending lower quality Ferndale thermal coal with the high quality Gunnedah thermal coal) and operating and corporate cost savings.

The value of the consideration payable by Whitehaven for Boardwalk excluding the Milestone Shares is A$393 million and including the Milestone Shares is A$491 million. The value of the consideration payable exceeds the valuation of Boardwalk determined by the Independent Expert of between A$200 million and A$330 million (as stated in the Independent Expert's Report set out in Section 8).

As stated in the Independent Expert's Report set out in Section 8, the Independent Expert has adopted the valuations of the Boardwalk tenements prepared by its technical expert, Minarco-MineConsult. The Whitehaven Board has taken a commercial view of the tenements and the likelihood of their successful development under the Merged Group's ownership. The Whitehaven Directors believe that the consideration payable for Boardwalk represents fair value. In arriving at this decision, the Whitehaven Directors have received advice from Whitehaven's financial advisers, as well as advice from Whitehaven's tax, legal and accounting advisers. The Whitehaven Board has considered the Boardwalk assets, their quality, location, proximity to existing mines and infrastructure and the overall benefits to Whitehaven Shareholders of adding a portfolio of exploration assets to the expanded Merged Group. As part of its consideration, the Whitehaven Board has taken into account expected tax savings from the step up in the value of Boardwalk's tenements which have a present value of approximately A$50 million (as noted in Section 6.2). The Whitehaven Board has also had regard to other potential acquisition opportunities and the relative advantages and disadvantages of these opportunities when compared with the Boardwalk portfolio.

The Boardwalk Transaction represents an important milestone in the continued growth of the Whitehaven group.

This Section describes certain matters that are considered to be key risks relating to Boardwalk and its portfolio of coal exploration assets. Many of these risks are similar to the operating risks outlined in Section 7.1 in relation to the development of the existing projects of the Merged Group that are in the exploration phase. This Section does not contain an exhaustive list of risks associated with Boardwalk and the information set out here should be considered in conjunction with the other risks set out in Section 7.

59 As Boardwalk holds only an indirect interest in the Oaklands North Project through Boardwalk's shareholding in Coalworks, Boardwalk does not have any influence or control of the Oaklands North Project.

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Key risks include:

- there is no guarantee that future exploration on Boardwalk's existing tenements will lead to economically viable resources being identified and developed;
- Boardwalk being unable to meet, or being delayed in meeting, its farm in obligations, including in relation to the Dingo and Ferndale projects;
- delays in obtaining, or the inability to obtain, relevant authorisations and permits (including mining leases) may adversely impact the viability of new projects or their cost and development timeframes;
- changes to laws, regulations and Government policy may adversely impact Boardwalk's ability to conduct future exploration activities, for example, see Section 7.4 in relation to the impact of the proposed Queensland Urban Exploration Ban for the Sienna Project.

5.8.3. Summary of the key terms of the Boardwalk Transaction Documents including conditions precedent

The Boardwalk Transaction is conditional upon the satisfaction or waiver of various conditions precedent including:

- Merger between Aston and Whitehaven being approved at the Second Court Hearing;
- other customary completion conditions precedent including receipt of FIRB approval;
- Whitehaven Shareholder approval under ASX Listing Rule 7.1 at a general meeting of Whitehaven Shareholders approving the issue of Whitehaven Shares to Boardwalk Securityholders as consideration for the Boardwalk Transaction; and
- no material adverse change or material transaction occurring in relation to Boardwalk or Whitehaven.

The Whitehaven Directors are of the opinion that the resolution to issue Whitehaven Shares under the Boardwalk Transaction is in the best interests of Whitehaven, noting that completion of the Boardwalk Transaction is conditional on approval of the Merger.

The Whitehaven Directors have unanimously recommended that Whitehaven Shareholders vote in favour of the resolution to issue Whitehaven Shares under the Boardwalk Transaction. Whitehaven Shareholders (including Whitehaven Directors) representing approximately 43% of the total Whitehaven Shares on issue have indicated they intend to vote in favour of the resolution at the Whitehaven Shareholders' meeting.

Subject to satisfaction or waiver of all conditions precedent to the Boardwalk Transaction, including approval of the Merger between Aston and Whitehaven at the Second Court Hearing, it is expected that the Boardwalk Transaction will complete after the Effective Date and prior to the Implementation Date.

The Boardwalk Transaction Documents contain customary representations and warranties that are provided by the Boardwalk Securityholders to Whitehaven in relation to the business and assets of Boardwalk. The warranties and representations are subject to certain qualifications and limitations including limits on the period of time during which claims may be made by Whitehaven against the Boardwalk Securityholders for a breach of warranty and on the minimum and maximum amounts that may be claimed.

On or around the date of completion of the Boardwalk Transaction, restriction deeds will be entered into by Whitehaven and the Boardwalk Securityholders which set out the terms of the restrictions that will apply to the Milestone Shares including that the Boardwalk Securityholders will not dispose or transfer their Milestone Shares or exercise any voting rights in relation to their Milestone Shares during the restriction period. As noted above, the restrictions on the Milestone Shares will be released upon the occurrence of certain trigger events including the grant of mining leases and environmental approvals at any two of the Boardwalk Projects or Oaklands North which is a project of Coalworks (being 17.01 million Milestone Shares for each approval).

5.8.4. Current ownership of Boardwalk

As at the date of this Scheme Booklet, Boardwalk has the following securities on issue:

- 115,600,000 shares; and
- 28,900,000 warrants.

The major shareholder of Boardwalk is currently BRI, an Associate of Nathan Tinkler and the Tinkler Group, which owns approximately 83.4% of the issued share capital of Boardwalk as at the date of this Scheme Booklet. Philip Christensen (through an Associate), also owns shares in Boardwalk and will therefore be issued and have an interest in New Whitehaven Shares upon completion of the Boardwalk Transaction. Refer to Section 14.3 for further information.

The warrants are held by Farallon Funds which, upon their exercise, entitle their holders to 28,900,000 shares in Boardwalk (which equates to approximately 20% of shares on issue on a fully diluted basis).

Upon completion of the Boardwalk Transaction, Whitehaven will own all the issued shares and warrants of Boardwalk.

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5.8.5. Company overview

Boardwalk is an unlisted public company with a portfolio of Australian coal exploration assets across Queensland and New South Wales. In selecting the exploration assets, Boardwalk has focused on securing projects in established locations, with well understood geology in proven coal basins. All of the Boardwalk exploration assets are located near established mines and/or coal development projects and existing rail infrastructure.

Project locations



Boardwalk's head office and registered office is located in Queensland at Level 28, 345 Queen Street, Brisbane. Boardwalk's board of directors is comprised of four non-executive directors as follows:

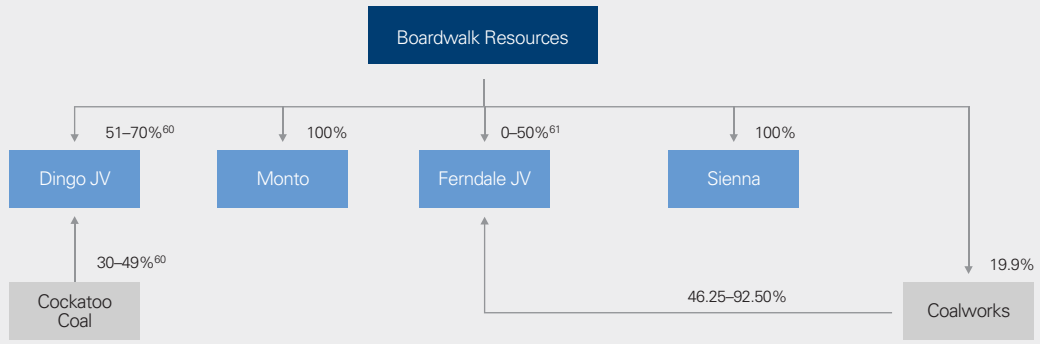
- Nathan Tinkler – non-executive director and Chairman;
- Paul Flynn – non-executive director;
- Philip Christensen – non-executive director; and
- Ian Craig – independent director.

Boardwalk has an experienced management team including Simon Slesarewich as Acting Chief Executive Officer, Alan Wigan as Chief Financial Officer and Company Secretary and Matt King as the New South Wales General Manager. As at the date of this Scheme Booklet, Boardwalk has 10 employees and three contractors across its head office and operations in Queensland and New South Wales.

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The Boardwalk group's simplified operating structure as at the date of this Scheme Booklet is shown in the diagram below.

Boardwalk operating structure



5.8.6. Project overviews

Boardwalk currently has interests in four coal exploration projects:

- the right to acquire up to 50% of the Ferndale Project, located within the Sydney coal basin, New South Wales upon completion of the farm-in arrangements with Coalworks via its Subsidiary, Loyal Coal Pty Limited. The Ferndale Project is targeting open-cut thermal coal and underground thermal and semi-soft coking coal;
- 51% of the Dingo Project (with the right to acquire a further 19% to increase its total interest to 70% upon completion of its farm-in arrangements with Cockatoo Coal via its Subsidiary, Independent Coal Pty Limited), located within the Bowen Basin in Queensland and targeting open-cut hard coking, PCI and thermal coal;
- 100% of the Sienna Project, also located within the Bowen Basin in Queensland and targeting open-cut and underground hard coking, PCI, and thermal coal; and
- 100% of the Monto Project, located in the Mulgildie Basin in Queensland and targeting open-cut thermal coal.

Project	Ferndale Project	Dingo Project	Sienna Project	Monto Project
Direct interest	Right to acquire up to 50%	51% and right to acquire up to 70%	100%	100%
Basin	Sydney	Bowen	Bowen	Mulgildie
Estimated area (Ha)	3,742	25,600	10,800	29,600
Target stratigraphy	Newcastle and Wittingham coal measures	Baralaba and Burngrove coal measures	Rangal, Moranbah and German Creek coal measures	Mulgildie coal measures
Target coal type	Semi-soft coking coal and thermal coal	Hard coking coal, PCI and thermal coal	Hard coking coal, PCI and thermal coal	Thermal coal
Target mining method	Open-cut/ underground	Open-cut	Open-cut/ underground	Open-cut
Exploration Target (Mt)[62]	99 – 453	82 – 462	14 – 565	0 – 1,832

60 Boardwalk currently owns a 51% interest in the Dingo Project and has a right to acquire up to a 70% interest in the Dingo Project upon completion of the farm-in and joint venture arrangements with Cockatoo Coal (via its Wholly-Owned Subsidiary, Independent Coal Pty Limited).
61 Boardwalk has a right to acquire up to a 50% interest in the Ferndale Project upon completion of the farm-in arrangements with Coalworks (via its Subsidiary, Loyal Coal Pty Limited).
62 The potential quantity and quality of the Exploration Targets is conceptual in nature, there has been insufficient exploration to define Resources and it is uncertain if further exploration will result in the determination of Resources.

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Project	Ferndale Project	Dingo Project	Sienna Project	Monto Project
Rail infrastructure	Immediately adjacent to rail line	Intersected by rail line	18km by rail line	8km by rail line
Port infrastructure	Newcastle (125km away)	Gladstone (225km away)	Abbot Point (440km away) or Dudgeon Point (285km away)	Gladstone (160km away)

Competent Person's Statement

The Exploration Target range estimates for the Ferndale, Dingo, Sienna and Monto projects are based on information compiled by Mr Brad Willis, who is a Member of the Australasian Institute of Mining and Metallurgy (205328). Mr Willis is the General Manager-Geological Services and is employed by Palaris Mining Pty Ltd. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person, as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Willis has over 13 years experience in exploration and mining of coal deposits. Mr Willis consents to the inclusion of these Exploration Target ranges in this Scheme Booklet of the matters based on his information in the form and context in which it appears.

In addition, Boardwalk has a 19.9% interest in Coalworks (ASX:CWK), an ASX listed Australian company with a portfolio of coal assets, the majority of which are located in New South Wales and which include the Oaklands North project. It should be noted that although Boardwalk owns 19.9% of Coalworks, Boardwalk does not have any influence or control over the development of Coalworks' assets including the Oaklands North Project.

Coalworks also has an interest in the Ferndale Project in the Sydney Basin, and will own 46.25% of the Ferndale Project upon completion of Boardwalk's 50% farm-in arrangement, and a 71% interest in the Vickery South Project located in the Gunnedah Basin.[63]

Coalworks owns a 33.34% interest in Orpheus Energy Limited which is an ASX listed Australian company with a primary focus on development and exploration of coal deposits in Australia and Indonesia. Boardwalk also has a 3.2% direct interest in Orpheus Energy Limited which it acquired in September 2011 in connection with a dividend paid by Coalworks to its shareholders that was paid by way of a distribution of Coalworks' shareholding in Orpheus Energy Limited.

Ferndale Project

a) Description

The Ferndale Project is located in the Sydney Basin within the Hunter Coalfield, the largest coal producing area in New South Wales. Located at Yarrawa, approximately eight kilometres south-west of Denman, it is close to rail and road and is about 125 kilometres from the port of Newcastle. EL7430 covers 3,742 hectares adjacent to the Wollemi National Park. The Ferndale Project targets Newcastle coal measures for prospective open-cut thermal coal and also targets the Wittingham coal measures for prospective underground thermal and semi-soft coking coal.

On 17 February 2012 Coalworks announced to ASX an Inferred Resource (classified in accordance with the JORC Code) within EL7430 of 743 million tonnes of bituminous coal, based on a Resource Model update prepared by Ravensgate Minerals Industry Consultants. A copy of this announcement is available on the Coalworks website at www.coalworks.com.au

The Resource Model update was commissioned solely by Coalworks and has not been reviewed by or commented upon by Boardwalk or the Ferndale Coal Joint Venture (FCJV) which comprises Boardwalk and Coalworks subsidiary Loyal Coal Pty Limited. Boardwalk and the FCJV take no responsibility for and disclaim all liability in relation to the Coalworks ASX announcement and the Ravensgate Resource Model update.

The FCJV is in the process of undertaking its own resource model update in relation to EL7430 which is completely independent of the Ravensgate Resource Model update. This work is ongoing.

63 Coalworks' 71% interest in the Vickery South Project will reduce to 51% upon completion of the bankable feasibility study to be funded by Coalworks' joint venture partner, ITOCHU.

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b) Target coal type

Based on preliminary studies and regional knowledge of the target coal seams, Boardwalk anticipates that product from the Ferndale Project will be marketed as semi-soft coking coal and thermal coal. Open-cut production within the Newcastle coal measures is likely to produce a thermal coal product, whilst underground production would likely realise both semi-soft coking coal and thermal coal products from the Wittingham coal measures.

c) Drilling plan

Stages 1 and 2 of the drilling program have been completed which resulted in the drilling of 17 cored holes and three open holes.

Stage 3 of the drilling program for the Ferndale Project is planned for completion in 2012. The stage 3 drilling program consists of up to 80 holes fully cored and will be conducted in two stages (i.e. stage 3A and stage 3B). Stage 3A is substantially completed and comprises infill drilling to a 1km grid with 26 shallow cored holes. Stage 3B is planned for completion in March 2012 and comprises infill drilling to a 500m grid with 54 cored holes. The objective of the drilling plan is to define Resources by May 2012.

Dingo Project

a) Description

The Dingo Project is comprised of three exploration permits: EPCs 862 (Dingo North), 863 (Middle Creek) and 1063 (Tryphina) located in the Bowen Basin in Central Queensland between the townships of Dingo and Duaringa in Central Queensland and covers a strike length of the Baralaba Coal Measures of around 35km. Boardwalk currently envisages developing the Dingo Project into a series of two to three pits feeding into a central coal handling and processing plant and rail distribution point.

Although an Exploration Target has been identified, no JORC-compliant Resources have been estimated for the Dingo Project by Boardwalk.

b) Target coal type

Based on preliminary studies and regional knowledge of the target coal seams, Boardwalk anticipates that product from the Dingo Project will be marketed as hard coking, PCI and thermal coal, targeting the Baralaba and Burngrove coal measures.

c) Drilling plan

Stage 1 of the drilling plan has been completed which resulted in approximately 640 boreholes being drilled in order to assess the geology of the Dingo Project. The majority of the boreholes are clustered in the Pearl Creek area with 450 boreholes drilled in this area.

Stage 2 of the drilling program for Pearl Creek is substantially completed and comprises 43 open holes. Stage 3 of the drilling program for Pearl Creek is planned for completion in March 2012 and comprises 29 cored holes. The objective of the drilling plan is to define a JORC Resource in May 2012.

Sienna Project

a) Description

The Sienna Project, which comprises EPC1033 and EPC2089, covers 10,080 hectares located in the heart of the Bowen Basin in Central Queensland and is generally separated into smaller project areas:

- Sienna North and South: in the south; prospective for PCI and thermal coal in the Rangal coal measures; and
- Electra: in the north; prospective for hard coking coal in the Moranbah and German Creek coal measures.

The Sienna Project is adjacent to the town of Middlemount and 100km south of the coal mining centre of Moranbah.

Although an Exploration Target has been identified, no JORC-compliant Resources have been estimated for the Sienna Project by Boardwalk.

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b) Target coal type

Based on preliminary studies and regional knowledge of the target coal seams, Boardwalk anticipates that product from the Sienna Project will be marketed as open-cut PCI and thermal coal targeting the Rangal coal measures and underground hard coking coal, targeting the Moranbah and German Creek coal measures.

c) Drilling plan

Stages 1 and 2 of the drilling program have been completed. For the open-cut area, a total of 50 holes were drilled with Stage 1 targeting coal to a depth of 200m and stage 2 targeting shallow sub-cropping Rangal coal measures. For the underground Electra area, one hole was drilled and intersected the Moranbah coal measures at a depth of 580m.

Boardwalk expects that the next stage of the drilling program will commence in the second quarter of 2012 and is expected to comprise 52 open holes and 30 cored holes. The objective of the drilling plan is to define a JORC Resource.

d) Queensland Urban Exploration Ban

It is important to note that the Sienna Project (EPC1033) may be adversely affected if the Resources Legislation (Balance, Certainty and Efficiency) Amendment Bill 2011 (QLD) (**Bill**) is enacted, as part of EPC1033 falls within the Urban Restricted Area, as defined by that Bill. The implications for the Sienna Project are:

- until the Bill is enacted and becomes law, there is no impact on currently authorised activities; and
- if the Bill is enacted and becomes law as proposed:
  - the consent of Isaac Regional Council would need to be obtained for exploration activities to continue within that part of the Sienna Project that falls within the Urban Restricted Area; and
  - open-cut mining would be prohibited within that part of the Sienna Project that falls within the Urban Restricted Area.

For further details on the Queensland Urban Exploration Ban, please refer to Section 7.

Monto Project

a) Description

The Monto Project (EPC1220) covers an area of 29,600 hectares and is located near the town of Monto in the Mulgildie Basin approximately 120km south-west of Gladstone, Queensland, one of the few remaining undeveloped thermal coal basins in Australia.

Although an Exploration Target has been identified, no JORC-compliant Resources have been estimated for the Monto Project by Boardwalk.

b) Target coal type

No coal quality data is available from the previously drilled water bores in EPC1220. It is possible that the coal intersected during future exploration programs may exhibit similar qualities to those found in the neighbouring Monto thermal coal project, owned by Macarthur Coal (which is now 100% owned by Peabody Energy Corporation) and joint venture partners.

c) Drilling plan

The drilling program for the Monto Project is planned for completion in April 2012. The drilling plan is expected to comprise 21 shallow (100m) open holes. The objective of the drilling plan is to further define the identified Exploration Target.

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5.8.7. Outstanding obligations and key contracts relating to Boardwalk

Under the terms of the farm-in arrangements relating to the Ferndale and Dingo Projects, and the sale and purchase agreement under which Boardwalk acquired the Sienna Project from Norton Gold Mines Pty Limited, a Subsidiary of Norton Gold Fields, Boardwalk is required to fulfil the following obligations:

Ferndale Project

- Stage 1: Boardwalk to achieve a minimum Measured Resource of 50Mt in respect to EL7430 or spend an amount equal to A$10 million (whichever occurs first and provided the stage 1 works have been completed by 30 June 2012). Upon completion of stage 1 of the farm-in arrangements, Boardwalk will be entitled to receive a 25% interest in the Ferndale Project.
- Stage 2: Boardwalk to complete a bankable feasibility study to allow for mine development and environmental assessment studies for an open-cut mine and a prefeasibility study to allow for mine development and environmental assessment studies for an underground coal mine or spend a total of A$25 million being the total of the stage 1 contribution amount of A$10 million and the stage 2 contribution amount of A$15 million (whichever occurs first and provided the stage 2 works have been completed by 31 December 2013). Upon completion of stage 2 of the farm-in arrangements, Boardwalk will be entitled to receive a further 25% interest in the Ferndale Project.

As at the date of this Scheme Booklet, Boardwalk expects that stage 1 of the Ferndale Project farm-in arrangements will be completed by the end of March 2012.

Dingo Project

- Completion of the third phase of the farm-in arrangements for the Dingo Project will be achieved upon Boardwalk completing the third phase of the exploration program including a feasibility study or the further expenditure of A$5 million on the exploration program by 1 October 2012.
  - As at the date of this Scheme Booklet, Boardwalk expects that the third phase of the farm-in arrangements for the Dingo Project will be completed by the end of March 2012.

Sienna Project

- The following two deferred payments of the purchase consideration for the acquisition of 100% of the Sienna Project are payable to Norton Gold Mines Pty Limited, a Subsidiary of Norton Gold Fields:
  - A$5 million on 22 February 2012; and
  - A$10 million on 14 March 2013.

Both tranches of deferred consideration will become payable within 10 Business Days of certain events occurring including if there is a change in control with respect to Boardwalk (except in certain circumstances) or if an application is made for the grant of a mining lease over all or any part of the area of EPC1033. The Boardwalk Transaction will not trigger the early payment of the deferred consideration.

Merewether Royalties Pty Ltd **(Merewether)**, an entity affiliated with Nathan Tinkler, is entitled to receive royalties for coal sold from any existing and additional tenements at the Sienna and Monto Projects under the terms of the Royalty Deeds dated 22 February 2011 between the relevant subsidiaries of Boardwalk and Merewether. The royalty payable to Merewether will be 1% of the price free of the board trimmed per metric tonne of coal produced from the Sienna and Monto Projects and sold by Boardwalk or a related entity.

5.8.8. Boardwalk financial information

The following selected financial information for Boardwalk is extracted from the audited consolidated financial statements of Boardwalk for the year ended 30 June 2011 and the reviewed consolidated financial statements of Boardwalk for the six months ended 31 December 2011. The financial information has been prepared in accordance with the recognition and measurement requirements of Australian Accounting Standards (including Australian Accounting Interpretations) adopted by the AASB and the Corporations Act. The financial information also complies with the recognition and measurement requirements of International Financial Reporting Standards and interpretations issued by the International Accounting Standards Board. The audit and review opinions in these financial statements were issued by Ernst & Young and were unqualified.

The financial information presented in the tables below does not represent complete financial statements and should therefore be read in conjunction with the financial statements for the respective periods, including the description of accounting policies contained in those financial statements and the notes to those financial statements. Where appropriate, adjustments have been made to headings and classifications of historical data to provide a consistent basis of presentation.

Complete copies of the consolidated financial statements of Boardwalk for the year ended 30 June 2011 and the six months ended 31 December 2011 have been lodged with ASIC. Aston Shareholders may obtain copies of these financial statements from ASIC for a fee or may view complete copies of these statements on the Boardwalk website at www.boardwalkresources.com.

In the interval between the end of the half year to 31 December 2011 and the date of this Scheme Booklet, there has not arisen any item, transaction or event of a material and unusual nature likely, in the opinion of the directors of Boardwalk, to significantly affect the operations of the consolidated entity, the results of those operations, or the state of affairs of the consolidated entity, in future financial years.

Consolidated statement of financial performance

AUD ($'000)	2011 (Audited)	HY12 (Reviewed)
Other income	–	630
Operating expenses	(2,572)	(2,269)
Depreciation and amortisation expense	(14)	(227)
Foreign exchange gains/(losses)	3,174	(2,685)
Finance costs (net)	(2,078)	(3,698)
Other expenses	(1,027)	(2,062)
Unrealised gain/(loss) on investments	(2,967)	1,409
Profit/(loss) before income tax	**(5,484)**	**(8,900)**
Income tax expense	–	–
Profit/(loss) for the period	**(5,484)**	**(8,900)**

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Consolidated statement of financial position

AUD ($'000)	2011 (Audited)	HY12 (Reviewed)
Assets		
Cash and cash equivalents	10,945	739
Trade and other receivables	393	760
Total current assets	**11,338**	**1,499**
Investments	16,318	19,069
Property, plant and equipment	30,396	33,552
Exploration and evaluation	6,121	13,562
Total non-current assets	**52,835**	**66,183**
Total assets	**64,173**	**67,682**
Liabilities		
Trade and other payables	16,734	22,729
Employee benefits	245	596
Total current liabilities	**16,979**	**23,325**
Loans and borrowings	52,747	58,810
Total non-current liabilities	**52,747**	**58,810**
Total liabilities	**69,726**	**82,135**
Net assets	**(5,553)**	**(14,453)**
Equity		
Issued capital	294	294
Retained earnings	(5,847)	(14,747)
Total equity attributable to equity holders of the parent	**(5,553)**	**(14,453)**

Consolidated statement of cash flows

AUD ($'000)	2011 (Audited)	HY12 (Reviewed)
Cash flows from operating activities		
Cash paid to suppliers and employees	(1,871)	(2,830)
Security deposit	–	(711)
Interest received	178	133
Net cash from/(used in) operating activities	**(1,693)**	**(3,409)**
Cash flows from investing activities		
Acquisition of property, plant and equipment	(388)	(1,958)
Acquisition of mining tenements	(15,000)	–
Acquisition of investments	(19,285)	–
Exploration and evaluation expenditure	(2,674)	(4,839)
Net cash used in investing activities	**(37,347)**	**(6,797)**
Cash flows from financing activities		
Proceeds from borrowings	48,416	–
Proceeds from related party borrowings	1,477	–
Net cash from/(used in) financing activities	**49,893**	**–**
Net increase/(decrease) in cash and cash equivalents	10,852	(10,206)
Cash and cash equivalents at beginning of period	**92**	**10,945**
Cash and cash equivalents at year end	**10,945**	**739**

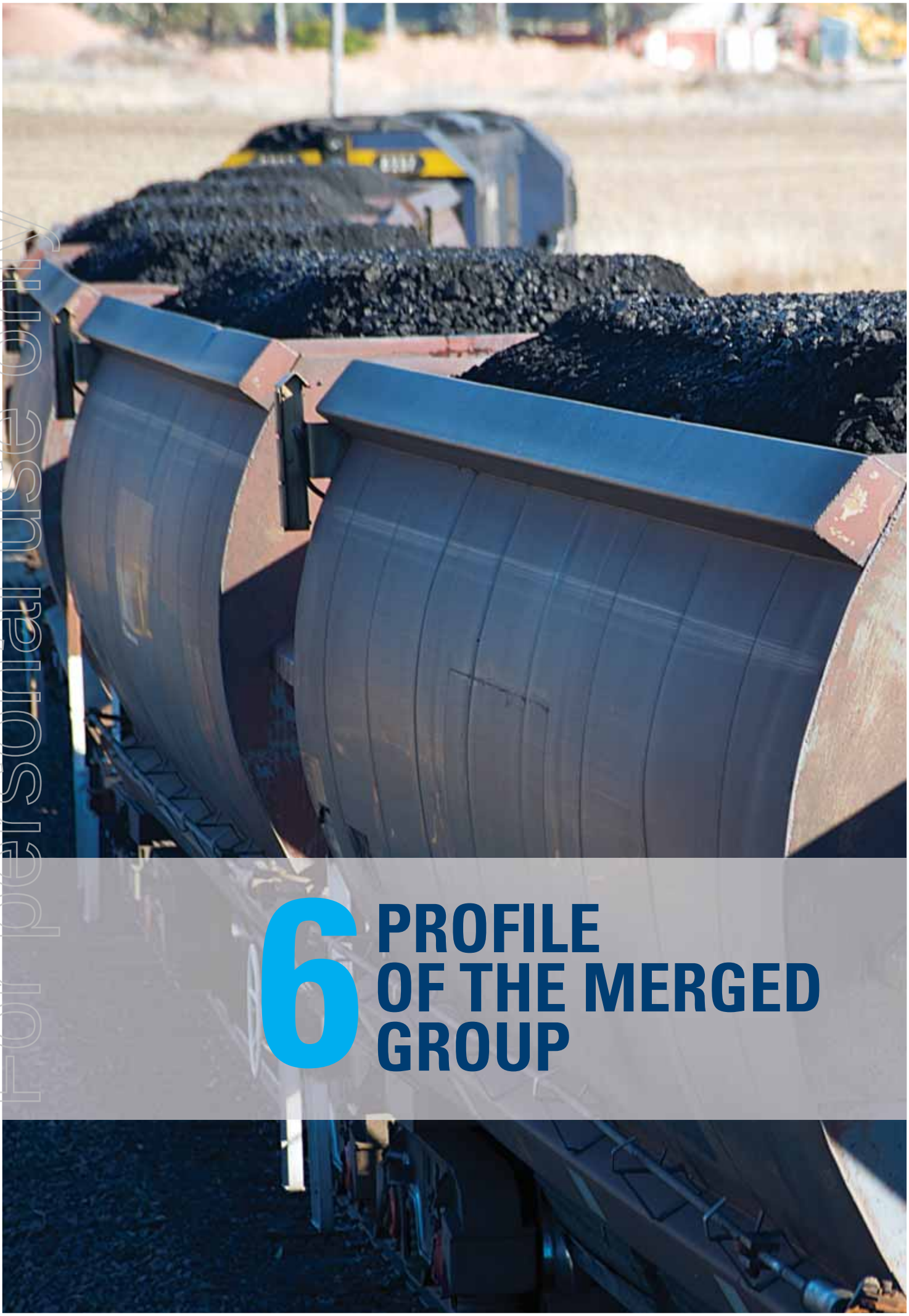
5.9. Further information

As a company listed on ASX and a disclosing entity under the Corporations Act, Whitehaven is subject to regular reporting and disclosure obligations which require it to announce price sensitive information as soon as it becomes aware of that information. Whitehaven's most recent announcements are available from its website. Further announcements concerning Whitehaven will continue to be made available on the Whitehaven website after the date of this Scheme Booklet www.whitehavencoal.com.au.

ASX maintains publicly available information about entities listed on its exchange. Whitehaven's information is available for inspection at ASX during normal business hours and is available on its website www.asx.com.au.

Whitehaven is required to lodge various documents with ASIC. Copies of documents lodged with ASIC by Whitehaven may be obtained from, or inspected at ASIC offices.

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6 PROFILE OF THE MERGED GROUP

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6. PROFILE OF THE MERGED GROUP

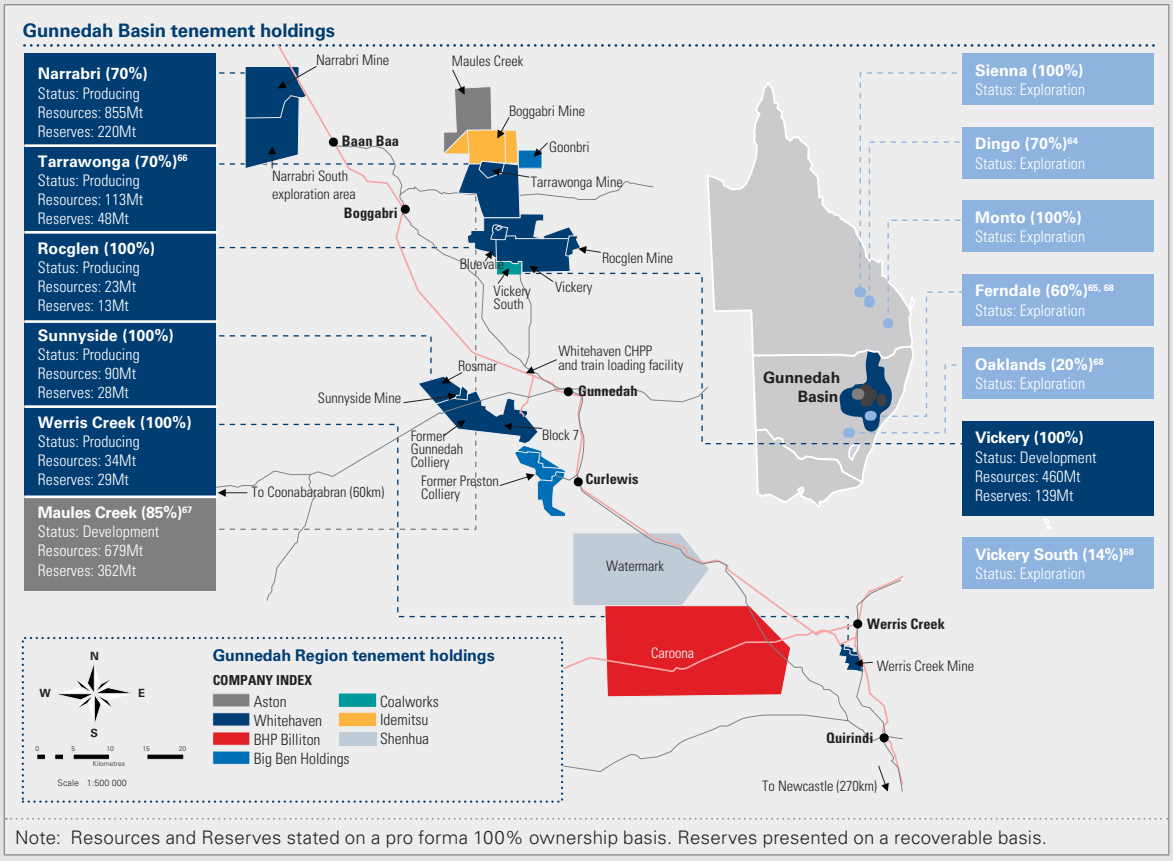
6.1. Overview of the Merged Group

The Merger of Aston and Whitehaven, together with Whitehaven's acquisition of Boardwalk, brings together highly complementary and growth focused groups and will create a leading independent Australian coal company.

The Merged Group would have had a market capitalisation of approximately A$5.1 billion (based on the closing prices on 9 December 2011, immediately prior to the announcement of the Merger), making it one of the largest listed coal companies on ASX. The transaction will create a major supplier of semi-soft coking and PCI coals with the potential to maximise margins and access a broader customer base and will have significantly enhanced scale and financial strength. This improved risk profile will enable it to pursue a range of value adding business development options not available to either company in isolation. The Merged Group will have the unique combination of a solid production and profit base from five competitive producing mines, a substantial growth pipeline including the ramp-up of Narrabri, development of Maules Creek and Vickery and an attractive suite of exploration assets located across two states.

Operating mines	Development projects	Exploration projects
• Narrabri – underground long wall operation • Rocglen – open-cut truck and shovel operation • Sunnyside – open-cut truck and shovel operation • Tarrawonga – open-cut truck and shovel operation • Werris Creek – open-cut truck and shovel operation	• Maules Creek – open-cut truck and shovel operation • Vickery – open-cut truck and shovel operation	• Bonshaw • Dingo[64] • Ferndale[65] • Merton • Monto • Sienna

The map below highlights the highly complementary portfolio of assets created by the Merger.



Note: Resources and Reserves stated on a pro forma 100% ownership basis. Reserves presented on a recoverable basis.

64 Subject to the Boardwalk Transaction proceeding. In the event that Boardwalk and Cockatoo Coal do not agree on whether a proposal for the development of a coal mine should be adopted, the approving party may in certain circumstances be entitled to elect to purchase the interest of the non-approving party under the terms of the farm-in and joint venture arrangements between Boardwalk and Cockatoo Coal.

65 Subject to the Boardwalk Transaction proceeding. In the event that Boardwalk and Coalworks do not agree on the decision to mine at Ferndale, the approving participant may have a right to purchase the non-approving party's interest in the Project pursuant to the joint venture arrangement between Boardwalk and Coalworks.

66 Whitehaven has a 70% interest in Tarrawonga open-cut and a 100% interest in Tarrawonga underground.

67 Aston has entered into an agreement to sell a 10% interest in the Maules Creek Project to J-Power. This agreement is conditional on (amongst other things) the consent of Aston's existing joint venture partner ITOCHU. As at the date of this Scheme Booklet, ITOCHU's consent and waiver of its pre-emptive rights has been obtained, subject to the asset sale completing in its current form on or before 30 June 2012 or such later date as is agreed by the parties. If the transaction completes, Aston's interest in the Maules Creek Project will be reduced from 85% to a 75% interest.

68 Based on an indirect interest held through a 19.9% ownership in Coalworks. Ferndale includes Boardwalk's 50% share held directly.

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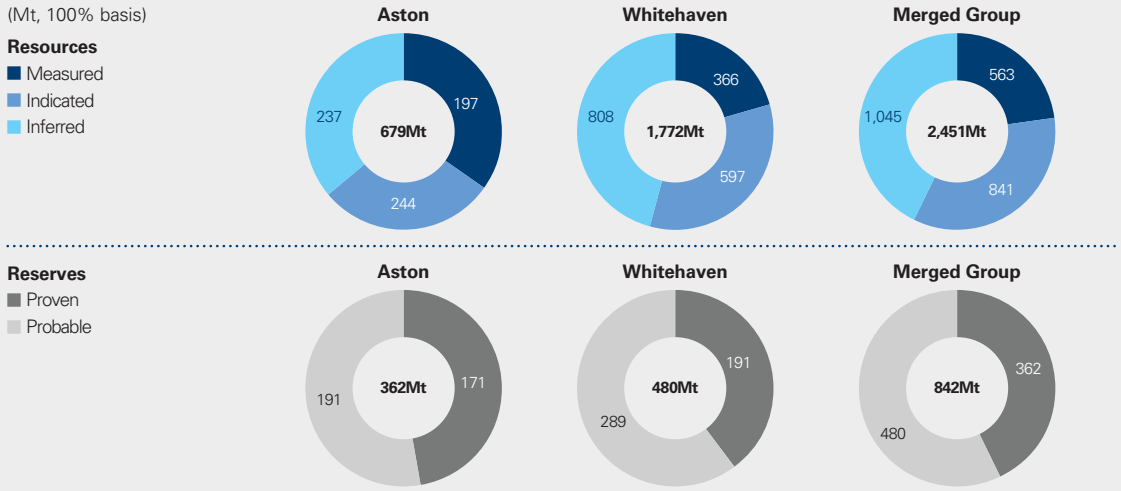
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Detailed descriptions of each of these mines and projects are contained in the profiles of Aston in Section 4 and of Whitehaven and Boardwalk in Section 5.

Resource and Reserve position

Based on the most recently published Resources and Reserves statements, the Merged Group will have a significant Resource base of 2,451Mt and substantial Reserve base of 842Mt. The Merged Group pro forma Reserves and Resources profile is set out below.

Merged Group pro forma Recoverable Reserves and Resources[69]



Note: Resources are reported inclusive of Reserves (that is, Reserves are not additional to Resources). Numbers may not add due to rounding.

Summary of Reserves and Resources (Mt)[69]

		100% basis		Equity basis	
Asset	**Ownership**	**Resources**	**Reserves**	**Resources**	**Reserves**
Narrabri	70%	855	220	598	154
Vickery	100%	460	139	460	139
Tarrawonga	70% / 100%[70]	113	48	91	34
Sunnyside	100%	90	28	90	28
Werris Creek	100%	34	29	34	29
Rocglen	100%	23	13	23	13
Other WHC	100%	197	4	197	4
Total Whitehaven		**1,772**	**480**	**1,493**	**401**
Maules Creek	**85%[71]**	**679**	**362**	**577**	**308**
Total Merged Group		**2,451**	**842**	**2,070**	**708**

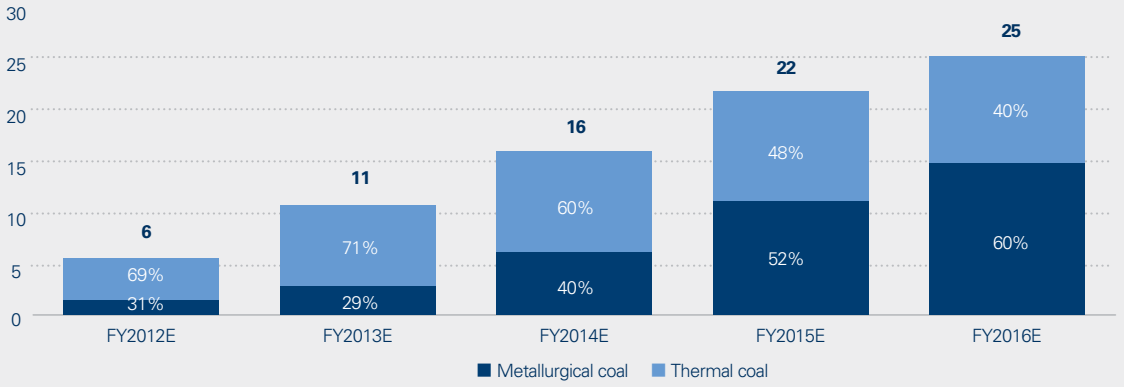
Note: Resources are reported inclusive of Reserves (that is, Reserves are not additional to Resources). Numbers may not add due to rounding.

69 Includes only Aston and Whitehaven assets as Boardwalk has not delineated any Resources or Reserves for the Boardwalk assets.
70 Whitehaven has a 70% interest in Tarrawonga open-cut and a 100% interest in Tarrawonga underground.
71 Aston has entered into an agreement to sell a 10% interest in the Maules Creek Project to J-Power. This agreement is conditional on (amongst other things) the consent of Aston's existing joint venture partner ITOCHU. As at the date of this Scheme Booklet, ITOCHU's consent and waiver of its pre-emptive rights has been obtained, subject to the asset sale completing in its current form on or before 30 June 2012 or such later date as is agreed by the parties. If the transaction completes, Aston's interest in the Maules Creek Project will be reduced from 85% to a 75% interest.

Production profile

The Merged Group will have a solid production and profit base from five competitive producing mines. The Merged Group will be one of Australia's largest listed coal producers based on annual saleable production, with metallurgical and thermal coal production of approximately 15Mt and 10Mt respectively for the financial year ending 2016. Substantial growth in production is expected to be driven by the Narrabri, Maules Creek and Vickery projects.

Saleable production forecasts (Mt, 100% basis)[72]



Note: Data shown for year ending 30 June. These estimates relate to planned future events and expectations and as such involve known and unknown risks and uncertainties. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions.

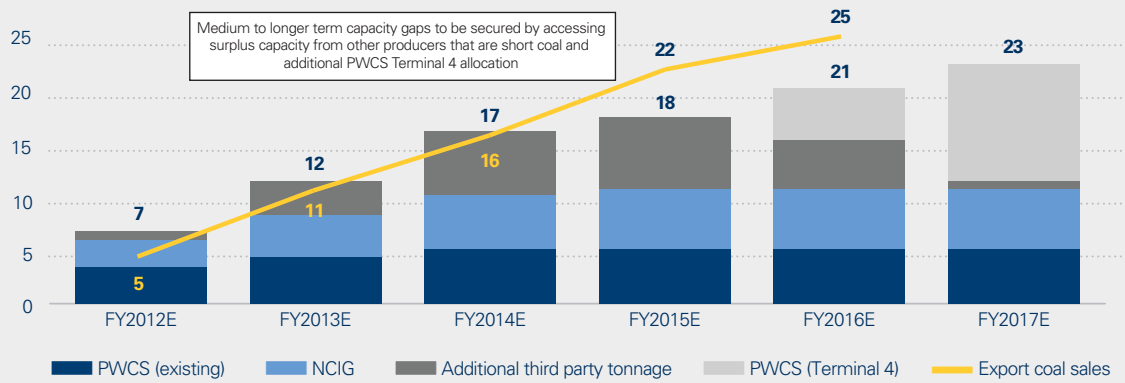
Production profile is based on assumed coal quality characterisation.

Port and rail capacity

Extensive existing port and rail infrastructure agreements are in place and support the Merged Group's production growth plans, including:

- 7Mtpa port capacity in FY2012, with potential to grow to 23Mtpa by FY2017 subject to delivery of PWCS Terminal 4 and NCIG stage 2AA;
- strategically significant 11% shareholding in Newcastle Coal Infrastructure Group; and
- ability to secure port capacity gaps by accessing surplus capacity from other producers and additional PWCS Terminal 4 allocations, subject to PWCS delivering Terminal 4.[73]

Port capacity and export coal sales (Mt, 100% basis)[74]



Note: Data shown for year ending 30 June. These estimates relate to planned future events and expectations and as such involve known and unknown risks and uncertainties. The actual production is likely to vary on an annual basis as a function of supply, demand and other market conditions.

These estimates are subject to, amongst other things, the timing of delivery of Terminal 4 and the operation of the Capacity Framework Arrangements.

72 Includes only Aston and Whitehaven assets as Boardwalk has not delineated any Resources or Reserves for the Boardwalk assets.
73 The Terminal 4 project is awaiting key environmental approvals which are required for the project to proceed.
74 Includes only Aston and Whitehaven assets as Boardwalk has not delineated any Resources or Reserves for the Boardwalk assets.

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The Merged Group will have in place long-term track access agreements with ARTC and a long-term haulage agreement with Pacific National for a significant portion of production and will leverage this capacity to maximise the sale of higher margin coals. ARTC has identified track upgrades which will increase rail capacity to approximately 60Mtpa from the Gunnedah Basin which is expected to support the Merged Group's production growth plans. Traditionally, ARTC has funded upgrades through long-term take-or-pay agreements, however, the preferred method for funding the substantial expansion necessary to support growth in the Gunnedah Basin has not yet been determined.

Operational risks associated with the expansion of the port infrastructure, the ARTC track upgrades and the ability to enter into future commitments for both above and below rail are discussed in Section 7.1.

Future expenditure and funding

The Merged Group will have a number of development projects and prospects, most notably the development of the Maules Creek (see Section 4.2) and Vickery projects (see Section 5.2). In addition, certain of the Boardwalk projects will require additional expenditure under farm-in and deferred purchase consideration arrangements. While the expenditure in relation to certain of these projects is still to be determined (for example, the Vickery project), it is expected that total annual capital expenditure for the Merged Group will be significant in the next three to five years. The directors are confident that the Merged Group will have access to sufficient funding sources to enable the development and expansion of the various projects and operations in order to achieve the combined entity's growth objectives in the proposed timeframe.

Funding sources for the Merged Group in the short to medium term are expected to include:

- cash flows from Whitehaven's operating mines;
- cash reserves of the Merged Group, including:
  - cash proceeds of A$370 million from the sale of 10% of the Maules Creek equity stake to J-Power, if that transaction proceeds;
  - the additional cash (net cash of approximately A$96 million) that will be in Boardwalk, if the acquisition of Boardwalk by Whitehaven proceeds;
- debt facilities of the Merged Group. In this context, Whitehaven secured an expansion of its existing debt facilities by a total of A$450 million in December 2011 to in part deal with any funding contingencies or cash requirements of the Merged Group. The additional facility brings the total facilities available to the Merged Group to A$800 million of which only A$50 million has been drawn as at 31 December 2011. The Special Dividend of approximately A$247 million will be paid from these facilities; and
- if necessary, accessing additional debt and/or equity funding at either the Merged Group parent level or project level.

6.2. Overview of potential synergies

The Aston and Whitehaven Directors believe that the Merged Group will generate significant benefits to all shareholders through exposure to a larger, more diversified asset base with an improved risk profile and enhanced capability for growth and value creation.

The key benefit is expected to be realised through the substantial synergies that the Merged Group is likely to create through infrastructure efficiencies from the consolidation of Gunnedah Basin operations, coal blending and marketing opportunities, operational cost savings and reduction in corporate costs. The Merged Group will also have access to the substantial skill and expertise of the proposed board and management team to assist the company in successfully realising these potential synergies and enhancing shareholder value.

The Aston and Whitehaven Directors believe that the Merged Group may be able to achieve synergies with a net present value of **A$575 – 775 million**, which is broadly consistent with the range of A$510 – 680 million of readily quantifiable synergies assessed by the Independent Expert. The Independent Expert notes that its assessment of infrastructure savings and efficiencies and operational cost synergies, two of the key categories of the expected synergy benefits, are regarded as conservative, which is a view shared by the Aston and Whitehaven Directors. In addition, the Aston and Whitehaven Directors and the Independent Expert considers there is further synergy potential which has not been

quantified in the Scheme Booklet, including pricing benefits from combined marketing strategies, lower borrowing costs, labour efficiencies and potential Boardwalk synergies.

The synergy estimate was prepared by the Aston and Whitehaven management teams based primarily on existing standalone mine plans (as disclosed in Sections 4 and 5 of this Scheme Booklet), adjusted for optimisation opportunities and cost savings benefits that may in the future arise across the combined portfolio. The synergies also reflect expected savings in future corporate costs, as well as potential future tax benefits.

The net present value estimate of the future annual synergies has been calculated assuming a nominal WACC of 10%, and is based on market consensus assumptions in relation to coal prices and exchange rates.

Estimates of future annual synergies vary materially from year to year depending on, among other things, production timing and production/sale volumes of individual mines and assumed coal prices. In addition, a significant part of the synergies relates to costs that are yet to be incurred. Accordingly, the directors of Aston consider it appropriate to express the estimate as a net present value.

The net present value of the synergies anticipated to be achieved relate to future matters which involve risks and uncertainties. Accordingly, no assurance can be given that the actual value of the synergies achieved will not materially differ from those anticipated.

The quantifiable synergies, as assessed by the Aston and Whitehaven Directors, have been segregated into the four key areas outlined in the following table.

POTENTIAL AREAS FOR THE MERGED GROUP TO GENERATE SYNERGIES		INDICATIVE NPV IMPACT[75]
Infrastructure savings and efficiencies	As a larger entity, with a leading position in the Gunnedah Basin and managed production ramping up to 25Mtpa by FY2016, the Merged Group is expected to realise substantial synergies from infrastructure and logistic efficiencies and benefits as a result of: • more efficient negotiating position with rail providers; • a more co-ordinated haulage schedule with additional trains and load points reducing the potential for lost train paths; • greater port allocation providing the Merged Group with greater flexibility across the export supply chain; • demurrage savings as the Merged Group will be continually running trains to the port and will effectively have a dedicated stockpile; and • flexibility to maximise profitability by shipping higher margin coals during periods of infrastructure constraints.	A$200 – 300m
Coal blending and marketing	The Merger is expected to generate significant coal blending and marketing synergies, primarily associated with blending Aston's high energy, low ash thermal coal with some of Whitehaven's low energy, high ash thermal coal to effectively produce a Newcastle benchmark thermal coal product. There is also potential for substantial additional yield benefits and cost savings from blending Maules Creek thermal coal with bypass coal from Whitehaven that would have otherwise been washed. Additional coal blending opportunities are expected to arise as the Boardwalk assets are developed, particularly from blending lower quality Ferndale thermal coal with the high quality Gunnedah thermal coal. The Merged Group is also expected to realise substantial marketing benefits given it will become a major global producer of premium quality semi-soft coking and PCI coals with access to a broad portfolio of coals and customers. The Aston and Whitehaven Directors also believe that in time an independent Gunnedah Basin thermal coal benchmark could be established to maximise the value from the high energy and low ash content of these coals.	A$75 – 100m

75 These estimates relate to planned future events and as such involve known and unknown risks.

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POTENTIAL AREAS FOR THE MERGED GROUP TO GENERATE SYNERGIES		INDICATIVE NPV IMPACT[75]
Operating cost savings	Economies of scale and the stronger bargaining position of the Merged Group with suppliers are expected to generate material operating cost savings across the company's consumables. The key areas include fuel, explosives, equipment, tyres, electricity, accommodation, maintenance costs, inventory and spare parts. The Merged Group is also expected to realise additional benefits from the sharing of resources between the various mines to avoid the need to hire discrete pieces of equipment as needed.	A$50 – 100m
Corporate costs and tax	The Merger is expected to eliminate various duplicate corporate overheads across the Aston and Whitehaven businesses, including some senior management positions, listing costs and professional services fees. In addition, as a standalone company, Aston would need to significantly expand its corporate overheads as Maules Creek ramps up production. However, given Whitehaven's operations largely have this infrastructure in place, the Merger is expected to negate the need for these expansion costs to be incurred. The Aston and Whitehaven Directors understand that as part of the purchase price accounting for Aston and Boardwalk, if 100% of the shares in both companies are acquired by Whitehaven, the tax base of the Aston and Boardwalk assets should be reset. The advice received by Aston and Boardwalk is that the tax base of the Aston and Boardwalk tenements are expected to increase, enabling the Merged Group to claim additional tax depreciation each year against its assessable income. As a larger, more diversified company, the Merged Group is also likely to benefit from lower borrowing costs than Aston or Whitehaven can achieve on a standalone basis, particularly in the years prior to Maules Creek ramping up production.	A$250 – 275m[76]

Through the Merged Group's participation in joint ventures and its use of other third parties for exploration, mining and other activities, it is reliant on others for the success of its current operations, development projects and exploration assets. While the situation is normal for the mining and exploration industry, problems caused by third parties may arise which have the potential to impact on the performance of the Merged Group, including the ability to realise synergies.

The long-term success of the Merged Group and the realisation of the estimated synergies set out above will depend, amongst other things, on the success of management in integrating the respective businesses and the strength of management of the Merged Group. There is no guarantee that the business of the Merged Group will be able to be integrated successfully, or over the expected time period or at the implementation cost estimated. There are risks that any integration of the Merged Group may take longer than expected and that anticipated efficiencies and benefits of that integration may be less than estimated. These risks include possible differences in the management cultures, an inability to achieve synergy benefits and costs savings and the potential loss of key personnel.

75 These estimates relate to planned future events and as such involve known and unknown risks.

76 The amounts of any reset and the potential depreciation cannot be calculated until the value of Whitehaven Shares issued for the acquisition of Aston (at the date of issue) is known and the fair value of Aston assets and liabilities is determined. Only the estimated value from the step-up in Aston assets has been included in the value of the synergies. If the Boardwalk Transaction is completed, the estimated net present value of the step-up on the Boardwalk assets is expected to be approximately an additional A$50 million.

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6.3. Intentions in relation to Aston and the Merged Group

This Section sets out the intentions of Aston and Whitehaven in relation to Aston and the Merged Group if the Scheme becomes Effective.

These statements of intention are formed on the basis of publicly available information as at the date of this Scheme Booklet as well as information made available in the course of due diligence carried out by Aston on the business of Whitehaven, and due diligence carried out by Whitehaven on the business of Aston.

The Merged Group's Board and management intend to explore opportunities to optimise the Merged Group's existing operations and development projects and maximise value for the Merged Group's shareholders.

Final decisions regarding any such matters will be made by the Merged Group's Board in light of material information and circumstances at the relevant time. Accordingly, the statements set out in this section are statements of current intentions only, which may vary as new information becomes available or circumstances change and the Merged Group further develops its strategic focus and outlook.

Corporate matters in relation to Aston

If the Scheme is implemented, it is intended that:

- Aston be removed from the official list of ASX; and
- as Aston will be a Wholly-Owned Subsidiary of the Merged Group, the Aston Board be reconstituted so that it comprises persons nominated by the Merged Group's Board.

Continuation of Aston and Whitehaven's businesses

It is the current intention of Aston and Whitehaven that the Merged Group will continue to operate the businesses of Aston and Whitehaven in substantially the same manner as they are currently being conducted. The Merged Group will continue to review all aspects of the assets and operations to identify ways to maximise value for all shareholders.

Notwithstanding the overlap between the Aston and Whitehaven businesses, both from a geographic and operational perspective, given the stage and status of the Maules Creek Project compared to Whitehaven's portfolio, the Aston and Whitehaven Directors do not expect any significant reduction in the number of employees as a result of the Merger.

Name of the Merged Group

The structure of the transaction, which was considered the most efficient way to effect a combination of Aston and Whitehaven, will result in Whitehaven issuing New Whitehaven Shares to Aston Shareholders. Accordingly, the Merged Group will continue to trade on ASX under the name Whitehaven Coal Limited.

Dividend policy

The Board of the Merged Group will review the amount of any future dividends to be paid to shareholders having regard to the company's profits, its financial position and the board's assessment of the capital required to grow the Merged Group's businesses.

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6.4. Director profiles of the Merged Group's Board

The Merged Group will comprise nine directors, including four independent directors. The details of the directors who will comprise the Merged Group's Board are set out below.



The Hon. Mark Vaile, Independent Chairman (Current Independent Non-Executive Deputy Chairman of the Aston Board)

As leader of the National Party from 2005 to 2007, Mark established an extensive network of contacts throughout regional Australia, particularly in Northern New South Wales. Mark led negotiations for Australia's Free Trade Agreements with the United States, Singapore and Thailand and helped to launch negotiations with China, Japan and ASEAN.

Importantly, Mark also acted as Minister for Transport and Regional Services and was instrumental in the establishment of the ARTC as operator of the Hunter Valley Rail Network.

Mark brings significant experience as a company director and as a former senior government leader, including as Deputy Prime Minister and Minister for Trade in the Federal Government.

Mark is the Chairman of CBD Energy and an independent director of Servcorp Limited and Virgin Australia Holdings Limited, all of which are listed on ASX. Mark is also a director of Stamford Land Corporation, which is listed on the Singapore Stock Exchange.



John C Conde AO, Independent Deputy Chairman (Current Chairman of the Whitehaven Board)

John has over 30 years of broad based commercial experience across a number of industries, including the energy sector.

John is Chairman of Ausgrid, BUPA Australia and the Sydney Symphony.

He is also President of the Commonwealth Remuneration Tribunal, a non-executive director of the DEXUS Property Group and Chairman of Destination NSW (which incorporates his previous chairmanships of Events NSW and the Homebush Motor Racing Authority).

John was formerly Chairman and Managing Director of Broadcast Investment Holdings, Chairman of EnergyAustralia prior to its acquisition by TRUenergy in 2011, as well as being a former non-executive director of BHP Billiton Limited and Excel Coal Limited.

John holds a Bachelor of Science and a Bachelor of Engineering (Electrical) (Hons) from the University of Sydney, and a Masters of Business Administration (Distinction) from Harvard Business School.



Tony Haggarty, Managing Director (Current Managing Director of Whitehaven)

Tony has over 30 years experience in the development, management and financing of mining companies, with particular expertise in the coal mining sector.

He was co-founder and Managing Director of Excel Coal Limited from 1993 to 2006 when it was acquired by Peabody Energy. Prior to this, Tony worked for BP Coal and BP Finance in Sydney and London, and for Agipcoal as the Managing Director of its Australian subsidiary.

Tony was appointed Managing Director of Whitehaven in October 2008.

Tony is also non-executive Chairman of King Island Scheelite Limited and a non-executive director of IMX Resources Limited.

Tony holds a Masters of Commerce degree from the University of New South Wales.



Rick Gazzard, Independent Non-Executive Director (Current Independent Non-Executive Director of Aston)

Rick has 25 years experience in the coal mining industry and a further five years experience in the iron ore, base metals and gold mining industries.

Rick has held senior management positions with BHP and Camberwell Coal including operational and financial responsibility for BHP's 50Mtpa Queensland coal business – a large, complex, multi-mine, multi-port mining business. He also has more than a decade's experience as a mine manager, predominantly working for CSR Limited.

He is a former non-executive director of Carabella Resources and of ASX-listed Eastern Corporation. Since January 2007, Rick has been an independent director of Stracon Holdings Ltd, a privately owned company with contracting mining and civil construction operations in Peru and New Zealand.

Rick has a Bachelor of Mining with second class honours (Division 1) from The University of Sydney.



Philip Christensen, Non-Executive Director (Current Non-Executive Director of Aston)

Philip has extensive experience in the mining and energy sector. Philip has over 30 years experience with leading law firm Freehills, where his clients included Australian and international coal and mining companies.

Philip was admitted to the Freehills partnership in 1988 where he remained a senior partner until commencing with Boardwalk, where he is presently a director.

Philip holds a Bachelor of Commerce with Merit and Bachelor of Laws from The University of New South Wales and is a solicitor admitted to practice in New South Wales.



Hans Mende, Non-Executive Director (Current Non-Executive Director of Whitehaven)

Hans has been President of the AMCI Group since he co-founded the company in 1986.

Prior to starting AMCI Group, Hans was employed by the Thyssen group of companies in various senior executive positions.

He has served as a director of Alpha Natural Resources, Inc. and as Chairman of the board of directors of ANR Holdings from 2003 to 2005.

Other current directorships held by Hans include MMX Mineracao and White Energy.

Hans was born in Lobositz, Czech Republic, and was educated in Germany and the USA.



Paul Flynn, Non-Executive Director

Paul has extensive experience in the mining, infrastructure, construction and energy sectors gained through 20 years as a professional adviser at Ernst & Young. Paul is currently the Chief Executive Officer and Managing Director of the Tinkler Group. He is responsible for the diverse portfolio of businesses and investments, which principally focus on mining, infrastructure, construction, rail and ports.

Prior to joining the Tinkler Group, Paul was the Managing Partner of Ernst & Young's Sydney office and a member of its Oceania executive team. As a partner for over eight years, Paul managed many of the firm's largest mining and energy clients across Australia, Asia, South and North America.

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Allan Davies, Executive Director (Current Executive Director of Whitehaven)

Allan is a mining engineer and has over 35 years experience in the Australian and international coal and metalliferous mining industries.

Allan commenced work with MIM Ltd at Mt Isa and then Union Corporation in South Africa. Subsequently, he joined BP Coal where he was, in succession, mine manager at the Howick Open Cut, Director Mining, BP Coal Inc, General Manager of the Agipcoal United underground mine in the Hunter Valley and General Manager of the Rio Tinto Hunter Valley No 1 and Howick mines.

He was a founding director of Excel Coal Limited and had direct responsibility for operations and construction projects.

Allan is a non-executive director of Qube Logistics Holdings and was previously a director of Pacific National Pty Ltd, QR National Ltd and Q Master Ltd.

Allan holds a Bachelor of Engineering (Mining) (Honours) from the University of Queensland.

An additional, Independent Non-Executive Director will be nominated by Aston and Whitehaven prior to the implementation of the Scheme

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6.5. Management of the Merged Group

Details of the proposed members of the senior management team of the Merged Group are set out below.



Tony Haggarty, Managing Director (Current Managing Director of Whitehaven)

See Section 6.4 for details of Mr Haggarty's qualifications and background.



Peter Kane, Chief Operating Officer – Aston and Boardwalk Operations (Current Interim CEO of Aston)

Peter is a mining engineer with more than 20 years experience in the mining industry throughout Australia and New Zealand and is the interim Chief Executive Officer (CEO) for Aston.

Peter began his career with BHP Iron Ore in Western Australia and then transferred to BHP Coal in Queensland where he held various operational roles over a 10 year period. He then held senior executive roles at the Leighton Group for another 10 years, working in mine contracting and operations in Central Queensland and the Hunter Valley in New South Wales, culminating in a role as General Manager of East Coast Australia and New Zealand.

As Chief Operating Officer for Macarthur Coal, Peter oversaw all operational aspects and project development. Peter also served as Managing Director and Chief Executive Officer of Boardwalk.



Allan Davies, Executive Director – Whitehaven Operations (Current Executive Director of Whitehaven)

See Section 6.4 for details of Mr Davies's qualifications and background.



Austen Perrin, Chief Financial Officer (Current Chief Financial Officer of Whitehaven)

Austen has extensive experience in the mining, infrastructure and transport sectors. Austen was appointed the Whitehaven Chief Financial Officer and Company Secretary in October 2008.

Prior to joining Whitehaven, Austen was the Chief Financial Officer for Asciano Limited having worked within the Toll Group for over 11 years. During Austen's time with Toll he held the role of Chief Financial Officer for Pacific National Limited and Chief Financial Officer and Executive Director for Toll NZ Limited.

Prior to joining the Toll Group, Austen was with TNT Australia for nine years working in various senior finance roles in Australia and China, having initially started his career with KPMG.

Austen holds a Bachelor of Economics from Macquarie University and is a Chartered Accountant.

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6.6. Capital structure and ownership

Share capital

If the Scheme is implemented, Whitehaven will issue approximately 388.1 million New Whitehaven Shares to Aston Shareholders. In addition, as consideration for the Boardwalk Transaction (subject to Whitehaven Shareholder approval), 85.89 million Whitehaven Shares (excluding Milestone Shares) will be issued to Boardwalk Securityholders. A further 34.02 million Whitehaven Shares will be issued to Boardwalk Securityholders as Milestone Shares[77] on a restricted basis, subject to completion of certain conditions.[78]

As a result of the Scheme and the Boardwalk Transaction, the number of Whitehaven Shares on issue will increase from approximately 496.2 million (being the number currently on issue) to approximately 970.2 million (excluding the Milestone Shares), as illustrated below.

	Whitehaven Shares to be issued	Cumulative total Whitehaven Shares on issue
As at the date of this Scheme Booklet	Not applicable	496,245,083
To be issued as Scheme Consideration	388,081,549	884,326,632
To be issued as consideration for the Boardwalk Transaction[79]	119,905,183	1,004,231,815

The above table includes the impact of Whitehaven Shares issued to holders of Aston performance rights. As outlined in Section 2.14, the Aston Board has the discretion to apply a six month holding restriction in relation to the New Whitehaven Shares associated with these performance rights. In addition, the table excludes any Aston option holders who elect to convert their options into Whitehaven Shares under the alternatives available to them as outlined in Section 2.14.

Options and performance rights

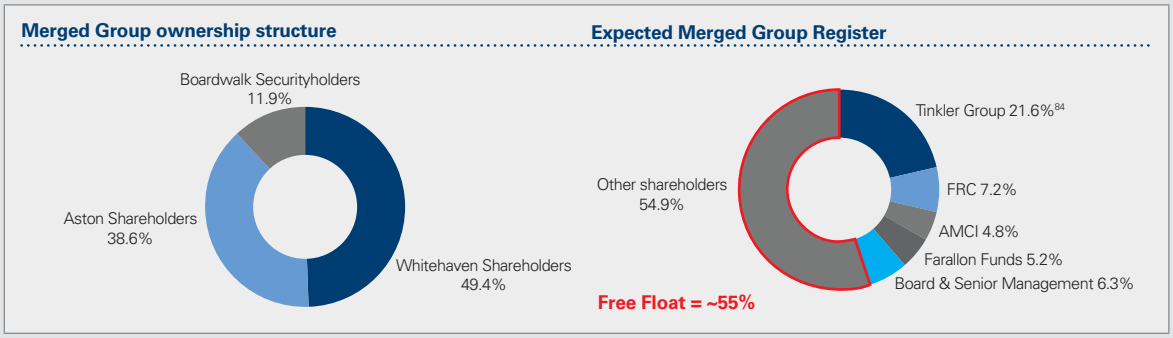
If the Scheme is implemented, it is expected that the Merged Group will have the following options and performance rights on issue.

	Performance rights	Unlisted options
As at the date of this Scheme Booklet	1,323,321	6,423,334
Maximum number to be issued as a result of the Scheme	Nil	18,428,451[80]
Maximum number to be issued following completion of the Boardwalk Transaction	Nil	2,922,168[81]
Following implementation of the Scheme	1,323,321	27,773,953[82]

All of the Whitehaven options on issue at the date of the Scheme Booklet have vested. For the performance criteria in relation to Whitehaven's performance rights, see Section 5.4.

77 During the restricted period, the holders of Milestone Shares, will not be able to sell those shares or enjoy the usual rights attaching to shares, such as the right to vote or to participate in dividends.
78 The conditions for the restrictions on the Milestone Shares to be lifted are described at Section 5.8 of this Scheme Booklet.
79 Includes the 34.02 million Whitehaven Shares issued as Milestone Shares.
80 Represents the potential maximum number of options to be issued as a result of the Scheme, as Aston option holders have other alternatives as outlined in Section 2.14.
81 Represents the maximum number of Whitehaven options proposed to be issued to Peter Kane and the current management of Boardwalk following completion of the Boardwalk Transaction.
82 Represents the expected maximum number of options on issue following implementation of the Scheme, assuming that all Aston option holders cancel their options in consideration for the issue of Whitehaven options (rather than one of the other alternatives available to them as described in Section 2.14), no current Whitehaven option holders exercise their Whitehaven options before implementation of the Scheme and including the maximum number of Whitehaven options proposed to be issued to Peter Kane and the current management of Boardwalk following completion of the Boardwalk Transaction.

Shareholding structure[83]



Note: Based on the shareholdings of Aston as at 17 February 2012 and of Whitehaven as at 16 February 2012.

The Tinkler Group will be the largest shareholder in the Merged Group post implementation of the Scheme and the Boardwalk Transaction, with an expected shareholding of 21.6% (including shares received from the Boardwalk Transaction, including the Milestone Shares). It is expected that the Merged Group free float will be approximately 55%, which should be sufficient for the Merged Group to be included in key indices including the S&P/ASX 100.

6.7. Pro forma historical financial information

Historical financial profile of the Merged Group

The Merged Group pro forma historical financial information provided in this Scheme Booklet comprises a pro forma consolidated statement of financial position as at 31 December 2011 which is based upon:

- the Whitehaven consolidated statement of financial position as at 31 December 2011;
- the Aston consolidated statement of financial position as at 31 December 2011;
- the Boardwalk consolidated statement of financial position as at 31 December 2011,

(Hereafter the "Historical Financial Information"); and

- relevant pro forma adjustments required to present the Merged Group,

(collectively, the "Pro Forma Financial Information")

Basis of preparation

The Pro Forma Financial Information is provided for illustrative purposes and is prepared in accordance with the recognition and measurement requirements of Australian Accounting Standards on the assumption that the pro forma adjustments had occurred on 31 December 2011.

The Pro Forma Financial Information has been presented in an abbreviated form insofar as it does not contain all the disclosures required by the Australian Accounting Standards applicable to annual financial reports usually provided in an annual report prepared in accordance with the Corporations Act.

Ernst & Young has reported on the Pro Forma Financial Information, in an Investigating Accountant's Report which has been included in Section 11. Aston Shareholders should note the comments made in relation to the scope and limitations of this report.

83 Assuming the Boardwalk Transaction proceeds and that a Tinkler Group Associate subscribes for A$150 million in Boardwalk shares before completion of the Boardwalk Transaction. Includes the 34.02 million Whitehaven Shares to be issued as Milestone Shares. Assuming that none of the Aston option holders exercise their Aston options or cancel their Aston options in consideration for the issue of Aston Shares and receive New Whitehaven Shares as Scheme Consideration and that no current Whitehaven option holders exercise their Whitehaven options before implementation of the Scheme.

84 Excluding Milestone Shares, the Tinkler Group's expected shareholding in the Merged Group will be 19.6%.

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Pro forma adjustments

Although the terms of the proposed Merger reflect a merger of equals, Australian Accounting Standards require the Merger to be accounted for as an in substance acquisition, with Whitehaven deemed to be the acquirer. Acquisition accounting will be applied in accordance with AASB 3: Business Combinations. The value of the consideration issued to Aston, as well as Boardwalk, will be measured based upon the value of Whitehaven Shares at close of trading on the Implementation Date. For the purposes of the Merged Group pro forma financial information, a value of A$4.58 per Whitehaven Share has been assumed, being the closing price of Whitehaven Shares on 31 December 2011, adjusted for the payment of the Special Dividend, including an adjustment for the full value of its fully franked nature. The ultimate value of the purchase consideration for accounting purposes as at the Implementation Date will differ from the amount assumed for the purposes of the Pro Forma Financial Information.

The following pro forma adjustments to the Historical Financial Information have been made in order to present the Pro Forma Financial Information, including the adjustments to reflect the accounting impact of the acquisitions of Aston and Boardwalk, as follows:

- payment of the Special Dividend of A$0.50 per share to existing Whitehaven Shareholders;
- the equity contribution of A$150 million cash into Boardwalk by the Boardwalk Securityholders. This will be used to repay existing Boardwalk debt. The remainder is cash available for development;
- the acquisition of Boardwalk for 85.89 million Whitehaven Shares and 34.02 million Milestone Shares as described in Section 5.8.1;
- the acquisition of Aston by Whitehaven through the issuance of 1.89 Whitehaven Shares for each Aston Share as described in this Scheme Booklet, as well as the issuance of Whitehaven Shares and options in consideration for Aston performance rights and options outstanding as described in Section 2.14; and
- the inclusion of transaction costs associated with the above transactions.

Pro Forma Financial Information

This Section contains the Pro Forma Financial Information for the Merged Group, reflecting the combined businesses of Aston, Whitehaven and Boardwalk. The Pro Forma Financial Information is presented to provide Aston Shareholders with an indication of the Merged Group's statement of financial position if the Merger occurred as at 31 December 2011, subsequent to the payment of the Special Dividend and the acquisition of Boardwalk by Whitehaven in accordance with the terms of the Boardwalk Transaction Documents.

However, the Boardwalk Transaction Documents contain various conditions precedent that need to be satisfied, including the approval of the Whitehaven Shareholders in accordance with Listing Rule 7.1. Whitehaven Shareholders representing approximately 43% of total Whitehaven Shares on issue have indicated that they intend to vote in favour of the resolution. Whilst the board of Whitehaven is confident that the conditions precedent to the acquisition of Boardwalk will be satisfied, there is no guarantee that the Whitehaven Shareholders will approve the acquisition or that the conditions precedent will be satisfied. Accordingly, the Pro Forma Financial Information of the Merged Group excluding Boardwalk is also outlined below to provide Aston Shareholders with an indication of the Merged Group's assets and liabilities if the acquisition of Boardwalk by Whitehaven does not occur.

Pro forma Merged Group statement of financial position – 31 December 2011

AUD ($'000)	Whitehaven	Aston	Boardwalk	Pro forma adjustments (including Boardwalk)	Pro forma Statement of financial position (including Boardwalk)	Pro forma adjustments (excluding Boardwalk)	Pro forma Statement of financial position (excluding Boardwalk)
Current assets							
Cash and cash equivalents	103,523	122,573	739	33,416	**260,251**	(57,930)	**168,166**
Trade and other receivables	61,790	6,141	760	–	**68,691**	–	**67,931**
Inventories	33,280	–	–	–	**33,280**	–	**33,280**
Investments	17,534	–	–	–	**17,534**	–	**17,534**
Current tax receivable	21,910	–	–	–	**21,910**	–	**21,910**
Deferred stripping	78,208	–	–	–	**78,208**	–	**78,208**
Derivative financial instruments	15,183	–	–	–	**15,183**	–	**15,183**
Total current assets	**331,428**	**128,714**	**1,499**	**33,416**	495,057	**(57,930)**	**402,212**
Non-current assets							
Trade and other receivables	6,361	3,582	–	–	**9,943**	–	**9,943**
Investments	1,210	–	19,069	–	**20,279**	–	**1,210**
Property, plant and equipment	1,023,870	602,462	33,552	1,153,612	**2,813,496**	1,153,612	**2,779,944**
Exploration and evaluation	12,457	–	13,562	365,684	**391,703**	–	**12,457**
Intangible assets	51,423	2,911	–	–	**54,334**	–	**54,334**
Total non-current assets	**1,095,321**	**608,955**	**66,183**	**1,519,296**	3,289,755	**1,153,612**	**2,857,888**
Total assets	**1,426,749**	**737,669**	**67,682**	**1,552,712**	3,784,812	**1,095,682**	**3,260,100**
Current liabilities							
Trade payables and other payables	73,461	13,600	22,729	–	**109,790**	–	**87,061**
Interest-bearing loans and borrowings	49,572	37	–	–	**49,609**	–	**49,609**
Employee benefits	10,018	519	596	–	**11,133**	–	**10,537**
Current tax payable	–	43,849	–	–	**43,849**	–	**43,849**
Deferred income	607	–	–	–	**607**	–	**607**
Derivative financial instruments	3,102	–	–	–	**3,102**	–	**3,102**
Provisions	1,395	–	–	–	**1,395**	–	**1,395**
Total current liabilities	**138,155**	**58,005**	**23,325**	–	219,485	–	**196,160**
Non-current liabilities							
Trade and other payables	–	1,275	–	–	**1,275**	–	**1,275**
Interest-bearing loans and borrowings	197,794	83	58,810	189,159	**445,846**	247,969	**445,846**
Deferred tax liabilities	38,122	34,455	–	(23,734)	**48,843**	(51,833)	**20,744**
Provisions	35,526	–	–	13,357	**48,883**	–	**35,526**
Total non-current liabilities	**271,442**	**35,813**	**58,810**	**178,782**	544,847	**196,136**	**503,391**
Total liabilities	**409,597**	**93,818**	**82,135**	**178,782**	764,332	**196,136**	**699,551**
Net assets	**1,017,152**	**643,851**	**(14,453)**	**1,373,930**	3,020,480	**899,546**	**2,560,549**
Equity							
Issued capital	591,596	543,206	294	1,693,833	**2,828,929**	1,232,545	**2,367,347**
Share-based payments reserve	26,429	27,914	–	(24,042)	**30,301**	(24,042)	**30,301**
Hedge reserve	8,456	–	–	–	**8,456**	–	**8,456**
Option reserve	–	–	–	34,650	**34,650**	34,650	**34,650**
Retained earnings/(accumulated losses)	390,671	72,731	(14,747)	(330,511)	**118,144**	(343,607)	**119,795**
Total equity attributable to parent	**1,017,152**	**643,851**	**(14,453)**	**1,373,930**	3,020,480	**899,546**	**2,560,549**

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As the Merger will be effected at a future date, the ultimate statement of financial position of the Merged Group post implementation will differ from that presented above.

The pro forma adjustments are outlined below:

AUD ($'000)	Special Dividend (note 1)	Boardwalk financing (note 2)	Acquisition of Boardwalk (note 3)	Acquisition of Aston (note 4)	Pro forma adjustments (including Boardwalk)	Pro forma adjustments (excluding Boardwalk)
Current assets						
Cash and cash equivalents	–	95,710	(4,364)	(57,930)	**33,416**	**(57,930)**
Total current assets	**–**	**95,710**	**(4,364)**	**(57,930)**	**33,416**	**(57,930)**
Non-current assets						
Property, plant and equipment	–	–	–	1,153,612	**1,153,612**	**1,153,612**
Exploration and evaluation assets			365,684	–	**365,684**	**–**
Total non current assets	**–**	**–**	**365,684**	**1,153,612**	**1,519,296**	**1,153,612**
Total assets	**–**	**95,710**	**361,320**	**1,095,682**	**1,552,712**	**1,095,682**
Non-current liabilities						
Interest-bearing loans and borrowings	247,969	(58,810)	–	–	**189,159**	**247,969**
Deferred tax liabilities	–	–	28,099	(51,833)	**(23,734)**	**(51,833)**
Provisions	–	–	13,357	–	**13,357**	**–**
Total non-current liabilities	**247,969**	**(58,810)**	**41,456**	**(51,833)**	**178,782**	**196,136**
Total liabilities	**247,969**	**(58,810)**	**41,456**	**(51,833)**	**178,782**	**196,136**
Net assets	**(247,969)**	**154,520**	**319,864**	**1,147,515**	**1,373,930**	**899,546**
Equity						
Issued capital	–	155,362	305,926	1,232,545	**1,693,833**	**1,232,545**
Share-based payments reserve	–	–	–	(24,042)	**(24,042)**	**(24,042)**
Option reserve	–	–	–	34,650	**34,650**	**34,650**
Retained earnings/(accumulated losses)	(247,969)	(842)	13,938	(95,638)	**(330,511)**	**(343,607)**
Total equity attributable to parent	**(247,969)**	**154,520**	**319,864**	**1,147,515**	**1,373,930**	**899,546**

Note 1

Represents the payment of the A$0.50 Special Dividend to Whitehaven Shareholders. The Special Dividend will be paid immediately prior to implementation of the Merger and will be funded through a draw down on Whitehaven's existing debt facilities.

Note 2

Represents the effect of the following transactions:

- the partial conversion of Boardwalk debt into equity (A$5.3 million); and
- the equity contribution of A$150 million in cash into Boardwalk from existing Boardwalk Securityholders. This contribution is to be made by BRI or its nominees or such other existing Boardwalk Securityholders as are procured by BRI to provide some or all of such equity contribution. The funds will be used to repay existing Boardwalk debt, with the remainder available for use to fund exploration and development activities.

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Note 3

The acquisition accounting for Boardwalk has been determined on a provisional basis as permitted under AASB 3: Business Combinations. The fair value of the consideration paid, the assets acquired and liabilities assumed by Whitehaven have been determined based on preliminary fair value estimates as at 31 December 2011, which will be different to the ultimate fair values at the Implementation Date and may be adjusted at any time within 12 months of the acquisition date in accordance with AASB 3.

The provisional purchase price allocation is as follows:

Fair value of consideration paid:		**AUD ($'000)**
Initial consideration (85.89 million Whitehaven Shares)	(a)	392,962
Contingent consideration (up to 34.02 million Whitehaven Shares)	(a),(b)	98,028
Total fair value of consideration paid		**490,990**
Fair value of net assets acquired		
Existing book value of Boardwalk net assets as at 31 December 2011		(14,453)
Conversion of debt to equity prior to acquisition (refer note 2)		5,362
Cash injection (note 2)		150,000
Accelerated amortisation of loan fees		(842)
Pre acquisition Boardwalk transaction costs		(1,404)
Adjusted Boardwalk net book value		**138,663**
Fair value adjustments:		
– Royalty liability		(13,357)
– Fair value uplift allocated to acquired exploration properties		365,684
Total fair value of net assets acquired		**490,990**

(a) Assumes the fair value of Whitehaven Shares for the purpose of determining the consideration paid of A$4.58, based on the share price of Whitehaven as at 31 December 2011 (A$5.29) adjusted for the payment of the Special Dividend (A$0.50) and the value of the associated franking credit (A$0.21).

(b) Contingent consideration has been measured at fair value in accordance with AASB 3: Business Combinations. The determination of fair value includes an assessment of the probability that the Milestone Shares will ultimately vest and factors in a discount as the Milestone Shares cannot be traded until they vest.

In addition, A$2.0 million (A$1.4 million net of tax) transaction costs have been adjusted to retained earnings representing the estimated stamp duty payment on the acquisition of the Boardwalk shares.

As indicated in the above purchase price allocation, the fair value allocated to Boardwalk's exploration properties, being Sienna, Dingo, Ferndale and Monto, is A$365.7 million in aggregate, being the difference between the fair value of the purchase price, including the Milestone Shares, and the value allocated to non-exploration assets and liabilities. As this transaction has not yet completed and given the high degree of subjectiveness inherent in valuing early stage mineral properties, this allocation is considered preliminary. This preliminary allocation is based on work undertaken by Whitehaven and its accounting and technical advisers.

It should be noted that this preliminary allocation is greater than the value as assessed by the Independent Expert, details of which are set out in Section 8 of this Scheme Booklet. The preliminary allocation used in the Pro Forma Financial Information reflects Whitehaven's view that the exploration properties have higher values than those determined by the Independent Expert. Whitehaven has taken a commercial view of the tenements and the likelihood of their successful development under the Merged Group's ownership. In arriving at this view, Whitehaven has undertaken detailed due diligence on the Boardwalk assets, their quality, location, proximity to existing mines and infrastructure and the overall benefits to shareholders of adding a portfolio of exploration assets to the expanded Merged Group. The actual values that will be recognised in the financial statements of Whitehaven will only become known once the acquisition has occurred and following a detailed analysis by the company based on information available at that time. Whitehaven management has 12 months from the date of acquisition to finalise these estimates and allocations.

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Note 4

The acquisition accounting for Aston has been determined on a provisional basis as permitted under AASB 3: Business Combinations. The fair value of the consideration paid, assets acquired and liabilities assumed by Whitehaven have been determined based on preliminary fair value estimates as at 31 December 2011 which will be different to the ultimate fair values at the Implementation Date and may be adjusted at any time within 12 months of the acquisition date in accordance with AASB 3.

The provisional purchase price allocation is as follows:

Fair value of consideration paid:		AUD ($'000)
Consideration paid to current Aston Shareholders	(a)	1,769,997
Consideration paid to Aston performance right holders	(a)	5,754
Consideration paid to Aston optionholders	(b)	34,650
Total fair value of consideration paid		**1,810,401**
Fair value of net assets acquired		
Existing book value of Aston net assets as at 31 December 2011		643,851
Pre acquisition Aston transaction costs		(21,517)
Derecognition of deferred tax liability due to tax step up		34,455
Adjusted Aston net book value		**656,789**
Fair value adjustments:		
– Mineral reserves (included in property, plant and equipment)		1,153,612
Total fair value of net assets acquired		**1,810,401**

(a) Assumes the fair value of Whitehaven Shares for the purpose of determining the consideration paid of A$4.58 based on the share price of Whitehaven as at 31 December 2011 (A$5.29) adjusted for the payment of the Special Dividend (A$0.50) and the value of the associated franking credit (A$0.21).

(b) The pro forma assumes that Aston option holders will receive equivalent new Whitehaven options. The fair value of the new Whitehaven options has been assessed based on a Black Scholes option pricing model using the theoretical Whitehaven Share price of A$4.58 referred to in (a) above.

In addition, A$17.3 million (A$12.1 million net of tax) of Whitehaven transaction costs have been adjusted to retained earnings representing estimated stamp duty and adviser fees.

Forecast financial information for the Merged Group

Aston and Whitehaven have given careful consideration as to whether a reasonable basis exists to produce reliable and meaningful forecast financial information. The Aston and Whitehaven Directors have concluded that, as at the date of this Scheme Booklet, it would be misleading to provide forecast financial information, as a reasonable basis does not exist for providing forecasts that would be sufficiently meaningful and reliable as required by applicable law, policy and market practice.

The financial performance of the Merged Group in any period will be influenced by various factors that are outside the control of the directors and that cannot, at this time, be predicted with a high level of confidence. In particular, the financial performance of the Merged Group will be materially affected by:

- prevailing contract prices that will be settled for thermal and metallurgical coal;
- prevailing exchange rates, especially the A$:US$ exchange rate, which are subject to material change from time to time;
- the timing and level of production;
- the costs related to exploration, development and operating activities;
- the degree to which port and rail constraints will constrain export volumes; and
- the timing of individual ship sailings, particularly such sailings which are close to the end of the relevant period.

Aston and Whitehaven do not have an established practice of issuing financial forecasts given the potential impact of the considerations shown above.

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7 RISK FACTORS

7. RISK FACTORS

7.1. Operating risks

There are a number of factors, both specific to the Merged Group and of a general nature, which may, either individually or in combination, affect the future operating and financial performance and/or financial position of the Merged Group, its prospects, and/or the value of the Merged Group's shares. A significant number of these operating risks are, or will be, matters that will be relevant to Aston whether or not the Scheme is approved. Many of the circumstances giving rise to these risks are beyond the control of the Merged Group, the directors, and the Merged Group's management.

This Section describes certain specific areas that are believed to be the major risks associated with investment in the Merged Group. Aston Shareholders and Whitehaven Shareholders should note that this Section does not contain an exhaustive list of the risks associated with the Merged Group and the information set out here should be considered in conjunction with other information disclosed in this Scheme Booklet. Aston Shareholders should have regard to their own investment objectives and financial circumstances, and should consider seeking professional guidance from their accountant, stockbroker, lawyer or other independent professional adviser before deciding whether to vote in favour of the Scheme.

Development

The information provided in this Scheme Booklet in relation to the current estimate of Resources and Reserves, and capital and operating costs, is determined from geological data obtained from drill holes and other exploration techniques and studies conducted to date. Further exploration may result in changes to the size and quality of Reserves and the estimated costs of recovering coal from the projects, affecting the viability of those projects.

There is a risk that circumstances (including unforeseen circumstances) may cause:

- an inability to acquire an expected stake in a project; or
- a delay to project development, exploration milestones or other operating factors, resulting in the receipt of revenue at a later date than expected or not at all.

Additionally, the construction of new projects/expansion by the Merged Group may exceed the currently envisaged timeframe or cost for a variety of reasons outside of the control of the Merged Group. These may include delays in obtaining land use approvals or in the construction of mine infrastructure. The contractual terms for the procurement and delivery of various components necessary for planned expansions including any related infrastructure requirements are yet to be established. There are many milestones which need to be met in a timely fashion for production to commence at any projects currently in the pre-development or development stages as per the Merged Group's mine plan and there is a risk that circumstances (including unforeseen circumstances) may cause delay, resulting in the receipt of revenue at a later date than expected or not at all.

Although the Merged Group has an established coal production, development and exploration business, its future value is materially dependent on the success or otherwise of the Merged Group's activities which are directed towards development and exploration of new coal deposits. In particular:

- Whitehaven plans to ramp up production at the Narrabri mine and develop Vickery assets (noting that Whitehaven Shareholders are already exposed to this risk through their ownership of Whitehaven Shares);
- Aston's continued development of Maules Creek (noting that Aston Shareholders are already exposed to this risk through their ownership of Aston Shares); and
- the Merged Group's development of other exploration assets (noting Boardwalk's farm-in obligations in relation to the Ferndale and Dingo projects as referred to in Section 5.8.7).

Although the rewards can be substantial, there is no guarantee that future exploration on tenements for which the Merged Group collectively has exploration permits and licences will lead to commercial discovery or, if there is such discovery, that the Merged Group will be able to develop it economically. There is also a risk that if the Merged Group is unable to meet its farm-in obligations it will risk losing its exploration licence. Further information about the Merged Group's farm-in obligations is set out in Section 5.8.7. Future developments are dependent on whether mining leases can be obtained to recover coal from current or future development and exploration projects. Factors affecting the ability to obtain those mining leases include (but are not limited to) native title, impacts on the environment and objections from people and entities with interests located close to the proposed mining leases. Development of any future Resources will also be dependent on the exploration and appraisal programs gaining all necessary approvals by government authorities.

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Operations

The Merged Group's coal mining operations will be subject to operating risks that could result in decreased coal production which could reduce its revenues. Operational difficulties may impact the amount of coal produced at its coal mine, delay coal deliveries or increase the cost of mining for a varying length of time. Such difficulties include (but are not limited to) weather (including flooding) and natural disasters, unexpected maintenance or technical problems, failure of key equipment, depletion of the Merged Group's Reserves, increased or unexpected reclamation costs and interruptions due to transportation delays. Other difficulties may arise as a result of variations in mining conditions from those projected from drilling, such as variations in coal seam thickness and quality, variations in the Strip Ratio, variations in rock and other natural materials, variations in geological conditions and the actions of any contractor engaged by the Merged Group to operate Maules Creek (including any breach of contract or other action outside the control of the Merged Group).

These unforeseen geological and operating difficulties could cause a loss of revenue due to lower production than expected, higher operating and maintenance costs and/or ongoing unplanned capital expenditure to meet coal production targets.

A failure to obtain access (whether under a contractual arrangement or otherwise) to an adequate supply of capital equipment (including excavators, shovels, haul trucks and rolling stock) or consumables (including ammonia nitrate, explosives and other materials required for explosives) for use in the Merged Group's operations could result in delays to the commencement of operations at a project, and/or reduced production rates, and/or increased costs.

It is common in new mining operations to experience unexpected problems and delays during development, construction and mine start-ups which delay the commencement of mineral production. Accordingly, there is no assurance that the Merged Group's future exploration and development activities will develop into profitable mining operations.

Production and capital costs

The Merged Group's business operations and financial condition may vary with fluctuations in production and capital costs. The Merged Group's main production expenses are expected to be contractor costs, materials (including fuel, explosives and mining consumables), personnel costs and energy. The Merged Group contemplates that certain capital expenditures will be made in US dollars. Changes in the costs of the Merged Group's mining and processing operations as well as its capital costs could occur as a result of unforeseen events, including international and local economic and political events (including movement in exchange rates), and could result in changes in Reserve estimates. Many of these factors may be beyond the Merged Group's control. In addition, some of the capital cost estimates are based on conceptual engineering design and there may be a material change to the estimates once final engineering has been completed. In past resource cycles, operating and capital costs have tended to increase as commodity prices have increased. Thus, the Merged Group may be faced with higher than currently expected operating and capital costs in the future.

Financing risks

Impact on existing financing arrangements

Implementation of the Scheme will trigger a number of provisions (such as change of control provisions) in the Aston Senior Syndicated Facility Agreement dated 15 July 2011 and the Boardwalk Senior Facilities Agreement dated 28 January 2011, giving rise to financier termination rights which may require the early repayment of those facilities. Such termination rights may arise unless approval from the relevant financiers is obtained or the facilities are repaid or refinanced.

In addition, the current finance arrangements of Whitehaven will require Aston and/or Boardwalk to accede as guarantors. In order to accede as a guarantor, Aston and Boardwalk will need to:

- obtain the consent from their financiers under, as applicable, the Aston Senior Syndicated Facility Agreement dated 15 July 2011 or the Boardwalk Senior Facilities Agreement dated 28 January 2011, or otherwise repay, refinance or cancel the facilities; and
- if necessary, complete a financial assistance whitewash in accordance with the Corporations Act.

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If approval from the relevant financiers is not obtained or the facilities are not repaid or refinanced, the accession by Aston and/or Boardwalk under the Whitehaven facility will trigger termination rights under the relevant facility.

Aston understands that Whitehaven has in place existing financing arrangements under which, subject to the terms of those arrangements including conditions precedent to drawing normal for finance facilities, Whitehaven has the capacity to repay or refinance the Boardwalk facility provided under the Senior Facilities Agreement dated 28 January 2011 and the Aston facilities provided under the Aston Senior Syndicated Facility Agreement dated 15 July 2011.

Further, Aston understands that it is a condition subsequent under some of Whitehaven's existing financing arrangements that the Boardwalk facility provided under the Senior Facilities Agreement dated 28 January 2011 and the Aston facilities provided under the Aston Senior Syndicated Facility Agreement dated 15 July 2011 are to have been repaid and all commitments under them cancelled within 30 days of the Implementation Date.

In acceding as guarantors, Aston and Boardwalk will become liable for the amounts due under Whitehaven's financing arrangements, their assets and operations restricted by the representations and undertakings to be given by them under those documents.

Post implementation of the Scheme and any accession to Whitehaven's debt facilities, Aston will be part of the Whitehaven Group and will therefore be impacted upon by Whitehaven's compliance with its existing and future financing arrangements. This will include continuing compliance by Whitehaven with its gearing and other financial covenants and compliance with any negative covenants as to financial indebtedness and the granting of security interests. A breach of such obligations under the Whitehaven facility may lead to the termination of these facilities which could have an adverse impact on the Merged Group to the extent it relies on those facilities for its funding requirements.

Following any such default, a demand made under a guarantee by Aston may request its winding up or any of its subsidiaries and a sale of its assets upon enforcement of any security by Whitehaven's lenders may result in a return to Aston (and ultimately its shareholders) significantly lower than could have been achieved by Aston had those assets been sold in the ordinary course of business or had Aston continued trading.

Other financing considerations

Existing credit facilities and internally-generated funds may not be sufficient for expenditure that might be required for acquisitions, new projects and developments, further exploration and feasibility studies. The Merged Group may need to raise additional debt or equity funds in the future. There is no assurance that the Merged Group will be able to obtain additional debt or equity funding when required, or that the terms associated with that funding will be acceptable to the Merged Group and this may have a material adverse effect on the Merged Group.

Securing funding for projects or other forms of financing for operations may depend on a number of factors, including commodity prices, interest rates, economic conditions, debt market conditions, share market conditions and country risk issues. Inability to obtain financing or refinancing or other factors could cause delays in developing properties or increase financing costs and, thus, adversely affect the financial condition and performance of the Merged Group.

If current funding alternatives, including the proposed sale of 10% of Maules Creek to J-Power, do not eventuate or are insufficient, the Merged Group may need to raise additional debt and/or equity to reduce the scope of its anticipated development, which could adversely affect its business, financial condition and operating results, and its ability to continue as a going concern or its ability to pay its debts as and when they fall due. Any additional equity financing may be dilutive to shareholders, and debt financing (including lease financing of equipment), if available, may involve restrictions on financing and operating activities. There is no assurance that the Merged Group will be able to obtain or access additional funding when required, or that the terms associated with that funding will be acceptable or favourable to the Merged Group or permissible given any legal restrictions. In such circumstances, if the Merged Group is unable to secure refinancing, or refinancing on favourable terms, this may have a material adverse effect on the Merged Group.

The Merged Group's ability to secure funding in amounts sufficient to meet its financial needs could be adversely affected by many factors beyond its control, including but not limited to, economic conditions and the state of the capital markets. If the Merged Group is unable to raise the necessary funds, it will

have to revise its planned capital expenditure and may be required to reduce the scope of its anticipated activities. Such possible reduction could adversely affect the Merged Group's ability to complete the development and maintain ongoing production.

The Merged Group's ability to service its debt will depend on its future performance and cash flows, which will be affected by many factors, some of which are beyond the Merged Group's control. Any inability of the Merged Group to service its existing debt would have a material adverse effect on the Merged Group.

Whitehaven will be required to provide new or increased guarantees to:

- the Department of Primary Industries (NSW) environmental rehabilitation bond for various expansion and development projects;
- PWCS, annually in August of each year, due to changes in handling costs and fees;
- NCIG, on changes in capacity entitlement or handling costs and fees; and
- secure below rail access from ARTC.

Aston expects it will be required to enter into guarantees to secure, amongst other things:

- PWCS port allocation, annually in August of each year;
- below rail access from ARTC; and
- environmental rehabilitation bond for Maules Creek provided to the NSW Department of Trade and Investment, Regional Infrastructure Services.

Hedging

Both Aston and Whitehaven have historically sought to ameliorate the potential adverse consequences of exchange rate fluctuations. The Merged Group is also likely to attempt to ameliorate any adverse consequences of exchange rate fluctuations and currency risk on sales, purchase, demurrage and other transactions that are denominated in another currency other than the respective functional currency of the Merged Group, the Australian dollar, through hedging arrangements. However, there can be no assurance that the Merged Group will be able to hedge its exchange rate exposure successfully or that it will be able to hedge such exposure at a satisfactory cost.

Failure to enter into, or reliance on major customers for, sales/off-take

The Merged Group's thermal and metallurgical coal contracts are held with a number of major North-Asian end user consumers along with some coal traders (which include Noble) and other coal producers. These contracts typically have a term of greater than one year. The Merged Group is exposed to the volatility in the coal market beyond the term of these contracts.

Regarding new and future coal sales agreements and other off-take arrangements, the Merged Group may depend upon a small number of large customers, the loss of any of which, or inability to collect payment from, could adversely affect the Merged Group results of operations and financial condition. Furthermore, the Merged Group's ability to receive payment for coal sold and delivered depends on the continued creditworthiness of its customers. If the Merged Group is unable to collect payments from any of these customers, the Merged Group's financial condition and results of operations could be materially adversely affected.

Infrastructure

Coal produced from the Merged Group's mining operations is intended to be transported to customers by a combination of road, rail and sea. A number of factors could disrupt these transport services, including any failure of infrastructure providers to increase capacity in order to meet future export requirements, key equipment and infrastructure failures, weather-related problems and industrial action, thereby impairing the Merged Group's ability to supply coal to customers.

Rail and port capacity is obtained through long-term contract arrangements with service providers. In most cases these contracts include take-or-pay provisions which require payment of all rail and shipping charges irrespective of whether the service is used or whether sufficient capacity is available for all contracted entitlement to be used. In the event utilised capacity is below contracted capacity, there is a risk the Merged Group will be required to pay take-or-pay charges for capacity which it is unable to use.

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The Merged Group will be one of many users of the PWCS and NCIG terminals at the port of Newcastle. Any unexpected delay in the construction of the various stages of the respective terminal expansions, or insufficient terminal capacity allocation at either or both terminals may have a material adverse effect on the Merged Group. The Merged Group will need to secure further capacity on the rail and port systems from existing users or these systems would need to be increased in order for the Merged Group to secure sufficient capacity to meet its proposed mine plan requirements. There is no assurance that such additional required capacity will be secured or secured in the timeframe contemplated by the Merged Group's mine plan which may have a material adverse effect on the Merged Group.

There is a possibility that the Merged Group may not secure capacity from existing users or that a capacity increase may not occur on either the rail system or the port system or both. In addition, the Merged Group's capacity allocation through either terminal may be adversely affected by decisions, rulings or judgements by governmental or quasi governmental bodies (including courts or the Australian Competition and Consumer Commission), government regulations or by the actions of third parties.

ARTC has identified that considerable increases in capacity will be needed to accommodate growth on the single-track Muswellbrook – Werris Creek – Narrabri line. Existing or prospective rail users may seek to, or may be asked to, fund infrastructure which creates additional capacity on the Gunnedah Rail System. ARTC has previously indicated that any project implemented to address rail capacity constraints (including the Liverpool Range bottleneck) will require upfront investment from producers via a special purpose vehicle or long-term contractual commitments to underpin ARTC's funding arrangements. Further, pursuant to the terms of the current ARTC Access Undertaking, ARTC will only negotiate track access rights with a producer, once that producer has contracted exit port capacity, to ensure alignment of contracted track capacity with port capacity. The Merged Group will be required to negotiate sufficient port capacity prior to being in a position to negotiate with ARTC regarding any required future rail capacity to meet the Merged Group's proposed mine plan requirements.

Although the Merged Group holds interests in a significant portion of the required surface land, the Merged Group does not hold a relevant interest in all of the surface land connecting their assets to water sources, roads and rail infrastructure. The Merged Group will need to maintain arrangements with the owners of the surface land connecting the nearby highway and the main north-south railway line to the proposed mine site at Maules Creek as well as the Lower Namoi Regulated River Water Source and other relevant land in relation to access, development and use of that land.

Geology and estimation of Resources and Reserves

The volume and quality of the coal the Merged Group recovers may be less than the estimates included in this Scheme Booklet. Resource and Reserve estimates (including those contained in this Scheme Booklet) are stated to the JORC Code and are expressions of judgement based on knowledge, experience and industry practice. There are risks associated with such estimates, including that coal mined may be of a different quality, tonnage or Strip Ratio from those in the estimates. Resource and Reserve estimates are necessarily imprecise and depend to some extent on interpretations and geological assumptions, coal prices, cost assumptions, and statistical inferences which may ultimately prove to have been unreliable.

Consequently, Reserve and Resource estimates are often regularly revised based on actual production experience or new information and could therefore be expected to change. Furthermore, should the Merged Group encounter mineralisation or formations different from those predicted by past drilling, sampling and similar examinations, Reserve and Resource estimates may have to be adjusted and mining plans, coal processing and infrastructure may have to be altered in a way that might adversely affect the Merged Group's operations. Moreover, a decline in the price of coal, stabilisation at a price lower than recent levels, increases in production costs, decreases in recovery rates or changes in applicable laws and regulations, including environment, permitting, title or tax regulations, that are adverse to the Merged Group, may mean the volumes of coal that the Merged Group can feasibly extract may be significantly lower than the Reserve and Resource estimates indicated in this Scheme Booklet. If it is determined that mining of certain of the Merged Group's Reserves has become uneconomic, this may ultimately lead to a reduction in the Merged Group's aggregate Reserves.

If the Merged Group's actual Resources and Reserves are less than current estimates, the Merged Group's prospects, value, business, results of operations and financial condition may be materially adversely affected.

Certain projects of the Merged Group will focus on exploration activities. The exploration potential of these projects currently has insufficient sampling at this time to define Resources and it is uncertain how much of the potential will be converted to Resources with further drilling. The potential quantity and quality of the Exploration Targets for these projects is conceptual in nature since there has been insufficient work completed to define them beyond Exploration Targets and it is uncertain if further exploration will result in the determination of a Resource.

Tenements and permits

There is a risk that NSW Trade and Investment may not grant a renewal of the Merged Group's current tenements and permits or that additional conditions may be added to any renewal granted which could restrict the Merged Group's ability to conduct its mining operations.

Overlapping tenements

The tenements held by the Merged Group are subject to overlapping petroleum exploration licences, an application for an overlapping exploration permit and other exploration interests. Overlapping tenements could potentially be incompatible with the future development of the Merged Group's projects because both the Merged Group and the relevant petroleum exploration licence or other exploration licence holders could potentially seek to undertake their respective activities on the overlapping area or the same resource seams. There is a risk that if a co-operation agreement cannot be entered into with the overlapping tenement holders and the matter is referred to the New South Wales Land and Environment Court or the Minister, then an adverse order may be made.

Water and power

Water is used in coal mining operations for various purposes, the main uses being for dust suppression on mine sites and for coal washing at the Merged Group's CHPP operations. The Merged Group currently holds a number of water access licences, however, there may not be sufficient water to undertake development as contemplated by the Merged Group's mine plan. In addition, in the future, due to factors such as climate (including drought), changes in allocations or government policy, continuing access to water cannot be guaranteed. There is also a risk that the Merged Group may have excess water at times which may result in dam overflow and discharge and potentially breach the terms of the Merged Group's environmental consents.

The Merged Group will require access to a power source and water pipeline sufficient to permit the conduct of the mining activities. Any failure to procure such infrastructure would limit the Merged Group's ability to carry out its business in accordance with the mine plan.

High demand for input production factors

Due to the increased demand for most mineral commodities experienced over the last few years, there has been significant demand for many mining and processing inputs. The Merged Group, like most other mining and processing operations worldwide, may face shortages and delays in the procurement of some required parts and supplies. These market pressures have been reflected in the cost and availability of certain inputs. The Merged Group cannot guarantee that no equipment will be rendered inoperative due to lack of parts supply, or that there will be no other adverse effects from the Merged Group's inability to obtain other mining and processing inputs in a timely manner.

Insurance coverage

Aston does not yet have insurance coverage in place against flood or other natural disasters. As a consequence, the Merged Group's insurance coverage with respect to its operations may be inadequate and the occurrence of a significant event could adversely affect the Merged Group's business, results of operations and financial condition. In addition, the Merged Group may incur liabilities to third parties (in excess of any insurance cover or statutory reserves) arising from negative environmental impacts or other damages or injury. There is a risk of an occurrence of a significant event leading to losses that are not fully covered by insurance.

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Shortage of skilled labour and industrial action

A shortage of skilled labour in the Australian mining industry could result in the Merged Group having insufficient employees or contractors to operate its business, which could adversely affect the Merged Group's business, results of operations and financial condition. Specifically, the Narrabri underground mining operations require a more specialised workforce which is sourced from a smaller base of employees and contractors. Challenges in sourcing the necessary labour have previously contributed to and continue to cause delays in the ramp-up of the underground longwall mining operation at Narrabri and operations at this mine therefore remain subject to a greater risk of delay or disruption than the Merged Group's other operations.

Similarly, industrial action by the Merged Group's (future) employees or mining contractors' employees could disrupt operations (e.g. employees covered by industrial agreements may take protected industrial action (e.g. strike) once these agreements pass their nominal expiry date). None of the current Whitehaven industrial agreements have passed their nominal expiry dates.

The Merged Group depends on a large number of contracted personnel. There is a risk that contracted personnel fail to perform their contractual obligations and that the Merged Group is unable to find suitable replacement contractors. While the situation is normal for the mining and exploration industry, problems caused by third parties may arise which have the potential to impact on the performance of the Merged Group.

Dependence on key personnel

The loss of key personnel and the failure to recruit sufficiently qualified staff could affect the Merged Group's future performance. The Merged Group has entered into employment contracts with a number of key personnel whose expertise and experience in the mining industry are important to the continued development and operation of its mining interests.

Due to management's experience and the important role they have taken in developing the Merged Group's mining, business and financial plans, the Merged Group could be adversely affected if any of them ceased to actively participate in the management of the Merged Group or left the Merged Group entirely. There may be a limited number of persons with the requisite experience and skills to serve in the Merged Group's senior management positions if existing management leave the Merged Group.

If the Merged Group cannot attract, train and retain qualified managers, the Merged Group may be unable to successfully manage its growth or otherwise compete effectively in the Australian coal industry.

Reliance on third parties

Through the Merged Group's participation in joint ventures and its use of contractors and other third parties for exploration, mining and other activities, it is reliant on others for the success of its current operations, development projects and exploration assets. While the situation is normal for the mining and exploration industry, problems caused by third parties may arise which have the potential to impact on the performance of the Merged Group.

Subject to relevant joint venture agreements, the Merged Group cannot control the actions of joint venturers, and therefore, cannot guarantee that joint ventures will be operated or managed in accordance with the Merged Group's preferred direction or strategy.

Hazardous materials

The Merged Group's operations may substantially impact the environment or cause exposure to hazardous materials. The Merged Group will use hazardous materials and will generate hazardous waste. The Merged Group may be subject to common law claims, natural resource damages, and other damages as well as the investigation and clean-up of soil, surface water, groundwater, and other media. Such claims may arise, for example, out of current or former activities at sites that the Merged Group owns or will operate. Mining operations can also impact flows and water quality in surface water bodies and remedial measures may be required, such as lining of stream beds, to prevent or minimise such impacts.

These and other impacts that the Merged Group's operations may have on the environment, as well as exposures to hazardous substances or wastes associated with the Merged Group's operations and environmental conditions at the Merged Group's properties, could result in costs and liabilities that would have a material adverse impact on the financial position and operating results of the Merged Group.

Title

The Merged Group's properties and mineral claims (whether held by or on behalf of the Merged Group or by joint venturers) may be subject to prior unregistered agreements or transfers and title may be affected by undetected defects. Accordingly, other parties could possibly dispute the Merged Group's title to its mining rights and other interests, which if successful may have a material adverse impact on the financial position and operating results of the Merged Group.

7.2. Market risks

Coal prices and demand

The Merged Group's profits are expected to be derived from the production and sale of coal. In developing its mine plan, the Merged Group has made certain assumptions regarding coal prices and demand for coal. The price which the Merged Group will receive for its coal depends on numerous factors and accordingly, some or all of the Merged Group's underlying assumptions may materially change and actual coal prices and demand may differ materially to those expected by the Merged Group.

The factors which affect coal prices and demand include the outcome of future sales contract negotiations, general economic activity, industrial production levels, changes in foreign exchange rates, changes in energy demand and demand for steel, changes in the supply of seaborne coal, changes in international freight rates or other transportation infrastructure and costs, the cost of other commodities and substitutes for coal, market changes in coal quality requirements and government regulation which restricts the use of coal, imposes taxation on the resources industry or otherwise affects the likely volume of sales or pricing of coal. All of these factors are out of the control of the Merged Group and may have a material adverse impact on coal prices and demand. There may be limited scope for the Merged Group to limit coal price risk in its coal sales contracts.

Exchange rates

The majority of the Merged Group's sales will provide for payment in foreign currencies (principally in US dollars). Most of the Merged Group's operating costs are denominated in Australian dollars. If the Australian dollar strengthens in value relative to the value of the US dollar, then, all other factors being equal, the Merged Group's financial results will be adversely affected due to the resultant lower Australian dollar receipts. The board will consider whether to manage currency fluctuation risk, by hedging the US dollars which it expects to receive under export contracts from Australia. However, there can be no assurance that the Merged Group will hedge its exchange rate exposure, that it will be able to hedge such exposure on acceptable terms in the future or that any exchange rate hedging conducted by the Merged Group will be effective or will not result in an adverse financial impact arising from the inability to benefit from a favourable movement in exchange rates.

Competition and substitution

Competition in the coal industry is based on many factors, including price, production capacity, coal quality and characteristics, transportation capability and costs, and brand name. The Merged Group faces competition from other Australian and international producers of coal. An increase in production or reduction in price of competing coals from both Australia and overseas may adversely impact the Merged Group's ability to sell its coal products and the price attained for sales. Increased competition in the future, including from new competitors, may emerge.

The development of new steel making technologies or practices may also lead to greater use of lower quality coals or other carbon sources in substitution for the metallurgical coals produced by the Merged Group. This could lower demand for, and the price of, the metallurgical coals produced by the Merged Group.

Marketing risk

Aston's marketing strategy is expected to be targeted at maximising the volume of coal sold as a semi-soft coking coal product. However, Aston's production volumes may impact the market price of semi-soft coking coal and, depending upon growth in the metallurgical coal market over time and/or changes in the price differential between metallurgical coal and high grade thermal coal, Aston may market a higher proportion of export thermal coal than is currently intended.

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7.3. Legal risks

Litigation

The Merged Group is exposed to risks of litigation which may have a material adverse effect on the Merged Group. As at the date of this Scheme Booklet, there are no current litigation matters that are considered material to the Merged Group's business.

Licences, permits and environment

There is a risk that necessary land use approvals, including:

- approval under Part 3A of the EPA Act;
- approval of projects with Strategic Cropping Land areas;
- approvals of projects within Urban Restricted Areas; and
- renewals of (or additional) mining leases, including in the case of the Maules Creek Project, the application for the renewal of CL375 and A346 which remain pending with the application for a mining lease within A346 for the proposed Northern Overburden Emplacement Area,

may not be granted, may be granted on terms not satisfactory to the Merged Group, or may be granted but not within the timeframes anticipated by the Merged Group. The Merged Group may be unable to obtain and renew permits and licences necessary for its operation or mining of specific coal deposits. Mining companies must obtain numerous permits issued by various governmental agencies and regulatory bodies that impose strict regulations on various environmental and safety matters in connection with coal mining. The permitting rules are complex and may change over time, making the Merged Group's ability to comply with the applicable requirements more difficult or even impossible, thereby precluding continuing or future mining operations. Private individuals and the public have certain rights to comment upon and otherwise engage in the permitting process, including through court intervention. Accordingly, the permits the Merged Group needs may not be issued, maintained or renewed, may not be issued or renewed in a timely fashion, or may involve requirements that restrict the Merged Group's ability to conduct its mining operations. An inability to conduct the Merged Group's mining operations pursuant to applicable permits would reduce the Merged Group's production, cash flow, and profitability. Another factor affecting future developments is successfully obtaining the grant of mining leases to recover coal from current or future exploration projects. No assurance can be given that current or future development and exploration will lead to mining operations. Environmental regulation of mining activities in New South Wales imposes significant obligations on mining companies in relation to pollution control during mining operations and rehabilitation on completion of them. Changes to environmental regulation or circumstances beyond the control of the Merged Group, such as drought or flood, may impact on the cost of meeting the Merged Group's environmental obligations.

Environmental and safety legislation may change in a manner that may require standards in addition to those now in effect, and a heightened degree of responsibility for companies and their directors and employees. There may also be unforeseen environmental liabilities resulting from coal related activities, which may be costly to remedy. In particular, the acceptable level of pollution and the potential abandonment costs and obligations for which the Merged Group may become liable as a result of its activities may be impossible to assess against the current legal framework.

Compensation

The Merged Group may also incur costs and liabilities resulting from claims for damages to property or injury to persons arising from the Merged Group's operations. The Merged Group must compensate employees for work-related injuries. If the Merged Group does not make adequate provisions or is otherwise not adequately insured for its workers' compensation liabilities and is pursued for such sanctions, costs and liabilities, the Merged Group's business, financial condition and results of operations could be adversely affected.

Native title

There is a risk that an existing Aboriginal land claim under the *Aboriginal Land Rights Act 1983* may be approved in relation to land within the pipeline and infrastructure corridors. If granted, the Merged Group may need to negotiate an appropriate access arrangement with the relevant Aboriginal land council.

Based on searches of the registers administered by the National Native Title Tribunal (**NNTT**) completed on 24 February 2012, certain mining tenements held by the Merged Group are covered by native title determination applications. In New South Wales, this is the Gomeroi Nation Native Title Determination Application. In Queensland, the claims are the Barada Barna, Wakka Wakka #4 and the Port Curtis Coral Coast Native Title Determination Application. Whilst it is not unusual for the area of a mining tenement to be covered by a Native Title claim, it may mean that the claimants are afforded certain procedural rights, such as to participate in the 'right to negotiate' for the grant of a mining tenement (see below).

Where a new mining lease or exploration licence is required and the relevant land is land in relation to which native title may still exist, the *Native Title Act 1993* (Cth) (**NTA**) may need to be complied with in order for the tenement to be validly granted. Compliance with the NTA (right to negotiate procedure) may take between 12 to 18 months to complete. Further compensation may be payable as part of any agreement reached, including for the extinguishment or impairment of native title.

Separate to native title, the Merged Group will need to ensure that Aboriginal cultural heritage is protected in accordance with the *National Parks and Wildlife Act 1974* (NSW) and the *Aboriginal Cultural Heritage Act 2003* (QLD). This may require approvals to be obtained that authorise the impact of Aboriginal cultural heritage. Alternatively, the Merged Group may be required to negotiate and agree cultural heritage management plans that prescribe how Aboriginal cultural heritage may be impacted during the course of operations.

7.4. Regulatory risks

Carbon pollution reduction scheme

Much publicity has been given in recent times to pollution emission and the use of 'clean' energy sources to reduce greenhouse gas emissions. In particular, a number of nations have ratified the Kyoto Protocol to the United Nations Framework Convention on Climate Change signed in December 1997 in Kyoto, Japan, and negotiations are continuing with a view to implementing it. The first commitment period of the Kyoto Protocol expires in 2012.

At the United Nations Climate Change Conference 2011 in South Africa a second commitment period was agreed from 1 January 2013. This second commitment period was part of the decision to adopt a universal legal agreement on climate change by 2015, which will replace the Kyoto Protocol and be operational by 2020. Parties who choose to sign up to the second commitment period must ensure their economy-wide targets are converted into quantified emission limitation or reduction objectives and submit them for review by 1 May 2012. At the date of this Scheme Booklet, Australia has indicated that it is prepared to consider a further commitment.

It is the current policy of the Federal Government to attempt to meet the emissions target set for Australia in the Kyoto Protocol, which, combined with efforts by other nations to reduce greenhouse gas emissions, could affect the usage of and, accordingly, the demand for and price of coal.

Carbon emissions regulation

There have been recent cases in both New South Wales and Queensland in relation to or considering the environmental effects of greenhouse gas emissions produced as a result of coal mining. Although this area of law is still developing, those cases confirm the importance for proponents of major projects, including coal mines, to ensure that environmental assessments are comprehensive. Defending actions can be financially burdensome and can potentially delay projects. As the case law develops, there may be more onerous environmental obligations imposed on proponents of projects, particularly in relation to greenhouse gas emissions.

In addition, stricter environmental regulations (both in Australia and in other countries) of emissions from coal fired electricity generating plants, including emissions of carbon dioxide, could increase the costs of using coal, thereby reducing demand for coal as a fuel source, and the volume and price of the Merged Group's coal sales. Stricter regulations could make coal a less attractive fuel alternative in the planning and building of utility power plants in the future.

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Carbon price

The Federal Parliament recently passed legislation which will introduce a carbon price broadly into the Australian economy. To the extent that any costs related to a carbon price cannot be passed on from the Merged Group to its customers, it may have a significant impact on the Merged Group's future budgeted costs and financials.

Queensland Urban Exploration Ban Policy

In August 2011, the Queensland Government announced its intention to restrict exploration and mining activities in urban areas. The Government immediately exercised an existing power under the *Mineral Resources Act 1989* (QLD) (**MRA**), declaring a restricted area (**RA384**) around all Queensland regional centres and towns with a population of over 1,000 (with a two kilometre buffer zone), and the entire region of South-East Queensland.

This prohibited the grant of new tenements but did not affect existing rights. Local Councils were given the opportunity to opt in or opt out of RA384.

The Government announced that RA384 was an interim measure, and that a permanent solution would be introduced by legislation.

Local governments which had authority over towns with a population of 1,000 or more had the opportunity to opt out of RA384. The North Burnett Regional Council adopted a resolution to opt out in relation to the affected towns in its area (Monto, Gayndah and Mundubberra).

While the Isaac Regional Council chose to opt out in relation to the town of Clermont, RA384 applies to sub-blocks of exploration permits located within two kilometres of the towns of Middlemount, Glenden, and Dysart.

November Bill

On 29 November 2011 the Government introduced the *Resources Legislation (Balance, Certainty and Efficiency) Amendment Bill 2011* (the **Bill**), its proposed permanent measure to restrict exploration and mining production in urban areas.

The Bill proposes to amend the MRA (and other pieces of resources legislation) to allow the Minister for mines to declare any part of Queensland an Urban Restricted Area.

The area of an Urban Restricted Area would be subject to the following controls:

- the holder of an exploration permit (regardless of whether it was granted before or after commencement of legislation giving effect to the Bill) within an Urban Restricted Area would require written approval from the local government before carrying out activities (there is a process for appeal to the Land Court if the local government does not allow the exploration activities); and
- open-cut mining would be prohibited within the Urban Restricted Area (subject to certain transitional exceptions).

Implementation

The Queensland Government has said that it will initially declare an Urban Restricted Area over the area of RA384, other than in and around the towns which have already opted out of RA384 and that RA384 will continue to operate until the Bill has passed through parliament.

The Bill has been referred to the Industry, Education, Training and Industrial Relations Committee (Committee) for inquiry. The Department of Employment, Economic Development and Innovation publicly briefed the Committee about the Bill on 12 December 2011. The Committee is accepting submissions until 20 January 2012. Public hearings concerning the Bill will be held in February 2012.

Sienna Project

Relevantly, a material part of the Sienna Project (EPC1033) falls within the area of RA384 around the town of Middlemount. The implications for the Sienna Project are:

- Until the Bill is enacted and becomes law, there is no impact on currently authorised activities.
- If the Bill is enacted and becomes law:
  - the consent of Isaac Regional Council would need to be obtained for exploration activities to continue in that part of the Sienna Project that falls within the area of RA384; and
  - open-cut mining would be prohibited in that part of the Sienna Project that falls within the area of RA384.

Other regulatory factors

Extensive government regulations impose significant costs on the Merged Group's mining operations, and future regulations could increase those costs or limit the Merged Group's ability to produce and sell coal. The Australian coal industry is subject to increasingly strict regulation by Australian law with respect to matters such as limitations on land use, employee health and safety, mine permitting and licensing requirements, reclamation and restoration of mining properties, air quality standards, water pollution, protection of human health, plant life and wildlife, discharge of materials into the environment, surface subsidence from underground mining and the effects of mining on groundwater quality and availability.

Australian safety and health regulation in the coal mining industry is a comprehensive and pervasive system designed for protection of employee safety and health. Aston and Whitehaven are strongly committed to complying with these requirements and any new regulations or orders. The costs, liabilities and requirements associated with these and other regulations (which could include mine shut down) may be costly and/or time-consuming and may delay commencement or continuation of exploration or production operations which may harm the Merged Group's future results. Failure to comply with these regulations may result in the assessment of administrative, civil and criminal penalties, the imposition of clean-up and site restoration costs and liens, the issuance of injunctions to limit or cease operations, the suspension or revocation of permits, and other enforcement measures that could have the effect of limiting production from the Merged Group's operations.

The possibility exists that new legislation and/or regulations and orders may be adopted that may materially adversely affect the Merged Group's mining operations, the Merged Group's cost structure and/or the ability of the Merged Group's customers to use coal. New legislation or administrative regulations (or new judicial interpretations or administrative enforcement of existing laws and regulations), including proposals related to the protection of the environment that would further regulate and tax the Australian coal industry, may also require the Merged Group or its customers to change operations significantly or incur increased costs.

Other changes in government regulation may impact the Merged Group's business adversely. These include changes to taxation laws, fiscal, monetary and regulatory policy changes and changes to export regulation in Australia and import regulation in the country of origin of the Merged Group's customers.

7.5. Scheme specific risks

Risks if the Scheme does not proceed

Aston Shareholders will also face risks if the Scheme is not implemented. If the Scheme does not proceed, and no Superior Proposal for Aston is received, the Aston Directors will consider a number of alternative strategies for the operation and ownership of Aston's Maules Creek Project, as well as other growth initiatives. These alternatives would take time to implement. The Aston Directors believe that the Scheme is likely to deliver benefits to Aston Shareholders greater than other alternatives which have been considered, including Aston continuing as a standalone entity and using existing financial resources to pursue its growth and diversification strategies.

Change in risk profile and risks of investment in the Merged Group

If the Scheme is implemented, there will be a change in the risk profile to which Aston Shareholders are exposed. Aston Shareholders are currently exposed to various risks as a result of their investment in Aston. If the Scheme is approved, Aston will merge its business with that of Whitehaven and Aston Shareholders will receive New Whitehaven Shares. As a consequence, Aston Shareholders will be exposed to risk factors relating to Whitehaven, and to certain additional risks relating to the Merged Group and the integration of the two companies. These include risks relating to the operation of a broader suite of coal assets than Aston currently operates. In a number of cases, those risks are different from or additional to those currently faced by Aston Shareholders. The change in risk profile may be seen to be a disadvantage by some Aston Shareholders.

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The investment profile for Aston Shareholders will change

While Aston is active in a number of the same commodity markets, operations and geographies as Whitehaven, the operational profile, capital structure, size and geography of the Merged Group will be different to that of Aston on a standalone basis.

It is possible that certain Aston Shareholders may wish to maintain an interest in Aston as a standalone entity because they are seeking an investment in a publicly listed company with the specific characteristics of Aston (such as its current commodities, operational profile, capital structure, size and geography).

The change in investment profile under the Merger would be a disadvantage to such shareholders.

The exact value of the Scheme Consideration is not certain

Under the terms of the Merger, Aston Shareholders will receive 1.89 New Whitehaven Shares for each Aston Share they hold. The exact value of this Scheme Consideration that would be realised by individual Aston Shareholders will be dependent on the price at which the New Whitehaven Shares trade on ASX after the Implementation Date.

In addition, the Sale Agent (and/or a nominee of the Sale Agent) will be issued New Whitehaven Shares attributable to certain Ineligible Foreign Shareholders and will sell them on market as soon as reasonably practicable after the Implementation Date. It is possible that such sales may exert downward pressure on the Merged Group's share price during the applicable period.

In any event, there is no guarantee regarding the prices that will be realised by the Sale Agent or the future market price of the New Whitehaven Shares. Future market prices may be either above or below current or historical market prices.

Risks of trading during deferred settlement trading period

Scheme Shareholders will not necessarily know the exact number of New Whitehaven Shares (due to rounding) that they will receive (if any) as Scheme Consideration until a number of days after those shares can be traded on ASX on a deferred settlement basis. Aston Shareholders who trade New Whitehaven Shares on a deferred settlement basis, without knowing the number of New Whitehaven Shares they will receive as Scheme Consideration, may risk adverse financial consequences if they purport to sell more New Whitehaven Shares than they receive.

Transaction and other costs

Transaction and other costs incurred (or which are expected to be incurred) by Aston in relation to the implementation of the Merger are currently estimated at A$32 million, comprising adviser, legal, accounting and expert fees, employee costs (including termination rights, bonuses, long-term incentive options and insurance), and various other costs. This amount does not include transaction costs that may be incurred in relation to the Merger by Whitehaven.

Implications for Aston if the Merger is not implemented

If the Merger is not implemented, Aston will continue to operate its current businesses as a standalone entity. Each Aston Shareholder will retain their Aston Shares and will not receive any New Whitehaven Shares. Aston will still incur a relative proportion of the transaction and other costs of the Merger. In those circumstances, Aston management would seek to continue to develop the Maules Creek Project and continue to maximise value for Aston Shareholders.

Aston Shares may trade below their current market price (or the value attributed by the Independent Expert) if the Merger is not implemented. This may occur if, for example, investors consider that Aston's growth prospects are lower in the absence of the Merger.

Rights, obligations and Break Fee under the Scheme Implementation Agreement

Under the Scheme Implementation Agreement entered into between Aston and Whitehaven, a liquidated amount (or Break Fee) of A$20.6 million (exclusive of GST) may become payable by one party to the other in certain circumstances, including in certain circumstances if the Scheme is not approved. The Scheme Implementation Agreement also sets out various other rights and obligations of Aston and Whitehaven in relation to the Merger. Further information in relation to the Scheme Implementation Agreement is set out in Section 13.4.

Tax consequences for Scheme Shareholders

If the Scheme proceeds, there may be tax consequences for Aston Shareholders which may include tax payable on any gain on the disposal of Scheme Shares. However, Aston Shareholders should seek their own professional advice regarding the individual tax consequences applicable to them.

Boardwalk Transaction

The issue of Whitehaven Shares to the Boardwalk vendors as consideration for the Boardwalk Transaction is subject to approval of the Whitehaven Shareholders for the purposes of Listing Rule 7.1. The acquisition is also subject to satisfaction of other conditions precedent. There is no guarantee that the Whitehaven Shareholders will approve the acquisition or that the conditions precedent will be satisfied in a timely manner or at all. If these conditions are not satisfied or waived, or are delayed and the acquisition of Boardwalk does not complete, this may have an adverse effect on the position of the Merged Group. The pro forma historical financial information (Section 6.7) provides further information to shareholders on the assets and liabilities of the Merged Group if the Merger occurred at 31 December 2011, but the Boardwalk Transaction did not proceed.

7.6. Implementation risks

Integration risk

The long-term success of the Merged Group will depend, amongst other things, on the success of management in integrating the respective businesses and the strength of management of the Merged Group. There is no guarantee that the businesses of the Merged Group will be able to be integrated successfully, or over the expected time period or at the implementation cost estimated in this Scheme Booklet. There are risks that any integration of the businesses of Aston and Whitehaven may take longer than expected and that anticipated efficiencies and benefits of that integration may be less than estimated. These risks include possible differences in the management culture of the two groups, inability to achieve synergy benefits and cost savings, and the potential loss of key personnel.

Any failure by the Merged Group to ensure implementation costs remain below those anticipated may have a material adverse effect on the financial performance and position, and future prospects, of the Merged Group.

Change in cash profile

The cash flow generation from operations and requirements for project development of the Merged Group will be different to those of Aston as a standalone entity. In particular, Whitehaven will bring to the Merged Group more development projects for advancement in the near term that will require capital expenditure. These changes will increase competition for funds that may have otherwise been available to Aston projects or been available for return to shareholders.

Dividends

Future dividends will be assessed subject to profits, cash flow and capital requirements. There can be no guarantee as to the likelihood, timing, franking or quantum of future dividends from Aston or Whitehaven or (if the Merger proceeds) the Merged Group.

Risks associated with future growth initiatives

Historically, Aston and Whitehaven have each sought to grow both organically and through new investment opportunities. This will continue to be a strategic objective for the Merged Group if the Merger proceeds.

Contract risk

The Scheme may be deemed under contracts to which members of Aston and Whitehaven are parties, to result in a change of share ownership event in respect of Aston or Whitehaven that allows the counterparty to review or terminate the contract as a result of the change, or the issue of shares by Whitehaven, upon implementation of the Scheme. If the counterparty to any such contract were to validly seek to renegotiate or terminate the contract on that basis, this may have a material adverse effect on the financial performance of the Merged Group, depending on the relevant contracts.

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Accounting risk

In accounting for the Merger and the Boardwalk Transaction, the Merged Group will need to perform a fair value assessment of all of Aston's and Boardwalk's assets, liabilities and contingent liabilities, which will include the identification and valuation of mineral rights and intangible assets. As a result of this fair value assessment, the Merged Group's depreciation and amortisation charges will be substantially greater than the depreciation and amortisation charges of Aston, Whitehaven and Boardwalk as separate businesses, and to that extent may significantly reduce the future earnings of the Merged Group.

To the extent goodwill is recognised in respect of accounting for the acquisition of Aston or Boardwalk by Whitehaven, it will be subject to annual impairment testing. In the event that the recoverable amount of goodwill is impaired, this will result in a charge against future earnings.

The Merged Group will be subject to the usual business risk that there may be changes in accounting policies which may have an adverse impact on the Merged Group.

A Superior Proposal for Aston may yet emerge

It is possible that a Superior Proposal for Aston, which is more attractive for Aston Shareholders than the Merger, may materialise in the future. The implementation of the Merger would mean that Aston Shareholders would not obtain the benefit of any such proposal.

The Aston Board is not currently aware of any such proposal and notes that since Aston and Whitehaven announced the Merger, there has been a significant period of time and ample opportunity for an alternative proposal for Aston which provides a different outcome for Aston Shareholders to emerge.

Whilst Aston engaged in certain discussions of an incomplete nature with a number of parties, Aston did not formally consider any alternative proposals prior to entering into the Scheme Implementation Agreement with Whitehaven. Since the Scheme was announced, no alternative proposal has emerged and the Aston Directors have decided that the Merger is the best option available at the date of this Scheme Booklet. In addition, shareholders in the Merged Group will still have an opportunity to realise a full premium in the event of any future change of control transaction for the Merged Group.

Following implementation of the Merger, the Merged Group's share price might change

Following the implementation of the Merger, the Merged Group's share price may rise or fall based on market conditions and the Merged Group's financial and operational performance. If the Merged Group's share price falls, the value of the New Whitehaven Shares received by Aston Shareholders as Scheme Consideration will decline in value. Accordingly, there is no guarantee that Aston Shareholders will actually realise the implied value of the Scheme Consideration to be received under the Merger.

Other risks

Additional risks and uncertainties not currently known to Aston or Whitehaven may also have a material adverse effect on Aston or Whitehaven's business and that of the Merged Group and the information set out above does not purport to be, nor should it be construed as representing, an exhaustive list of the risks affecting Aston, Whitehaven or the Merged Group.

7.7. Taxation risks

Mineral Resource Rent Tax and taxation

The Federal Government is proposing to apply a Mineral Resource Rent Tax (**MRRT**) to iron ore and coal production in Australia. The MRRT is proposed to apply from 1 July 2012.

In general terms the MRRT is proposed to apply an effective tax rate of 22.5% to the assessable profit (being the value of the taxable resource, determined at its first saleable form less all costs to that point). The amount of tax payable under the MRRT will be rebateable against state royalties payable by the Merged Group.

The Bills required to implement the measure are currently before Parliament and are expected to pass through Parliament in early 2012, with the Government apparently having secured the necessary support from the minor parties and from key independent Members of Parliament.

The introduction of the MRRT may materially increase the amount of tax that the Merged Group will be liable to pay (after 1 July 2012) and may adversely impact the overall economic profile of the Merged Group's assets.

The Merged Group will be subject to royalty fee payments to state governments. The New South Wales Government has indicated an intention to increase royalties applicable to coal. Any future increases in federal or state taxes, duties or royalties may not be able to be passed on in full to customers or may result in the Merged Group's pricing becoming uncompetitive in the international market.

Emissions trading scheme

Federal Parliament passed carbon price legislation on 9 November 2011. The fixed carbon price will apply from 1 July 2012 at A$23/t Carbon Dioxide equivalent to operate for three years before transitioning to a cap and trade emissions trading scheme. The fixed price will commence at A$23 per tonne of CO_2e, indexed at 2.5% in real terms. The Merged Group is expected to be directly liable for its fugitive methane emissions under the scheme and will be subject to the proposed reduction in the diesel fuel excise rebate. Additional pass throughs of carbon cost are expected on electricity consumption and port and rail charges.

Tax audit

The ATO, as part of its ordinary processes in reviewing large business taxpayers, takes into account their size and complexity. The Merged Group, as a large and complex group, can be expected to be subject to a high level of review by the ATO in respect of ongoing taxation compliance. The ATO is currently auditing the increase in tax cost base of certain assets recorded by Whitehaven on its listing on ASX due to tax consolidation. The audit is currently in the information gathering stage. Whitehaven Directors do not believe there will be any adverse material result.

Tax base reset risk

The pro forma analysis as a result of the Merger and the Boardwalk Transaction, including the potential tax outcomes, are outlined in Sections 6.2 and 6.7. This analysis is preliminary and based on an assessment of information currently available and presented as at 31 December 2011. Due to differences between the value of consideration determined for tax purposes for both the Merger and the Boardwalk Transaction, and between asset and liability values at the date of acquisition for tax purposes, the ultimate tax outcomes will vary from those included in the pro forma analysis in Sections 6.2 and 6.7.

7.8. Investment risks

Stock market fluctuations and economic conditions

The Whitehaven Shares issued under this Scheme carry no guarantee in respect of profitability, dividends, return of capital, or the price at which they may trade on ASX. The value of the New Whitehaven Shares will be determined by the stock market and will be subject to a range of factors beyond the control of Aston, the Aston Directors, and Aston's management.

Such factors include, but are not limited to, the demand for and availability of Whitehaven Shares, movements in domestic interest rates, exchange rates, fluctuations in the Australian and international stock markets and general domestic and economic activity. Returns from an investment in the New Whitehaven Shares may also depend on general stock market conditions as well as the performance of the Merged Group.

Changes in economic and business conditions or government policies in Australia or internationally (including the proposed MRRT) may affect the fundamentals which underpin the projected growth of the Merged Group's target markets or its cost structure and profitability. Adverse changes in such things as the level of inflation, interest rates, exchange rates, government policy (including fiscal, monetary and regulatory policies), consumer spending and employment rates, among others, are out of the control of the Merged Group, the directors, and the Merged Group's management and may result in material adverse impacts on the business or its operating results.

Wars, terrorism, political and environmental events

Events may occur within or outside Australia that could impact upon the world economy, the market for coal, the operations of the Merged Group and the price of Whitehaven Shares. These events include war, acts of terrorism, civil disturbance, political intervention and natural events such as earthquakes, floods, fires and poor weather affecting roadways, mining and transport of coal. The Merged Group has only a limited ability to insure against some of these risks.

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8 INDEPENDENT EXPERT'S REPORT



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Independent Expert's Report on the proposed merger with Whitehaven Coal Limited

Aston Resources Limited

March 2012

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Part A – Independent Expert's Report

The Directors
Aston Resources Limited
Level 10, AMP Place
10 Eagle Street
Brisbane QLD 4000

6 March 2012

Dear Directors,

Proposed Merger of Aston Resources Limited and Whitehaven Coal Limited

1. Introduction

On 12 December 2011 Aston Resources Limited (Aston) and Whitehaven Coal Limited (Whitehaven) jointly announced that they had entered into a Scheme Implementation Agreement (SIA) under which they agreed to merge via a Scheme of Arrangement (Scheme) under Part 5.1 of the *Corporations Act 2001* (Corporations Act). Aston and Whitehaven are both ASX-listed Australian coal companies. Whitehaven operates five mines in the Gunnedah Basin in North-west New South Wales while Aston's major asset is its interest[1] in the Maules Creek coal development project also located in the Gunnedah Basin.

Under the Scheme, shareholders of Aston will receive 1.89 Whitehaven shares for each Aston share, following distribution of a fully franked special dividend of $0.50 per share to existing Whitehaven shareholders conditional on the Scheme proceeding (Whitehaven Special Dividend). Existing Aston option-holders will have the choice to:

- Exercise their Aston options and be issued with Aston shares. These Aston shares will then be exchanged for Whitehaven shares under the Scheme;
- Enter into arrangements to cancel their options in exchange for Whitehaven options which are intended to financially replicate their current position (to the extent possible); or
- Enter into arrangements to cancel their Aston options in exchange for Aston shares of an equivalent value. These Aston shares will then be exchanged for Whitehaven shares under the Scheme.

Whitehaven and Aston announced that an overriding principle of the Scheme is that it represents a merger of equals under which neither party is taking control of the other party. The primary

[1] Aston's interest in the Maules Creek coal project is currently 85% and will reduce to 75% upon completion of the J-Power agreement, which is conditional on (amongst other things) the consent of Aston's joint venture partner in Maules Creek, ITOCHU Corporation (ITOCHU).

PricewaterhouseCoopers Securities Limited, ACN 003 311 617, ABN 54 003 311 617, Holder of Australian Financial, Services Licence No 244572,
Darling Park Tower 2, 201 Sussex Street, GPO BOX 2650, SYDNEY NSW 1171
T: +61 2 8266 0000, F: +61 2 8266 9999, www.pwc.com.au

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purpose of the Scheme is to bring together two complementary and growth focused groups, creating a large independent Australian coal company.

Simultaneous to entering into the SIA, Whitehaven entered into separate agreements to acquire all of the shares and other issued securities in unlisted coal exploration company, Boardwalk Resources Limited (Boardwalk) in exchange for 85.89 million Whitehaven shares (Initial Shares) and 34.02 million additional Whitehaven shares with rights restricted in accordance with the Restriction Deeds outlined below (Milestone Shares) (the Proposed Boardwalk Transaction). As part of the Proposed Boardwalk Transaction, existing Boardwalk investors will contribute $150 million of cash to Boardwalk which will be used for the ongoing development of its assets. Boardwalk also had $58.8 million of outstanding debt to entities related to certain Boardwalk investors as at 31 December 2011. Prior to implementation, Boardwalk's debt will reduce by $5.3 million through the conversion of debt to equity.

Boardwalk investors, including entities controlled by Mr. Nathan Tinkler (Tinkler Group) and funds advised and managed by Farallon Capital Management, L.L.C. (Farallon), will not be eligible to receive the Whitehaven Special Dividend. In addition, the Proposed Boardwalk Transaction is conditional on the satisfaction of various conditions precedent, including the Scheme being approved at the second court hearing, Whitehaven shareholder approval under Australian Securities Exchange (ASX) Listing Rule 7.1 approving the issue of Whitehaven shares to Boardwalk investors as consideration for the Proposed Boardwalk Transaction, as well as other customary completion conditions precedent including receipt of FIRB approval. However, the Scheme is not conditional on the approval of the Proposed Boardwalk Transaction.

On or around the date of completion of the Proposed Boardwalk Transaction, Restriction Deeds will be entered into by Whitehaven and the Boardwalk investors which set out the terms of the restrictions that will apply to the Milestone Shares. These restrictions will be released upon the occurrence of certain trigger events, including the grant of mining leases and environmental approvals at any two of Boardwalk's projects, or Oaklands North, which is a Coalworks Limited (Coalworks) owned project.

Aston has a total of approximately 204.7 million shares, 9.8 million options on issue and 0.7 million performance rights on issue. Of these, approximately 65 million shares are held by the Tinkler Group (equal to approximately 32% of the issued share capital of Aston). Whitehaven has a total of approximately 496.2 million shares, 6.4 million options and 1.3 million performance rights on issue.

Based on the respective number of issued shares assuming the Proposed Boardwalk Transaction is completed, the collective interest of Aston shareholders in the combined group comprising Whitehaven, Aston and Boardwalk (Merged Group) will be approximately 40.8% (before potential dilution from the Milestone Shares). On a fully diluted basis (taking into account the options and performance rights that Whitehaven and Aston have on issue and the full issue of Milestone Shares), the Aston shareholders will collectively hold approximately 39.5% of the shares of the Merged Group.

The Scheme is subject to the satisfaction of a number of conditions which are set out in full in the Notice of Meeting and Explanatory Memorandum (Scheme Booklet) to be sent to shareholders by Aston. The shareholders of Aston are to consider a resolution seeking approval of the Scheme at a general meeting of Aston shareholders that is expected to be held in April 2012 (Scheme Meeting). The Scheme is subject to a number of key conditions, a summary of which include:

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- an independent expert concluding that the Scheme is in the best interests of the shareholders of Aston (excluding any shares held by Whitehaven or any of its associates or by any person on behalf of, or for the benefit of, Whitehaven or any of its associates);
- the Scheme being approved by the requisite majority of Aston shareholders at a meeting convened pursuant to section 411(1) of the Corporations Act in respect of the Scheme;
- no material adverse change in Whitehaven or Aston from the date of the Scheme to the second court hearing;
- approval by the court under Section 411(4)(b) of the Corporations Act; and
- all regulatory approvals being obtained by the second court hearing.

Other elements of the Scheme include:

- Aston and Whitehaven have agreed to certain exclusivity restrictions including no-talk, no-shop and no-due diligence provisions.
- a break fee of approximately $20.6 million (exclusive of GST) is payable by Aston to Whitehaven in certain circumstances including if any Aston director changes adversely or withdraws the recommendation in favour of, or voting intentions in relation to, the Scheme or if before the Scheme becomes effective, a third party announces a superior proposal and, as a result, acquires an economic interest in at least 50% of the issued share capital of Aston;
- immediate notification of approaches and counter offers, and Whitehaven having the right to match such terms; and
- a sunset date of 1 June 2012 (unless extended by agreement of Aston and Whitehaven).

The issue of shares as part of the Proposed Boardwalk Transaction will require the approval of Whitehaven shareholders (under Listing Rule 7.1) at a meeting to take place prior to the implementation of the Scheme.

Aston has agreed to propose the Scheme to Aston shareholders (Aston Shareholders) and the directors of Aston (Aston Directors) have unanimously recommended that Aston Shareholders vote in favour of the Scheme in the absence of a superior proposal and subject to the independent expert concluding that the Scheme is in the best interests of Aston Shareholders.

The directors of Aston have engaged PricewaterhouseCoopers Securities Limited (PwC Securities) to prepare an independent expert's report setting out whether, in its opinion, the Scheme is in the best interests of Aston shareholders and to state reasons for that opinion.

This letter contains a summary of the opinion and main conclusions of PwC Securities and is extracted from the full independent expert's report, a copy of which (including this summary letter) will accompany the Scheme Booklet.

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2. Basis of assessment

This report has been prepared in accordance with the Corporations Act and Australian Securities and Investments Commission (ASIC) Regulatory Guide 111, Content of expert reports (RG111).

We have prepared this independent expert's report for the purpose of stating, in our opinion, whether or not the Scheme is in the best interests of Aston shareholders, and to set out reasons for that opinion.

While there is no definition of "in the best interests of the members" provided in the Corporations Act, relevant guidance is provided in RG111, which is framed largely in terms that relate specifically to control transactions effected by way of a scheme of arrangement.

RG111.18 indicates that an expert evaluating a control transaction effected by way of a scheme of arrangement should undertake a form of analysis substantially the same as "fair and reasonable" reports for takeover offers under Section 640 of the Corporations Act. In this context RG111.18-22 indicates that assessment of whether a proposal is "in the best interests of the members" for reports on control transactions prepared for the purposes of Section 411 should be evaluated by reference to whether the proposal is "fair and reasonable" and should also include an opinion on this basis.

RG111.30-31 requires that the assessment of fairness of a control transaction under Section 640 of the Act compares the value of scrip consideration (allowing for a minority interest discount) to the value of the securities being given up assessed on a controlling interest basis assuming 100% of the securities were available for sale. The Regulatory Guides reflect ASIC's underlying philosophy that the premium for control of a company be shared by all members of that company.

However, RG111.31 also requires the expert to assess whether a scrip takeover is in effect a "merger of entities of equivalent value when control of the merged entity will be shared equally between the bidder and the target". In such circumstances, the expert may use an equivalent approach to valuing the securities of the 'bidder' and the 'target'.

We have given particular consideration as to whether the Scheme should be assessed as a takeover of Aston by Whitehaven or as a merger of the two entities. To determine whether the Scheme is a merger of equals or a control transaction, we have considered the following factors:

- The collective interests of the Aston shareholders and existing Whitehaven shareholders;
- The mix of the members of the Board and senior management of the Merged Group;
- Contribution by Aston and Whitehaven to the assets and liabilities to the Merged Group;
- The comparative trading performance of each company's shares on the ASX and their relative market capitalisations;
- Whether any shareholder from either company will be in a position to control or significantly influence the Merged Group, or if the shareholder register of the Merged Group will be relatively open after the Scheme;
- Whether entering into the Scheme reduces the opportunity for Aston shareholders to receive a takeover offer for their shares in the Merged Group; and
- The intentions of the board and management of Aston and Whitehaven on entering into the Scheme.

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Upon completion of the Scheme, Aston shareholders will hold approximately 40.8% of the Merged Group (excluding any vesting of the Milestone Shares as a result of Boardwalk milestones being achieved), there will be no individual shareholder with a shareholding of sufficient size to exert significance influence over the Merged Group, and that the board and management control of the enlarged group will be shared between Aston and Whitehaven. Having regard to these factors, we consider that the Scheme should be evaluated as a merger rather than a control transaction and that as such the consideration offered and the securities given up should be assessed on an equivalent basis for our assessment.

Accordingly, our assessment of the value of Aston's ordinary shares and the Whitehaven shares in the Merged Group which form the consideration offered has been undertaken using equivalent controlling interest and minority interest values for each security.

As a comparison of the relative value of the consideration offered to the value of the securities given up using the above basis does not evaluate whether a full premium for control is offered, we have separately considered other significant advantages and disadvantages of the Scheme to Aston shareholders (including the likelihood of another offer being received on better terms) in order to form an opinion as to whether the scheme is in the best interests of shareholders.

Elements of the Scheme and the Proposed Boardwalk Transaction are contemporaneous. Accordingly, our evaluation of the Scheme has involved an assessment of elements of the Proposed Boardwalk Transaction to the extent that we consider this is relevant. However, ultimately our assessment of the Scheme requires an overall judgement as to whether Aston shareholders are likely to be better off if the Scheme is implemented than if it is not and not the specifics of the Proposed Boardwalk Transaction standalone.

3. Summary of our opinion and key conclusions

After consideration of all of the issues set out in this independent expert's report and the Scheme Booklet, in our opinion, the Scheme is in the best interests of Aston shareholders

Full details of our opinion and the reasons for our opinion are set out in our full independent expert's report. The following provides a summary of the reasons for our opinion.

- **Valuation assessment suggests that the Scheme is equitable**

The following tables summarise our valuation assessment for Aston and Whitehaven on a standalone basis.

Aston – Valuation Summary

In $ million	Low	High
Maules Creek (75%)	1,872.7	2,812.2
Surplus assets	251.6	268.8
Surplus cash	58.3	58.3
Value attributable to shareholders (controlling interest)	2,182.6	3,139.3
Potential proceeds from exercise of options which are "in-the-money"	71.1	71.1
Value attributable to shareholders (fully diluted basis)	**2,253.7**	**3,210.4**

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In $ million	Low	High
Shares on issue	204.7	204.7
Potential issue of shares for options on issue which are "in-the-money"	10.4	10.4
Potential shares on issue (fully diluted basis)	**215.1**	**215.1**
Value attributable to shareholders (fully diluted basis)	**$10.48**	**$14.92**
Implied premium to Aston VWAP for 3 months prior to announcement of merger discussions	**3.5%**	**47.3%**

Whitehaven – Valuation Summary

In $ million	Low	High
Coal mining operations	2,692.0	3,435.0
Surplus assets	486.2	924.2
Net debt	(104.1)	(104.1)
Value attributable to shareholders (controlling interest)	**3,074.1**	**4,255.1**
Potential proceeds from exercise of options which are "in-the-money"	12.0	12.0
Value attributable to shareholders (fully diluted basis)	**3,086.1**	**4,267.1**
Shares on issue	496.2	496.2
Potential issue of shares for options on issue which are "in-the-money"	7.7	7.7
Potential shares on issue (fully diluted basis)	504.0	504.0
Value attributable to shareholders (fully diluted basis)	**$6.12**	**$8.47**
Implied premium to Whitehaven VWAP for 3 months prior to announcement of merger discussions ($5.81)	5.3%	45.8%

Source: PwC Securities analysis

The valuation summary for Aston and Whitehaven presented above reflects evidence as to the underlying value of Aston and Whitehaven shares based on a discounted cash flow analysis, comparable company analysis, and valuation benchmarks commonly used in the coal mining sector.

To assist in our valuation of the coal assets held by Aston, Whitehaven and Boardwalk, Aston engaged on our behalf a technical expert, Minarco-MineConsult (MMC) to provide a Technical Expert's Report (MMC Report) for use and reliance by us in the preparation of our independent expert's report.

We have relied upon the work undertaken by MMC in forming our valuation assessment. The MMC Report conforms to the requirements of the Code and Guidelines for Assessment and Valuation of Mineral Assets and Mineral Securities for Independent expert reports as adopted by the Australasian Institute of Mining and Metallurgy (the "Valmin Code").

In addition, Aston engaged on our behalf a coal market expert, AME Consulting Pty Limited (AME) to provide commentary on the market for thermal and coking (metallurgical) coal

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products produced (or to be produced) by Aston and Whitehaven and to provide views on the near term outlook for coal prices (AME Report). We have referred to the views of AME and other publicly available longer term market outlooks for coal prices and foreign exchange rates in forming our valuation assessment.

The MMC and AME Reports in sections 9 and 10 of the Scheme Booklet should be read in conjunction with our full independent expert's report.

The valuations of Aston and Whitehaven represent an assessment by PwC Securities of the underlying value for each company and are based on a number of important assumptions. Many of the key influences over the value for Aston and Whitehaven shares are common to both entities. These include future coal prices and coal demand, the relative strength of the US dollar against the Australian dollar, coal mining costs, railing costs, port costs and the performance of the coal supply chain through the Port of Newcastle. As such our comparison of relative value has been undertaken at similar low and high points in our assessed range of value for Aston and Whitehaven shares.

Set out below is a summary of our assessment of the relative stand-alone value per share on both a controlling interest and minority interest basis for each of Aston and Whitehaven (net of unavoidable transaction costs related to the Scheme) compared with the share exchange ratio under the Scheme.

$ per share	Low	High
Controlling interest value of Aston shares	10.48	14.92
Controlling interest value of Whitehaven shares	6.12	8.47
Less: Whitehaven Special Dividend	0.50	0.50
Controlling interest value of Whitehaven shares (less Whitehaven Special Dividend)[2]	5.62	7.97
Relative value on controlling interest basis (Aston/Whitehaven less Special Dividend)	1.86	1.87
Minority interest value of Aston shares	9.10	10.10
Minority interest value of Whitehaven shares	5.60	5.85
Less: Whitehaven Special Dividend	0.50	0.50
Minority interest value of Whitehaven shares (less Whitehaven Special Dividend)	5.10	5.35
Relative value on minority interest basis (Aston/Whitehaven)	1.78	1.89

When the relative value is below the offer indicated by the Scheme of 1.89, it is supportive of the proposition that the Scheme is in the best interests of the Aston shareholders.

[2] The controlling interest value of Whitehaven shares is shown on a fully diluted basis, despite the Whitehaven Special Dividend being on an undiluted basis due to the fact that options and performance rights outstanding comprise less than 2% of potential shares on issue (on a fully diluted basis) and thus considered immaterial.

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The relative share value based on VWAP's prior to announcement of merger discussions is set out below:

$ per share [3]	Aston	Whitehaven	Ratio
Share market price (pre- announcement 2 Dec)	9.11	5.14	1.77
Share market price (1 month VWAP)	9.64	5.08	1.90
Share market price (3 month VWAP)	10.13	5.31	1.91
Share exchange ratio under the Scheme			1.89

The exchange ratio for Aston shares under the Scheme is above our assessment of the relative value of Aston shares and Whitehaven shares on a stand-alone basis (both on a controlling interest and minority interest basis). Under the Scheme, Aston shareholders are receiving a higher proportionate interest in the Merged Group (excluding the dilution from the Proposed Boardwalk Transaction) relative to Whitehaven shareholders based on the value (on a minority basis) of the Aston and Whitehaven as stand-alone entities.

The comparison of relative contribution of Aston and Whitehaven to the Merged Group has been undertaken before considering the potential impact of the Proposed Boardwalk Transaction.

- **The terms of the Scheme both including and excluding the Proposed Boardwalk Transaction are value accretive to Aston shareholders**

  We have considered whether the Scheme is likely to be value accretive to Aston shareholders by comparing the effective interest an Aston shareholder will hold in the underlying assets of the Merged Group relative to the interest currently held in Aston's underlying assets. We consider that the underlying value to the Aston shareholders will be enhanced both in the event of the completion of the Scheme and in the event of both the Scheme and the Proposed Boardwalk Transaction. Our assessment has only been undertaken on a controlling interest basis as it is not possible to predict with certainty the price at which the Whitehaven shares will trade subsequent to completion of the Scheme. However, we expect that an uplift in the underlying value of the share of assets held is likely to be reflected in the share traded price together with other market benefits outlined in this section.

  The implied value of the Aston shareholders' interest in the Merged Group as a result of both the Scheme and the Proposed Boardwalk Transaction as reflected in the table below is on a controlling interest basis. Aston shareholders will have no way to realise a controlling interest value (other than potentially through a subsequent change of control transaction where a control premium is paid). It is expected that the shares of the Merged Group would trade at a discount to underlying controlling interest value, in the same way that shares in Aston on a standalone basis would be expected to trade at a discount to their underlying controlling interest value.

[3] Whitehaven per share figures denoted above are shown net of the Whitehaven Special Dividend of $0.50 per share.

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Our value assessment is set out in the following table:

Scheme and Proposed Boardwalk Transaction– Valuation Summary

	Scheme		Scheme and Proposed Boardwalk Transaction	
$ in millions (except as noted)	**Low**	**High**	**Low**	**High**
Total equity value of Aston on standalone diluted, controlling interest basis	2,254	3,210	2,254	3,210
Total equity value of Whitehaven on standalone diluted, controlling interest basis	3,086	4,267	3,086	4,267
Special Whitehaven Dividend	-250	-250	-250	-250
	5,090	**7,227**	**5,090**	**7,227**
Value of Boardwalk	-	-	200	330
Value impact of contingent consideration for Boardwalk	-	-	-100	-139
Synergies	510	680	510	680
Incremental transaction costs	-60	-60	-60	-60
Value of Merged Group	**5,540**	**7,847**	**5,640**	**8,038**
Issued shares in Whitehaven (millions)	504.0	504.0	504	504
Shares issued to Aston shareholders (at 1.89 ratio)	406.5	406.5	406.5	406.5
Initial Shares issued for Proposed Boardwalk Transaction	-	-	85.9	85.9
Issued shares in Merged Group (on a fully diluted basis)	**910.5**	**910.5**	**996.4**	**996.4**
Implied controlling interest share value upon completion (on a fully diluted basis)	$6.08	$8.62	$5.66	$8.07
Scheme exchange ratio	1.89	1.89	1.89	1.89
Implied value of consideration	**$11.50**	**$16.29**	**$10.70**	**$15.25**
Aston share value (fully diluted, controlling interest basis)	**$10.48**	**$14.92**	**$10.48**	**$14.92**

As shown in the table above, the estimated implied value of the consideration on a controlling interest basis is in the range of $11.50 to $16.29 per Aston share as a result of the Scheme. If the Proposed Boardwalk Transaction is completed, the estimated implied value of consideration per share is in the range of $10.70 to $15.25 per share. Our range of values excludes any special value which a particular purchaser might attribute to the Merged Group shares.

The consideration offered is above our assessed value of $10.48 to $14.92 per Aston share on a controlling interest basis.

Our assessment is based on an aggregate controlling interest value of the Merged Group (post dilution) ranging from approximately $5,640 million to $8,038 million including the acquisition of Boardwalk and in the range from approximately $5,540 million to $7,847 million

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excluding the acquisition of Boardwalk. Aston shareholders will have no control over whether the Proposed Boardwalk Transaction is effected.

In our assessment of the Merged Group we have aggregated our assessed values of Aston and Whitehaven and considered the impact of the Proposed Boardwalk Transaction, the Whitehaven Special Dividend, anticipated synergies and transaction costs.

MMC was appointed to provide a Technical Expert's Report in relation to the four principal exploration projects of Boardwalk. PwC Securities estimated the value of Boardwalk to be in the range of approximately $200 million to $330 million having regard to the assessment prepared by MMC, the estimated value of other assets held by Boardwalk, including the 19.9% interest held in Coalworks, the net cash position of approximately $100 million as well as other considerations.

We recognise that the valuation of early stage mineral prospects is highly subjective and that individual purchases may place a strategic value on such assets.

Given the early stage, exploration nature of these assets, the ultimate value extracted is highly sensitive to exploration outcomes and emerging economic factors including coal prices and extraction costs. Accordingly, ultimate value achieved by the Merged Group may fall outside of the range shown.

For the purposes of our assessment, we have treated the value impact of the contingent consideration of Boardwalk as a dilution of the value of the combined group's shareholders having regard to the terms and conditions attached to the Milestone Shares as set out in the SIA and Proposed Boardwalk Transaction documents.

Assessing a valuation range for the dilution inherent in the contingent consideration is highly complex and uncertain.

For example, the maximum dilution impact would arise in the event of a takeover of the Merged Group without any further exploration activity in relation to the Boardwalk assets. On the other hand, the minimum outcome would be zero, reflecting a situation where none of the Milestone Shares vest, or the continued exploration outcomes are very favourable such that the increase in value on the Boardwalk assets outweigh any potential dilution from the contingent consideration.

As the assessments we might make of factors (including takeover prospects and exploration success) that a precise value outcome will be inevitable speculative and subjective, we have assessed the value at the midpoint of the maximum and minimum values.

This midpoint results in a value consistent with the pro-forma financials estimate of the probability weighted value of the contingent consideration. We consider this to be appropriate as the maximum and minimum outcomes are, in our view, low likelihood scenarios.

We note however that even if the maximum possible dilution was selected, the transaction would still be accretive under all scenarios from an Aston point of view.

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Value impact of contingent consideration of Boardwalk

$ million	Low	High
Maximum potential dilution: Implied value of the Milestone Shares based on post Scheme implied controlling interest share value of Merged Group on fully diluted basis, before contingent consideration	196	278
Minimum value of the Milestone shares	0	0
Value adopted in pro-forma financials in scheme booklet ($98 million on a minority basis; grossed up for a control premium in the low case of 5% and high case 50% in line with underlying valuations)	103	147
Assessed value impact of contingent consideration of Boardwalk	**100**	**139**

- **Synergies**

Aston and Whitehaven management expect a number of key synergy benefits to arise following implementation of the Scheme. The most readily quantifiable of these relate to infrastructure efficiency synergies, operational cost synergies, coal blending synergies and tax uplifts which are expected to arise as a consequence of the Scheme and combining the operations of Aston with Whitehaven. However, other significant operational and financing benefits are also expected to arise which are not immediately quantifiable.

We have assessed the identified and readily quantifiable synergy benefits on a DCF basis using similar parameters to those adopted in our DCF analysis of the underlying operations of Aston and Whitehaven and added a level of risk weighting where we considered appropriate.

We have assessed the value of the above quantifiable synergy benefits to the Merged Group to be in the order of $510 million to $680 million, as set out below:

Synergies – Valuation Summary

$ million	Low	High
Operational cost synergies	100	160
Infrastructure	140	240
Blending synergies	60	80
Taxation benefits	160	200
Margin benefits and circumstances of export capacity constraints	50	-
PwC Securities assessed value of readily quantifiable synergies	**510**	**680**

There is a risk that the benefits identified above will not be fully realised, that they will take longer to achieve in practice or that the implementation costs will be higher than expected.

A number of other potential operational and funding benefits have been identified by Aston and Whitehaven in the Scheme Booklet. These further opportunities will be subject to review following completion of the Scheme. Whilst these opportunities and other operational cost synergies are reasonably expected to occur in the Merged Group, such potential synergies have not yet been evaluated or quantified by management. Other than for the specific benefits identified above, no allowance has been made in our valuation assessment for other potential operating cost synergy benefits.

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Other operational cost saving synergies which were not able to be quantified include accommodation savings, inventory and spare parts, labour efficiencies, resource sharing and demurrage savings associated with the continuous running of trains to port and utilisation of what would effectively be a dedicated stockpile.

Additional synergies relating to the Scheme have been identified, but are somewhat unquantifiable. These include:

- the Merged Group potentially benefiting from the ability to mix coal produced from certain mining projects in the Boardwalk portfolio with coal produced from the Gunnedah mines;
- enhanced marketing opportunities for the Merged Group by gaining access to a broader range of customers; and
- the potential benefit from lower borrowing costs as a result of increased size and diversity of operations of the Merged Group.

In the event that the transaction is not completed and no other transaction is forthcoming, or expected to be forthcoming, then the Merged Group will not be able to benefit from the realisation of these potential synergies.

- **The Merged Group will be a large scale, diversified coal producer with investment characteristics superior to those of Aston on a standalone basis**

Should the Scheme be implemented, the Merged Group will be one of Australia's largest coal companies and a major supplier of semi soft and PCI coals. Based on current share market values, the Merged Group will have a combined market capitalisation of more than $4.6 billion, attributable JORC resources of more than 2,000 Mt and attributable JORC reserves of more than 650 Mt.

Aston will benefit from the financial stability of Whitehaven, leveraging Whitehaven's cash flows for the development of the Maules Creek Project as the mine progresses towards the operational stage of its life. In addition, Aston shareholders become eligible for potential cash flow streams stemming from dividends paid by the Merged Company, as a result of the expansion of the mining portfolio to include Whitehaven's producing mines.

The investment characteristics of the Merged Group will be considerably more attractive than those of Aston on a standalone basis. In particular:

- The free float of the Merged Group is expected to be greater than 50% compared to the current Aston free float of 30%. Based on current share market value and the expected post completion free float of the Merged Group of approximately 57%, the free float adjusted market capitalisation of the Merged Group will be approximately $2.9 billion (based on closing prices as at 9 December 2011);
- The Merged Group will have an increased free float adjusted market capitalisation which should attract additional institutional support, additional covering contributors and reduce the bid-ask spread as a percentage of share price, as well as a greater level of trading; reducing the capital market related costs of trading shares;
- There is a realistic prospect of a positive market re-rating of the Merged Group over time although the timing and magnitude of any re-rating will depend on a variety of factors,

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including, but not limited to, future coal prices, exchange rates, operational issues and overall equity market sentiment;

- The Merged Group will have a substantial growth pipeline including ramp up of Narrabri, the development of the Maules Creek Project and Vickery, and a suite of exploration assets;
- The Merged Group will be managed by a more experienced management team than available within Aston on a standalone basis. This provides shareholders and potential investors with enhanced confidence in the ability of the company to convert business opportunities into cash flows and development projects into feasible, operating coal mines; and
- In our opinion, it is likely that the Merged Group will be viewed as no less attractive, and possibly more attractive, as a takeover target by potential foreign investors.

Aston shareholders will participate in a substantially larger, more diversified and less risky coal company, with more attractive investment characteristics than Aston in its current form.

Furthermore, if the Scheme is implemented, the Aston shareholders will continue to have an opportunity to realise full underlying value (including a premium for control) for their interests to compensate for a passing of control.

- **No alternative proposals have been received**

  The Directors of Aston have advised us that no alternative proposals have been received by Aston as at the date of this independent expert's report.

- **The disadvantages and risks are not significant having regard to the benefits**

  Aston Shareholders have no control over whether the Proposed Boardwalk Transaction is completed. The choice for Aston Shareholders is between Aston continuing as a standalone entity and the Scheme as proposed.

  While the Scheme does not appear to produce any significant disadvantages to Aston shareholders, we note that the completion of the Proposed Boardwalk Transaction is dilutive to Aston shareholders, when compared to the Scheme excluding this aspect.

  Aston shareholders may seek an asset class with an investment profile which provides exposure to risks and returns influenced by coal type, the stage of development of a mine asset, the position on the cost curve, and the degree to which diversification of risks is available. While Aston shareholders effectively diversify their risk exposure related to the development of the Maules Creek Project by gaining access to the portfolio of assets in the Merged Group, there are risks to future share price performance of the Merged Group which may result from uncertainties in the estimation of exploration targets and/or mineral resources, and variances in expected production and forecast cash flows to that actually achieved. In addition, there are risks, and possible additional costs, related to the successful development of the exploration stage assets being acquired from Boardwalk. These risks may include the enactment of legislation, environmental regulations, title to existing tenements, and the obtainment of authorisations, licenses and other approvals.

  The risks to the realisation of anticipated benefits to the Aston shareholders resulting from the Scheme include the long-term success of the Merged Group and the realisation of the estimated synergies will depend on, among other things, the abilities of management of the Merged Group and their success in integrating the respective businesses. As there is no guarantee that Aston

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and Whitehaven will be able to be integrated successfully, or over the expected time period or at the estimated implementation costs, there are risks that an integration of the businesses of Aston and Whitehaven may take longer than expected and that anticipated efficiencies and benefits of that integration may be less than estimated. These risks include possible differences in the management culture of the two groups, inability to achieve synergy benefits and cost savings and the potential loss of key personnel.

In the event the Scheme is not implemented, transaction costs related to the Scheme will be incurred.

- **Aston shareholders are likely to be better off if the Scheme is implemented**

  To the extent the Scheme is not implemented, Aston will incur incremental transaction costs of approximately $3 million above those brought to account as at 31 December 2011.

  In addition, under the terms of the Call Option, Whitehaven has the right to acquire 19.9% of the issued share capital of Aston at an exercise price of 1.978 Whitehaven shares per Aston share, which is at a 15.0% implied premium to the Scheme. Details of the Call Option are set out in section 14.4 of the Scheme Booklet. Whitehaven may only exercise the Call Option over ARI's shares in Aston in the event of certain specified trigger events which relate to alternate control transactions arising before completion of the Scheme. The Call Option is intended to increase the certainty of the Scheme being implemented.

4. Other Matters

The decision to vote for or against the Scheme is a matter for individual shareholders based on each shareholder's view as to value, their expectations about future market conditions and their particular circumstances including risk profile, liquidity preference, investment strategy, portfolio structure and tax position. In particular, taxation consequences may vary from shareholder to shareholder. If in any doubt as to the action they should take in relation to the Scheme, shareholders should consult their own professional adviser.

This independent expert's report has been prepared specifically for Aston shareholders. Neither PwC Securities, PwC and its employees, officers and agents undertakes responsibility to any person, other than Aston shareholders, in respect of this independent expert's report, including any errors or omissions howsoever caused.

Aston has indemnified PwC Securities, PwC and its employees, officers and agents against any claim, liability, loss or expense, cost or damage, including legal costs on a solicitor client basis, arising out of reliance on any information or documentation provided by Aston, which is false and misleading or omits any material particulars or arising from a failure to supply relevant documentation or information.

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The independent expert's report contains only general financial product advice. It was prepared without taking into account individual personal objectives of Aston shareholders, financial situation or needs. Aston shareholders should consider their own objectives, financial situation and needs when assessing the suitability of the independent expert's report to your situation. You may wish to obtain personal financial product advice from the holder of an Australian Financial Services Licence to assist you in this assessment.

Our opinion is made at the date of this letter and reflects circumstances and conditions as at that date. This letter must be read in conjunction with the full independent expert's report attached.

Yours faithfully
PricewaterhouseCoopers Securities Limited



Richard Stewart
Authorised Representative



Roger Port
Authorised Representative

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1 Introduction

1.1 Background

On 12 December 2011 Aston Resources Limited (Aston) and Whitehaven Coal Limited (Whitehaven) jointly announced that they had entered into a Scheme Implementation Agreement (SIA) under which they agreed to merge via a Scheme of Arrangement (Scheme) under Part 5.1 of the *Corporations Act 2001* (Corporations Act).

Aston and Whitehaven are both ASX-listed Australian coal companies. Whitehaven operates five mines (and is developing a sixth mine) in the Gunnedah Basin in New South Wales (NSW). Aston's major asset is its interest[4] in the Maules Creek coal development project also located in the Gunnedah Basin.

Whitehaven and Aston announced that an overriding principle of the Scheme is that it represents a merger of equals under which neither party is taking control of the other party. The primary purpose of the Scheme is to bring together two complementary and growth focused groups, creating a large independent Australian coal company.

In addition, Whitehaven entered into separate agreements on 12 December 2011 to acquire all of the shares and other issued securities in unlisted coal exploration company, Boardwalk Resources Limited (Boardwalk), as set out in section 1.3.

1.2 Terms of the Scheme

1.2.1 Structure

Under the SIA, it is proposed that:

- Aston shareholders will receive 1.89 Whitehaven shares for each Aston share held; and
- Conditional on completion of the Scheme, Whitehaven will pay a fully franked special dividend of $0.50 per share to existing Whitehaven shareholders (Whitehaven Special Dividend). Aston and Boardwalk shareholders will not be eligible to receive the Whitehaven Special Dividend.

1.2.2 Conditions of the Scheme

The Scheme is subject to the satisfaction of a number of conditions which are set out in full in the Notice of Meeting and Explanatory Memorandum (Scheme Booklet) to be sent to shareholders by Aston. The shareholders of Aston are to consider a resolution seeking approval of the Scheme at a general meeting of Aston shareholders that is expected to be held in April 2012 (Scheme Meeting). The Scheme is subject to a number of key conditions, a summary of which include:

- an independent expert concluding that the Scheme is in the best interests of the shareholders of Aston (excluding any shares held by Whitehaven or any of its associates or by any person on behalf of, or for the benefit of, Whitehaven or any of its associates);
- the Scheme being approved by the requisite majority of Aston shareholders at a meeting convened pursuant to section 411(1) of the Corporations Act in respect of the Scheme;
- no material adverse change in Whitehaven or Aston from the date of the SIA to the second court hearing has occurred;
- approval by the court under Section 411(4)(b) of the Corporations Act is granted; and
- all regulatory approvals being obtained by the second court hearing.

[4] Aston's interest in the Maules Creek coal project is currently 85% and will reduce to 75% upon completion of the J-Power agreement, which is conditional on (amongst other things) the consent of Aston's joint venture partner in Maules Creek, ITOCHU Corporation (ITOCHU).

1.2.3 Other elements of the Scheme

Other elements of the Scheme include:

- Aston and Whitehaven have agreed to certain exclusivity restrictions including no-talk, no-shop and no-due diligence provisions.
- a break fee of approximately $20.6 million (exclusive of GST) is payable by Aston to Whitehaven in certain circumstances including if any Aston director changes adversely or withdraws the recommendation in favour of, or voting intentions in relation to, the Scheme or if before the Scheme becomes effective, a third party announces a superior proposal and, as a result, acquires an economic interest in at least 50% of the issued share capital of Aston;
- immediate notification of approaches and counter offers, and Whitehaven having the right to match such terms; and
- a sunset date of 1 June 2012 (unless extended by agreement of Aston and Whitehaven).

1.2.4 Board and Management composition

Following implementation of the Scheme, it is proposed that the board and management of Whitehaven will comprise nine directors, including four independent directors. The Merged Group's Board will comprise:

- Four independent directors (Mr. M. Vaile, Mr. J. Conde, Mr. R. Gazzard, and a fourth independent director to be nominated);
- Two executive directors (Mr. T. Haggarty and Mr. A. Davies);
- Two Tinkler Group representatives (Mr. P. Christensen and Mr. P. Flynn); and
- One AMCI representative (Mr. H. Mende).

Initial management positions known at this point include:

- Mr T. Haggarty is proposed to be the initial Managing Director;
- Mr. P. Kane, current interim CEO of Aston, is proposed to be Chief Operating Officer – Aston and Boardwalk; and
- Mr. A. Davies is proposed to be an Executive Director;
- Mr. A. Perrin is proposed to be the initial Chief Financial Officer.

Other senior management roles are to be determined following a strategic review of the organisational structure of the Merged Group.

1.2.5 Treatment of Aston options and performance rights

Existing Aston option-holders will have the choice to:

- Exercise their Aston options and be issued with Aston shares. These Aston shares will then be exchanged for Whitehaven shares under the Scheme;
- Enter into arrangements to cancel their options in exchange for Whitehaven options which are intended to financially replicate their current position (to the extent possible); or
- Enter into arrangements to cancel their Aston options in exchange for Aston shares of an equivalent value. These Aston shares will then be exchanged for Whitehaven shares under the Scheme.

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1.2.6 *Shareholder intentions*

Aston has agreed to propose the Scheme to Aston shareholders (Aston Shareholders) and the directors of Aston (Aston Directors) have unanimously recommended that Aston Shareholders vote in favour of the Scheme in the absence of a superior proposal and subject to the independent expert concluding that the Scheme is in the best interests of Aston Shareholders.

Each of the independent directors of Aston intend to vote any Aston shares controlled by them in favour of the Scheme, in the absence of a superior proposal. However, Mr. Nathan Tinkler, Mr. Philip Christensen and Farallon Funds and their respective affiliates will not vote any Aston shares that they control on the Scheme at the Scheme Meeting, having regard to their interest in the Proposed Boardwalk Transaction.

1.3 *Proposed acquisition of Boardwalk Resources Limited by Whitehaven*

Simultaneous to entering into the SIA, Whitehaven entered into separate agreements to acquire all of the shares and other issued securities in Boardwalk (the Proposed Boardwalk Transaction) in exchange for 85.89 million Whitehaven shares (Initial Shares) and 34.02 million additional Whitehaven shares (Milestone Shares).

The Milestone Shares will be issued immediately and have rights restricted in accordance with the terms of the restriction deeds as discussed in the Scheme Booklet. The restrictions attaching to the Milestone Shares will cease to apply upon the grant of mining leases and environmental approvals for any two of the following Boardwalk projects; Dingo, Sienna, Ferndale, Monto and Oaklands North, which is a Coalworks Limited (Coalworks) project (17.01 million Whitehaven Shares will be released from the restriction arrangements upon the grant of approvals for any one project).

As part of the Proposed Boardwalk Transaction, existing Boardwalk investors will contribute $150 million of cash to Boardwalk which will be used for the ongoing development of its assets. Boardwalk also had $58.8 million of outstanding debt as at 31 December 2011. Prior to implementation, Boardwalk's debt will reduce by $5.3 million through the conversion of debt to equity.

Boardwalk investors, including entities controlled by Mr. Nathan Tinkler (Tinkler Group) and funds advised and managed by Farallon Capital Management, L.L.C. (Farallon), will not be eligible to receive the Whitehaven Special Dividend. The Proposed Boardwalk Transaction is conditional on Scheme approval (not vice versa). In addition, Whitehaven shareholder approval under Australian Securities Exchange (ASX) Listing Rule 7.1 will be required for the issue of shares to Boardwalk investors. However, the Scheme is not conditional on the approval of the Proposed Boardwalk Transaction.

1.4 *Call option agreement*

In addition to entering into the Scheme and the Proposed Boardwalk Transaction, Whitehaven simultaneously entered into a call option agreement (Call Option) with Aston Resources Investments Pty Limited (ARI), an entity controlled by the Tinkler Group, whereby, in consideration of payment of $1, Whitehaven has been granted an option to acquire up to 40,913,305 ordinary shares in Aston (equal to 19.9% of the issued share capital of Aston shares)(Option Shares) at an exercise price of 1.978 Whitehaven shares per Option Share. The Option Shares will be granted in two tranches - Tranche A, being 30,679,862 of the Aston shares (equal to 14.99% of the issued share capital of Aston) and Tranche B being 10,233,443 of the Aston shares (equal to 5.0% of the issued share capital of Aston) which will be granted subject to obtaining certain approvals. The terms of the Call Option stipulate that, among other items, upon settlement of a sale of the Option Shares ARI has the right to have one director appointed to the board of Whitehaven as well as providing ARI with certain 'upside sharing' rights in the event of a counterproposal by a third party or if Whitehaven disposes of any Aston shares it acquires under the Call Option within 12 months of exercise.

Under the terms of the Call Option, Whitehaven has the right to acquire 19.9% of the issued share capital of Aston shares at an exercise price of 1.978 Whitehaven shares per Option share, which is at a 15.0% implied premium to the Scheme (the Whitehaven Special Dividend would not be paid in this scenario). Details of the Call Option are set out in section 14.4 of the Scheme Booklet. Whitehaven may only exercise the Call Option over ARI's shares in Aston in the event of certain specified trigger events including the announcement of a rival takeover bid or scheme. The Call Option is intended to increase the certainty of the Scheme being implemented.

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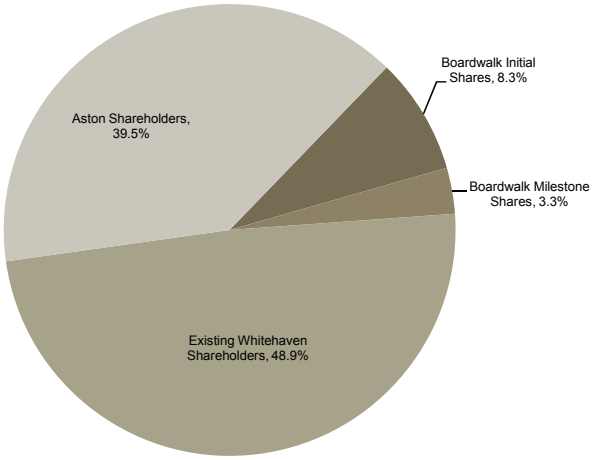
1.5 Pro forma Merged Group shareholding structure

Aston has a total of approximately 204.7 million issued shares, 9.8 million options and 0.7 million performance rights on issue. Of these, approximately 65 million shares are held by the Tinkler Group (equal to approximately 32% of the issued share capital of Aston). Whitehaven has a total of approximately 496.2 million issued shares, 6.4 million options on issue and 1.3 million performance rights on issue.

Based on the respective number of issued shares assuming the Proposed Boardwalk Transaction is completed, the collective interest of Aston shareholders in the combined group comprising Whitehaven, Aston and Boardwalk (Merged Group) will reduce to approximately 40.8% (before potential dilution from the Milestone Shares). On a fully diluted basis (taking into account the options and performance rights that Whitehaven and Aston have on issue and the full issue of Milestone Shares), the Aston shareholders will collectively hold approximately 39.5% of the shares of the Merged Group.

The following diagram depicts the likely share holdings in the Merged Group of relevant groups post completion of the Scheme. Note that this assumes the conversion or exercise of share options and performance rights and completion of the Proposed Boardwalk Transaction (including the full issue of Milestone Shares).

Figure 1.1: Shareholdings in Merged Group post Scheme implementation (on a fully diluted basis)



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2 Scope of the Independent Expert's Report

2.1 Purpose of the Independent Expert's Report

The proposed merger of Aston and Whitehaven is to be effected by a members' scheme of arrangement (the Scheme). Schemes of arrangement are governed by Section 411 of the Corporations Act 2001 (Cth) (Corporations Act) and Schedule 8 of the Corporations Regulations. Before the Scheme can proceed, it must be considered and approved by the shareholders and the court.

Clause 8303 of Part 3 of Schedule 8 requires that, in the circumstances where the party proposing a scheme holds more than 30% of the issued capital of the company the subject of the scheme, the explanatory statement provided to shareholders is to be accompanied by a report from an independent expert stating whether, in the expert's opinion, the scheme is in the best interests of members of the company subject to the scheme and setting out the reasons for that opinion.

Whitehaven and its related parties do not hold an interest of more than 30% in the issued capital of Aston and have no common directors. Accordingly, there is no requirement under the Corporations Act for an independent expert's report to be prepared in connection with the proposed scheme. Nevertheless, the SIA contains a condition precedent that an independent expert's report is obtained providing that, "the Scheme is in the best interests of Scheme Participants" (being Aston shareholders other than Whitehaven and its associates). We have been requested to prepare an independent expert's report stating whether, in our opinion, the Scheme is in the best interests of the Aston shareholders and to set out reasons for that opinion.

Section 606 of the Corporations Act (s606) provides a general prohibition to any person increasing their relevant interest in the issued voting securities of a listed company from 20% or below to more than 20%. However there are various exceptions to this prohibition including those set out in section 611 of the Corporations Act (s611) including court approved schemes of arrangement.

2.2 Our Approach

There is no definition of "in the best interests of the members" provided in the Corporations Act. Relevant guidance is provided in Australian Securities and Investments Commission ("ASIC") Regulatory Guide 111 – Content of experts reports (RG111). RG111 is framed largely in terms which relate specifically to control transactions effected by way of a scheme of arrangement. RG111.18 indicates that an expert evaluating a control transaction effected by way of a scheme of arrangement should undertake a form of analysis substantially the same as "fair and reasonable" reports for takeover offers under Section 640 of the Corporations Act. In this context RG111.18-22 indicates that assessment of whether a proposal is "in the best interests of the members" for reports on control transactions prepared for the purposes of Section 411 should be evaluated by reference to whether the proposal is "fair and reasonable" and should also include an opinion on this basis.

RG111.30-31 requires that the assessment of fairness of a control transaction under Section 640 of the Corporations Act compares the value of scrip consideration (allowing for a minority interest discount) to the value of the securities being given up assessed on a controlling interest basis assuming 100% of the securities were available for sale. The Regulatory Guides reflect ASIC's underlying philosophy that the premium for control of a company be shared by all members of that company.

However, RG111.31 also requires the expert to assess whether a scrip takeover is in effect a "merger of entities of equivalent value when control of the merged entity will be shared equally between the 'bidder' and the 'target'". In such circumstances, the expert may use an equivalent approach to valuing the securities of the 'bidder' and the 'target'.

We have given particular consideration as to whether the Scheme should be assessed as a takeover of Aston by Whitehaven or as a merger of the two entities. To determine whether the Scheme is a merger of equals or a control transaction, we have considered the following factors:

- The collective interests of the Aston shareholders and existing Whitehaven shareholders;
- The mix of the members of the Board and senior management of the Merged Group;
- Contribution by Aston and Whitehaven to the assets and liabilities to the Merged Group;
- The comparative trading performance of each company's shares on the ASX and their relative market capitalisations;
- Whether any shareholder from either company will be in a position to control or significantly influence the Merged Group, or if the shareholder register of the Merged Group will be relatively open after the Scheme;
- Whether entering into the Scheme reduces the opportunity for Aston shareholders to receive a future takeover offer for their shares in the Merged Group; and
- The intentions of the board and management of Aston and Whitehaven on entering into the Scheme.

Upon completion of the Scheme, Aston shareholders will hold approximately 40% of the Merged Group (excluding any vesting of the Milestone Shares as a result of Boardwalk milestones being achieved), there will be no individual shareholder with a shareholding of greater than 20% to exert significant influence over the Merged Group, and the board and management control of the Merged Group will be shared between Aston and Whitehaven. Having regard to these factors, we consider that the Scheme should be evaluated as a merger of equals rather than a control transaction. As such, the consideration offered and the securities given up have been assessed on an equivalent basis for our assessment.

Our assessment of the value of Aston's ordinary shares and the Whitehaven shares in the Merged Group which form the consideration offered has been undertaken using values on both a controlling interest and a minority interest valuation basis for each security.

As a comparison of the relative value of the consideration offered to the value of the securities given up using the above basis does not evaluate whether a full premium for control is offered, we have separately considered other significant advantages and disadvantages of the Scheme to Aston shareholders (including the likelihood of another offer being received on better terms and the ability to receive a control premium at a later date) in order to form an opinion as to whether the Scheme is in the best interests of shareholders.

2.3 Valuation approach

We have considered valuation approaches that are commonly applied to determine the fair value of assets or securities and selected methodologies which we consider to be appropriate having regard to the nature of the underlying assets and circumstances of the entities being assessed.

As the mining operations of Aston and Whitehaven have finite lives, varying operating parameters and capital requirements over the mine lives, we do not consider that the use of methodologies which apply a multiple to estimated future maintainable earnings is appropriate for the purposes of our evaluation. The orderly realisation of assets basis is commonly applied to businesses which are not going concerns, or comprise non-core assets or are not generating economic returns on the assets employed. None of these circumstances are relevant to Aston or Whitehaven's principal operations. However, we have applied this approach for surplus cash assets and other sundry assets and liabilities.

We have primarily assessed the value of Aston and Whitehaven on a controlling interest by using the discounted cash flow (DCF) methodology to assess the value of the coal mining operations and the near term development coal projects to which we have added the estimated realisable value of any surplus assets not assessed within the cash flow modelling of the mining operations and deducted net debt. The DCF methodology has a strong theoretical basis and is commonly used to value mining companies. The application of this methodology involves projecting cash flows after tax over a future period and selection of an appropriate discount rate which reflects the risks inherent in the estimated future cash flows. Consistent with our basis of assessment of the Scheme, our valuation of Aston and Whitehaven on a standalone basis has been undertaken using the current tax base of assets held.

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We have cross checked the DCF based value of the coal mining operations to value per tonne of resource and reserve multiples implied from other listed coal companies and from recent transactions for coal companies and interests in coal projects. We have also compared the sum of the parts valuation of the entities derived under the primary valuation approach outlined above to the quoted listed price for Aston and Whitehaven shares after allowing for a premium for control.

We have assessed the stand alone value of Aston and Whitehaven shares on a minority interest basis by reference to the prices at which securities in the companies have traded having regard to the depth of share trading and the volatility of the share prices.

For the purposes of our assessment, we have assessed fair market value on the basis of *"a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length"* in accordance with RG111.11(a).

2.4 Other Factors

We have been mindful that RG111.5 requires the expert to adequately deal with concerns that could reasonably be anticipated of those persons affected by the proposed transaction. We note that the proposed acquisition of Boardwalk by Whitehaven is conditional on the implementation of the Scheme between Aston and Whitehaven. We note that the principal shareholder of Boardwalk is a significant shareholder in Aston. Accordingly, we consider that a key concern of Aston shareholders is likely to be the value implications of the proposed acquisition of Boardwalk.

Elements of the Scheme and the Proposed Boardwalk Transaction are contemporaneous. Accordingly, our evaluation of the Scheme has involved an assessment of elements of the Proposed Boardwalk Transaction to the extent that we consider this is relevant. However, ultimately our assessment of the Scheme requires an overall judgement as to whether Aston shareholders are likely to be better off if the Scheme is implemented than if it is not, rather than the specifics of the Proposed Boardwalk Transaction standalone.

2.5 Sources of Information

In preparing this report, we have used and relied upon the information set out in Appendix B and representations made by Aston's and Whitehaven's management. Financial information set out in this report for the years ended 30 June 2010 and 2011 is based on the audited financial statements of Aston and Whitehaven. Any financial information relating to the six months to 31 December 2011 and for any period after 31 December 2011 is based on reviewed financial information. We have conducted checks, enquiries and analyses of the information provided to us which we regard as appropriate for the purposes of this report. Based on these procedures, we believe that the information used as the basis for forming the opinions in this report is accurate, complete and not misleading and we have no reason to believe that material information relevant to our report has been withheld. Whilst our work has involved an analysis of financial information and accounting records, it does not constitute an audit of either Aston or Whitehaven in accordance with Australian Auditing Standards, and accordingly no such assurance is given in this report.

The information provided to us includes life of mine and other strategic cash flow models for both Aston and Whitehaven prepared by each company's respective management teams. Some of the companies' projects have not yet progressed to detailed mine planning stage and are based on identified and target resources. We have reviewed management's budgets and cash flow models to develop valuation models for the mining operations and advanced development projects of both Aston and Whitehaven and to assess the sensitivity of the value of these operations to changes in key assumptions.

The information included in this report relating to prospective future events and cash flows does not purport to reflect forecast financial information, but reflects scenarios adopted for valuation purposes upon which extensive sensitivity analysis has been undertaken in order to assess a likely valuation range. The directors of Aston have not included prospective financial information in the Scheme Booklet relating to the Scheme on the basis that there is significant uncertainty relating to the estimation of many parameters influencing future financial performance.

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2.6 Reliance on Technical Experts

To assist in our valuation of the coal assets held by Aston, Whitehaven and Boardwalk, Aston engaged on our behalf a technical expert, Minarco-MineConsult (MMC) to provide a Technical Expert's Report (MMC Report) for use and reliance by us in the preparation of our independent expert's report.

MMC has been engaged to assess the reasonableness of the resources and key operating parameters adopted by Aston and Whitehaven in the strategic cash flow models including coal quality, product mix, yields, development costs, operating and capital costs. MMC has also considered the reasonableness of the quantification of key operational synergies identified by the management of Aston and Whitehaven for the Scheme. Some of the identified resources have not yet progressed to a detailed mine planning stage. Accordingly, we have relied upon assessments of the value of these projects and other mineral exploration assets by MMC.

We have relied upon the work undertaken by MMC in forming our valuation assessment. The MMC Report conforms with the requirements of the Code and Guidelines for Assessment and Valuation of Mineral Assets and Mineral Securities for Independent expert reports as adopted by the Australasian Institute of Mining and Metallurgy (the "Valmin Code").

We are satisfied that:

- MMC has appropriate qualifications, industry experience and competence to conduct its assessments;
- the methodologies used in its valuations are consistent with generally accepted industry practice; and
- the MMC report contains sufficient information to support the conclusions drawn.

We have also considered whether MMC is suitably independent of Aston, Whitehaven and Boardwalk for the purposes of this assessment. We note that MMC and other external consultants have had review involvement in various aspects of Whitehaven's resource classification and also in development of mine plans for several of Whitehaven's mines, as well as various projects with Aston and Boardwalk. We are satisfied that the nature of work previously undertaken by MMC for Whitehaven, Boardwalk and Aston and the procedures in place by MMC for the purposes of their report, including use of personnel from different offices and a related company Runge, are sufficient to ensure that MMC is sufficiently independent for the purposes of our evaluation.

The MMC Report is in section 9 of the Scheme Booklet and should be read in conjunction with our report.

Aston engaged on our behalf a coal market expert, AME Consulting Pty Limited (AME), to provide commentary on the market for thermal and coking (metallurgical) coal products produced (or to be produced) by Aston and Whitehaven and to provide views on the near term outlook for coal prices. The coal market report by AME (AME Report) provides additional relevant information in considering the Scheme. We have referred to the views of AME and other publicly available market outlooks for coal prices and foreign exchange rates in forming our valuation assessment.

We are satisfied that:

- AME has appropriate qualifications, industry experience and competence to conduct its assessments;
- AME is suitably independent of Aston and Whitehaven; and
- the AME Report contains sufficient information to support the conclusions drawn.

The AME Report is attached in section 9 of the Scheme Booklet and should be read in conjunction with our report.

2.7 Shareholders should seek personal advice

An individual Shareholder's decision in relation to the Scheme may be influenced by his or her particular circumstance. In undertaking the assessment, we have considered the Scheme for shareholders as a whole. We have not considered the effect of the Scheme on the particular circumstances of individual shareholders nor

have we considered their individual objectives, financial situation or needs. Individual shareholders will have varying financial and tax circumstances and it is not practical or possible to consider the implications of the Scheme on individual shareholders as their respective financial circumstances are not known to us. Due to particular circumstances, individual shareholders may place different emphasis on various aspects of the Scheme from that adopted in this independent expert's report. Accordingly, individual shareholders may reach different conclusions as to whether they should approve or not approve the Scheme. Accordingly, individual shareholders should seek their own financial advice.

We have prepared a Financial Services Guide (FSG) in accordance with the Corporations Act. The FSG is included as Part B of this report.

2.8 Limitations and reliance on information

This report has been prepared solely for the purpose noted above and is not permitted to be used for any other purpose.

We have not provided an opinion on whether the Scheme is in the best interests other than in terms of its effect on Aston shareholders, and prohibit anyone from relying on this report for any other purposes. Any decision to approve or not approve the Scheme rests solely with Aston shareholders and it is up to them to undertake their own enquiries and due diligence, and form their own opinion as to the Scheme.

In preparing this report, we have had regard to public and non-public information. A listing of this information is detailed in Appendix B of this report. We have used and relied on the information set out in Appendix B and representations made to us by and on behalf of the management of Aston and Whitehaven.

In preparing this report, we have considered the interests of the shareholders of Aston taken as a whole. This report contains only general financial product advice and does not consider the personal objectives, financial situation or needs of individual shareholders of Aston. An individual's decision in relation to voting for or against the Scheme may be impacted by the individual's particular circumstances and shareholders may wish to obtain personal financial product advice from their financial adviser.

We have conducted such checks, enquiries and analysis on the information provided which we regard as appropriate for the purposes of this report however, such information and representations are not always capable of external verification or validation. Based on this evaluation, we believe that the information used in forming our opinions in this report is reliable, complete and not misleading and we are not aware of any reason to believe that material facts have been withheld. Preparation of this report does not in any way imply that we have audited the financial statements or other records of Aston, Whitehaven or Boardwalk. It has been assumed that the accounting information relied upon was prepared in accordance with generally accepted accounting principles.

Our assessment has been made as at the date of this report. Economic conditions, market factors and performance changes may result in the report becoming outdated. We reserve the right, but are under no obligation to review our assessments, and, if we consider it necessary, to issue an addendum to this report in the light of any relevant material information which subsequently becomes known to us prior to the Scheme Meeting scheduled to be held in early April 2012.

All value amounts in the report are denominated in Australian dollars ($) unless otherwise stated. All capitalised terms not otherwise defined in our Glossary contained in Appendix G, will take the form as defined in the Scheme Booklet. Financial tables may be subject to rounding.

We provided draft copies of this independent expert's report to the Directors, advisors and management of Aston, and where relevant, Whitehaven, for their comments as to factual accuracy, as opposed to opinions, which are our responsibility alone. Changes made to this independent expert's report as a result of this review by the Directors, advisors and management of Aston, and where relevant, Whitehaven, have not changed the methodology or conclusions reached by us.

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3 Overview of Aston

3.1 Company history

Established in 2008, Aston is an ASX-listed Australian coal company whose primary focus is development of the Maules Creek coal project (Maules Creek Project). Listed below are highlights of significant events in Aston's history since its establishment:

Date	Event
January 2008	Aston is established by current non-executive chairman, Mr. Nathan Tinkler.
February 2010	The Maules Creek open cut coal project was acquired from Coal & Allied Industries Ltd. 100% of the asset was purchased for $480 million, with Noonday Global Management (a sister fund of Farallon Capital Management) providing a combination of short term and long term debt facilities of $505 million. At the time of acquisition, the Maules Creek Coal Project contained JORC Resources of approximately 398Mt, including 57 Mt measured, 218 Mt indicated and 123 Mt inferred.
April 2010	A JORC Reserve Statement was released, upgrading the Maules Creek Project JORC Reserves from zero to 356Mt, and JORC Resources from 398Mt to 610Mt.
August 2010	Aston successfully completed an IPO, raising $400 million through the issue of 67.1 million shares at $5.96 per share. The proceeds were used to pay down a proportion of the funding used for the acquisition of the Maules Creek Project, and to provide working capital to progress the detailed engineering design for the Maules Creek Coal Project.
December 2010	Aston signed an Asset Sale and Purchase Agreement for the sale of a 15% stake in the Maules Creek Coal Project to a wholly owned subsidiary of the Japanese resources and trading conglomerate ITOCHU Corporation (ITOCHU). When the asset sale completed on 6 May 2011, the parties formed the Maules Creek Joint Venture, and Aston received cash proceeds of $345 million.
	Aston completed a drilling program to further increase both JORC resource and JORC reserve levels. JORC resources were increased from 610 Mt to 679 Mt, and JORC reserves were increased from 356 Mt (151 Mt Proved and 205 Mt Probable) to 362 Mt (171 Mt Proved and 191 Mt Probable).
July 2011	Aston announced the completion of a definitive feasibility study (DFS) for the Maules Creek Project.
	Aston secured revolving credit facilities from ANZ and Macquarie Bank. The facility included an immediately available corporate loan facility of $175 million, and an immediately available bank guarantee facility of $60 million (Tranche 1). A further $75 million corporate loan facility and $40 million bank guarantee facility (Tranche 2) is available upon satisfaction of further conditions precedent. These facilities are due to mature on 31 March 2014. Refer to section 3.5 for further information regarding Aston's debt structure.
September 2011[5]	Aston entered into a conditional agreement with J-Power Australia Pty Ltd (J-Power) for the sale of a 10% stake in the Maules Creek Project. The transaction consideration was $370 million, and was inclusive of a long term thermal coal sales agreement between the Maules Creek Joint Venture and Electric Power Development Co. The 10 year agreement includes offtake of 150ktpa occurring in the first year (agreement commences April 2014), increasing by 150ktpa each year up to 900 ktpa from 2019 and includes a price premium for high energy and low ash content. The transaction is conditional on ITOCHU consenting to the terms of the agreement as well as other consents and conditions. Subject to the receipt of these consents, the transaction is expected to complete in 2012.
November 2011	Aston announced significant re-organisation of the board and senior management group. The re-organisation included the resignation of CEO Todd Hannigan and CFO Tom Todd, as well as the appointment of founder and major shareholder Mr. Nathan Tinkler as non-executive chairman. In addition, Aston also announced the appointment of Mr. Rick Gazzard and Mr David Ryan as independent, non-executive directors to the board of directors.
December 2011	Aston announces merger of equals with Whitehaven under the Scheme.
	Aston announced that it had, on behalf of the Maules Creek Joint Venture, signed a joint venture agreement with Boggabri Coal Pty Limited for the design, construction and operation of a shared rail spur. On commencement, the Maules Creek Joint Venture will have a participating interest of approximately 52%, and the right to rail 10.8Mtpa, with the ability to increase this throughput to 15 Mtpa upon receipt of appropriate approvals. In addition, a term sheet was signed under which costs will be shared in relation to the shared transmission line, upstream communications and control equipment and an access road.

[5] In February 2012, Aston entered into a Pre-emption Waiver Deed and a Deed of Acknowledgement and Consent with both ITOCHU and J-Power to obtain ITOCHU's consent for the J-Power sale and the long term thermal coal sales agreement.

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Date	Event
December 2011	Aston announced that the Planning Assessment Commission appointed to review its application for environmental approval requested an extension to the 16 December 2011 reporting date for the Maules Creek Project whereby an extension was granted to 24 February 2012.

3.2 Overview of the Maules Creek Project

The Maules Creek Project is a development stage, open cut mine located in the Gunnedah Basin (NSW), approximately 380km northwest of Newcastle. The tenement area is to the east of Whitehaven's Narrabri mine, and immediately north of the Boggabri and Tarrawonga mines. It is situated 16km from the Hunter Valley Coal Rail Network, which services the coal terminals at the Port of Newcastle.

The multi-seam coal deposit includes JORC resources of approximately 679Mt (on a 100% basis), including 197Mt measured, 244Mt indicated and 237Mt inferred. The resources incorporate JORC coal reserves of 362Mt, of which 171Mt is categorised as proved and 191Mt as probable. The JORC recoverable reserves equate to 329Mt of JORC marketable reserves (141Mt proved and 188Mt probable).

The Maules Creek Project has a targeted average annual production of 10.8 Mt saleable coal over a project life in excess of 30 years. Aston is targeting first coal production in mid calendar year 2013, with saleable production exceeding 10Mtpa from 2016.

The Maules Creek Project is expected to have a low strip ratio (at an average of 6.4:1 over the first 20 years); and an expected saleable mine yield of 86%. Due to its favourable geology, the Maules Creek Project is expected to produce coal at relatively low operating costs per tonne. Drilling programs and coal quality testing have confirmed a combination of high quality, low ash, low sulphur semi soft coking coal (with the ability to produce approximately 84% metallurgical coal, although only up to 80% will be marketed as semi-soft coking coal) and premium low ash, high energy thermal coal.

Other selected items in relation to the development of the Maules Creek Project, include:

- An Access Holder Agreement with the Australian Rail Track Corporation (ARTC), securing 2Mtpa of below rail capacity from 1 April 2013. This increases to 5Mtpa from 1 July 2013.

- Up to 7.1Mt of port capacity at Newcastle Coal Infrastructure Group (NCIG) between July 2013 and the end of FY16 under an NCIG Substitute Shipper Agreement with an existing Newcastle coal shipper. In December 2011, Aston announced that they had accepted a further allocation of port capacity from Port Waratah Coal Services (PWCS) of 3.5Mtpa from 2015 in addition to an existing allocation at PWCS of 1.7Mtpa from 2013, which ramps up to 5Mtpa from 2015. The additional capacity will be sourced from the yet to be developed Terminal 4 (T4).

The above rail access and port allocation is below the targeted production level from the Maules Creek Project, however Aston management advised us that they have not currently contracted for the full targeted production level because they believe such capacity will become available in the market in the future.

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3.2.1 *Financial performance*

The following table summarises Aston's audited financial performance for the fiscal years ended 30 June 2010, and 2011 and the reviewed financial performance for the six months ended 31 December 2011.

Table 3.1: Consolidated Statement of Financial Performance

$ millions	Fiscal year ended 30 June 2010 (Audited)	Fiscal year ended 30 June 2011 (Audited)	Half year ended 31 December 2011 (Reviewed)
Other income	17.0	6.9	3.8
Gain on sale	2.3	253.9	0.0
Employee benefits expense	(3.8)	(10.4)	(22.8)
Other expenses	(10.5)	(4.1)	(3.4)
Foreign exchange gains/(losses)	(29.6)	82.0	(0.1)
Revaluation of warrants	(113.2)	0.0	0.0
Profit/(loss) before income tax	(137.8)	328.3	(22.5)
Income tax expense	0.0	(85.4)	0.5
Profit/(loss) for the period	(137.8)	242.9	(22.0)

Source: Aston Resources 2011 Annual Report, Aston Resources reviewed financial performance for the half year ended 31 December 2011

In relation to the financial performance of Aston set out above, we note that:

- Aston is primarily involved in the development of the Maules Creek Project with historical costs largely capitalised in exploration and development. The historical financial performance has been influenced over the past two and a half years by the impact of the partial sell-down of its interest in the Maules Creek Project and financing arrangements.
- Other income consists of management fees, interest income, debt forgiven, rental income, water licence income and other income.
- The gain on sale in FY10 relates to the sale of the Dingo Project, whilst in FY11 it relates to the sale of the 15% interest in the Maules Creek Project to ITOCHU, completed on 6 May 2011. Aston has signed a conditional sale agreement with J-Power for the sale of a further 10% interest in the Maules Creek Project. This transaction is subject to ministerial consent, however we note that ITOCHU's pre-emption waiver and consent to the long term coal sales agreement has been obtained. As such the December 2011 half year earnings do not include recognition of this sale.
- A revaluation of warrants immediately prior to the reclassification to equity (2 June 2010) was undertaken by an independent valuer, who ascribed a fair value of approximately $113.2 million to the warrants. The increase in fair value of the warrants was expensed in net income and transferred from a financial liability to equity in Shareholders Funds.
- Aston held certain USD denominated financial instruments which when translated to Australian dollars results in realised and unrealised foreign exchange gains and losses. There were no USD balances as at 31 December 2011.

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3.2.2 *Financial position*

The table below summarises Aston's audited financial position as at 30 June 2010 and 30 June 2011, and the reviewed financial position as at 31 December 2011.

Table 3.2: Consolidated Statement of Financial Position

$ in millions	30 June 2010 (Audited)	30 June 2011 (Audited)	31 December 2011 (Reviewed)
ASSETS			
Cash and cash equivalents	3.2	341.9	122.6
Trade and other receivables	0.1	1.7	1.6
Prepayment and other assets	2.8	1.7	4.6
Total current assets	6.1	345.3	128.7
Property, plant and equipment	6.9	29.6	30.5
Mining tenements	538.6	545.4	572.0
Intangibles	3.0	2.9	2.9
Prepayments and other assets	0.0	0.0	3.6
TOTAL ASSETS	554.6	923.2	737.7
LIABILITIES			
Trade and other payables	8.5	11.0	13.5
Borrowings	151.0	0.0	0.0
Provisions	0.2	0.3	0.5
Income tax payable	0.0	40.3	43.8
Total current liabilities	159.7	51.7	58.0
Non-current payables and provisions	1.8	7.7	1.3
Borrowings	401.9	180.1	0.1
Deferred tax liabilities	0.0	38.5	34.5
TOTAL LIABILITIES	563.4	278.1	93.8
EQUITY			
Contributed equity	26.2	543.2	543.2
Warrants	113.2	0.0	0.0
Reserves	0.0	7.2	27.9
Retained earnings	(148.2)	94.7	72.7
TOTAL EQUITY	(8.8)	645.1	643.9

Source: Aston Resources 2011 Annual Report, Aston Resources reviewed financial position as at 31 December 2011

In relation to Aston's audited financial position as set out above, we note that:

- The net asset position of $643.9 million as at 31 December 2011 is relatively consistent with the position as at 30 June 2011. However gross assets reduced over this period primarily through the repayment of debt from cash balances.
- Cash and cash equivalents were $341.9 million at 30 June 2011, predominantly due to the sale of the 15% interest in the Maules Creek Project to ITOCHU for $345.0 million and the $377.9 million in cash raised from the issue of share capital.
- Mining tenements, land and intangibles all remained fairly stable between the periods. Mining tenements relates to Coal Lease CL 375 (a mining lease for open-cut and underground mining for coal and petroleum minerals, which is due to expire in June 2012) and Authorisation A346. Land consists of interests in surface land in the Maules Creek area, whilst intangibles comprise water licences, primarily Water Access License 13050, which is considered to have an infinite life as it was granted for an unlimited duration.

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3.2.3 Cash flows

The table below summarises Aston's consolidated statement of cash flows for the years ended 30 June 2010 and 2011 and the six months ended 31 December 2011.

Table 3.3: Consolidated Statement of Cash Flows

$ in millions	Fiscal year ended 30 June 2010 (Audited)	Fiscal year ended 30 June 2011 (Audited)	Half year ended 31 December 2011 (Reviewed)
Net cash from operating activities	(8.9)	(0.3)	(4.2)
Net cash from investing activities	(509.4)	296.8	(24.6)
Net cash from financing activities	521.4	39.5	(190.4)
Net increase/(decrease) in cash and cash equivalents	3.1	336.0	(219.3)
Net foreign exchange differences	0.0	2.7	0.0
Cash and cash equivalents at the beginning of the financial period	0.0	3.2	341.9
Cash and cash equivalents at end of period	3.2	341.9	122.6

Source: Aston Resources 2011 Annual Report, Aston Resources reviewed cash flows for the half year ended 31 December 2011

In relation to the Aston cash flows set out above, we note that:

- There is minimal net cash flow from operating activities given the pre-development nature of Aston's operations.
- Investing activities primarily consists of payments for mining tenements, land and intangibles and proceeds on the sale of mining investments. Investing activities principally relate to the purchase of the Maules Creek Project in February 2010 and the sale of the 15% interest in the Maules Creek Project in December 2010.
- Financing activities primarily arise from the drawdown of external borrowings to acquire the Maules Creek Project and its subsequent repayment in part from net cash raised from the IPO in August 2011 and in part from proceeds from the sale of a joint venture interest in the project.

3.3 Capital structure

3.3.1 Largest Shareholders

As at 20 January 2012, the issued capital of Aston comprised 204.7 million ordinary shares. The following table indicates Aston's top five shareholders (based on substantial shareholder notices) as at 27 January 2012.

Table 3.4: Substantial Shareholders

Rank	Size of holding	Number of securities	% of issued capital
1	Aston Resources Investments Pty Ltd	64,645,799	31.6%
2	Farallon Capital Management, L.L.C.	19,371,047	9.5%
3	JCP Investment Partners Ltd.	17,870,581	8.7%
4	Burlingham International Ltd	13,555,154	6.6%
5	Kuok Group (Corporate Group)	11,238,370	5.5%
	Total of top five shareholders	**126,776,568**	**61.9%**

Source: Thomson Reuters, updated for substantial shareholder notices

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We note that as at 27 January 2012, Aston had five substantial shareholders with holdings above 5.0% of issued capital. Together, these shareholders hold approximately 61.9% of issued share capital.

3.3.2 Options and warrants

The following table illustrates the options and performance rights of Aston on issue as at 12 December 2011.

Table 3.5: Options and performance rights on issue

Expiry date	Exercise price ($)	Number of securities
Options		
17 August 2015	5.96	5,285,464
10 November 2015	6.29	104,575
17 August 2016	8.94	4,360,464
Performance rights		
16 November 2014	0.00	215,292
17 August 2015	0.00	450,000

Source: Scheme Implementation Agreement

All of Aston's options and performance rights on issue vest in the event of a 'change of control'. This includes any event which the Board determines to be a change of control, including a merger of the company with another company. Should the proposed transaction be implemented, all options and performance rights on issue will vest.

3.4 Capital raising history

Aston has not completed any capital raisings since its IPO in August 2010 when 67.1 million shares were issued at $5.96 per share raising approximately $400.0 million ($378.8 million net of costs).

Refer to section 3.6 for further information on recent share price performance.

3.5 Debt structure

Aston's current debt structure consists of revolving credit facilities provided by ANZ and Macquarie Bank in July 2011.

These include an immediately available corporate loan facility of $175 million and an immediately available bank guarantee facility of $60 million (Tranche 1).

A further $75 million corporate loan facility and $40 million bank guarantee facility (Tranche 2) are available upon satisfaction of further conditions precedent, most notably

a) the receipt of approval for the project under Part 3A under the *Environmental Planning and Assessment Act 1979* (NSW); and

b) confirmation that up-to-date capital cost assessments do not exceed the Project Support Capital Estimate dated 1 June 2011 by greater than 20%, or, where it has, additional Equity Contributions or Permitted Finance debt has been raised (subject to conditions).

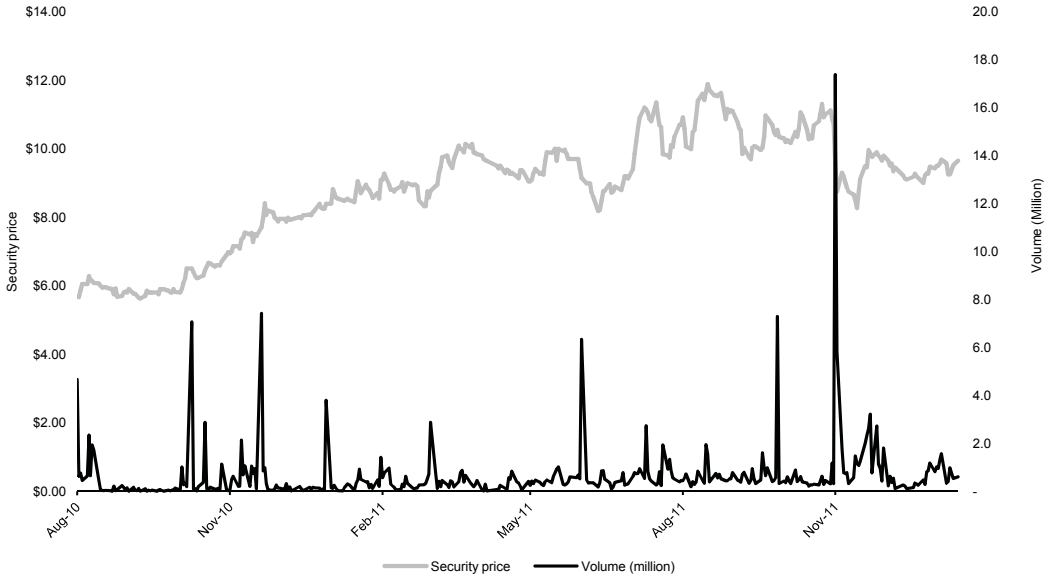
These facilities are due to mature on 31 March 2014.

3.6 Share price performance

The following graph depicts the trading volume and price of shares for the period 17 August 2010 (the date on which Aston commenced trading on the ASX) to 30 January 2012. We have analysed Aston's share price performance and trading volumes.

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Figure 3.1: Aston share price and volume traded (17 August 2010 – 30 January 2012)



Source: Capital IQ, PwC Securities analysis

In relation to Aston's share price movements, we note that:

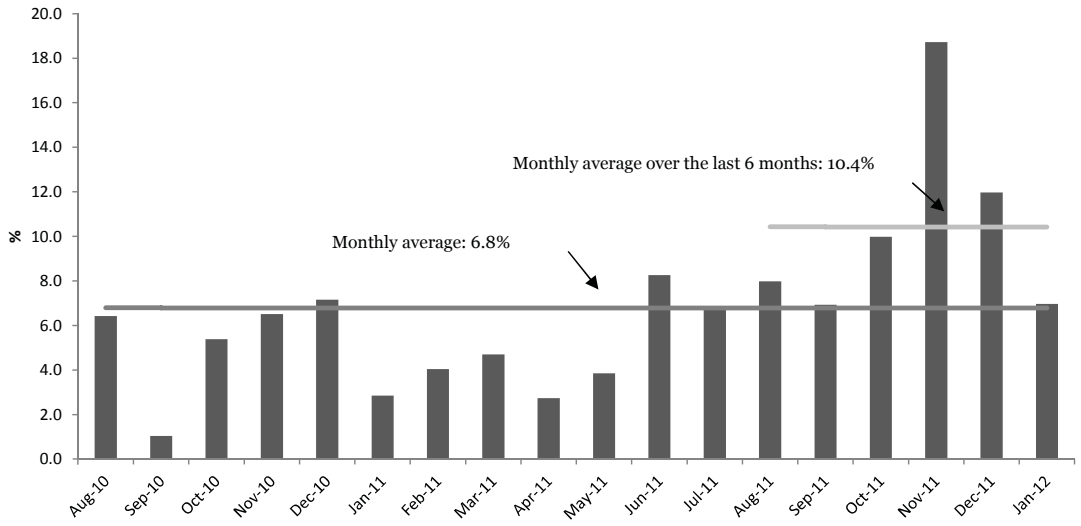
- The IPO (on 17 August 2010) raised $400.0 million through applications for 67.1 million securities at an initial price of $5.96 per Security.
- Aston's lowest closing Security price was on 24 September 2010, closing at $5.63, whilst its highest closing price ($11.88) was reached on 1 September 2011.
- Aston's share price closed at $8.41 on 8 December 2010, following the announcement of the sale of the 15% stake in the Maules Creek Coal project to ITOCHU.
- Following the announcement of the changes to the Board and senior executive team in November 2011, Aston's share price fell significantly. Aston's share price fell by 11.2% on 17 November 2011, and a further 8.4% on 18 November. On 17 November, the daily trading volume rose to 32.9 times the daily average since the IPO, and 11.0 times the average on 18 November. The changes included:
  - Founder and major shareholder Nathan Tinkler appointed non-executive Chairman.
  - The immediate resignation of CEO Todd Hannigan; and
  - The immediate resignation of CFO Tom Todd.
- Since Aston's IPO, the company has not paid any dividends to shareholders, and total shareholder return since the IPO has been approximately 69.9% to 30 January 2012.

3.6.1 Liquidity analysis

The graph below depicts the monthly volume of Aston's shares traded as a proportion of the weighted average shares outstanding.

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Figure 3.2: Monthly volumes of shares traded as % of total shares



Source: Capital IQ, PwC Securities analysis

In relation to the above chart, we note that:

- In the six months leading up to 31 January 2012, the average monthly volume of shares traded as a percentage of weighted average shares outstanding was approximately 10.4%. This is 3.6% higher than the monthly average of 6.8% since the IPO.
- The increased levels of trade throughout November were a major factor behind the most recent six month average being substantially higher than the overall average.
- Overall, Aston's shares have a relatively low liquidity given its size primarily due to:
  - The small proportion of shares freely traded on the ASX;
  - Various shareholders entered into voluntary escrow arrangements with Aston at or around the time of the IPO, under which they agreed not to deal with their shares or their interests in the relevant shareholding entity without the consent of the Company until 14 February 2011 (the date on which the Financial Report for the half year ended 31 December 2010 was released by the ASX to the market); and
  - Free float market capitalisation of approximately $592.7 million at 31 January 2012 placing Aston outside the S&P/ASX 100 index.

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4 Overview of Whitehaven

4.1 Background

Whitehaven is a producer of thermal and metallurgical coal with significant growth prospects. The primary mining operations are based in the Gunnedah Basin of NSW, approximately 350km Northwest of Newcastle. As at the date of this report, annual coal production is approximately 5.5 Mtpa, consisting of a split between thermal coal (80%) and HV PCI/semi-soft coking coal (20%). However, production and the proportion of metallurgical coal is planned to increase substantially over the next two years as longwall operations commence at the Narrabri underground mine and the development of the Vickery project.

Listed below are highlights of significant events in Whitehaven's history since its establishment:

Date	Event
February 1999	Whitehaven is established.
September 2000	Mining first commenced at Canyon open cut mine.
June 2007	Whitehaven initially listed on the ASX through the issue of 1.9 million shares at $1.00 per share.
November 2007	Whitehaven purchased the remaining 60% of the Werris Creek mine it did not already own for approximately $48 million. The acquisition was funded by a $130 million capital raising, whereby 49.06 million shares were issued at $2.65 per share. Under the placement, approximately 11.32 million shares were allocated to entities associated with AMCI International AG (AMCI) and AMCI's founders, Hans Mende and Fritz Kundrun. The share issue also funded the initial works for the Narrabri North project. See section 4.4 for further information regarding Whitehaven's capital raising history.
February 2008 – August 2009	Between February 2008 and August 2009, Whitehaven sold four separate 7.5% interests in the Narrabri project to four different partners, namely Yudean Group (China), Electric Power Development Co. (Japan), EDF Trading (Japan) and a Korean consortium consisting of Daewoo International Corporation and Korea Resources Corporation. See section 4.2 for more information regarding the Narrabri coal mine.
October 2009	Whitehaven reached agreement to acquire the Vickery Coal project from Coal & Allied Industries for $31.5 million cash and a 1,156ha parcel of land in the Gunnedah region.
June 2010	Coal production commenced at the Narrabri coal mine from development works following $227 million of investment.
July 2010	Whitehaven receives Part 3A approval for Narrabri Coal project Stage 2, allowing development of the proposed longwall mining operations and associated infrastructure to an approved level of production of 8Mtpa.
February 2011	Whitehaven updated coal Resources by 7% to 1749.7Mt, whilst marketable coal Reserves increase by 15% to 365.7Mt.
May 2011	Whitehaven announced that it had entered into a Heads of Agreement with Boggabri Coal Pty Limited (Boggabri Coal) (a wholly owned subsidiary of Idemitsu Australia Resources Pty Ltd) in relation to an extension of the existing Tarrawonga Joint Venture. Under the agreement, additional Boggabri Coal and Whitehaven land will be incorporated under the Tarrawonga Joint Venture, allowing for additional existing reserves to be mined.
August 2011	Whitehaven updated coal Resources by 1% to 1,771.5Mt, whilst marketable coal Reserves increase by 17% to 426.1Mt.
	First Reserve Corporation and AMCI International AG sold 65 million shares to a range of Australian and international institutional and sophisticated investors at $6.00 per share. Both parties were pre-IPO investors in Whitehaven, and following the sale, they remained the two largest shareholders in Whitehaven, with First Reserve holding 14.7% and AMCI holding 9.7%.
September 2011	Whitehaven announced that it has secured temporary access to an additional 8.4Mt of capacity at the Port of Newcastle over the period May 2012 to June 2016.
October 2011	Approval received for Werris Creek mine extension, increasing approved rate of mining from 2Mtpa to 2.5Mtpa
November 2011	Whitehaven announced that it had secured an additional 2.4 Mtpa of port capacity at PWCS from 2015.
December 2011	Whitehaven announces merger of equals with Aston Resources, and contemporaneous acquisition of Boardwalk.

4.2 Business operations

Whitehaven currently produces approximately 5.5 Mtpa from four open cut mines in the Gunnedah Basin, and the Narrabri underground mine. The Gunnedah production base incorporates the Tarrawonga, Rocglen and Sunnyside mines (Gunnedah Operations), whilst the Werris Creek mine is stand-alone. Whitehaven holds a

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70% ownership interest in the Narrabri north and south underground projects and 100% ownership interest in the Vickery coal project.

The table below outlines the principal assets held by Whitehaven, and the respective interest in each.

Table 4.1: Summary of Whitehaven's principal coal assets

	Tarrawonga[6]	Rocglen	Sunnyside	Werris Creek	Narrabri	Vickery
Ownership interest	70%	100%	100%	100%	70%	100%
Coal type	SSCC, PCI, TC	TC	TC	PCI, TC	PCI, TC	SSCC, TC
Mine type	OC /UG	OC	OC	OC	UG	OC

Source: Company reports

The table below summarises the Resources and Reserves of Whitehaven:

Table 4.2: Summary of Whitehaven's Resources and Reserves

	Tarrawonga	Rocglen	Sunnyside	Werris Creek	Narrabri	Vickery	Other	Total
RESOURCES								
Measured	41.54	11.66	19.60	23.35	214.60	55.66	-	**366.41**
Indicated	41.87	8.34	47.40	8.25	285.00	170.66	35.70	**597.22**
Inferred	29.1	3.1	22.9	2.6	355.0	233.9	161.3	**807.9**
Total Resources	112.6	23.1	89.9	34.2	854.6	460.2	197.0	**1,771.5**
Equity basis	90.6	23.1	89.9	34.2	598.2	460.2	197.0	**1493.3**
RESERVES								
Proved Recoverable	21.70	9.20	6.60	21.50	90.70	41.23	-	**190.9**
Probable Recoverable	25.90	3.80	21.10	7.60	128.90	97.52	4.00	**288.8**
Total Recoverable	47.60	13.00	27.70	29.10	219.60	138.75	4.00	**479.8**
Equity basis	34.43	13.00	27.70	29.10	153.72	138.75	4.00	**400.7**
Proved Marketable	20.30	7.60	5.80	21.50	85.40	33.29	-	**173.9**
Probable Marketable	23.80	3.10	18.90	7.60	114.50	80.28	4.00	**252.2**
Total Marketable	44.10	10.70	24.70	29.10	199.90	113.57	4.00	**426.1**
Equity basis	31.80	10.70	24.70	29.10	139.90	113.57	4.00	**353.8**

Source: Company reports, PwC analysis

Note: Equity basis based on Whitehaven's 70% interest in Narrabri, 70% interest in Tarrawonga open cut mine and 100% interest in Tarrawonga underground.

Whitehaven's interest in other coal resources and reserves mostly arises from its 100% interest in EL5183, EL6450, EL6587 and CCL701 which are located in or near the Gunnedah Basin.

The following provides a summary of each of the principal assets held by Whitehaven.

[6] Whitehaven holds a 70% interest in Tarrawonga the open cut mine and a 100% interest in the underground mine.

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Tarrawonga

- The Tarrawonga mine is located approximately 16km east of Boggabri, on tenement ML 1579. The open cut mine is a joint venture (the Tarrawonga Joint Venture) between Whitehaven Coal Mining Limited (70%) and Boggabri Coal (30%). Resources associated with potential underground mining operations are not subject to the Tarrawonga JV and are 100% owned by Whitehaven. Mining is by conventional truck and excavator techniques and currently produces up to 2Mtpa of HV PCI and SSCC (80%) and thermal coal (20%) per year, with production expected to increase to 3Mtpa by the first half of CY14. Coal is currently trucked to the nearby Gunnedah CHPP for selective washing and then railed to the Port of Newcastle. Under a recent extension of the Tarrawonga JV, Boggabri Coal's proposed washplant has been expanded to accommodate coal from the joint venture allowing the Gunnedah CHPP to be used for other Whitehaven coal washing. The open cut mine has an expected life of 20 years.

Rocglen

- Rocglen is an open cut mine located approximately 28 km north of Gunnedah on tenement ML 1620. The mine produces approximately 1.2 Mtpa of thermal coal. Coal is trucked to the Gunnedah CHPP for selective washing, and then railed to the Port of Newcastle. The mine has an expected life of 8-10 years.

Sunnyside

- Sunnyside is an open cut mine located approximately 15 km west of Gunnedah on tenement ML 1624. The mine produces approximately 0.5 Mtpa of thermal coal using a truck and excavator method. Coal is trucked to the Gunnedah CHPP for washing, and then railed to the Port of Newcastle. The mine has an expected remaining life of 3 years under current port availability but could be operated for longer if port capacity became available.

Werris Creek

- Werris Creek is an open cut mine located approximately 4 km west of Werris Creek on tenements ML 1563, EL 5993 and EL 7422. The mine has saleable production capacity of approximately 2.0Mtpa of thermal coal (84.0%) and HV PCI (16.0%) per annum via a truck and excavator method, and railed directly from Werris Creek to the Port of Newcastle. Lower operating costs at the Werris Creek mine are a result of the coal being sold unwashed, with the mine having lowest strip ratio of the existing Whitehaven mines and being the closest to the port. Recently received Government approvals allow for production of up to 2.5Mtpa for 20 years.

Narrabri

- The deposit is located approximately 28km south of Narrabri on tenements ML 1609 and EL6243. The longwall operations at Narrabri North underground mine are due to be commissioned in the second quarter of 2012. Whitehaven expects longwall mining production at Narrabri to increase to 6Mtpa of ROM coal once the longwall becomes operational, comprising 40% HV PCI and 60% export thermal coal. Current Narrabri production is derived from the development works being undertaken by continuous miners in advance of installation of the longwall. The resources and reserves cover both the Narrabri South and Narrabri North deposits. Whitehaven currently owns 70% of the operation. The remaining 30% is shared amongst four partners, each holding a 7.5% interest and coal off take agreements.

- To date, approximately $227 million has been spent on surface infrastructure and establishment of the box cut, which is now complete. Further development has commenced, with $300 million planned to be spent on works including the construction of the CHPP, as well as underground development and purchase of the longwall. Longwall production is expected to commence in April 2012. A further $40 million (100% basis) remains to be spent on developments including underground installation and ventilation.

Vickery

- The Vickery Coal Project is a proposed open cut mine located near Gunnedah which will incorporate the Vickery, Merton, Bluevale and Canyon Extended deposits. The Vickery assets comprise Authorisation 406, Coal Lease 316, 3,450ha of associated land and licences for 399 mega litres of water per year. The mine is expected to produce at 4.5 Mtpa ROM, consisting of 55% semi soft coking coal and 45% export thermal coal, although the mine could produce 80% metallurgical coal if all coal is washed. The stripping ratio is expected to be around 10:1, and coal is to be trucked to the nearby Gunnedah CHPP. The mine is estimated to have an expected life in excess of 35 years. Whitehaven expects the bankable feasibility

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study (BFS) for the Vickery Coal Project to be completed mid-2012, whilst applications for development approval are expected to be lodged in early 2012, for mine production commencement in FY14.

Whitehaven's historical saleable coal production over the last five years is summarised in the table below.

Table 4.3: Whitehaven's historical saleable coal production

	FY08	FY09	FY10	FY11	6 months to 31 December 2011
Gunnedah operations	1,266	1,690	2,200	2,303	1,251
Werris Creek	784	1,107	1,280	1,722	777
Narrabri				143	127
Total	**2,050**	**2,797**	**3,480**	**4,168**	**2,155**

Source: Whitehaven Coal Quarterly reports

Note: Production is on attributable basis

In relation to Whitehaven's historical production, we note:

- First coal production at Narrabri commenced in June 2010. Narrabri produced approximately 0.2Mt of saleable coal as a continuous miner operated mine during the year ended 30 June 2011. Significant production ramp up is expected once the longwall becomes operational.

Whitehaven exports coal out of the Port of Newcastle through coal terminals operated by PWCS and NCIG. Rail and port capacity secured for the sale and export of Whitehaven's coal includes the following:

- Whitehaven has an 11.0% interest in NCIG, which provides rights to 3.3Mtpa from the first phase development and which will increase to 5.8Mtpa when the terminal capacity is expanded to 66Mtpa, planned for 2014.
- Whitehaven also has a rolling 10 year, 3.6Mtpa allocation from existing berths at PWCS. The company has also secured an additional 2.4Mtpa of capacity at PWCS from once operational, arising from the proposed development.
- Whitehaven has also entered into temporary capacity transfer arrangements under which a total of 8.4Mt of NCIG capacity will be available to Whitehaven between May 2012 and June 2016.
- In August 2011, Whitehaven entered into a rolling 10 year arrangement with ARTC for rail access between the company's mines and Newcastle Port. This agreement provides Whitehaven with sufficient access to below rail infrastructure to meet its planned production.

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4.2.1 *Financial performance*

The table below summarises Whitehaven's audited financial performance for the financial years ended 30 June 2010, and 2011 and the reviewed financial performance for the six months ended 31 December 2011. For the purposes of our analysis revenue and costs have been shown before significant items, which have been shown as a single line item in the statement of financial performance set out below.

Table 4.4: Consolidated Statement of Financial Performance

$ in millions	Fiscal year ended 30 June 2010 (Audited)	Fiscal year ended 30 June 2011 (Audited)	Six months to 31 December 2011 (Reviewed)
Revenue	**406.8**	**622.2**	**340.4**
Operating expenses	(240.5)	(405.6)	(214.7)
Depreciation & amortisation	(32.0)	(40.9)	(18.5)
Gross profit	**134.3**	**175.7**	**107.2**
Other income	9.4	15.2	5.9
Selling and distribution expenses	(51.2)	(66.4)	(36.9)
Other expenses	(0.8)	(4.3)	(26.0)
Administrative expenses	(14.9)	(13.1)	(10.8)
Profit before financing income	**76.8**	**107.1**	**39.4**
Financial income	12.8	9.1	6.0
Financial expenses	(10.9)	(17.8)	(12.3)
Profit before tax	**78.7**	**98.4**	**33.1**
Income tax expense	(23.6)	(25.1)	(11.1)
Underlying net profit after tax	**55.1**	**73.3**	**22.0**
Significant items post-tax	59.8	(63.4)	(2.1)
Net profit attributable to equity holders	**114.9**	**9.9**	**19.9**
Effective portion of changes in fair value of cash flow hedges	29.5	136.4	(0.4)
Change in fair value of cash flow hedges transferred to profit and loss	(48.7)	(92.2)	(35.8)
Income tax on items of other comprehensive loss	5.8	(13.3)	10.9
Other comprehensive loss for the period, net of tax	(13.5)	30.9	(25.3)
Total comprehensive income for the period	**101.4**	**40.9**	**(5.4)**

Performance measure	Fiscal year ended 30 June 2010	Fiscal year ended 30 June 2011	Six months to 31 December 2011
Coal sales including purchased coal (Mt)	4.13	6.13	3.00
Average price per tonne ($)	$98	$101	$113
Operating expenses per tonne ($)	$58	$66	$72

Source: Whitehaven Coal 2011 Annual Report and reviewed Report for Half Year ended 31 December 2011

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In relation to Whitehaven's financial performance as set out above, we note that:

- Profitability over each of the periods reflected above has been significantly adversely impacted by historical coal offtake contracts which were initially entered into in 2006 in anticipation of elevated levels of future production. Whitehaven renegotiated the offtake arrangements with customers to establish delivery into these contracts over an extended timeframe after then proposed expansion plans were deferred. The adverse impact of these low priced contracts has been compounded by significant increases in the benchmark coal price and the requirement of Whitehaven to purchase coal from third parties when production has not been sufficient to meet the delivery program. The final obligations to supply coal under these legacy contracts ends in March 2012.
- Revenue comprises the sale of coal. Revenue has increased over the periods shown due to both increased realised coal prices and increased production of saleable coal, but has been negated by delivery into legacy coal contracts.
- Costs of sales per tonne of marketable coal have increased over the period shown due to escalating costs including cost of purchasing coal.
- Other income includes hire of plant at Tarrawonga to the Joint Venture partner, rental income, gain on sale of non-current assets and sundry income relating to the groups share of income from the Blackjack Carbon Joint Venture.
- Whitehaven's financial performance has been significantly impacted by significant items during 2010 and 2011.

Significant items ($ in millions)	Fiscal year ended 30 June 2010	Fiscal year ended 30 June 2011	Six months to 31 December 2011
Gain on sale of 7.5% of Narrabri JV interest	114.3	0.0	0.0
Losses arising from coal purchases for and in relation to settlement payments of legacy coal sale contracts	0.0	(65.4)	0.0
Settlement of a claim for obligations under a coal sales contract	0.0	0.0	(1.5)
Net financial costs on deferred consideration from previous sale of a Narrabri JV interest to EDF	(2.7)	(16.3)	2.4
Share-based compensation	(16.7)	(2.1)	(0.4)
Due diligence costs and project costs	(2.4)	(5.8)	(3.3)
Total significant items before tax	92.5	(89.6)	(2.8)
Applicable income tax expense	(32.7)	26.2	0.7
Total significant items after tax	59.8	(63.4)	(2.1)

Source: Whitehaven Coal 2011 Annual Report and reviewed Report for Half Year ended 31 December 2011

- During FY 2010, a significant gain of $114.3 million before taxation was made on the disposal of a 7.5% interest in the Narrabri project. This was offset by share based payment of $16.7 million and other less material significant items of $5.1 million.
- During FY 2011, losses of $65.4 million were recognised as a significant item which related to legacy coal contracts. These items included:
  - a $39.8 million loss on financial settlements undertaken on contracts which could not be filled by either Whitehaven Coal or purchased coal;

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  - $22.3 million of losses where third party coal was purchased to fulfil legacy contracts which could not be filled from Whitehaven's own production; and
  - provisions for future losses on sales of coal into legacy contracts of $3.3 million.

- Approximately 0.33Mt of deliveries relating to the legacy contracts remain, and are expected to be delivered in the March quarter of 2012.
- A historical sale of a 7.5% interest in the Narrabri Joint Venture to EDF was undertaken on a basis which included deferred consideration denominated in US dollars. Significant unrealised exchange losses were incurred during FY 2011 due to the strengthening of the Australian dollar against the US dollar.
- The remaining significant items identified in Whitehaven's financial statements include the issue of executive shares and executive options and in relation to due diligence on a number of projects in relation to corporate and asset transactions.

4.2.2 Financial position

The table below summarises Whitehaven's financial position as at 30 June 2010, 30 June 2011, and 31 December 2011.

Table 4.5: Consolidated Statement of Financial Position

$ in millions	30 June 2010 (Audited)	30 June 2011 (Audited)	31 December 2011 (Reviewed)
ASSETS			
Cash and cash equivalents	141.0	207.6	103.5
Trade and other receivables	289.2	92.4	61.8
Inventories	20.9	25.9	33.3
Deferred stripping	27.9	55.6	78.2
Derivative financial instruments	23.1	56.0	15.2
Other current assets		24.8	39.4
Total current assets	502.2	462.3	331.4
Trade and other receivables	37.2	2.7	6.4
Property, plant and equipment	761.0	937.0	1,023.9
Exploration and evaluation	5.3	9.4	12.5
Intangible assets	43.5	49.8	51.4
Other non-current assets	2.1	1.2	1.2
Total non-current assets	849.1	1,000.1	1,095.3
TOTAL ASSETS	1,351.3	1,462.4	1,426.7
LIABILITIES			
Trade and other payables	128.4	154.3	73.5
Other accruals, provisions and deferred income	45.2	14.1	12.0
Interest bearing loans and borrowings	37.3	49.4	49.6
Derivative financial instruments	14.3	7.2	3.1
Total current liabilities	225.2	225.0	138.2
Interest bearing loans and borrowings	57.6	129.2	197.8

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$ in millions	30 June 2010 (Audited)	30 June 2011 (Audited)	31 December 2011 (Reviewed)
Deferred tax liabilities	12.1	38.6	38.1
Provisions, deferred income and other liabilities	33.2	29.1	35.5
Total non-current liabilities	102.9	196.9	271.4
TOTAL LIABILITIES	328.1	421.9	409.6
EQUITY			
Issued capital	591.2	591.3	591.6
Share based payments reserve	17.9	24.4	26.4
Hedge reserve	2.8	33.8	8.5
Retained earnings	411.2	391.1	390.7
NET ASSETS	1,023.2	1,040.5	1,017.2

Source: Whitehaven Coal 2011 Annual Report and reviewed Report for Half Year ended 31 December 2011

We make the following observations in relation to Whitehaven's statement of financial position:

- Cash and cash equivalents increased over the year to 30 June 2011 as a result of proceeds from the sell down of the Narrabri project and increased cash generated from operations offset by investment in growth projects.
- Trade and other receivables decreased by $196.8 million over the year to 30 June 2011, predominantly due to a reduction in other receivables relating to consideration due on the sell down of the Narrabri North project.
- Other current assets at 30 June 2011 include a $14.9 million investment in unlisted preference shares in NCIG acquired in 2011 as part of the funding requirement of the NCIG Stage 2AA expansion.
- Derivative financial instruments relate to the hedging of US dollar denominated sales and certain Euro denominated capital expenditure for the Narrabri longwall equipment.
- There have been significant additions to property, plant and equipment due to major growth projects being undertaken by Whitehaven including the Narrabri underground mine, open cut mine expansion and an increase in wash plant capacity.
- Intangible assets comprise water access rights, acquired haulage rights, marketing commission rights and rail access rights. The marketing commission rights were entered into during FY11 as a result of acquiring interests in existing marketing agreements. The consolidated entity will receive the benefit of cost savings on marketing commissions that would have otherwise been payable under the marketing agreements. The rail access rights relate to agreements entered into with the Rail Infrastructure Corporation (RIC) and ARTC to underwrite 60% of the funding of a major upgrade of the Muswellbrook to Narrabri rail infrastructure, which is to increase the capacity of that line to 15 Mtpa.

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4.2.3 Cash flows

The table below summarises Whitehaven's cash flows for the fiscal years ended 30 June 2010 and 2011, and the six months to 31 December 2011.

Table 4.6: Consolidated Statement of Cash Flows

$ in millions	Fiscal year ended 30 June 2010 (Audited)	Fiscal year ended 30 June 2011 (Audited)	Six months to 31 December 2011 (reviewed)
Cash from operating activities	(39.5)	79.4	(53.8)
Proceeds from selldown of Narrabri project	99.7	190.9	44.1
Acquisition of property plant and equipment	(245.7)	(225.3)	(136.4)
Other investing	(0.7)	(19.1)	(3.5)
Net cash used in investing activities	(146.7)	(53.5)	(95.7)
Net proceeds from shares and options	221.3	0.2	0.3
Net drawdown of borrowing	31.4	88.5	76.1
Repayment of finance lease liabilities	(14.2)	(17.8)	(10.6)
Dividends paid	(42.4)	(30.1)	(20.3)
Net cash from financing activities	196.1	40.7	45.5
Net increase in cash and cash equivalents	9.9	66.6	(104.1)
Cash and cash equivalents at the beginning of the financial period	131.2	141.0	207.6
Cash and cash equivalents at end of period	141.0	207.6	103.5

Source: Whitehaven Coal 2011 Annual Report and reviewed Report for Half Year ended 31 December 2011

In relation to Whitehaven's cash flows as set out above, we note that:

- Net cash from operating activities during FY10 has been influenced by significant income taxes paid in relation to projects from the sell down of interests in Narrabri.
- Whitehaven has continued to make significant investment in growth projects over the periods shown which has been funded from a capital raising in FY10 and proceeds from selling down interests in the Narrabri project.
- Whitehaven declared and paid a total of $30.1 million in dividends to shareholders during the year. This included a final franked dividend for 2010 of $13.8 million (2.8 cents per share) and an interim franked dividend for 2011 of $16.3 million (3.3 cents per share). Whitehaven has also paid a final franked dividend for 2011 of $20.3 million (4.1 cents per share). Refer to section 4.6 for more information relating to share price performance and dividend payment history.

4.3 Capital structure

4.3.1 Largest Shareholders

As at 8 February 2012, Whitehaven's capital comprised 496.2 million shares on issue. The following table sets out Whitehaven's shareholders who hold more than 5.0% of the issued (undiluted) share capital as at 8 February 2012.

Table 4.7: Largest shareholders

Rank	Size of holding	Number of securities	% of issued share capital
1	FRC Whitehaven Holdings BV	72,650,000	14.64%

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Rank	Size of holding	Number of securities	% of issued share capital
2	AMCI International AG	47,951,500	9.66%
3	Ranamok Pty Ltd (Plummer Family A/C)	33,514,254	6.75%
4	HFTT Pty Ltd (Haggarty Family A/C)	33,479,897	6.75%
	Total of shareholders holding more than 5.0% of issued capital	**187,595,651**	**37.80%**

Source: Thomson Reuters

Whitehaven had four substantial shareholders with holdings above 5.0% of issued capital, including two entities related to directors. These four shareholders hold approximately 37.8% of issued share capital.

4.3.2 Options and warrants

The following table illustrates the options and performance rights of Whitehaven on issue as at 8 February 2012.

Table 4.8: Options and performance rights on issue

Expiry date	Exercise price	Number of securities
Options		
30 June 2012	$1.00	33,334
22 October 2012	$2.50	1,390,000
31 October 2013	$1.70	5,000,000
Performance rights		
1 July 2012	nil	658,340
1 July 2013	nil	424,996
1 July 2014	nil	239,985

Source: Whitehaven Appendix 3B 8 February 2012

As at 8 February 2012, Whitehaven had 6,423,334 options and 1,323,321 performance rights on issue. All of Whitehaven's options and performance rights on issue vest in the event of a 'change of control'. This includes a merger of the company with another company.

4.4 Capital raising history

Whitehaven successfully completed its IPO in June 2007 through the issue of 1.9 million shares at $1.00 per share. With 323 million shares on issue, the company had a market capitalisation of $323 million. At the time of listing, Whitehaven had 978 shareholders, with approximately 87% of shares held by directors, management and employees.

In November 2007, $130 million was raised through the issue of 49.06 million shares, issued at $2.65. The placement was conducted through a book-build process, whereby the issue price was a 3.6% discount to the last closing price ($2.75). The placement increased Whitehaven's non-director related shareholdings from 15.6% to 24.2%. Under the placement, approximately $30 million (or approximately 11.32 million shares) was allocated to entities associated with AMCI and AMCI's founders (Hans Mende and Fritz Kundrun). Approximately 0.8 million of the capital raised was allocated to Whitehaven directors (other than Hans Mende), with the remaining shares underwritten by Wilson HTM and placed with a broad range of domestic and international institutional investors, as well as other sophisticated investors.

In July 2009, Whitehaven completed an institutional placement of 60.7 million new ordinary shares at $3.05 per share (a 5% discount to the last closing price), raising approximately $185 million. In September 2009, following the successful completion of the institutional placement in July 2009, Whitehaven raised $26 million in new equity through its Share Purchase Plan. A total of 8.5 million ordinary shares were issued at $3.05 per share.

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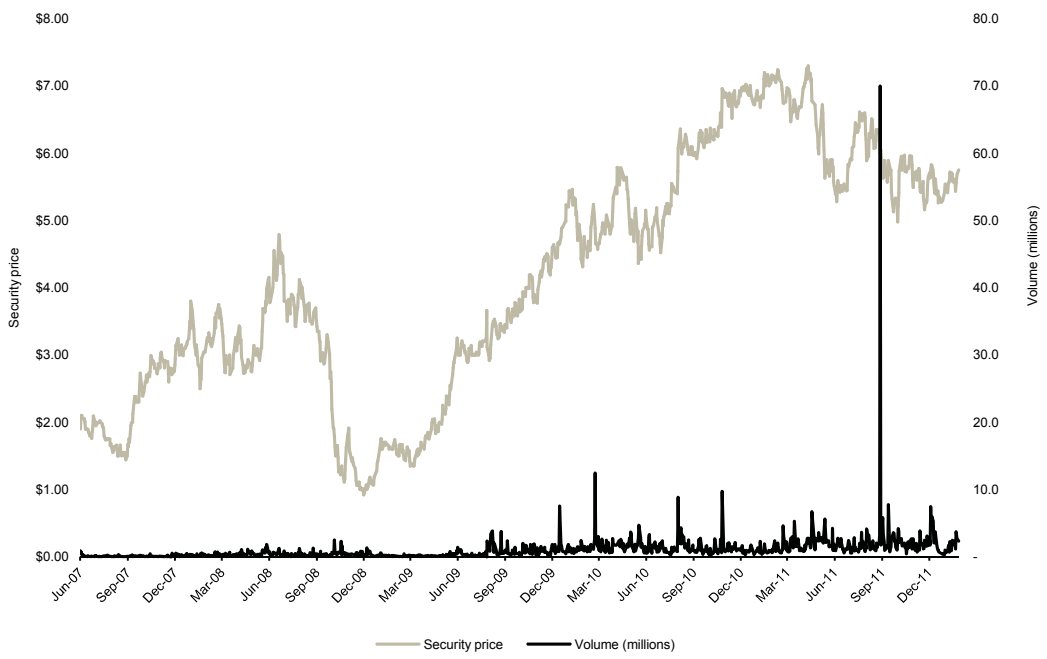
4.5 Financing structure

Whitehaven's debt structure consists of an unsecured, bi-lateral facility between eight institutions under a common term deed. The facility limit includes $350 million of revolving debt and a $125 million guarantee facility. These facilities mature on October 2016. In addition, Whitehaven secured an expansion of its existing facilities by a total of $450 million in December 2011. The facilities require that Whitehaven ensure a variety of undertakings are satisfied. Whitehaven also has a number of lease and financing facilities in place. Furthermore, Whitehaven had a total of approximately US$204 million in forward USD/$ exchange contracts at the end of December 2011, at an average rate of 0.9465 US$:$.

4.6 Key events and recent share price performance

The following graph depicts the trading volume and price of shares from ASX listing on 4 June 2007 to 30 January 2012. We have analysed Whitehaven's share price performance and trading volumes.

Figure 4.1: Whitehaven Coal share price and volume traded (4 June 2007 – 30 January 2012)



Source: Capital IQ

In relation to Whitehaven's share trading history, we note that:

- Whitehaven's lowest daily closing price since listing occurred on 4 December 2008, closing at $0.92, whilst the highest closing share price was achieved on 14 April 2011 ($7.30).
- Share prices rose significantly throughout the first half of CY09, following the announcement of a proposed merger with Gloucester Coal on 19 February 2009.
- In October 2010, Whitehaven announced that it was commencing a formal process to enable selected interested parties to conduct due diligence and submit proposals for a potential corporate transaction with the company. This led to an increase in the Whitehaven share price and speculation concerning an impending control transaction. Whitehaven announced in May 2011 that no proposal was sufficiently

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attractive to warrant recommendation to shareholders. The announcement led to a decline in the share price.

- The announcement of the sale of 65 million shares by First Reserve Corporation and AMCI International AG on 31 August 2011 saw the daily volume spike significantly above the average daily volume since listing. Whitehaven's share price fell by approximately 4.9% to $5.99 on this day.

4.6.1 *Dividend payment history*

- Whitehaven paid dividends of approximately $30.1 million in FY11, including a fully franked final 2010 dividend of 2.8 cents per ordinary share and a fully franked interim dividend for 2011 of 3.3 cents per ordinary share.

- A fully franked final ordinary dividend for 2011 of $20.3 million has been paid, which amounted to 4.1 cents per ordinary share.

The table below illustrates Whitehaven's dividend payment history:

Table 4.9: Whitehaven dividend payment history

	Final 2008	Interim 2009	Final 2009	Interim 2010	Final 2010	Interim 2011	Final 2011
Total dividend ($ in 000's)	6,663	10,178	28,583	13,819	13,822	16,295	20,273
Dividend per share (c)	1.7	2.5	6.0	2.8	2.8	3.3	4.1
Dividend yield (%)	0.49%	1.85%	1.70%	0.60%	0.46%	0.48%	0.73%

Source: Company reports, Capital IQ, Bloomberg, PwC analysis

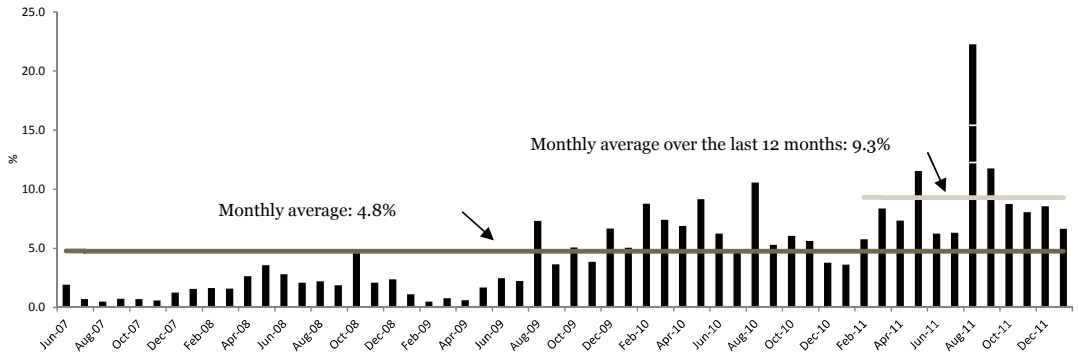
Note: Dividend yield is based on share price as at ex date

- Since the IPO, total shareholder return to 30 January 2012 has been approximately 222.2%.

4.6.2 *Liquidity analysis*

The graph below depicts the monthly volume of Whitehaven's shares traded as a proportion of the weighted average shares outstanding.

Figure 4.2: Monthly volumes of shares traded as % of total shares



Source: Capital IQ, PwC Securities analysis

In relation to the above chart, we note that:

- Over the past 12 months, the average monthly volume of shares traded as a percentage of total shares was approximately 9.3%. This is 4.5% higher than the monthly average of 4.8% since the IPO.

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- The traded volumes were elevated upon announcement commencement and cessation of the corporate transaction process in August 2010 and May 2011 respectively.
- The selldown of AMCI and First Reserve's share holding on 31 August 2011 caused a significant increase in the volume of shares traded throughout August.

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5 Overview of Boardwalk

5.1 Background

Boardwalk is an unlisted public company. The principal activities of Boardwalk consist of investment in coal mining, and the exploration and development of coal projects. Boardwalk has interests in four coal projects across NSW and Queensland, as well as a 19.9% interest in ASX listed coal developer Coalworks.

Listed below are highlights of significant events in Boardwalk's history:

Date	Event
April 2008	Incorporated in NSW as a proprietary company limited by shares.
December 2010	Boardwalk signed JV agreement with Loyal Coal Pty Ltd (subsidiary of Coalworks) to develop the Ferndale Coal project (Ferndale). Boardwalk is entitled to farm-in the Ferndale Joint Venture (Ferndale JV) by expending up to $25 million or completing a BFS for an open cut mine and a prefeasibility study for an underground mine over a period of approximately three years, to earn up to a 50% interest in the Ferndale JV.
January 2011	Boardwalk signs Senior Facility Agreement with Farallon Capital Management L.L.C. for USD50.0 million. Two USD25.0 million tranches have been drawn on and are due in the first half of 2013.
February 2011	Boardwalk invests $19.3 million for a 19.9% interest in Coalworks.
February 2011	Boardwalk enters into related party transactions with Merewether Royalties Pty Limited (Merewether), whereby payment of a 1% royalty on coal sold from the Monto and Sienna tenements will be made to Merewether.
March 2011	Boardwalk acquired the Sienna project from Norton Gold Fields for $30.0 million.
July 2011	Boardwalk enters into an agreement with Farallon Capital Management L.L.C. for the issue of 28,900,000 warrants
August 2011	Coalworks announces the distribution of part of their shareholding in Orpheus Energy Limited (Orpheus), whereby shareholders received 1 Orpheus share for every 8 Coalworks shares held. Boardwalk currently holds a 3.2% interest in Orpheus.
October 2011	Boardwalk enters into restriction agreement in relation to the receipt of financing.
November 2011	Peter Kane resigns as Managing Director of Boardwalk, assumes role of interim CEO at Aston Resources.
December 2011	Whitehaven announces entry into agreements to acquire all of the shares and other issued securities in Boardwalk in exchange for shares.

5.2 Principal assets

Boardwalk has interests in four coal projects across NSW and Queensland, namely the Sienna, Dingo, Monto and Ferndale projects. The asset portfolio comprises projects that will potentially deliver both metallurgical and thermal coal products in the event of successful exploration and resource development of proven coal deposits.

Table 5.1: Boardwalk - Summary of principal assets

	Sienna	Dingo	Monto	Ferndale	Coalworks
Interest	100.0%	51.0%	100.0%	0.0%	19.9%
Proposed mine type	UG/OC	OC	OC	UG/OC	UG/OC
Coal type	HCC, PCI, SHCC, TC	CC, PCI, TC	TC	TC, SSCC	TC, PCI, CC, SSCC

Source: Company reports

Note:Boardwalk currently owns 51% of Dingo with the right to acquire up to 70%, and has the right to acquire up to 50% of Ferndale, additional to the indirect interest already held via the interest in Coalworks.

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Sienna

- The Sienna project is located on 100km² of land near the town of Middlemount, approximately 200km west of Rockhampton, Queensland. The project is located 18km away from a rail line which links to Dalrymple Bay Port. The project covers two contiguous exploration licenses, namely EPC 1033 and EPC 2089. The project has an exploration target range of 14-565Mt. The area to the north is known as Electra, and is prospective for hard-coking coal. The area to the South is known as Sienna, and is an open cut target prospective for PCI and thermal coal. A planned drilling program may define a JORC Resource.

Dingo

- The Dingo project comprises a tenement area of approximately 256km², and is located approximately 150km west of Rockhampton, between the townships of Dingo and Duaringa. The project comprises three tenements, namely EPC 862, EPC 863 and EPC 1063, which lie in the south-eastern section of the Bowen Basin. The tenements are intersected by both the Capricorn highway and the Blackwater coal rail system, and are approximately 225 km away from the coal export port of Gladstone (by rail). The project has an exploration target range of 82-462Mt. Several open cut deposits are planned to be developed, targeting hard coking, thermal and PCI coal types. The Dingo project is to be developed in association with Cockatoo Coal through a farm in arrangement, whereby Boardwalk's interest will increase from 51% to 70% upon satisfaction of the Stage 3 farm-in (expected in March 2012).

Monto

- The Monto project lies on approximately 300km² of land near the town of Monto, approximately 120km southwest of Gladstone. 100% owned by Boardwalk, the project lies in a small fault controlled basin known as the Mulgildie Basin, and comprises tenement EPC1220. The project has an exploration target range of 0-1,832Mt. The project is prospective for open cut thermal coal. Drilling in the adjacent Monto Coal (owned by Peabody Energy Corporation) tenement contained seven seam groups, with individual seams generally one to two metres thick.

Ferndale

- Located approximately 8 km southwest of Denman on tenement EL7430, the Ferndale Coal project is a prospective open cut/underground mine. The tenement is close to rail and road infrastructure, and is located approximately 125km from the port of Newcastle. The project has JORC resources of 743Mt of thermal coal and semi-soft coking coal. The resources announced in February 2012 by Coalworks are based on the completion and geological interpretation of 40 exploration drill holes completed during the Stages 1, 2 and 3 of the current drilling program at Ferndale. The program which started in mid 2010 has concentrated on confirming continuity of seams both within the Shallow Newcastle Coal Measures and the deeper Upper and Middle Wittingham Measures.

- Coalworks 92.5% owned subsidiary Loyal Coal Pty Ltd executed a Farm in and Joint Venture with Boardwalk Ferndale Pty Ltd in December 2010. Under the agreement, Boardwalk can spend up to $25 million or complete a BFS for an open cut mine and a prefeasibility study for an underground mine as more fully discussed in the Scheme Booklet. If the $25 million is fully expended, the commitment will deliver Boardwalk a 50% stake in the Ferndale project. Stage 1 of the farm-in arrangements are expected to be completed by the end of March 2012, increasing Boardwalk's interest in Ferndale to 25%.

5.2.1 Coalworks

Coalworks is an ASX listed coal exploration and development company. As at 11 December 2011, Boardwalk held approximately 29.7 million ordinary shares in Coalworks, or 19.9% of issued ordinary capital. The company has interests in three coal projects across NSW, namely Ferndale (92.5% interest), Vickery South (71% interest) and Oaklands North (100% interest).

Ferndale

- In January 2010, Coalworks acquired a 90% interest in the Ferndale Coal project EL7430 for a consideration of $2.4 million. At the time, the Hunter Valley based project had preliminary exploration targets of 60-85Mt and initial production targets of 2Mtpa, increasing to 5Mtpa. On 17 February 2012,

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Coalworks announced a maiden JORC inferred coal resource of 743Mt at Ferndale. See section 5.2 for further information regarding the Ferndale Coal project.

Vickery South

- On 11 November 2010, Coalworks (Vickery South) Pty Ltd (a subsidiary of Coalworks) completed the purchase of the land on which EL7407 is situated for $13.9 million. The Vickery South coal project is located approximately 21km northeast of Gunnedah. The prospective open cut mine has JORC Resources of approximately 58.5 Mt, including 48Mt measured, 0.1 Mt indicated and 10.4Mt inferred. The proposed mine is expected to be an open cut truck and shovel operation, with 3Mtpa ROM coal.

- On 22 December 2010, Coalworks (Vickery South) Pty Ltd announced that it had signed a joint venture agreement with ICRA Vickery Pty Ltd (ICRAV), a wholly owned subsidiary of ITOCHU for the Vickery South project. The Joint Venture followed payment to Coalworks of the first tranche of $5 million by ICRAV for 29% of Vickery South (EL7407). The JV provides for ICRAV to earn up to 49% by the completion of a bankable feasibility study.

Oaklands North

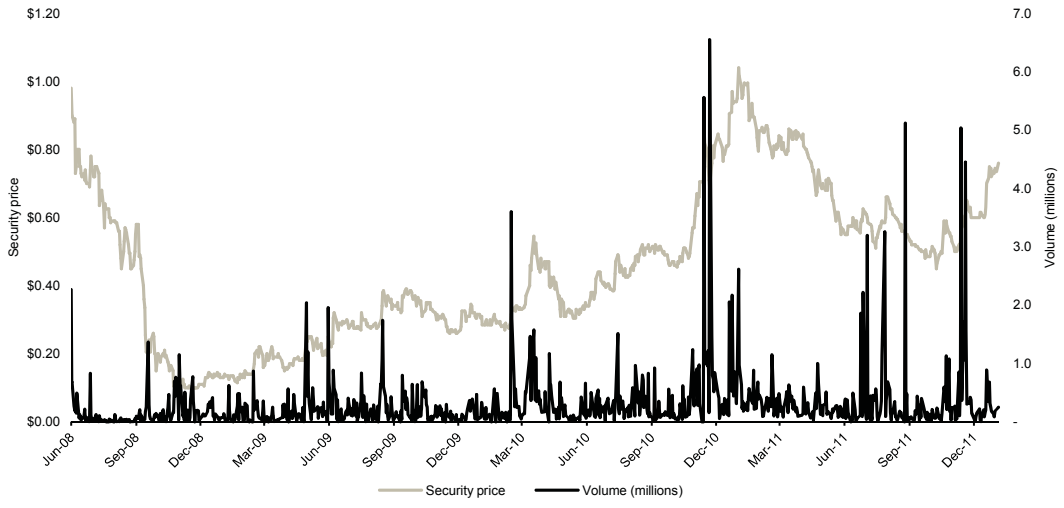
- Oaklands North is a prospective open cut mine comprising a tenement area of approximately 54km^2, 6km North of Oaklands, NSW on tenement EL6861. There are plans for the rail line which connects to the main Sydney to Melbourne rail line to be upgraded, providing the Oaklands coal mine the necessary link for the transport of coal and related products to port. The project is 100% owned by Coalworks and has a JORC Resource of approximately 822 Mt of sub-bituminous coal, including 121 Mt measured, 572 Mt indicated and 129 Mt inferred. The mine's black, thermal, low sulphur coal is ideal for gasification where coal is converted to synthetic natural gas for power.

Coalworks operations have total resources of approximately 880.5Mt on a 100% basis, and 851.8Mt on an equity basis.

5.2.2 Coalworks recent share price performance

The following graph depicts the trading volume and price of shares for the period 26 June 2008 (listing date) to 30 January 2012. We have analysed Coalworks' share price performance and trading volumes.

Figure 5.1: Coalworks share price and volume traded (26 June 2008 – 30 January 2012)



Source: Capital IQ

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In relation to the above chart, we note that:

- Coalworks' IPO in June 2008 raised $25.0 million through the issue of 25.0 million securities at an initial price of $1.00 per share;
- Coalworks' share price fell to a low of $0.09 in November 2008. This has been the lowest closing price since the IPO;
- Coalworks' share price reached a closing price of $1.04 on 27 January 2011 and 14 April 2011. These are the highest share closing prices to date;
- We note that Coalworks' share price has appreciated substantially in recent months, rising from a trough of $0.45 on 3 November 2011 to an eight month high of $0.75 on 17 January 2012, increasing market capitalisation from $67.1 million to $111.8 million;
- Over the past 12 months, the average monthly volume of shares traded as a percentage of total shares was approximately 6.4%. This is approximately 0.6% lower than the monthly average of 7.0% since the IPO; and
- Overall, Coalworks' shares have a very low liquidity primarily due to the size and scale of the company and the lack of analyst coverage.

We note that in September 2011, Boardwalk acquired a 3.2% interest in listed coal developer Orpheus Energy Limited (Orpheus). Boardwalk acquired this interest in connection with a dividend paid by Coalworks to its shareholders that was paid by way of a distribution of Coalworks' shareholding in Orpheus. Orpheus is an ASX listed Australian company with a primary focus on coal production, exploration and development of coal deposits in Australia and Indonesia. As at 31 January 2012, Orpheus had a market capitalisation of $13.8 million.

5.2.3 Port and rail infrastructure

Boardwalk has commenced infrastructure studies and planning for the potential export of coal from each of the company's projects, with options predominantly revolving around the utilisation of a number of yet to be developed coal terminals in NSW and Queensland, construction and extension of various rail spurs and possible acquisition of capacity from existing capacity holders.

5.3 Financial information

5.3.1 Financial performance

The table below summarises Boardwalk's financial performance for the fiscal years ended 30 June 2010, 30 June 2011 and six months to 31 December 2011.

Table 5.2: Consolidated Statement of Financial Performance

$ in millions	Fiscal year ended 30 June 2010 (Audited)	Fiscal year ended 30 June 2011 (Audited)	Six months to 31 December 2011 (Reviewed)
Revenue	0.0	3.2	
Unrealised loss on investments		(3.0)	
Employee benefits expense	(0.2)	(2.6)	
General expense	(0.1)	(1.0)	
Finance costs	0.0	(2.1)	
Loss before income tax	(0.3)	(5.5)	(8.9)
Net loss for the year/period	(0.3)	(5.5)	(8.9)

Source: Boardwalk 2011 Annual Report and reviewed financial performance for the half year ended 31 December 2011

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In relation to Boardwalk's financial performance as set out above, we note that:

- Revenue in FY11 consists solely of net gains on foreign exchange.
- Employee benefits expense includes wages and salaries, workers' compensation costs, superannuation, other employee benefit expense and share based payment expense. This increased by $2.3 million over the year ended 30 June 2011 as a result of substantial increases in wages and salaries, other employee benefits and share based payments.
- General expenses include travel and entertainment, legal expenses, rent and other expenses. This increased by approximately $0.9 million over the year ended 30 June 2011, due to material increases in all four of the abovementioned expenses.
- Finance costs include interest paid and interest income. Interest paid increased by approximately $2.2 million to $2.3 million over the year ended 30 June 2011, whilst interest income was approximately $0.2 million in FY11.
- The company had carry forward tax losses of $11.4 million at 30 June 2011, which may be able to be offset against future profits, subject to tax requirements.

5.3.2 *Financial position*

The table below summarises Boardwalk's financial position as at 30 June 2010, 30 June 2011 and 31 December 2011.

Table 5.3: Consolidated Statement of Financial Position

$ in millions	30 June 2010 (Audited)	30 June 2011 (Audited)	31 December 2011 (Reviewed)
ASSETS			
Cash and cash equivalents	0.1	10.9	0.7
Other receivables	0.0	0.2	0.6
Other current assets	0.1	0.2	0.1
Total current assets	0.2	11.3	1.5
Deferred expenditure	3.4	6.1	13.6
Mine tenements		30.0	30.0
Other financial assets		16.3	19.1
Property, plant and equipment	0.0	0.4	3.6
Total non-current assets	3.5	52.8	66.2
TOTAL ASSETS	3.6	64.2	67.7
LIABILITIES			
Trade and other payables	0.2	1.7	7.7
Provisions	0.0	0.2	0.6
Other liabilities		15.0	15.0
Total current liabilities	0.2	17.0	23.3
Loans and borrowings	3.8	52.7	58.8
Total non-current liabilities	3.8	52.7	58.8
TOTAL LIABILITIES	4.0	69.7	82.1

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$ in millions	30 June 2010 (Audited)	30 June 2011 (Audited)	31 December 2011 (Reviewed)
EQUITY			
Equity attributable to equity holders of the parent			
Contributed equity	0.0	0.3	0.3
Accumulated losses	(0.4)	(5.8)	(14.7)
TOTAL EQUITY	(0.4)	(5.6)	(14.5)

Source: Boardwalk 2011 Annual Report and reviewed financial position as at 31 December 2011

In relation to Boardwalk's financial position as set out above, we note that:

- Cash and cash equivalents were $10.9 million as at 30 June 2011, consisting predominantly of cash at bank. This increased due to the proceeds from the Senior Facility Agreement.
- Deferred expenditure relates to exploration and evaluation costs. This increased to $6.1 million as at 30 June 2011.
- Mining tenements relates to the Sienna assets. Boardwalk acquired interests in EPC 1033 and EPC 2089 in March 2011 for consideration of $30.0 million. $15.0 million was paid on completion, with the remaining $15.0 million recorded as a current liability. We note that a payment of $5.0 million is due in February 2012, with the remaining $10.0 million due in March 2013.
- Other financial assets relates to the 19.9% interest in Coalworks Limited acquired on 1 February 2011, following the drawdown of the Tranche 1 from the Senior Financing Agreement. The investment totalled approximately $19.3 million, however, the balance of this has been determined by reference to published price quotations in an active market.
- Trade and other payables increased to $1.7 million as at 30 June 2011, predominantly due to an increase in trade payables and accruals. Trade and other payables also consists of other payables, GST payables, payroll tax liability, PAYG withholding and superannuation.
- Other liabilities relates to the deferred purchase consideration for the acquisition of EPC 1033 and EPC 2089 in March 2011.
- Loans and borrowings were $52.7 million as at 30 June 2011. The increase is primarily due to a Senior Facility Agreement signed between Boardwalk and Farallon Capital Management L.L.C on 28 January 2011, for US$50.0 million. This agreement comprises two US$25.0 million tranches. Repayment of each tranche is required 24 months after the relevant utilisation date with interest payable at maturity. Interest for each tranche is calculated at 12.0% p.a. for the first anniversary since utilisation and 15% p.a. thereafter. The loan is secured by the following mortgages:
  - A share mortgage granted by Aston Resources Investments Pty Ltd over a number of shares held by Aston Resources Investments Pty Ltd in Aston Resources Ltd; and
  - A share mortgage granted by Boardwalk Resources Investments Pty Ltd over all of the shares held by Boardwalk Resources Investments in Boardwalk Resources Pty Limited.
- We note that the consolidated entity's total liabilities exceeded total assets by approximately $5.6 million as at 30 June 2011. The auditor of Boardwalk has included an Emphasis of Matter paragraph in their opinion, whereby they have stated that the company needs to raise further funds to meet its obligations. Should those funds not be available, there is significant uncertainty whether the company and the consolidated entity will continue as going concerns.
- Contributed equity increased to $0.3 million in the period to 30 June 2011, due to a number of shares issued to employees and associates throughout the financial year, including 13.1 million shares issued on

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21 January 2011 to employees and associates, and 2.5 million shares issued to employees on 14 April 2011.

5.3.3 Cash flows

The table below summarises Boardwalk's consolidated statement of cash flows for the years ended 30 June 2010 and 2011 and the six months ended 31 December 2011.

Table 5.4: Consolidated Statement of Cash Flows

$ in millions	12 months to 30 June 2010 (Audited)	12 months to 30 June 2011 (Audited)	Six months to 31 December 2011 (Reviewed)
Net cash flows used in operating activities	(0.2)	(1.7)	(3.4)
Net cash flows used in investing activities	(3.5)	(37.3)	(6.8)
Net cash flows (used in)/from financing activities	3.8	49.9	0.0
Net increase in cash and cash equivalents	0.1	10.9	(10.2)
Cash and cash equivalents at the beginning of period	0.0	0.1	10.9
Cash and cash equivalents at end of period	0.1	10.9	0.7

Source: Boardwalk 2011 Annual Report and reviewed cash flows for the half year ended 31 December 2011

In relation to Boardwalk's cash flows as set out above, we note that:

- Net cash flows used in operating activities to 30 June 2011 decreased by $1.5 million to ($1.7) million, primarily due to an enlarged net loss for the period.
- Net cash flows used in investing activities were $37.3 million to 30 June 2011, predominantly relating to the acquisition of the Sienna assets and costs incurred in relation to the acquisition of the 19.9% interest in Coalworks Limited, made on 1 February 2011.
- Net cash flows from financing activities increased by $46.1 million to $49.9 million over the period to 30 June 2011, primarily due to proceeds from the Senior Facility Agreement signed with Farallon Capital Management.
- Overall, Boardwalk recorded a net cash inflow of approximately $10.9 million, to have a cash balance of $10.9 million as at 30 June 2011.

5.3.4 Related party disclosures

On 22 February 2011, both Boardwalk Monto Pty Ltd (a 100% owned subsidiary of Boardwalk) and Boardwalk Sienna Pty Ltd (also a 100% owned subsidiary of Boardwalk) entered into Royalty Deeds with Merewether Royalties Pty Limited (Merewether) under which a payment of a 1% royalty on coal sold from the Monto and Sienna Tenements will be paid to Merewether.

The obligation to pay the royalty under each deed takes effect on and from the date on which Monto and Sienna respectively acquires a mineral development licence, mining lease or other production licence in respect of the Monto and Sienna coal projects. Merewether is an entity related to Mr. Nathan Tinkler.

5.3.5 Warrants

In July 2011, Boardwalk entered into an agreement with Farallon Capital Management L.L.C. and associated parties for the issue of 28.9 million warrants for total consideration of $10.

A maximum of 20,642,419 additional warrants may be issued for total consideration of $10 if certain qualifying events do not occur within specified time frames. Under the agreement, the conversion price is $1 for all warrants issued irrespective of number. Warrants may be converted to shares on a 1:1 basis.

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5.4 Debt structure

Boardwalk's debt structure mainly consists of a Senior Facility Agreement with Farallon Capital Management L.L.C. This agreement was signed on 28 January 2011.

The facility includes two US$25.0 million tranches. The first tranche was drawn down on 31 January 2011 (Tranche 1 utilisation date) for $24.5 million, and the second drawn down on 14 March 2011 (Tranche 2 utilisation date) for $23.9 million. Each tranche was converted at the US exchange rate on the date of which they were drawn, and incorporated fees as set out in the agreement.

The rate of interest on each tranche is 12.0% per annum for the first 12 months following utilisation date, and 15.0% per annum thereafter. Interest accrued on each loan is capitalised on the last day of each interest period (12 months) and then added to the principal of each respective loan, bearing interest thereafter.

The facility is to be applied for the following purposes:

1) To pay fees, costs, expenses and transactions related to the Senior Facility Agreement

2) To make payment on account of the stamp duty due in respect of the Coalworks acquisition (on completion)

3) To discharge the obligations under the Coalworks Acquisition Agreement to pay the purchase price for the Coalworks Sale Shares to Coalworks

4) The discharge of the obligations under the Sienna Project Agreement, the Ferndale Acquisition Documents and the Dingo Project Agreement.

Repayment of each tranche is required 24 months from the utilisation date. For Tranche 1, this is 31 January 2013, and for tranche 2, 14 March 2013.

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6 Australian Coal Mining industry

6.1 Overview

Coal mining is one of Australia's most important industries, with black coal being one of Australia's largest exports.

Aston, Whitehaven and Boardwalk all operate within the Australian Coal Mining industry. Both Aston and Whitehaven's assets lie in the Gunnedah region of NSW, while Boardwalk controls assets across both NSW and Queensland.

Australia produces two primary types of black coal, namely metallurgical coal (which includes hard coking coal, semi-hard coking coal, semi-soft coking coal and low volatile pulverised injection coal (LV PCI)), and thermal coal.

Metallurgical coal, also known as coking coal, is generally used for the production of metallurgical coke, which is used as a reductant in the production of iron and steel. It is used primarily for its high carbon content and coking characteristics. Thermal coal, also known as steaming coal, is used in the generation of electricity, where it is used as an energy source.

Coking coal markets and thermal coal markets have separate demand determinants and operate relatively independently, however product substitution does occur between markets.

Australia has substantial coal resources, predominantly found in the eastern states of NSW and Queensland. Australia has approximately 7% of the world's recoverable black coal resources, behind the US (31%), Russia (22%), China (14%) and India (8%).

Australia is the world's largest exporter of coal, comprising 58% of the worlds coking coal and 18% of the world's thermal coal exports.

Demand for coal from Asian economies has increased considerably in recent years, predominantly due to the industrialisation of the large and emerging economies within the region and China becoming a net importer of coal. Japan is the main destination of Australian product, accounting for approximately 49.2% of our thermal coal exports and 26.9% of our metallurgical coal exports in FY10. This was comprised of 48.5Mt of metallurgical coal and 66.4Mt of thermal coal, up from 42.2Mt and 62.6Mt respectively in FY09. Other major importers include China, South Korea, India and Taiwan, as well as various countries within the European Union.

In the seven years to 30 June 2010, Metallurgical and thermal coal exports combined have grown by an average rate of 5.0% per annum, growing to 292.2Mt in FY10. These exports accounted for approximately 21% of Australia's commodity exports in FY10, ranking second behind only iron ore.

With 145.4 Mt, NSW accounted for approximately 40.2% of domestic saleable coal production in FY10. Combined with Queensland, these two states accounted for over 97.0% of national saleable coal production.

As at 30 June 2010, there were 30 underground coal mines in NSW, producing 50.8Mt of raw black coal, as well as 31 open cut mines, producing 94.6Mt. The underground mines in NSW employed approximately 9,000 individuals, whilst the open cut mines employed approximately 10,000.

In NSW, there are five major coalfields, namely the Hunter, Newcastle, Southern, Western and Gunnedah coalfields. In total, NSW coal mines produced 182.0Mt of raw coal, and 138.5Mt of saleable coal in FY09. The Gunnedah coalfield (in which both Aston's and Whitehaven's mining assets lie) produced the lowest amount of raw and saleable coal of the five major coalfields in FY09, with 5.0Mt and 4.8Mt respectively.

Queensland coal mines produced approximately 205.7Mt of raw black coal in FY10 or 56.3% of domestic saleable coal production, more than any other state in Australia. This production was from a total of 54 operating mines, whereby 179.1Mt of coal was produced from 42 open cut mines and 26.6Mt of coal was produced from 12 underground mines.

The black coal industry in Queensland employs approximately 22,100 individuals, including 18,800 in open cut mines and 3,300 in underground mines.

6.2 Coking coal

Metallurgical coal is generally used for the production of metallurgical coke, which is used as a reductant in the production of iron and steel. It is used primarily for its high carbon content and coking characteristics. It is also used, to a smaller extent, for the smelting and casting of base metals.

Of the different types of coking coal, hard coking coal is the most valuable as it produces the highest quality coke. Semi-soft coking coals and PCI are predominantly used for blending with hard coking coal where they are used as an auxiliary fuel source to increase the effectiveness of blast furnaces, ultimately resulting in lower production costs.

In 2009, Australia accounted for 65.0% of the world's metallurgical coal exports (by volume). This was well ahead of the United States (16.5%), Canada (10.6%) and the Russian Federation (6.4%).

Australian metallurgical coal export volumes have grown by an average of 5.5% per annum over the past seven years, to reach 157Mt in FY10. The total value of these exports was approximately $24.5 billion.

For more information regarding metallurgical coal, including market supply and demand, please see the AME Report in section 10 of the Scheme Booklet.

6.3 Thermal coal

Commonly referred to as steaming coal, thermal coal generally contains less carbon than coking coal, rendering it unsuitable for the production of steel. It is used in the generation of electricity, where it is used as an energy source.

In 2009, Australia accounted for 19.2% of the world's thermal coal exports (by volume). This ranked second behind only Indonesia (32.2%), but ahead of other major exporters in the Russian Federation (12.9%), South Africa (9.2%) and Colombia (8.7%).

Thermal coal export volumes have grown by an average of 4.4% per annum over the past seven years, to reach 135Mt in FY10. The total value of these exports was approximately $11.9 billion.

For more information regarding thermal coal, including market supply and demand, please see the AME Report in section 10 of the Scheme Booklet.

6.4 Port and rail infrastructure

In addition to world class expertise in design, construction and operation of mines, Australia has relatively efficient transport and logistics systems in the mining industry.

In NSW, the majority of coal production is exported and sufficient access to port and rail infrastructure is critical to operations.

The Hunter Valley Coal Chain is spread across 450km and links 27 load points across NSW to the loading terminals at the Port of Newcastle. The network reaches as far north as Narrabri and Boggabri, and has a theoretical coal capacity of 189.0 Mtpa. The main rail coal haulage operators are Queensland Rail National (QR National) and Pacific National Pty Limited (Pacific National), who also service Queensland and South Australia. Coal producers typically enter into long term agreements with these operators in order to secure the required rail capacity for their production forecasts.

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Both the Hunter Valley coal rail network and the Gunnedah Basin coal rail network are owned by the Rail Infrastructure Corporation (RIC); however the network is managed by the Australian Government through the government owned ARTC.

Coal is railed to coal loading terminals where it is exported internationally. There are currently three coal loading terminal operators serving the NSW coal export market. Port Waratah Coal Services (PWCS) and Newcastle Coal Infrastructure Group (NCIG) operate at the Port of Newcastle, located approximately 160km north of Sydney, whilst Port Kembla Coal Terminal Limited operates at Port Kembla, approximately 112km south of Sydney.

Both Aston and Whitehaven have agreements in place for capacity at the Port of Newcastle over the short to medium term future.

In Queensland, coal is railed along five major rail networks, namely the Newlands, Goonyella, Blackwater, Moura and West Moreton systems. In total, the networks have a haulage capacity of between 225 and 242Mtpa.

Coal for export can be railed to a number of ports along the Queensland coastline. These include:

- Abbott Point Coal Terminal: Australia's northern-most coal port, Abbott Point Coal Terminal is located approximately 25kms north of Bowen, North Queensland.
- Hay Point: Situated approximately 40km south of Mackay, the Port of Hay Point comprises Dalrymple Bay Coal Terminal and the Hay Point Coal Terminal and is the largest coal export in the world.
- Gladstone: The world's fourth largest coal export terminal (by throughput) and is located approximately 525km north of Brisbane.
- Queensland Bulk Handling: Located at the Port of Brisbane, servicing mines from the West Moreton and Darling Downs coalfields.

The Queensland Government has given approval for the production of six new coal terminals as part of the Abbott Point expansion. The construction is to be built by a number of companies, including members of the North Queensland Coal terminal consortium Macarthur Coal, Peabody Energy, Middlemount Coal and Carabella Resources. The construction is expected to cost approximately $9 billion.

6.5 Regulatory environment

On 2 July 2010, the Australian Government announced the proposal of the Mineral Resources Rent Tax (MRRT), following a lack of support for the previously proposed Resource Super Profits Tax (RSPT). The tax is to be applied to coal and iron ore projects from 1 July 2012. Key characteristics of the proposed tax include:

- The tax is levied at a rate of 30%, with an extraction allowance of 25% to acknowledge the mining expertise required for the extraction of the resource (reducing the effective tax rate to 22.5%). The MRRT aims to tax only the value of the resources extracted (i.e. taxed at the point of extraction), less all mining expenditure to that point.
- Value-add processing and other downstream activities are not taxed under the MRRT.
- The corporate tax rate is proposed to reduce to 29% for the year ending 30 June 2014, with the proposed company tax rate for small companies to be 28% from the year starting 1 July 2012.
- MRRT profit is assessed after deducting capital costs and operating costs from revenue and after credits for state royalties paid.
- Carry forward losses can be transferred to other projects.
- Unutilised royalties and losses can be carried forward and are uplifted at a 7% premium to the long term government bond.

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- Companies with MRRT assessable profits below $50 million per annum will be excluded.

Following an update of the Garnaut Climate Change Review on 31 May 2011, the Federal Government released the Clean Energy Future Agreement on 10 July 2011 and Clean Energy draft legislation on 28 July 2011. These policies outlined a two stage carbon pricing policy mechanism, whereby a fixed price carbon period would become effective on 1 July 2012, transitioning to an emissions trading scheme from 1 July 2015.

Key characteristics of the policies include:

- A fixed price of $23/t for each tonne of CO2 emitted, with 2.5% increases in real terms for each of the years ending 30 June 2014 and 2015.
- The second stage transitions to a market driven approach where a 'cap and trade' system will be adopted. There will be floor prices and ceiling prices for the first three years of the second stage. A carbon permit floor price of $15/t (to rise by 4% per annum in real terms) and a ceiling price of $20/t (rising by 5% per annum in real terms) above the 'expected international price'.
- Carbon permits must be surrendered on emissions greater than 25 kilo-tonnes of CO2 from a single facility. Emissions produced by a facility will primarily be fugitive emissions, being mainly methane gas from open cut or underground coal mines.
- Mines with fugitive emissions that account for >0.1 tonnes of CO2 per tonne of saleable coal will receive assistance from the government, whereby the Government is to provide $1.3 billion over six years to cover 80% of fugitive emissions from these mines above the threshold.
- Government to provide $70 million over six years by way of grants, to assist mines implementing abatement technology (on a co-contribution basis).

Other state specific regulatory policies relevant to this transaction include:

- Queensland Urban Exploration Ban Policy: The Queensland Government announced a policy on 15 August 2011, under which all exploration activities would be prohibited within specific areas. The restricted areas include a 2km buffer zone around all Queensland regional centres and towns with populations above 1,000. Should this legislation be passed, both the Sienna and Monto projects (Boardwalk assets) may be adversely affected. The information released by the Queensland Government does not give any details of compensation or similar arrangements that may be offered to holders of existing EPC's.
- The effect of the *Native Title Act 1993 (Cth)* is that existing and new tenements held by mining companies may be affected by native title claims and procedures. Should any land be in relation to which native title exists, the Native Title Act right to negotiate procedure must be complied with in order for the tenement to be validly granted.

6.6 Outlook

Listed below are the key points in relation to the outlook for the Australian Coal Mining industry, as provided in the AME Report in section 10 of the Scheme Booklet:

- Global demand for coking coal is expected to remain firm in the short term, predominantly driven by steel production and consumption in China and India. In the medium to long term, demand should remain robust, as China becomes increasingly dependent on high quality coking coal imports. The Indian Government's increasing infrastructure developments and the national Steel Policy should see significant increases in steel production capacity, resulting in coking coal imports. Japan, Australia's largest metallurgical coal importer, is likely to import larger proportions of lower ranking coals as a result of improvements in technology.
- Prices for all coking coal types are expected to remain firm in the short to medium term, given the tight demand and supply dynamics, whilst in the long term, price increases are expected to slow as continued commissioning of infrastructure somewhat alleviates constraints.

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- Global demand for thermal coal is expected to grow moderately in the short term, driven mainly by relatively strong industrial growth in China and India. Japanese thermal coal demand in 2012 is expected to remain subdued due to the continued recovery efforts. Growth should remain robust in the medium term, whilst in the long term, coal will remain one of the main fuels for energy generation, however development of alternative sources may marginally affect growth.

- Thermal coal prices are expected to be US$114/t in the short term. In the medium term, AME expects contract thermal prices growth to be relatively subdued compared to recent periods.

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7 Valuation of Aston

7.1 Valuation approach

We have assessed the value of Aston shares on both a controlling interest basis and a minority interest basis for our evaluation of the Scheme.

We have assessed the controlling interest value of Aston by aggregating the value of its key underlying assets. We have assessed the value of Aston's interest in the Maules Creek Project using the DCF methodology, added the estimated realisable value of any surplus assets and deducted net debt. In our assessment we have assumed that the agreed sale of a 10% interest in Maules Creek to J-Power is completed as contemplated under the sale agreement. While this transaction is still subject to consent from various parties, we note that both the pre-emption waiver and consent to the long term coal sales agreement have been obtained from ITOCHU.

In our assessment of Maules Creek we have had regard to the recent transaction with J-Power (which is yet to be completed and is subject to conditions) and resource multiples observed for comparable listed companies and recent transactions for interests in coal projects. We have also considered the implied market premia to Aston's historical share prices which is implied from our assessment of Aston on a controlling interest basis.

Our assessment of Aston's share value on a minority interest basis has been by reference to the prices at which shares in the company have traded on the ASX.

7.2 Valuation summary

We have assessed the value of Aston shares on a controlling interest basis to fall in the range of $10.48 to $14.92. We have assessed the value of Aston shares on a minority interest basis to fall in the range of $9.10 to $10.10.

7.3 Controlling interest Valuation of Aston shares

A summary of our assessment of Aston's shares on a controlling interest basis is set out below:

Table 7.1: Aston Resources – valuation summary

In $ million		Low	High
Maules Creek (75%)	Sec 7.4	1,872.7	2,812.2
Surplus assets	Table 7.3	251.6	268.8
Surplus cash	Table 7.4	58.3	58.3
Value attributable to shareholders (controlling interest)		**2,182.6**	**3,139.3**
Potential proceeds from exercise of options which are "in-the-money"	Table 7.5	71.1	71.1
Value attributable to shareholders (fully diluted basis)		**2,253.7**	**3210.4**
Shares on issue		204.7	204.7
Potential issue of shares for options on issue which are "in-the-money"	Table 7.5	10.4	10.4
Potential shares on issue (fully diluted basis)		**215.1**	**215.1**
Value attributable to shareholders (fully diluted basis)		**10.48**	**14.92**
Implied premium to Aston VWAP for 3 months prior to the announcement date of the transaction ($10.13)	Table 7.6	**3.5%**	**47.3%**

Source: PwC Securities analysis

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7.4 Valuation of interest in Maules Creek JV

Our assessment of the Maules Creek Project, includes an allowance for corporate office costs that are incurred by the JV, working capital balances and the estimated impact of MRRT and carbon under currently enacted or proposed frameworks.

Our underlying valuation of the Maules Creek Project is based upon cash flows derived from Aston's life of mine modelling for the project (modified as appropriate to reflect the MMC assessment of operating and cost assumptions) under a range of sensitivities. Thermal and coking coal prices and the exchange rate of the Australian dollar to the US dollar have all exhibited considerable volatility over recent periods and there are a wide range of views by market commentators on future expectations for these parameters. AME has been commissioned to provide general commentary on the near term market outlook for thermal and metallurgical coal. Our valuation assessment is reflective of a range of market views for key assumptions in relation to coal prices and the US dollar exchange rate to the Australian dollar including both those of AME and the median outlook derived from a number of market commentators.

In practice, Maules Creek is capable of being actively managed to optimise returns in response to market circumstances e.g. the ability to prioritise saleable product as coking or thermal coal sales depending on market conditions. We consider that the ability to adjust production levels and the timing of project development in response to market conditions and potential to increase access to export capacity results in an optimised fair market valuation which is enhanced relative to the static model DCF assessments. Further, DCF models do not make allowance for the prospect of production or recovery enhancements over time or for the potential of Aston's tenement holding to host marketable coal beyond the current reserve base.

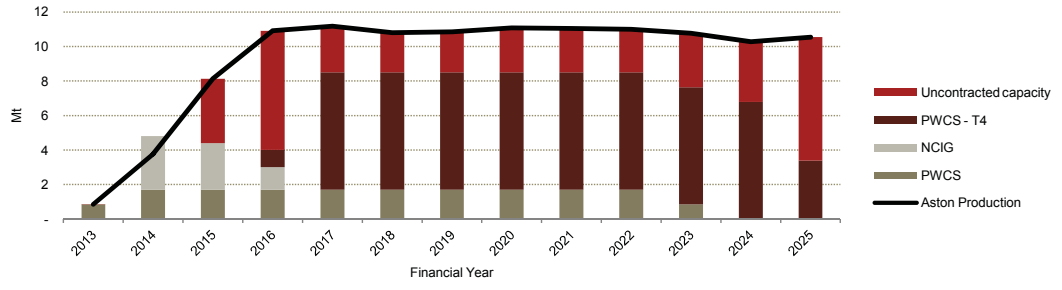
Accordingly, for the purposes of our assessment, we have adopted a valuation range for Aston on a controlling interest basis which reflects our analysis of a broad range of scenarios for the Maules Creek Project and not only the output of the base case model.

We have valued the Maules Creek Project in the range of $2,496.9 million to $3,749.6 million on a DCF basis (100% basis). The broad range of values reflects the high level of sensitivity to changes in the thermal coal and semi-soft coking coal selling price, foreign exchange rates and Aston's ability to secure port capacity for its forecast production targets. The key assumptions adopted in the base case valuation of the operations include:

- Permitting, development of the Maules Creek Project and open pit production levels are managed to correspond to anticipated timing of and access to additional rail and coal export capacity to be secured through coal export facilities at Newcastle. Coal export capacity at the Port of Newcastle is to be secured through a combination of; the existing Port Waratah Coal Services (PWCS) terminal, the PWCS Terminal 4 (T4) and the NCIG.

- The following chart shows Aston Resources' current port capacity allocation and the anticipated production for Maules Creek to 2025. Beyond 2025 Aston does not have any contracted port capacity. However there is no evidence to suggest that current port allocations to 2025 will not be extended in due course.

Figure 7.1: Port capacity - Aston



Source: Management information and PwC Securities analysis

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- Aston Resources has secured a small amount of capacity at the existing PWCS terminal (c.1.7Mt per year); with further port allocations secured pending the completion of PWCS T4 (c. 6.8Mt per year).

- In order to supplement the PWCS contracted capacity and to meet anticipated ramp up production at Maules Creek, Aston Resources has secured additional capacity from another Newcastle coal shipper at NCIG over the years FY14 to FY16. This additional capacity of 7.1Mt almost wholly satisfies Maules Creek's requirements up to FY16.

- T4 is still undergoing the NSW Government planning process and consistent with the views of MMC and other market commentators could be delayed considerably. Current estimates are that first coal will be delayed by approximately 12 months to the start of calendar year 2016, delivering only 1Mt in FY16 and full capacity thereafter. We have not specifically adjusted saleable production for a port capacity constraint due to the delay of T4 in our base case valuation. This is due to a large increase in capacity from other committed Port of Newcastle projects in the period preceding FY15. Should T4 be delayed, Aston Resources has performed analysis and is confident that there is sufficient surplus port capacity at the Port of Newcastle in the short to medium term to meet the Maules Creek shipping requirements. We also note that both Aston and Whitehaven management have successfully negotiated and secured additional temporary capacity from other Newcastle coal shippers on commercial terms, demonstrating their ability to secure surplus port capacity should it be required.

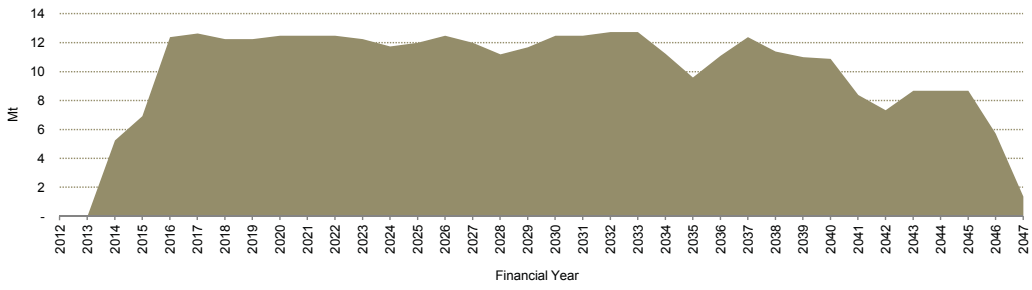
- We have taken port capacity constraint arising from the potential T4 delay into account in our low case valuation. Our low case valuation assumes that Aston is unable to acquire capacity from other sources such as a substitute shipper agreement until T4 is commissioned. This is based on the premise that if T4 is delayed there will be a number of miners affected who will also be seeking port capacity and potentially inhibiting Aston's ability to secure capacity on commercial terms.

- For the period post FY16 Aston has a shortfall of contracted port capacity of approximately 2.0Mtpa, with total contracted capacity being approximately 8.5Mt. Whilst our base case assumes this shortfall will be able to be contracted in full, the low end of our valuation range considers the possibility that Aston is unable to obtain all the port capacity it requires post FY16 to meet its current forecast production. Our low case assumes that Aston will be able to at least obtain 50% of the current shortfall projected, i.e. a port capacity allocation of 9.5Mtpa.

- Our base case valuation reflects the ability of Maules Creek to sell its anticipated production as shown below.

- ROM production is at levels to deliver product coal in accordance with the available coal export capacity and available CHPP capacity as per the base case valuation. The ROM mining levels and scheduling are based on the following profile.

Figure 7.2: Maules Creek production profile – base case valuation model (ROM tonnes, 100% basis)



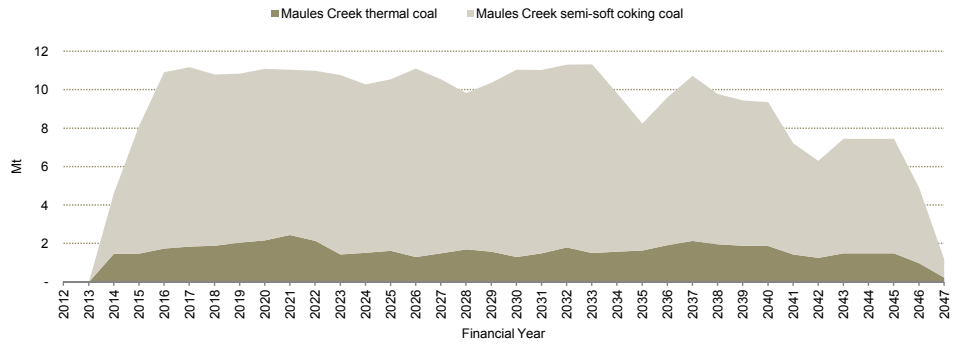
Source: Management information and PwC Securities analysis

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In our base case financial modelling, open pit mining is assumed to continue from currently identified reserves of 362Mt at the Maules Creek Project until 2047. It does not incorporate any conversion of any additional resources into mining inventory.

The mix of saleable coal as per the base case valuation is set out below:

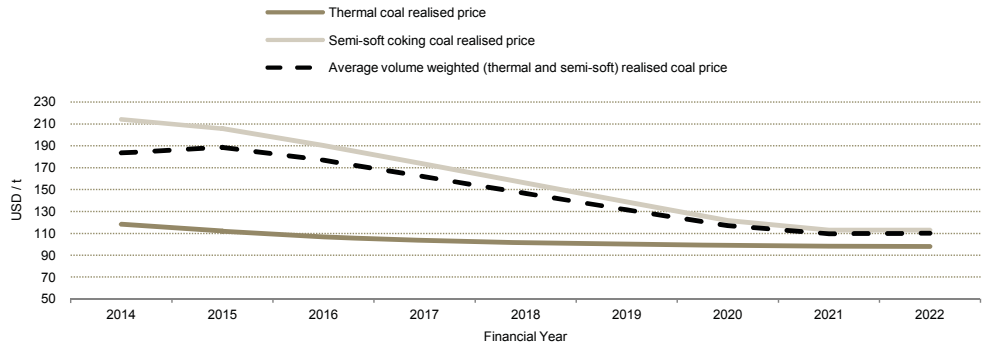
Figure 7.3: Maules Creek saleable coal – base case valuation model (product tonnes, 100% basis)



Source: Management information and PwC Securities analysis

Average realised free on board real prices in US dollars as follows:

Figure 7.4: Aston realisable coal price – base case valuation model (future prices in 2011 USD real per tonne)



Source: Management information, broker consensus and PwC Securities analysis

The average volume weighted selling price over the cash flow period is heavily influenced by the weighting of semi soft coking coal in the Maules Creek Project product mix. The near term base case selling price is largely based on market advice from AME and the medium and long term real price outlook is based on analysis of a number of commodity forecasters. The average price per tonne also recognises the favourable ash and energy attributes of coal from the Maules Creek Project and the product mix. Our low and high valuation cases are based on a low and high range forecast coal price profile.

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An exchange rate of the Australian dollar to the US dollar as follows:

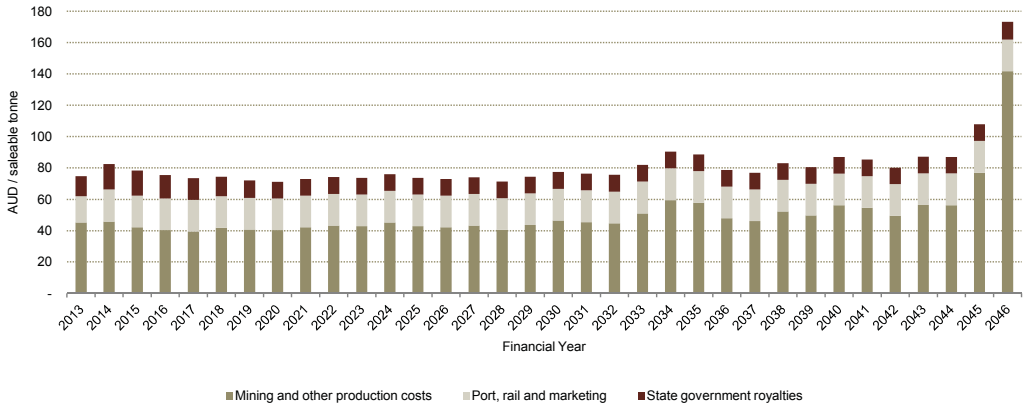
US$:A$	FY12	FY13	FY14	FY15	FY16	Long Term
	1.01	0.99	0.95	0.92	0.90	0.80-0.85

Source: PwC Securities analysis

Our selection of an exchange rate for the Australian dollar to the US dollar has been made on a basis consistent with our base case coal price assumptions. Our low and high valuation cases are based on a low and high range forecast exchange rate profile.

A cash operating cost profile of product coal FOB (including mining and other production cost including processing and rehabilitation, rail, port and marketing charges and royalties) as follows:

Figure 7.5: Cost of sales analysis – Maules Creek ($ per saleable product tonne 2011 real terms)



Source: Management information and PwC Securities analysis

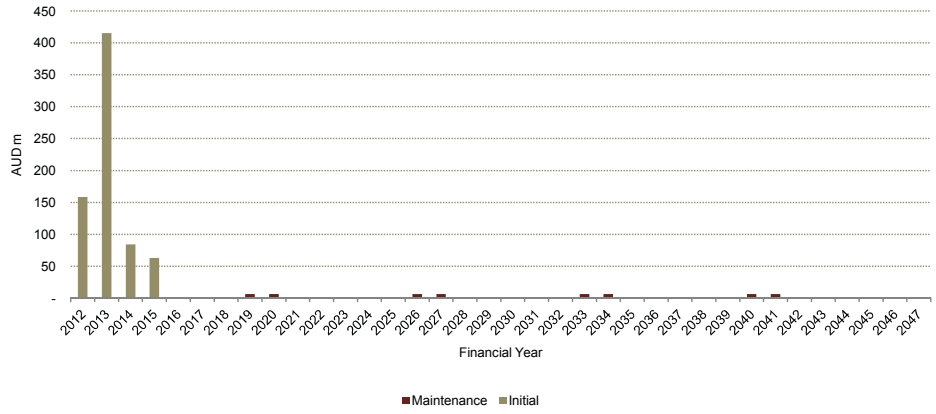
- The cash operating costs also make allowance for future carbon imposts assuming a carbon cost increasing to around $26 per tonne of carbon equivalent emission in 2016 and increasing in real terms thereafter at an average rate of 5% per annum to approximate Australian Government modelling. The net cost calculated on this basis has been reduced by 50% to reflect the pass through of some of the carbon impost to customers rather than by making explicit allowance in our assumed coal prices reflected above.

- The cash operating cost profile includes corporate costs of between $5.0 million and $10.8 million per annum as Maules Creek ramps up to full production capacity. We have performed a separate calculation to assess the costs specifically attributable to Aston Resources, which are not re-charged to the JV. These have been estimated to be between $2.7 million to $6.5 million per annum.

- A capital expenditure profile reflecting the construction of the CHPP, surface infrastructure, rail loop and associated infrastructure, land acquisition, bucket wheel, other capital expenditure and maintenance capital expenditure as follows:

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Figure 7.6: Capital expenditure – Maules Creek ($m 2011 real terms)



Source: Management information and PwC Securities analysis

- The high level of capital expenditure up to 2015 reflects the initial costs to bring the Maules Creek Project into production. Beyond this period, allowance is made for recurring maintenance capital expenditures ($1.5 million / year) and periodic major refurbishment maintenance amounts in accordance with the proposed mine scheduling ($10 million every 7th year). Contract mining is assumed with mobile equipment replacement factored into the assumed contract mining rates.

- A corporate tax rate of 29%, which reflects the proposed amendments to the Australian corporate taxation regime which will have probable effect from the 2014 financial year; and

- A real ungeared post tax discount of 11.2% per annum. Our assessment of the post tax discount rate applied in the valuation is set out at Appendix C.

Further details of the operational parameters of the mining operations are set out in the MMC Report which is in section 9 of the Scheme Booklet. We have not included in our assessment of the Maules Creek Project any benefits which may arise from joint management with those of Whitehaven.

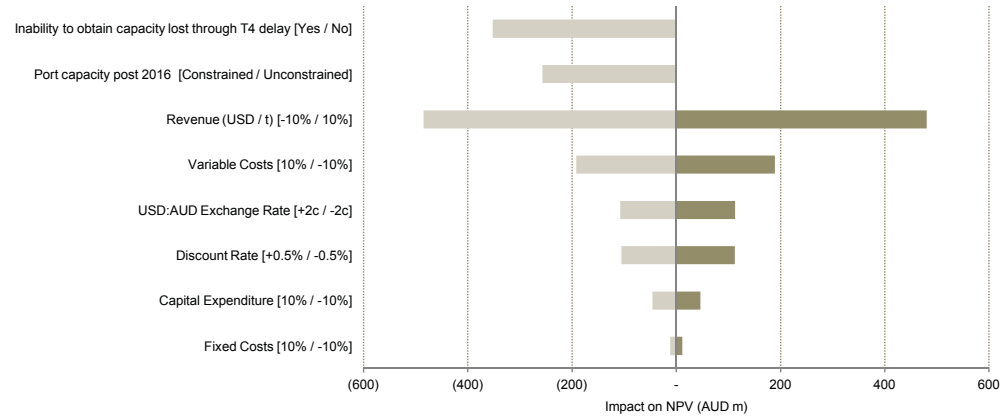
We have considered the sensitivity of the DCF valuation to various changes in the key assumptions. The chart below quantifies the impact of these changes on our base case valuation.

Our base case valuation is based on the production, saleable coal, realisable coal price, cost of sales and capital expenditure profiles outlined in figures 7.2, 7.3, 7.4, 7.5 and 7.6 above. In addition our base case valuation does not incorporate any shortfall in port capacity associated with the expected delay of T4. Further it assumes that in the period post FY16, Aston will be able to contract sufficient port capacity to meet its' forecast sales.

The DCF valuation is sensitive to the inability of Aston to obtain capacity lost through the delay of T4, the inability of Aston to secure required port capacity over and above their current allocation from 2016, coal prices, foreign exchange rates, variable operating costs and discount rates.

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Figure 7.7: Indicative valuation sensitivities - Aston



Source: PwC Securities analysis

7.5 Cross check of the value of Maules Creek to implied resource multiples

We have considered the values per resource tonne and reserve tonne implied from a selection of transactions of interests in coal projects and coal companies as a cross check to the total of our DCF valuation of the Maules Creek Project and assessed value for mineralisation not included in the DCF assessment. We have selected transactions in assets and companies that we deem comparable based on our knowledge of the Maules Creek Project and our experience in valuing mining assets.

Care should be taken in interpreting such an analysis as these implied resource multiples only provide very general indicators of potential value. There are significant differences in individual coal mining operations between product mix, geological settings, operating parameters, cost structures, current and proposed production levels, mine lives, stage of development, infrastructure constraints and many other factors which can significantly influence such benchmarks.

The resource and reserve multiples implied by our assessed DCF value of the Maules Creek Project and assessed value of mineralisation outside of the DCF analysis is set out below:

Table 7.2: Implied Aston resource and reserve multiples

		Low	High
Assessed DCF value of the Maules Creek Project (100% basis)	$ million	2,496.9	3,749.6
Assessed value of mineral interests not forming part of the DCF analysis	MMC Sec 8	23.0	46.0
Assessed value of the Maules Creek Project and mineral interests not forming part		**2,519.9**	**3,795.6**
Coal reserves (100% basis)	Mt	362	362
Multiple of reserves	**$/t**	**6.96**	**10.48**
Coal resources (100% basis)	Mt	679	679
Multiple of resources	**$/t**	**3.71**	**5.59**

Source: MMC, Management information and PwC Analysis

We have analysed our implied resource and reserve multiples for Aston alongside a selection of transactions in assets and companies that we deem comparable. In selecting transactions for our cross checks we have had

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regard to such characteristics pertaining to the target company as stage of development, product type and mix and scale of operations. Due to the number of transactions in development assets there are fewer comparable transactions for Maules Creek compared with Whitehaven. Appendix E sets out further detail regarding comparable transactions.

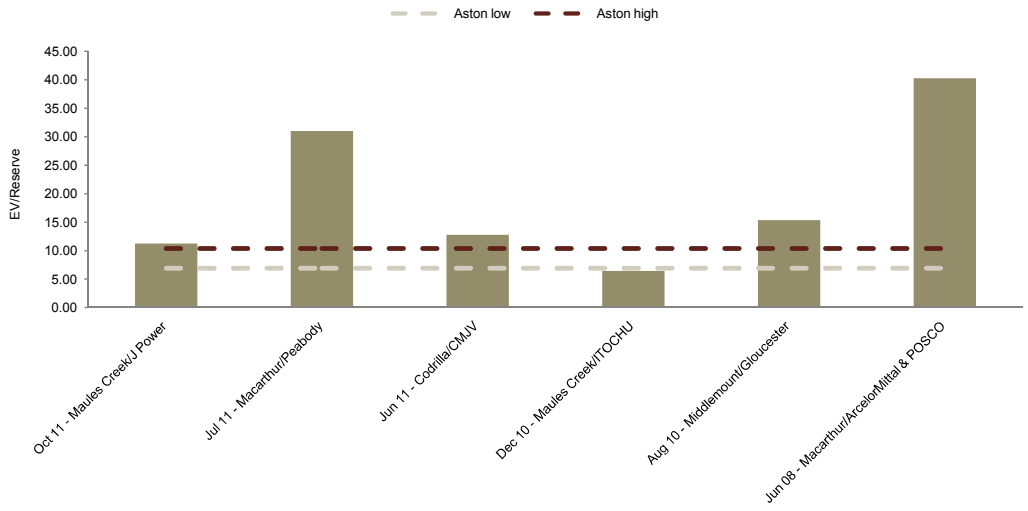
The reserve multiple range implied by our controlling interest valuation of the Maules Creek Project is $6.96/t to $10.48/t and is within the range of reserve multiples observed for a selection of comparable transactions, which exhibit a significant range of between $6.46/t and $40.27/t.

The resource multiple implied by our controlling interest of Maules Creek Project is $3.71/t to $5.59/t and is within the range of resources multiples observed for a selection of comparable transactions, which exhibit a significant range of between $1.21/t and $8.74/t.

We have also had regard to the recent sale agreement under which Aston has agreed to sell a 10% interest in the Maules Creek Project to J-Power for $370.0 million.

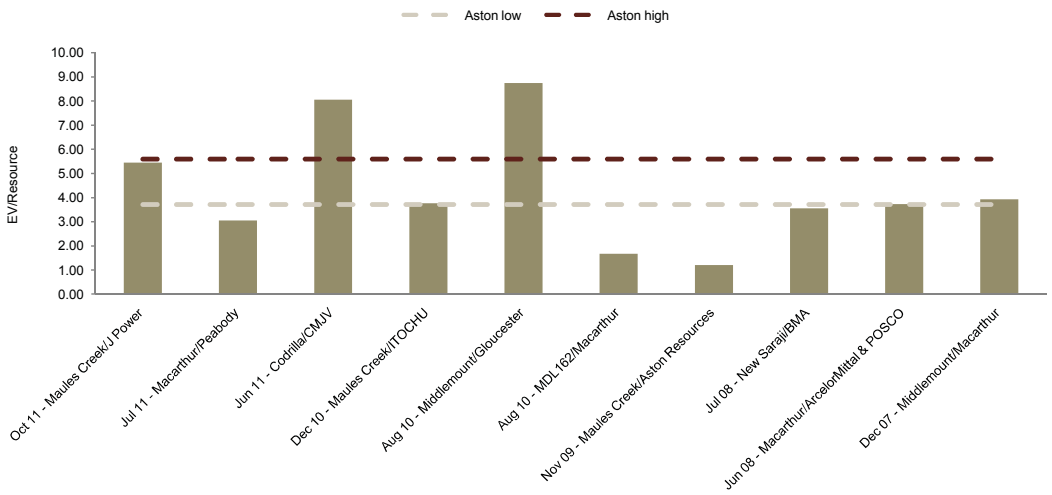
The following charts depict the resource and reserve multiples implied by comparable transactions over the past five years. Some transactions did not have reserve estimates at the time of the transaction and have therefore been excluded from the reserve multiple chart (refer to Appendix E for more information regarding the selected comparable transactions).

Figure 7.8: Comparable transactions - $/Reserve



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Figure 7.9: Comparable transactions - $/Resource



With regard to the above selected transactions we note the following:

- Macarthur acquisition of Middlemount: The Middlemount asset consisted of predominantly semi-hard and low volatile PCI coals prospective for a medium scale open cut operation. When acquired Middlemount was in an earlier development stage than Maules Creek at a period of lower coal prices.
- POSCO and ArcelorMittal acquisition of minority equity stakes in Macarthur Coal: The resource base of Macarthur Coal is predominantly comprised of metallurgical coals spread across a number of development projects. These acquisitions were by steel producers who had established customer relationships with Macarthur coal and were made during a period of historically high coal prices.
- BMA acquisition of New Saraji: Undeveloped hard coking coal resource (no reserves at time of acquisition) amenable for large scale underground mining. Sold during a period of high coal prices and included significant potential synergies to acquirer due to existing operational Saraji mine to the west.
- Aston Resources acquisition of Maules Creek: The asset was less developed at this stage having no JORC compliant reserves. It was not a part of the existing owner's immediate development plans and acquired during a period of weaker coal prices and from a seller actively and publicly looking to reduce debt levels.
- Macarthur Coal acquisition of MDL162: Asset prospective for semi-hard and PCI coals using a medium scale open cut mining operation. At the date of acquisition asset was in a less developed stage to Maules Creek requiring further exploration to establish maiden reserves and requiring a bankable feasibility study.
- Gloucester acquisition of Middlemount: Asset in advanced development stage for an open cut operation. Mining lease granted in September 2009 with key infrastructure commencing construction shortly after granting of lease and being commissioned near the date of acquisition.
- ITOCHU acquisition of a stake in Maules Creek: Acquisition of 15% stake in Maules Creek including an off take agreement for thermal coal, asset was in a significantly more developed state than when originally acquired by Aston, being acquired following maiden reserve statement. Acquired when product mix was expected to be 57% metallurgical coals, since revised to include a greater proportion of metallurgical coal.

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- Sell down of Codrilla to Coppabella Moorvale Joint Venture: Advanced Low Vol PCI coal project prospective for medium scale open cut coal operations expected to commence in FY13, no requirement to construct CHPP as coal is trucked to existing nearby processing facilities.

- Peabody acquisition of Macarthur Coal: As at the announcement date, Macarthur had an attributable share in the ratio of 9% reserves and 91% resources. In addition, Macarthur's attributable share of exploration target tonnage was in the range of approximately 1,231 Mt to 3,747 Mt. Given the sizeable quantum of resource, and exploration target tonnage, relative to the JORC reserves, it is not unexpected that the implied EV to reserve multiple is on the higher end of the listed transaction multiples.

- J-Power acquisition of Maules Creek: At the date of this report this transaction had not completed however the proposal is for a 10% stake in Maules Creek and an off take agreement for a small tonnage of thermal coal.

With reference to the above we have made the following observations:

- The implied reserves multiples implied from our valuation of Aston is in the high end of the resource multiple range and slightly below the average reserve multiple range (excluding acquisitions of Macarthur Coal by Peabody and ArcelorMital/POSCO) indicated by the comparable sales evidence. We note that reserve multiples are a more relevant cross check to our DCF valuation of the Maules Creek Project, given Aston's resource is well defined and the company has a relatively high reserve to resource ratio.

- The selection of comparable transactions consists of a combination of transactions at the equity level and asset level. Excluding the acquisition of minority stakes in Macarthur Coal by ArcelorMittal and POSCO, the transactions could be considered to include an element of control. This is due to the typical joint venture structures in mining assets which require mutual agreement between joint venture participants when making operating decisions.

- We note the markedly different economic climate which now exists in comparison with that under which some of the selected transactions may have occurred in. This further emphasises that these value indicators are to be assessed as guidelines only.

- We are of the opinion that the assessed DCF values lie within an expected range and are supported by the accompanying evidence.

- In addition we note that our valuation of a 100% interest implied by the sale of the 10% interest of the Maules Creek Project to J-Power announced in October 2011 is above our assessed valuation range. This is in part attributable to the significant step up in the tax base attributable to J-Power and a strong strategic rationale for J-Power to secure offtake rights.

7.6 Other Assets and Liabilities

We have reviewed Aston's assets and liabilities to ascertain the extent to which assets and liabilities as at 31 December 2011 have been reflected in the underlying DCF values of the Maules Creek Project. Our valuation has incorporated opening working capital (including tax obligations and amortisable balances) associated with the mining operations. Most of Aston's assets and liabilities are included within our assessed value of the mining operations.

As the Maules Creek Project is at the pre-development phase, most of Aston's working capital and non mineral deposit related balances are not incorporated into our valuation of the Maules Creek Project.

We have provided a summary of Aston's other assets and our adopted value range below:

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Table 7.3: Aston – other assets

In $ million		Low	High
J-Power receivable (less anticipated tax payable on sale)		274.4	274.4
Assessed value of mineral interests not forming part of the DCF analysis	MMC Sec 8	17.3	34.5
Head office costs		(37.4)	(37.4)
Unavoidable transaction costs		(2.7)	(2.7)
Other assets		**251.6**	**268.8**

Source: PwC Securities analysis and MMC

Aston will have a significant receivable from the recently agreed sale of a 10% interest in the Maules Creek Project to J-Power (subject to the completion of this transaction). The transaction includes an off-take agreement between the Maules Creek Joint Venture (Aston and ITOCHU) and Electric Power Development Co. Ltd. (J-Power) to supply up to 900ktpa of thermal coal for an initial period of 10 years. In February 2012, ITOCHU, Aston's existing Joint Venture Partner in the Maules Creek Joint Venture, has waived its pre-emption rights and consented to the terms of the long-term offtake agreement as required for the completion of this transaction.

The transaction is also conditional on ministerial consent. The amount payable ($370 million) will be paid in a single payment by J-Power on completion. At the date of this report, this transaction had not completed. We have included this amount as an asset on the assumption that ministerial consent will be achieved and this transaction will complete.

We have not included the receipt of these funds or the associated tax liability to Aston in the modelling of cash flows for the Maules Creek Project. We have assessed the present value of these receivables at approximately $274.4 million net of tax.

Cash flow analysis has not been performed for all coal resources and reserves held by Aston. MMC has assessed resources not included in the life of mine plans to have a value of $17.3 million to $34.5 million based on an equity interest basis. We have adopted these values to reflect a value range for these resources (please refer to the MMC Report in section 9 of the Scheme Booklet for more information).

A separate allowance for corporate costs has been made which relates to costs incurred in the administration of Aston which are not charged to the JV. We have made allowance for $37.4 million which reflects the discounted value of a yearly expense between $2.7 million and $6.5 million as Maules Creek ramps up to full production capacity.

Aston will also incur costs associated with the Scheme in addition to those already provided for in working capital balances. A total of $1.6 million was incurred by Aston to 31 December 2011. We have made an allowance for the unavoidable component of the transaction costs which are expected to be incurred subsequent to 31 December 2011, being $2.7 million.

The tax cost base of much of Aston's interest in the Maules Creek JV will be used to generate future tax deductions and has been reflected in the post-tax cash flows upon which the assessment of the Maules Creek Project has been based. Accordingly, the Maules Creek Project valuation reflects the estimated remaining available tax deductions.

Based on discussions with Aston management, no significant off balance sheet assets or liabilities were identified which require separate valuation adjustment.

7.7 Surplus cash

Aston had short and long term borrowings at 31 December 2011 of $0.1 million, income tax payable of $43.9 million relating to the sale of a 15% stake in Maules Creek to ITOCHU and cash balances of $122.6 million. As no opening cash balance is included in our valuation assessment of Maules Creek, we have treated the cash position at 31 December 2011 as surplus, and included this as an offset to the net debt balance.

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Table 7.4: Aston Resources – net surplus cash

In $ millions	Low	High
Cash	122.6	122.6
Borrowings	(0.1)	(0.1)
Tax payable	(43.9)	(43.9)
Consideration payable for buyback of ITOCHU coal option[7]	(20.3)	(20.3)
Surplus cash	**58.3**	**58.3**

Source: PwC Securities analysis

7.8 Share options

Aston has potentially dilutive share options and performance based incentive shares rights. Having regard to the number of these rights in existence at the valuation date and the relatively immaterial potential impact on the value of Aston's shares, we have assumed for the purposes of our assessment that these rights crystallise and are all exercised as at the valuation date. A summary of the rights on issue are set out below:

Table 7.5: Aston – share options and incentive rights

	Number of securities (million)	Funds from exercise $million
Employee options exercisable at $5.96 up to 17 August 2015	5.29	31.5
Employee options exercisable at $8.94 up to 17 August 2016	4.36	39.0
Employee options exercisable at $6.29 up to 10 November 2015	0.10	0.6
Executive performance share acquisition rights expiring up to 17 August 2015	0.45	0.0
Executive TSR based performance share acquisition rights expiring up to 16 November 2014	0.22	0.0
Total	**10.42**	**71.1**

Source: SIA

7.9 Minority interest Valuation of Aston shares

It is necessary to consider how Aston shares may have traded in the absence of the Scheme in order to assess the level of premium which may be implicit in our DCF calculations. The Scheme was announced in December 2011.

The price at which Aston's shares have traded exhibited a marked decline during November 2011, falling from $11.31 on 9 November 2011 to $8.27 on 30 November 2011, as summarised in section 3.6. Following from this, the shares appreciated to $9.11 on 2 December 2011 (the undisturbed price date). Following an announcement made on 5 December 2011 regarding confirmation of discussions for a potential merger of equals, Aston shares closed at $9.96 on 7 December 2011 and $9.76 on 9 December 2011 only days prior to the announcement of the Scheme. Since then, they have traded between $9.00 and $9.58.

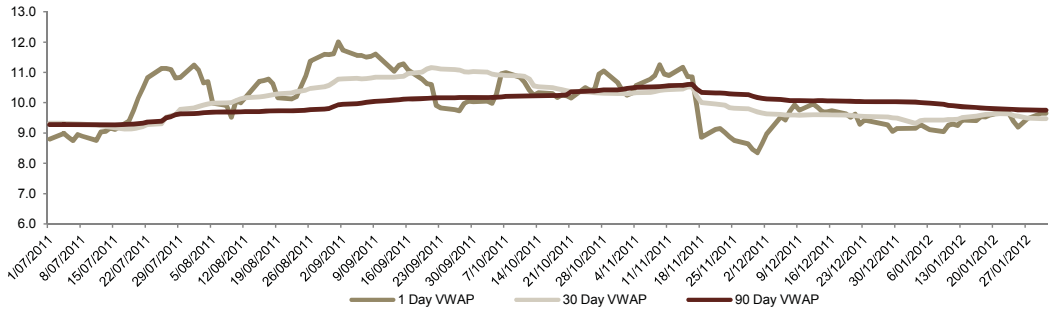
Following the announcement of the Scheme on Monday, 12 December 2012, the share price rose by approximately 1.4% to close that day at $9.90. The Aston share price at the time reflected a small discount to the Scheme exchange ratio.

The chart below outlines Aston's share price performance since 1 July 2011:

[7] Aston Coal 3 Pty Ltd has agreed to acquire ITOCHU's option to purchase up to 15% of annual coal produced from Maules Creek for $20.34 million which Aston has scheduled to pay before 26 March 2012.

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Figure 7.10: Aston's share trading performance



Source: Capital IQ, PwC Securities analysis

We have assessed the value of Aston shares on a minority interest basis falls in the range of $9.10 to $10.10 based on the trading range for Aston shares over the period from 1 September 2011 to the date of the Scheme announcement.

7.10 Cross check of our controlling interest valuation of Aston shares to Aston's share traded price

Our control valuation of Aston on a controlling basis represents the following premiums to the price at which Aston traded immediately prior to the announcement of the Scheme:

Table 7.6: Aston – implied control premiums

	$	Premium (low)	Premium (high)
Close price on 12 December 2011	9.90	5.9%	50.8%
Close price on 9 December 2011 (day prior to Scheme announcement)	9.76	7.4%	52.9%
Close price on 2 December 2011 (day prior to Whitehaven confirmation of discussions with Aston regarding a potential merger of equals)	9.11	15.0%	63.8%
1 month VWAP to 2 December 2011	9.64	8.7%	54.8%
3 month VWAP to 2 December 2011	10.13	3.5%	47.3%

Capital IQ, PwC Securities analysis

Our control valuation of Aston implies a significant premium to historically traded share prices. In our opinion, the premium implied by our controlling interest valuation are not unreasonable in comparison to historical premiums paid for controlling interests in Australian coal mining companies and projects.

Transactions involving the acquisition of a controlling interest in listed Australian coal mining companies over the past 10 years have exhibited a range of control premiums relative to target company share prices prior to deal announcement. Control premiums in excess of the minority interest traded share price values of the target companies, one day prior to the announcement date of the transactions, have historically ranged from 1.2% to 79.5% (with a midpoint average of 38.2% and median of 30.0%). [8]

As previously mentioned, there are significant differences in individual coal mining operations between product mix, geological settings, operating parameters, cost structures, current and proposed production levels, mine lives, stage of development, infrastructure constraints, share price performance and many other factors. These factors can significantly influence the control premiums referred to above. Accordingly, a wide range of control premiums is not unexpected.

[8] Based on information extracted from Capital IQ's database of transactions

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8 Valuation of Whitehaven

8.1 Valuation approach

We have assessed the value of Whitehaven shares on both a controlling interest basis and a minority interest basis for our evaluation of the Scheme.

We have assessed the controlling interest value of Whitehaven by aggregating the value of its key underlying assets. We have assessed the value of Whitehaven's coal mining operations using the DCF methodology, added the estimated realisable value of any surplus assets and deducted net debt.

In our assessment of Whitehaven's coal mining operations we have had regard to resource multiples observed for comparable listed companies and recent transactions for interests in coal projects. We have also considered the implied market premia to Whitehaven's historical share traded prices which is implied from our assessment of Whitehaven on a controlling interest basis.

Our assessment of Whitehaven's pre-merger share value on a minority interest basis has been by reference to the prices at which securities in the company have traded on the ASX.

8.2 Valuation summary

We have assessed the value of Whitehaven shares on a controlling interest basis to fall in the range of $6.12 to $8.47. We have assessed the value of Whitehaven shares on a minority interest basis to fall in the range of $5.60 to $5.85.

8.3 Controlling interest Valuation of Whitehaven shares

A summary of our assessment of Whitehaven's shares on a controlling interest basis is set out below:

Table 8.1: Whitehaven – valuation summary[9]

In $ million			Low	High
Coal mining operations		Section 8.4	2,692.0	3,435.0
Surplus assets		Table 8.3	486.2	924.2
Net debt		Table 8.4	(104.1)	(104.1)
Value attributable to shareholders (controlling interest)			**3,074.1**	**4,255.1**
Potential proceeds from exercise of options which are "in-the-money"		Table 8.5	12.0	12.0
Value attributable to shareholders (fully diluted basis)			**3,086.1**	**4,267.1**
Shares on issue			496.2	496.2
Potential issue of shares for options on issue which are "in-the-money"		Table 8.5	7.7	7.7
Potential shares on issue (fully diluted basis)			**504.0**	**504.0**
Value attributable to shareholders (fully diluted basis)			**$6.12**	**$8.47**
Implied premium to Whitehaven VWAP for 3 months prior to announcement of merger discussions ($5.81)	8.4	Table 8.6	**5.3%**	**45.8%**

Source: PwC Securities analysis

[9] The 31 December 2011 securities on issue have been adjusted to reflect the exercise of 1,530,000 executive options and a further 100,001 employee options in January and February 2012.

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8.5 Valuation of Whitehaven's coal mining operations

Our assessment of Whitehaven's coal mining operations includes an allowance for corporate office costs, working capital balances and the estimated impact of MRRT and carbon under currently enacted or proposed frameworks. We have separately assessed foreign currency exchange contracts associated with coal sales and equipment purchases as part of our valuation of derivative instruments within other assets.

Our underlying valuation of Whitehaven's coal mining operations is based upon cash flows derived from Whitehaven's life of mine modelling for each of its operating mines and near development projects (modified as appropriate to reflect the MMC assessment of operating and cost assumptions) under a range of sensitivities. Our assessment of Whitehaven's coal mining operations and development projects reflects Whitehaven's attributable interest in these assets.

Thermal and coking coal prices and the exchange rate of the Australian dollar to the US dollar have all exhibited considerable volatility over recent periods and there are a wide range of views by market commentators on future expectations for these parameters. AME has been commissioned to provide general commentary on the market outlook for thermal and metallurgical coal. Our valuation assessment is reflective of a range of market views for key assumptions in relation to coal prices and the US dollar exchange rate to the Australian dollar including both those of AME and the median outlook derived from a number of market commentators.

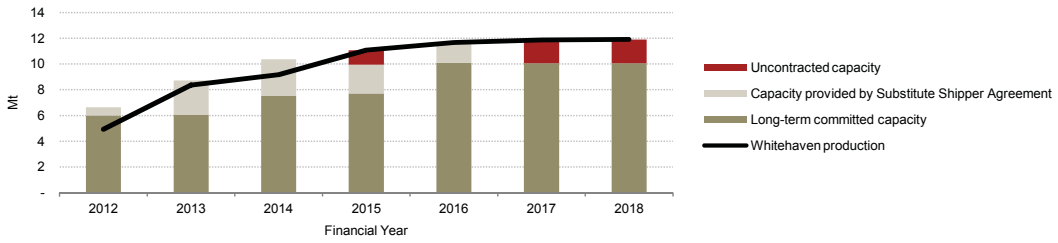
The assets are capable of being actively managed to optimise returns in response to market or operating circumstances. For example, there is the ability to prioritise saleable product coking or thermal coal sales depending on market conditions or to adjust production between mines in response to operational disruptions. As is the case with Aston, we consider that the ability to adjust production levels and the timing of project development in response to market conditions and potential to increase access to export capacity results in an optimised fair market valuation which is enhanced relative to the static model DCF assessments. Further, DCF models do not make allowance for the prospect of production or recovery enhancements over time or for the potential of Whitehaven's tenement holding to host marketable coal beyond the current reserve base.

For the purposes of our assessment, we have adopted a valuation range for Whitehaven on a controlling interest basis which reflects our analysis of a broad range of scenarios for Whitehaven's coal mining operations and not only the output of the base case model.

We have valued Whitehaven's coal mining operations in the range of $2,692 million to $3,435 million on a DCF basis. The broad range of values reflects the high level of sensitivity to changes in thermal coal, PCI coal and SSCC selling price and foreign exchange rates. The key assumptions adopted in the base case valuation of the operations included:

- Production levels and mine development are managed to correspond to anticipated timing of and access to additional rail and coal export capacity to be secured through coal export facilities at Newcastle as follows:

Figure 8.1: Whitehaven port capacity – committed, purchased and uncommitted (attributable production basis)



Source: Management information and PwC Securities analysis.
Note in the above chart that amounts are on an equity basis adjusted for JV partner volumes.

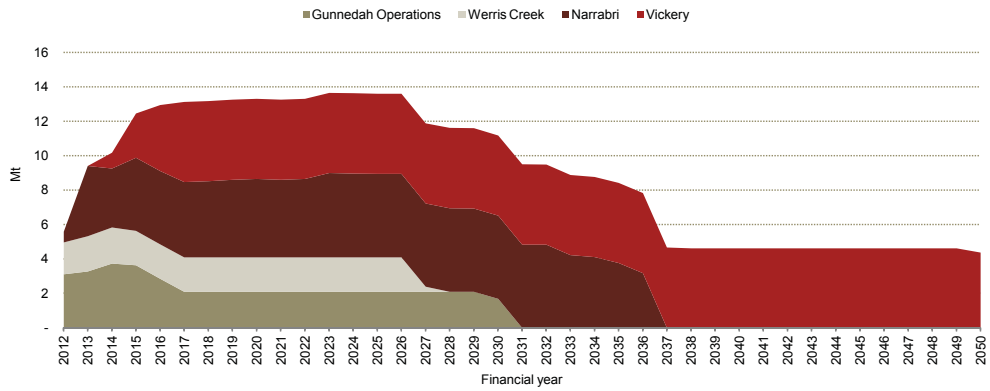
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- Whitehaven has secured significant port capacity allocations at Newcastle through both NCIG and PWCS. This includes capacity of 2.4Mtpa from the proposed PWCS T4 development which is assumed to be commissioned in financial year 2016 and ramp up to full capacity in the following year. Whitehaven have also purchased some additional temporary port capacity at NCIG from third parties under substitute shipper arrangements. Our base case modelling assumes that some further uncontracted capacity will also become available to Whitehaven prior to the commissioning of T4, and longer term capacity gaps will be able to be secured by accessing surplus capacity from other producers and additional T4 allocations to allow Whitehaven to meet its proposed mining schedule.

- We have taken the potential delay to T4 into account in our low case valuation together with Whitehaven being able to at least obtain 50% of the additional uncontracted tonnage beyond 2016.

- The assumed production profile is as follows:

Figure 8.2: Whitehaven attributable production profile – base case valuation model (attributable ROM tonnes)



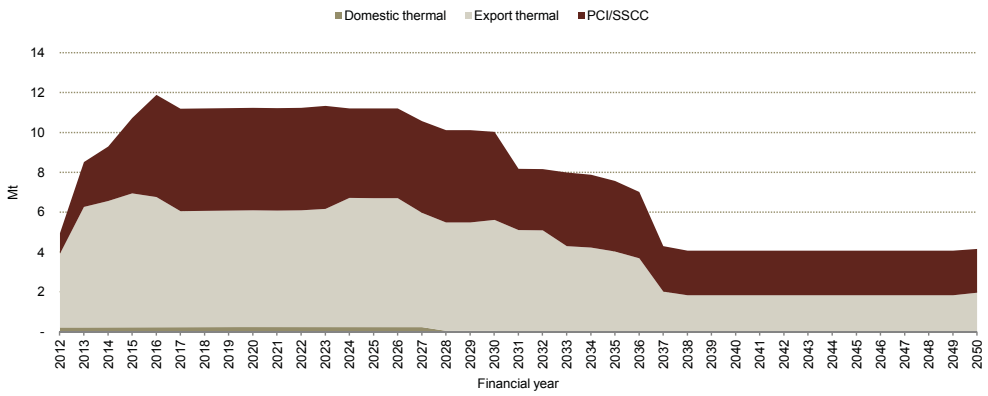
Source: Management information and PwC Securities analysis.

- In our base case financial modelling, open pit mining is assumed to continue over the life of existing Gunnedah operating mines (mostly from Tarrawonga) from current mines the Vickery deposit from 2014, Werris Creek (up to 2031) and from the Narrabri underground operations until 2050. The above production profile utilises 290Mt of Whitehaven's attributable proven and probable reserves and assumes conversion of 58Mt of measured resources into mining inventory (largely through infill drilling at Vickery). In practice other deposits held by Whitehaven for which mine plans have not been developed would be advanced upon expiry of existing mines in order to maintain production above that applied in our DCF analysis. The value of resources and reserves not included in our DCF analysis are included in our assessment of 'Other Assets'.

- This production profile approximates the anticipated export capacity available together with a small amount of domestic sales. The assumed mix of attributable saleable coal is as set out below:

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Figure 8.3: Whitehaven saleable coal – base case valuation model (attributable product tonnes)

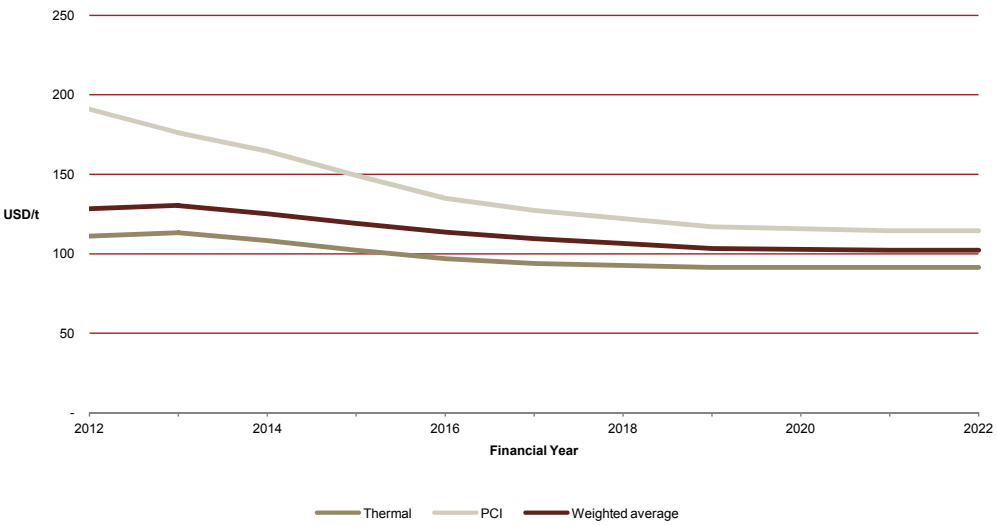


Source: Management information and PwC Securities analysis.

Note that there is some purchasing of coal for blending purposes which is not included in the above.

- Average realised free on board real prices in US dollars as follows:

Figure 8.4: Whitehaven realisable coal price – base case valuation model (USD/t 2012 real terms)



Source: Management information, broker consensus and PwC Securities analysis

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- The average volume weighted selling price over the cash flow period is influenced by the weighting of thermal coal in the product mix. The base case selling price is based on near term market advice from AME and the medium and long term real price outlooks of a number of commodity forecasters. The average price also recognises the ash and energy attributes of coal from Whitehaven's current and proposed mining operations. Our low and high valuation cases are based on a low and high range forecast coal price profile.

- An exchange rate of the Australian dollar to the US dollar as follows:

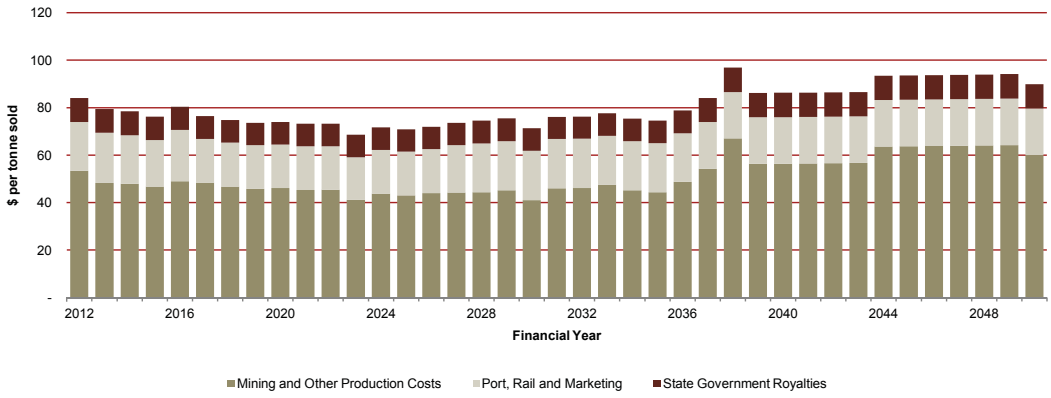
US$:A$	FY12	FY13	FY14	FY15	FY16	Long Term
	1.01	0.99	0.95	0.92	0.90	0.80-0.85

Source: PwC Securities analysis

- Our selection of an exchange rate for the Australian dollar to the US dollar has been made on a basis consistent with our base case coal price assumptions. Our low and high valuation cases are based on a low and high range forecast exchange rate profile.

- A cash operating cost profile of product coal FOB (including mining and processing costs, rail and port charges, royalties and marketing costs) as follows:

Figure 8.5: Whitehaven cash operating costs – base case valuation model ($ per product tonne in 2012 real dollars)



Source: Management information and PwC Securities analysis

- Costs associated with Narrabri (including mains & gates development, gas drainage, overheads in advance of the longwall) have been capitalised and are not reflected in the cash operating costs shown above.

- The operating costs associated with stripping and mine closures reflected in the above chart are shown when paid and may have timing differences relative to reported earnings.

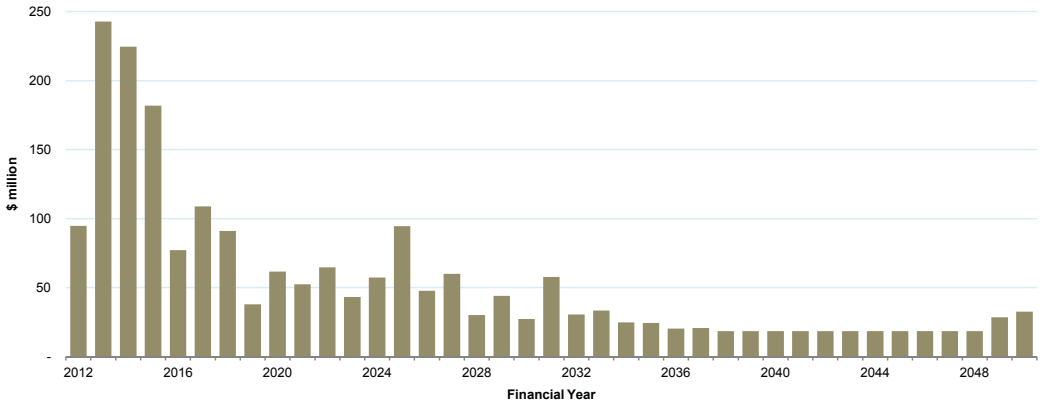
- The cash operating costs also make allowance for future carbon imposts assuming a carbon cost increasing to around $26 per tonne of carbon equivalent emission in 2016 and increasing in real terms thereafter at an average rate of 5% per annum to approximate Australian Government modelling. The net cost calculated on this basis has been reduced by 50% to reflect the pass through of some of the carbon impost to customers rather than by making explicit allowance in our assumed coal prices reflected above.

- Corporate costs of between $9 million and $18 million per annum.

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- A capital expenditure profile (reflecting land acquisition, mine development and sustaining capital) as follows:

Figure 8.6: Whitehaven capital expenditure – base case valuation model ($ in 2012 real dollars)



Source: Management information and PwC Securities analysis

Note: The amount shown for 2012 is for the second half of the financial year only.

- The high level of capital expenditure up to 2017 reflects the remaining development costs to bring the Narrabri North Underground Project into production (with longwall operations scheduled to commence in April 2012) and for development of the Vickery deposit between 2013 and 2017. Beyond this period, allowance is made for recurring capital expenditures and periodic mine development and fleet replacement costs in accordance with the proposed mine scheduling.

- A corporate tax rate of 29%, which reflects the proposed amendments to the Australian corporate taxation regime which will have probable effect from the 2014 financial year; and

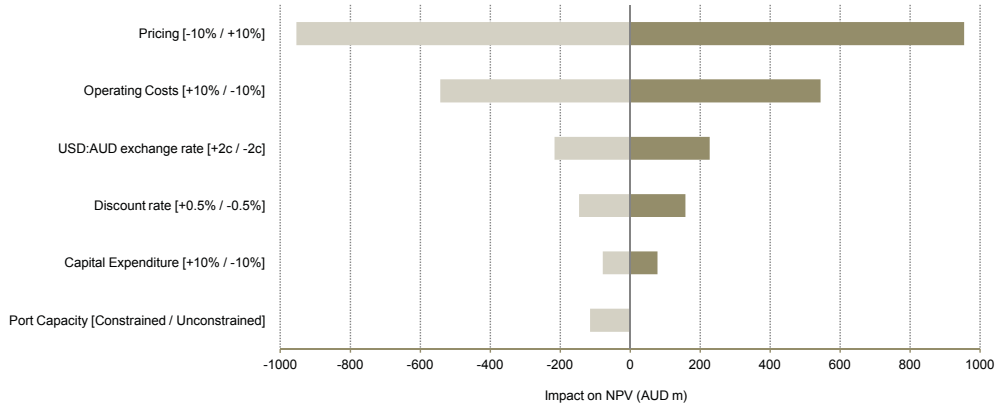
- A real ungeared post-tax discount rate of 8.3% per annum. Our assessment of the post-tax discount rate applied in the valuation is set out at Appendix C.

Further details of the operational parameters of the mining operations are set out in the MMC Report which is attached in section 9 of the Scheme Booklet. We have not included in our assessment of the Whitehaven's coal mining operations any benefits which may arise from joint management with those of Aston.

We have considered the sensitivity of the DCF valuation to various changes in the key assumptions including coal prices, foreign exchange rates, operating costs, capital costs, level of resources mined, product yield and access to export capacity. Our base case valuation is based on the production, saleable coal, realisable coal price, cost of sales and capital expenditure profiles outlined in figures 8.2, 8.3, 8.4, 8.5 and 8.6 above. In addition our base case valuation does not incorporate any shortfall in port capacity. As shown below, the valuation is particularly sensitive to changes in the coal price and exchange rate assumptions.

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Figure 8.7: Indicative valuation sensitivities



Source: PwC Securities analysis

8.6 Cross check of the value of Whitehaven's mineral interests to implied reserve and resource multiples

We have considered the values per resource tonne and reserve tonne implied from recent sales of interests in operating coal projects as a cross check to the total of our DCF valuation of Whitehaven's coal mining operations and assessed value for mineralisation not included in the DCF assessment. Care should be taken in interpreting such an analysis as these implied resource multiples only provide very general indicators of potential value. There are significant differences in individual coal mining operations between product mix, geological settings, operating parameters, cost structures, current and proposed production levels, mine lives and many other factors which can significantly influence such benchmarks.

The resource and reserve multiples implied by our assessed DCF value of Whitehaven's coal mining operations and assessed value of mineralisation outside of the DCF analysis is set out below:

Table 8.2: Implied resource and reserve multiples

		Low	High
Assessed DCF value of Whitehaven's mining operations	$ million	2,692.0	3,435.0
Assessed value of mineral interests not forming part of the DCF analysis	$ million	469.0	903.0
Assessed value of mineral interests	**$ million**	**3,161.0**	**4,338.0**
Attributable coal reserves	Mt	401	401
Multiple of reserves	**$/t**	**7.88**	**10.82**
Attributable coal resources	Mt	1,493	1,493
Multiple of resources	**$/t**	**2.12**	**2.91**

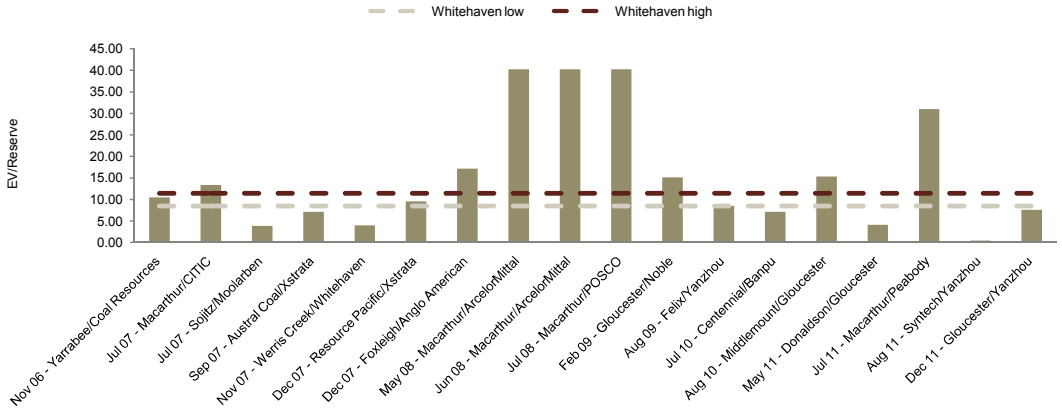
Source: PwC analysis

There are considerable limitations in comparing the indicators of value per tonne of resource or reserve implied from DCF analysis to those of other coal mining companies and mining companies in general.

Notwithstanding the difficulties inherent in such comparisons, we have considered Whitehaven's inferred controlling interest valuation by reference JORC resource and reserve multiples implicit in recent transactions within the Australian coal mining industry, noting that the impact of differing risk profiles, production levels, capacity constraints and mine lives may have significant effect on the resultant figures.

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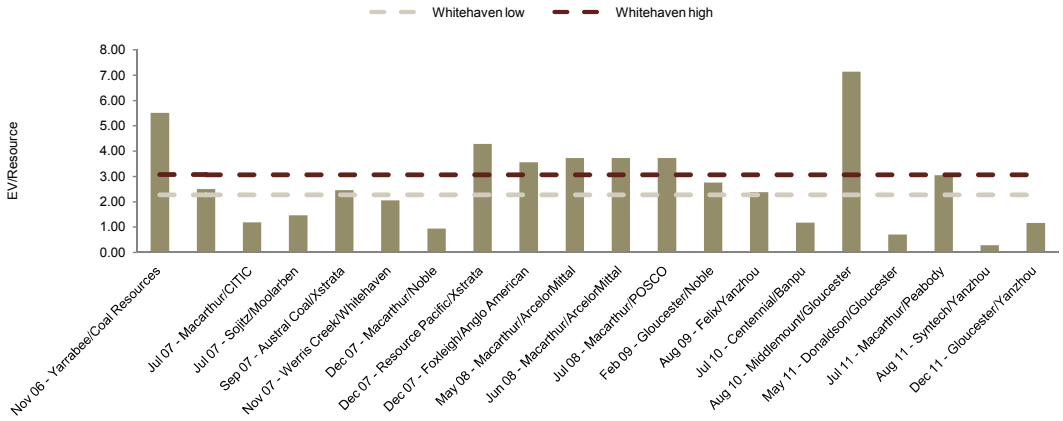
Figure 8.8: Comparable transactions – reserve multiples[11]



The following charts depict the resource and reserve multiples implied by comparable transactions over the past five years. In selecting transactions for our cross checks we have had regard to such characteristics pertaining to the target company as stage of development, product type and mix and scale of operations. The Gloucester Coal/Yanzhou Coal transaction is yet to be completed, however we believe that inclusion of this transaction is warranted, given its relative proximity to the timing of the merger between Aston and Whitehaven Due to the number of transactions in operational assets there are more comparable transactions for Whitehaven compared with Maules Creek. Appendix E sets out further detail regarding comparable transactions.

The companies used for comparison purposes have differing risk profiles. For example, Gujarat NRE Coking Coal Limited (Gujarat) may be considered somewhat illiquid given the size and scale of this company in relation to other comparable coal producing companies, lessening the comparability of this company with Whitehaven. Accordingly, Gujarat had an observed implied reserve multiple of $3.7/t, and an observed implied resource multiple of $0.7/t, both below the respective averages for the comparable set, and hence increasing the difference between the average of the set and the multiples implied by our valuation of Whitehaven.

Figure 8.9: Comparable transactions – resource multiples



As a result of significant merger and acquisition activity within the Australian coal mining sector over the past 12 months, a number of previously comparable listed companies have been delisted, resulting in a lower

[11] Refer to Appendix E for further information regarding comparable transactions

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population of companies and multiples to which our valuation can be compared, further reducing the emphasis placed on the comparable value cross checks.

Our DCF valuation of Whitehaven's coal mining operations falls within the range indicated by the comparable sales evidence.

Our implied reserve multiples range of $7.9/t to $10.8/t also falls in line with market evidence. The average reserve multiple of the selected transactions is above our range at $15.32/t, however we believe that the average is somewhat skewed by the wide range of multiples observed. The more noteworthy median multiple of $10.03/t fits within our implied reserve multiples range.

The average resource multiple of the selected comparable transactions is $2.69/t, which falls comfortably between our implied resource multiple range of $2.1/t to $2.9/t for Whitehaven. The median multiple of the selected comparable transactions also fits between our implied multiple range at $2.48/t.

We note the markedly different economic climate which now exists in comparison with that in which some of the selected transactions may have occurred. This further emphasises that these value indicators are to be assessed as guidelines only.

We are of the opinion that the assessed DCF values lie within an expected range and are supported by the accompanying evidence.

8.7 Other Assets and Liabilities

We have reviewed Whitehaven's assets and liabilities to ascertain the extent to which assets and liabilities as at 31 December 2011 have been reflected in the underlying DCF values of the mining operations. Our valuation has incorporated opening working capital (including tax obligations and amortisable balances) associated with the mining operations. Most of Whitehaven's assets and liabilities are included within our assessed value of the mining operations. However, we have given additional consideration to the timing and obligations for capital works at Narrabri and for third party coal purchases and reflected additional liabilities to the extent that these have not been included in the cash outflows costs modelled for the mining operations.

Table 8.3: Whitehaven – other assets

In $ million		Low	High
Exploration interests	MMC Sec 20	469.0	903.0
Foreign exchange derivatives		8.0	9.0
Balance of below market price legacy coal contracts		(10.0)	(7.0)
Creditors in relation to third party coal purchases unpaid as at 31 December 2011 where outflows are not reflected in the DCF assessment		(18.5)	(18.5)
NCIG subordinated loan receivable		17.5	17.5
Taxation prepayment		21.9	21.9
Unavoidable transaction costs not incurred as at 31 December 2011		(1.7)	(1.7)
Other assets		**486.2**	**924.2**

Source: PwC Securities analysis and MMC

As at 31 December 2011, Whitehaven had approximately 250,000 tonnes of legacy coal sales contracts with an average sale price of approximately USD73/t. These contracts are due for delivery prior to 31 March 2012 and have not been factored into our DCF assessment. We have assessed the shortfall on these contracts by reference to the assumed realisable coal price for 2012 and deducted attributable royalty and tax impacts. We are also advised that there are no out of the money coal purchase contracts.

Whitehaven has taken out forward currency exchange contracts to partially hedge the cost of capital purchases in Euro for the Narrabri project and 2012 calendar year coal sales in US dollars. The impact of these derivative instruments has not been included in our assessment of the underlying mining operations. We have assessed

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the derivatives by reference to the assumed exchange rates adopted within our DCF modelling and deducted attributable tax impacts.

Cash flow analysis has not been performed for all coal resources and reserves held by Whitehaven. MMC has assessed resources not included in the life of mine plans to have a value of $469 million to $903 million. The assessment by MMC is in section 9 of the Scheme Booklet.

The tax cost base of Whitehaven's interest in the underlying assets which will be used to generate future tax deductions has been reflected in the post-tax cash flows upon which the assessment of the mining operations has been based. Accordingly, the mining operation valuation reflects the estimated remaining available tax deductions.

Based on discussions with Whitehaven management, a number of surplus assets and liabilities were identified where cash outflows or inflows are not reflected in the DCF analysis of the mining operations. These include cash outflows for the settlement of a number of third party coal purchases recently entered into by Whitehaven, the prepayment of taxation instalments and interest bearing subordinated debt instruments issued by NCIG.

No significant off balance sheet assets or liabilities were identified through discussion with management or from a review of information provided by Whitehaven which we consider require separate valuation adjustment. We note that the ATO is currently auditing the tax cost base of certain assets recorded by Whitehaven and the period over which the tax base of certain of the assets subject to audit may be claimed as deductions against taxable income. The assets subject to audit had an increase in their tax base upon entry to the Whitehaven tax consolidated group in advance of the listing of Whitehaven's shares on the ASX. Some of the deductions associated with the uplifted tax base have been claimed over the taxation years between 2008 and 2011 as a deduction against taxable income. The audit is currently in the information gathering stage. In relation to the audit, the Whitehaven Directors do not believe there will be any material adverse result. We have not made any deduction from our valuation assessment for any potential exposure from the ATO taxation audit as the facts presented by Whitehaven appear to support its treatment.

The underlying cash flows used to value the mining operations of Whitehaven include an allowance for corporate costs associated with administration of Whitehaven. Accordingly no separate allowance for corporate administration costs has been made. However, Whitehaven will incur costs associated with the Scheme in addition to those already provided for in the working capital balances. We have made allowance in our assessment for the balance of unavoidable transaction costs above those brought to account by Whitehaven as at 31 December 2011. Whitehaven estimates that it will incur approximately $5.6 million of unavoidable transaction costs of which $3.9 million had been recognised as at 31 December 2011.

8.8 Net debt

Whitehaven had borrowings at 31 December 2011 of $247.4 million and cash balances of $103.5 million. As no opening cash balance is included in our valuation assessment of the mining operations, we have treated the cash position at 31 December 2011 as surplus and included this as an offset to the net debt balance. We have adjusted the cash on hand and the number of shares on issue as at 31 December 2011 to reflect the exercise of 1,530,000 executive options at $2.50 per share and 100,001 employee options at $1 per share in January and February 2012. These transactions raised a total of $3.9 million.

Table 8.4: Whitehaven – net debt

In $ million	
Debt	211.5
Less: cash	(107.4)
Net debt	**104.1**

Source: PwC Securities analysis

We have adopted the debt position of Whitehaven as at 31 December 2011 as the basis for our assessment, but have adjusted this balance to remove $35.9 million of obligations included for rail improvement works which were partly underwritten by Whitehaven, as agreement has now been reached for these works to be fully funded by the below-rail provider.

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8.9 Share options

Whitehaven has potentially dilutive share options and performance based incentive shares rights. Having regard to the number of these rights in existence at the valuation date and the relatively immaterial potential impact on the value of Whitehaven's shares, we have assumed for the purposes of our assessment that these rights crystallise and are all exercised as at the valuation date. A summary of the rights on issue is set out below:

Table 8.5: Whitehaven – share options and incentive rights

	Number of securities (million)	Funds from exercise $ in millions
Senior employee options exercisable at $2.50 up to October 2012	1.39	3.5
Senior employee options exercisable at $1.00 up to 30 June 2012	0.03	0.03
Director related options exercisable at $1.70 up to October 2013	5.00	8.5
Executive performance share acquisition rights (TSR based)	1.32	0.0
Total	**7.75**	**12.01**

Source: Whitehaven accounts

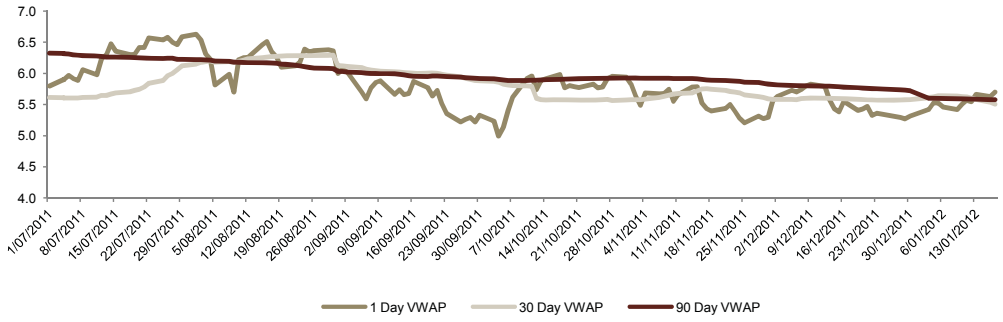
8.10 Minority interest Valuation of Whitehaven shares

It is necessary to consider how Whitehaven shares may have traded in the absence of the Scheme in order to assess the level of premium which may be implicit in the competing Scheme. Although the Scheme was announced on 12 December 2011, Whitehaven announced confirmation of discussions regarding a potential merger of equals with Aston to the market on 5 December 2011.

The price at which Whitehaven's shares have traded exhibited a marked decline during mid to late 2011, falling from $6.61 on 22 July 2011 to $4.98 on 4 October 2011. Following this decline, the share price increased to trade within the range of $5.16 and $5.97. In addition, Whitehaven's shares appreciated by 13.0% between 25 November 2011 and 8 December 2011.

The chart below outlines Whitehaven's share price performance since 1 July 2011:

Figure 8.10: Whitehaven's share trading performance

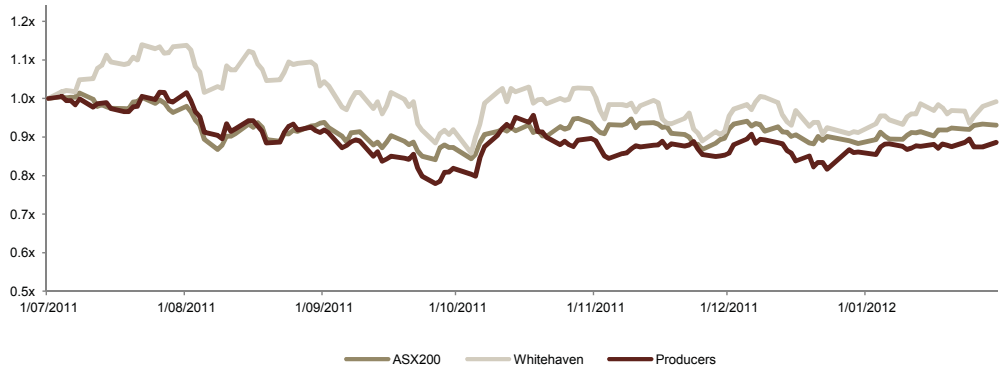


Source: Capital IQ, PwC Securities analysis

To overcome any impact of the Scheme on Whitehaven's share price, we have compared the historical Whitehaven share prices against a simple index reflecting the average movement in the prices of the key Australian listed companies focused principally on coal mining in Australia, as well as the movements in the S&P/ASX 200 index since 1 July 2011.

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Figure 8.11: Whitehaven's relative share trading performance



Source: Capital IQ, PwC Securities analysis

We note that Whitehaven's share price has broadly tracked the movements of the S&P/ASX 200 index, as well as other Australian listed coal producing companies over the past six months, on which we assume that company-specific announcements and proposal announcements have been relatively unexplanatory.

Whitehaven's share price closed at $5.82 on 9 December 2011. In the days following the announcement of the Scheme on Monday, 12 December 2011, the share price fell by approximately 7.2% to close at $5.40 on 15 December 2011. The Whitehaven share price at the time reflected a small premium to the share exchange ratio in the Merger Implementation Agreement. Since that date there have been no significant swings in share price, with shares trading in the range of $5.26 to $5.72. Since the announcement, the share prices of Australian coal companies and the S&P/ASX 200 index have also followed similar trading patterns to Whitehaven.

We have observed the value of Whitehaven shares on a minority interest basis to fall in the range of $5.60 to $5.85 based on the trading range for Whitehaven shares over the period from 1 September 2011 to the date of the Scheme announcement.

8.11 Implied control premium

Our valuation of Whitehaven on a controlling basis represents the following premiums to the price at which Whitehaven traded immediately prior to the announcement of the Scheme:

Table 8.6: Whitehaven – implied control premiums

	$	Premium (low)	Premium (high)
Close price on 12 December 2011	5.74	6.6%	47.6%
Close price on 9 December 2011 (day prior to Scheme announcement)	5.82	5.2%	45.5%
Close price on 2 December 2011 (day prior to Whitehaven confirmation of discussions with Aston regarding a potential merger of equals)	5.64	8.5%	50.2%
1 month VWAP to 2 December 2011	5.58	9.7%	51.8%
3 month VWAP to 2 December 2011	5.81	5.3%	45.8%

Capital IQ, PwC Securities analysis

Our valuation of Whitehaven implies a significant premium to historically traded share prices at the upper bound of our assessed value and a moderate premium to the share traded price at the lower bound of our assessed valuation range. Our valuation range for Whitehaven reflects its inter alia high sensitivity to the coal prices assumed.

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We note that the midpoint of our assessed valuation range represents a control premium of approximately 25.6% which is reflective of the historical premia associated with control transactions for Australian listed companies, but slightly below that generated in a number of recent transactions for comparable sized listed mining companies. We are also mindful that there has been ongoing speculation concerning a future control transaction for Whitehaven shares and that the share price of Whitehaven may in part reflect some speculative component in relation to the prospect of a future control transaction. Accordingly we do not regard the premiums implied by our valuation range as being unreasonable in comparison to historical premiums paid for controlling interests in Australian mining companies and projects.

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9 Evaluation of the Scheme

9.1 Basis of Evaluation

In forming our opinion as to whether the Scheme is in the best interests of Aston shareholders, we have considered the following:

- The estimated value of Aston and Whitehaven on a standalone basis;
- A comparison of relative value for shares in Aston and Whitehaven on a standalone basis on both a controlling interest and minority interest basis to the merger exchange ratio;
- The terms of the Scheme and their potential impact on the underlying value and trading price of the Merged Group;
- The terms of the Proposed Boardwalk Transaction and their potential impact on the underlying value of the Merged Group;
- The availability of synergies resulting from the Scheme and their potential impact on the underlying value of the Merged Group;
- The investment characteristics of the Merged Group as compared to the investment characteristics of Aston on a standalone basis;
- The prospect of alternative transactions that could realise a more favourable outcome; and
- Other advantages and disadvantages of the Scheme.

9.2 Relative Value Analysis excluding Boardwalk

We have set out in sections 7 and 8 our assessment of Aston and Whitehaven shares on a standalone basis.

We have compared the share exchange ratio under the Scheme with our assessment of the relative standalone values per share of Aston and Whitehaven on both a controlling interest and minority interest basis (net of unavoidable transaction costs related to the Scheme). The relative value analysis we have undertaken excludes the impact of the Proposed Boardwalk Transaction.

The controlling interest valuations of Aston and Whitehaven are based on a number of important assumptions. Many of the key influences over the underlying and traded value for Aston and Whitehaven shares are common to both entities. These include expectations for future coal prices and coal demand, the relative strength of the US dollar against the Australian dollar, coal mining costs, railing costs, port costs and the performance of the coal supply chain through the Port of Newcastle as well as other economic value drivers.

As such, our comparison of relative value has been undertaken at similar low and high points in our assessed ranges of value for Aston and Whitehaven shares, as set out in the following tables:

Table 9.1: Comparison of relative value

$ per share	Low	High
Controlling interest value of Aston shares	10.48	14.92
Controlling interest value of Whitehaven shares	6.12	8.47
Less: Whitehaven Special Dividend	0.50	0.50

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$ per share	Low	High
Controlling interest value of Whitehaven shares (less Whitehaven Special Dividend)[12]	5.62	7.97
Relative value on controlling interest basis (Aston/Whitehaven less Special Dividend)	1.86	1.87
Minority interest value of Aston shares	9.10	10.10
Minority interest value of Whitehaven shares	5.60	5.85
Less: Whitehaven Special Dividend	0.50	0.50
Minority interest value of Whitehaven shares (less Whitehaven Special Dividend)	5.10	5.35
Relative value on minority interest basis (Aston/Whitehaven)	1.78	1.89

When the relative value is below the offer indicated by the Scheme of 1.89, it is supportive of the proposition that the Scheme is in the best interests of the Aston shareholders.

Table 9.2: Comparison of underlying traded values

$ per share [13]	Aston	Whitehaven	Ratio
Share market price (pre-announcement 2 December 2011)	9.11	5.14	1.77
Share market price (1 month VWAP – 2 December 2011)	9.64	5.08	1.90
Share market price (3 month VWAP – 2 December 2011)	10.13	5.31	1.91
Share exchange ratio under the Scheme			1.89

The exchange ratio for Aston shares under the Scheme is above our assessment of the relative value of Aston shares and Whitehaven shares on a stand-alone basis (both on a controlling interest and minority interest basis). Accordingly, we consider Aston shareholders are receiving a higher proportionate interest in the Merged Group under the Scheme (excluding the impact from the Proposed Boardwalk Transaction) relative to Whitehaven shareholders based on the value (on a minority basis) of Aston and Whitehaven as stand-alone entities. When the share exchange ratio is below the offer indicated by the Scheme of 1.89, it is supportive of the proposition that the Scheme is in the best interests of the Aston shareholders.

We also note that the relative contributions of reserves and forecast coal production (after the commencement of production at Maules Creek) is broadly consistent with the merger exchange ratio.

Table 9.3: Relative contributions (reserves, resources and saleable coal production)

	Aston	Whitehaven	Aston Contribution
Coal Reserves - Equity basis (Mt)	272	401	40.5%
Coal Resources - Equity basis (Mt)	509	1493	25.4%
Forecast saleable coal production (Mtpa)			
- Fiscal year ending 2014	3.5	9.3	27.3%
- Fiscal year ending 2015	6.1	11.3	35.1%
- Fiscal year ending 2016	8.2	11.9	40.8%

[12] The controlling interest value of Whitehaven shares is shown on a fully diluted basis, despite the Whitehaven Special Dividend being on an undiluted basis due to the fact that options and performance rights outstanding comprise less than 2% of potential shares on issue (on a fully diluted basis) and thus considered immaterial.

[13] Whitehaven per share figures denoted above are shown net of the Whitehaven Special Dividend of $0.50 per share.

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In our view, the relative contribution analysis indicates that the collective interest of the Aston shareholders in the Merged Group will be broadly consistent with Aston's contribution to the Merged Group (excluding Boardwalk). Specifically, Aston shareholders will hold approximately 40.8% of the Merged Group, prior to the dilution from options and the Milestone Shares, and are contributing:

- Approximately 40.5% of the coal reserves and 25.4% of the coal resources (both on an equity basis); and
- Approximately 27.3%, 35.1% and 40.8% of the forecast coal production (attributable) for the fiscal years ending 2014, 2015 and 2016 respectively.

It must be recognised that the non financial parameters set out above are relatively broad measures of the relative contributions by Aston and Whitehaven to the Merged Group. In particular:

- Of the recoverable reserves and resources contributed by Whitehaven, approximately 25% and 20% respectively relate to mines in the development stage (Vickery) whereas 100% of the recoverable reserves and resources contributed by Aston relate to the Maules Creek Project (a development stage asset); and
- The assessment does not include the exploration targets related to the principal assets of Boardwalk.

9.3 Impact on underlying value of shares in the Merged Group

We have considered whether the Scheme is likely to be value accretive to Aston shareholders by comparing the effective interest an Aston shareholder will hold in the underlying assets of the Merged Group relative to the interest currently held in Aston's underlying assets. We consider that the underlying value to the Aston shareholders will be enhanced both in the event of the completion of the Scheme and in the event of both the Scheme and the Proposed Boardwalk Transaction. Our assessment has only been undertaken on a controlling interest basis as it is not possible to predict with certainty the price at which the Whitehaven shares will trade subsequent to completion of the Scheme. However, we expect that an uplift in the underlying value of the share of assets held is likely to be reflected in the share traded price together with other market benefits outlined in this section.

The implied value of the Aston shareholders' interest in the Merged Group as a result of both the Scheme and the Proposed Boardwalk Transaction as reflected in the table below is on a controlling interest basis. Aston shareholders will have no way to realise a controlling interest value (other than potentially through a subsequent change of control transaction where a control premium is paid). It is expected that the shares of the Merged Group would trade at a discount to underlying controlling interest value, in the same way that shares in Aston on a standalone basis would be expected to trade at a discount to their underlying controlling interest value.

Our value assessment is set out in the following table:

Table 9.4: Scheme and Proposed Boardwalk Transaction– Valuation Summary

	Scheme		Scheme and Proposed Boardwalk Transaction	
$ in millions (except as noted)	Low	High	Low	High
Total equity value of Aston on standalone diluted, controlling interest basis	2,254	3,210	2,254	3,210
Total equity value of Whitehaven on standalone diluted, controlling interest basis	3,086	4,267	3,086	4,267
Special Whitehaven Dividend	-250	-250	-250	-250
	5,090	**7,227**	**5,090**	**7,227**
Value of Boardwalk	-	-	200	330
Value impact of contingent consideration for Boardwalk	-	-	-100	-139
Synergies	510	680	510	680
Incremental transaction costs	-60	-60	-60	-60
Value of Merged Group	**5,540**	**7,847**	**5,640**	**8,038**

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	Scheme		Scheme and Proposed Boardwalk Transaction	
Issued share capital of Whitehaven (millions)	504.0	504.0	504	504
Shares issued to Aston shareholders (at 1.89 ratio)	406.5	406.5	406.5	406.5
Initial Shares issued for Proposed Boardwalk Transaction	-	-	85.9	85.9
Issued shares in Merged Group (on a fully diluted basis)	**910.5**	**910.5**	**996.4**	**996.4**
Implied controlling interest share value upon completion (on a fully diluted basis)	$6.08	$8.62	$5.66	$8.07
Scheme exchange ratio	1.89	1.89	1.89	1.89
Implied value of consideration	**$11.50**	**$16.29**	**$10.70**	**$15.25**
Aston share value (fully diluted, controlling interest basis)	**$10.48**	**$14.92**	**$10.48**	**$14.92**

As shown in the table above, the estimated implied value of the consideration on a controlling interest basis is in the range of $11.50 to $16.29 per Aston share as a result of the Scheme. If the Proposed Boardwalk Transaction is completed, the estimated implied value of consideration per share is in the range of $10.70 to $15.25 per share. Our range of values excludes any special value which a particular purchaser might attribute to the Merged Group shares.

The consideration offered is above our assessed value of $10.48 to $14.92 per Aston share on a controlling interest basis.

9.3.1 *Special Whitehaven Dividend*

Under the SIA, Whitehaven is to pay a fully franked dividend of $0.50 per share (which amounts to $250 million) to existing Whitehaven shareholders prior to the Scheme being implemented.

9.3.2 *Value of Boardwalk*

Our assessment of value of Boardwalk is summarised in the table below:

Table 9.5: Boardwalk – Valuation Summary

$ in millions	% interest	Low	High
Value of Boardwalk's interest in the following projects:			
- Sienna	100%	20	30
- Dingo	70% [1]	30	40
- Ferndale	50% [1]	30	90
- Monto	100%	0	50
		80	**210**
Injection of cash of $150.0 million, net of debt[14]		100	100
Other assets (predominantly Coalworks and Orpheus)		20	20
Value of Boardwalk		**200**	**330**

1 Adjusted for farm-in arrangements

MMC was appointed to provide a Technical Specialist Report in relation to the four principal assets of Boardwalk (being the Sienna, Dingo, Ferndale and Monto exploration stage projects).

In assessing the value of Boardwalk, we have primarily had regard to the MMC Report as set out in section 9 of the Scheme Booklet. We also considered a variety of other factors, including:

[14] Boardwalk has $58.8 million of outstanding debt as at 31 December 2011. Prior to implementation, Boardwalk's debt will reduce by $5.3 million through the conversion of debt to equity. We have adopted a round $50 million of debt based on an outstanding debt after capitalisation of interest less a $1.5 million reduction of Boardwalk related transaction costs.

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- The attributable interests held by Boardwalk in each of the Sienna, Dingo, Ferndale and Monto exploration stage projects and the rights to acquire additional interests based on farm-in and joint venture agreements currently in place;
- The expected payments in relation to acquiring additional interests of certain of the Boardwalk projects (specifically, Ferndale and Sienna) although in formulating our values we have not deducted the 'farm-in' payments as we anticipate they will add value as they are expended;
- Other expected payments in relation to exploration and development of Sienna, Dingo, Ferndale and Monto;
- The range of EV to exploration target multiples for six publicly listed, early stage coal development companies in Australia after deducting an estimated EV to resource value of approximately $0.20 per tonne from the EV of these companies resulting in an implied value per tonne of exploration target in the range of $0 and $0.08 per tonne;
- The recently announced heads of agreement under which NuCoal Resources Limited (NuCoal) is to acquire the Plashett Coal project from the Bloomfield Group for $76 million, as set out in Appendix E;
- The potential impact on value from environmental, regulatory and political risks, among others;
- The traded share market value of both Coalworks and Orpheus (on a minority interest basis);
- Capital raisings undertaken by Boardwalk; and
- The reported assets, liabilities and equity of Boardwalk as at 31 December 2011.

Having regard to the above, we consider the value of Boardwalk to be in the range of $200 million to $330 million. We recognise that the valuation of early stage mineral prospects is highly subjective and that individual purchasers may place a strategic value on such assets.

Given the early stage, exploration nature of these assets, the ultimate value extracted is highly sensitive to exploration outcomes and emerging economic factors including coal prices and extraction costs. Accordingly ultimate value achieved by the Merged Group may fall outside of the range shown.

9.3.3 Value impact of contingent consideration for Boardwalk

For the purposes of our assessment, we have treated the value impact of the contingent consideration of Boardwalk as a dilution of the value of the combined group's unrestricted shareholders at having regard to the terms and conditions attached to the Milestone Shares as set out in the SIA and Proposed Boardwalk Transaction documents.

Assessing a valuation range for the dilution inherent in the contingent consideration is highly complex and uncertain.

In particular, the Milestone shares are subject to a number of restrictions including, most notably:

- they do not have dividend rights while restricted; and
- they are not saleable while restricted

The restrictions are removed in two circumstances:

- when certain mining and environmental approvals are obtained for any two of the principal assets of Boardwalk (being Ferndale, Sienna, Dingo and Monto) and the Coalworks' Oaklands North project; or
- when the Merged Group is subject to a change of control transaction, regardless of whether the mining and environmental approvals have been received.

The interplay between these restrictions results in wide range of potential outcomes.

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For example, the maximum dilution impact would arise is in the event of a takeover of the Merged Group without any further exploration activity in relation to the Boardwalk assets.

On the other hand, the minimum dilution outcome is, by definition, zero, reflecting a situation where none of the Milestone Shares vest, or the continued exploration outcomes are very favourable such that the increase in value on the Boardwalk assets outweigh any potential dilution from the contingent consideration.

To assess a precise estimate of the impact of the contingent consideration requires allowance for a wide variety of uncertain factors including:

- the prospects and timing of both exploration success, and achievement of the required approvals;
- the economics of any proposed mining activity;
- the coal price and exchange rate levels at the time the mines begin and continue to operate;
- the share price performance and dividend policy of the merged group during the period of restriction;
- the prospects, potential outcomes and timing of takeover activity in relation to the merged group

Any assessment of these factors will be, inevitably speculative and subjective. Accordingly, we have assessed the value at the midpoint of the maximum and minimum values for potential dilution as set out above.

This midpoint results in a value consistent with the pro-forma financial statement's estimate of the probability weighted value of the contingent consideration. We consider the methodology used in the pro-forma to calculate this value reasonable, and the assumptions around the probabilities of the uncertainties above plausible, but note that the valuation basis (minority value versus pro-rata) differs to that used in these calculations. We have therefore made an adjustment to make the valuations comparable.

Table 9.6: Value impact of contingent consideration for Boardwalk Resources

$ in millions	Low	High
Maximum potential dilution: Implied value of the Milestone Shares based on post Scheme implied controlling interest share value of Merged Group on fully diluted basis, before contingent consideration	196	278
Minimum value of the Milestone shares	0	0
Value adopted in pro-forma financials in scheme booklet ($98 million on a minority basis; grossed up for a control premium in the low case of 5% and high case 50% in line with underlying valuations)	103	147
Assessed value impact of contingent consideration of Boardwalk	**100**	**139**

We consider this to mid-range estimate to be appropriate as the maximum and minimum outcomes are, in our view, low likelihood scenarios.

We note however that even if the maximum possible dilution was selected, the transaction would still be accretive under all scenarios from an Aston point of view.

9.3.4 Synergies

Aston and Whitehaven management expect a number of synergy benefits to arise following implementation of the Scheme. The most readily quantifiable of these relate to infrastructure savings and efficiencies, operational cost synergies, coal blending synergies, corporate cost savings and tax uplifts which are expected to arise as a consequence of the Scheme. However, significant other operational and financing benefits are expected to arise which are not immediately quantifiable as discussed below.

In forming our view on synergies we have had regard to estimates prepared by management in conjunction with consideration of previous mergers and the integration savings achieved together with the risk associated with the achievement of those synergies. We have also considered the commercial logic associated with the synergies.

We have assessed the identified and readily quantifiable synergy benefits on a DCF basis using similar parameters to those adopted in our DCF analysis of the underlying operations of Aston and Whitehaven and added a level of risk weighting where we considered appropriate.

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A summary of our assessed value of the readily quantifiable merger benefits is set out below:

Table 9.7: Synergies – Valuation Summary

$ in millions	Low	High
Infrastructure savings and efficiencies	140	240
Operational cost synergies	100	160
Blending synergies	60	80
Taxation benefits	160	200
Margin benefits in circumstances of export capacity constrained production	50	-
PwC Securities assessed value of readily quantifiable synergies	510	680

We have assessed the value of the above quantifiable synergy benefits to the Merged Group to be in the order of $510 million to $680 million.

Infrastructure savings and efficiencies

Aston and Whitehaven have identified a number of infrastructure savings and efficiencies which are expected to arise from the Scheme. These include:

- Operational efficiencies – arising from the ability to secure greater utility of key mining and transport infrastructure through the diversity of load points and mining areas under common ownership. In particular the flexibility to divert scheduled train paths to alternative load points is anticipated to reduce the incidence of train paths which would otherwise be lost during current rail capacity constraints to deliver increased throughput.

- Economies of scale – unit cost reductions for above rail services.

We have assessed the value of the above quantifiable infrastructure synergy benefits to the Merged Group to be in the order of $140 million to $240 million. We regard this as being a conservative assessment of infrastructure related cost synergies.

Operational cost synergies

Aston and Whitehaven have identified a number of operational cost synergies which are expected to arise from the Scheme. These include:

- Corporate cost savings – being savings arising from eliminating duplicated corporate functions (both head office and costs allocated to the mine sites) and costs in the Merged Group;

- Purchasing cost savings for key supplies and services – unit cost reductions able to be achieved through economies of scale and increased purchasing power. These primarily relate to fuel, tyres, explosives and other services; and

We have assessed the value of the above quantifiable operating cost synergy benefits to the Merged Group to be in the order of $100 million to $160 million. We regard this as being a conservative assessment of operational cost synergies.

A number of other potential operational and funding benefits have been identified by Aston and Whitehaven in the Scheme Booklet. These further opportunities will be subject to review following completion of the Scheme. Whilst these opportunities and other operational cost synergies are reasonably expected to occur in the Merged Group, such potential synergies have not yet been evaluated or quantified by management. Other than for the specific benefits identified above, no allowance has been made in our valuation assessment for other potential operating cost synergy benefits.

Blending synergies

The thermal coal from Maules Creek has favourable energy and ash content relative to Newcastle benchmark coal. Conversely, some of Whitehaven's run of mine coal from Rocglen and Werris Creek is below the Newcastle benchmark for energy and ash content. Pricing penalties associated with higher ash coals exceed equivalent premiums obtainable for low ash coal. Whitehaven currently washes the lower quality Rocglen run of mine coal

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to bring it to close to Newcastle standard. However, blending of this coal with Maules Creek thermal coal would avoid the necessity to wash the same quantum of Rocglen coal and suffer a loss of coal yield through washing. Whitehaven currently purchases some third party coal to blend with Werris Creek low rank product to improve its specification and realisable price which partially offsets the price penalty the Werris Creek coal would suffer.

There is opportunity for the Merged Group to secure further benefit from the ability to mix coal produced from the Aston and Whitehaven mine portfolio not otherwise available on a stand-alone basis, to secure coal by pass savings and revenue uplift. However, the quantum of this benefit is limited by the extent of Maules Creek thermal coal which will be available for blending (due to Aston's existing thermal coal offtake arrangements) and the benefits which would otherwise be available through purchases of third party coal for blending.

We have valued the thermal coal blending benefits anticipated to arise to the Merged Group by determining the present value of the net incremental post-tax cash flows from the estimated higher average selling price of the blended volumes. In undertaking this assessment, we have considered the future profile of coal production and coal quality in the mine plans of Aston and Whitehaven in order to quantify the tonnage suitable for blending and the level of quality uplift. We have also been mindful of the level of future thermal coal production which is subject to forward sale obligations and is therefore not available for blending as well as current blending which is achieved by Whitehaven through use of third party coal.

We have assessed the value of the synergy benefits to the Merged Group from product blending to be in the order of $60 million to $80 million.

Taxation benefits

Under the Scheme Whitehaven will acquire 100% of Aston shares. Additional tax uplifts are expected to arise to the Merged Group through an uplift to the tax cost base of assets upon Aston's entry to the Whitehaven tax consolidated group.

The tax cost base of Aston's assets upon entry to the Whitehaven tax consolidated group will be determined in part based on the trading price of Whitehaven prior to implementation of the Scheme and the assets and liabilities of Aston at the date of implementation of the Scheme. However, the uplift in the tax cost base has the potential to significantly reduce the future income tax payable by the Merged Group. We have estimated this benefit by reference to the current Whitehaven share price adjusted for the proposed cash dividend to existing Whitehaven shareholders (to provide a measure of the deemed consideration) and the book and tax value of Aston's net assets as at 31 December 2011. The tax uplift is expected to be realised over the life of the Maules Creek Project. We have adopted a valuation range of $160 million to $200 million to reflect the impact of lower taxation payments which would potentially arise upon uplift to the tax cost base of depreciable assets. Our assessed range allows for potential volatility in the Whitehaven share price prior to implementation.

In addition to the above, we have considered the potential tax savings benefits which may result from the acquisition of Boardwalk. In our opinion, any anticipated benefits would be included in the market value of the assets of Boardwalk.

Margin benefits in circumstances of export capacity constrained production

The lower end of our valuation ranges for Aston and Whitehaven on a stand-alone basis reflect allowance for risks associated with obtaining all of the current uncontracted coal export capacity at Newcastle which is required to meet each of the companies' mine plans (and in particular Aston's planned production levels). We consider that the Scheme will provide added synergy benefits in circumstances where export capacity may be constrained through management's ability to prioritise production and sales of higher margin coal from mines within the Merged Group. Accordingly, in our assessment of underlying value of the Merged Group we have reflected allowance for an additional $50 million of synergies at the lower end of our valuation range to recognise the benefit that a re-allocation of some of Whitehaven's contracted capacity to Maules Creek would bring.

Potential for other operational synergies

Additional potential synergistic benefits are anticipated to be realised from the Scheme but have not been quantified for the purposes of our assessment due to the lack of definitive plans to allow evaluation. These definitive plans are expected to be put into place following implementation of the Scheme. Such anticipated benefits include:

- Production scheduling and product mix optimisation - upon completion of the Scheme, the Merged Group will have the ability to optimise production by leveraging a larger project base. For example, the Merged Group can prioritise output of higher margin coals or reprioritise the timing of project development and production plans to secure value benefits above the current stand alone mine plans of Aston and Whitehaven;

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- The Merged Group would also be in a better position to deal with swings in market conditions, whereby volume shifts between metallurgical coal and thermal coal can be implemented dependent on market trends; and
- Sharing of technical and operating expertise across mines and projects.

Other operational cost saving synergies which were not able to be quantified include accommodation savings, inventory and spare parts, labour efficiencies, resource sharing and demurrage savings associated with the continuous running of trains to port and utilisation of what would effectively be a dedicated stockpile.

There is some risk that all identified benefits will not be fully realised, that they will take longer to achieve in practice or that the implementation costs will be higher than expected. Significant risks which may impact the timing, quantum and ability to achieve the expected benefits, and also the level of market share include:

- The integration of the businesses may be a distraction for management and staff which could negatively impact the businesses if not managed effectively;
- The responses from competitors; and
- The ability to integrate back office and information technology (IT) systems.

Additional synergies relating to the proposed transaction have been identified, but are somewhat unquantifiable. These include:

Marketing strategies

The combination of Aston and Whitehaven brings together two subsets of customers to be purchasing products from the single entity. As a result, marketing opportunities are enhanced as the company has access to a broader range of customers.

The Merged Group will be a significant producer of premium quality semi-soft coking and PCI coals.

This could strengthen the negotiating position of the Company, with improved pricing outcomes potentially creating valuable synergies. There is also the potential for the establishment of a Gunnedah Basin thermal coal benchmark index.

There is potential for longer term blending strategies with Narrabri and Vickery coals, however it is unlikely that there will be sufficient Maules Creek thermal coal to blend with coal from these assets until the Noble contract rolls off in 2023.

In the event that the transaction is not completed and no other transaction is forthcoming, then the Merged Group will not be able to benefit from the realisation of these potential synergies.

Borrowing costs

There is a possibility that the Merged Group will benefit from lower borrowing costs as a result of increased size and diversity of operations. These synergies are most likely to occur in the years prior to the Maules Creek ramp up stage as the Merged Group risk will be substantially lower than that of Aston standalone.

Labour efficiencies

The merger of Aston and Whitehaven should improve, amongst other things, employee retention as the Merged Group would be able to transfer human resources between mines near the of end of mine lives.

Boardwalk synergies

There is an opportunity for the Merged Group to benefit from the ability to mix coal produced from certain mining projects in the Boardwalk portfolio with coal produced from the Gunnedah mines.

There is potential for the Merged Group to benefit from further corporate cost savings related to the acquisition of Boardwalk.

Furthermore, it is also likely that there will be potential strategic value associated with a substantial holding in Coalworks given the proximity of some of its assets with those of the Merged Group.

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9.3.5 Transaction costs

The Scheme involves a variety of transaction costs, including stamp duty, directors' fees, adviser costs and professional fees. Approximately $9.9 million (being a combination of those costs incurred as at 31 December 2011 and allowed for) are unavoidable transaction costs which have been included in the standalone valuations of Whitehaven and Aston. The aggregate costs (for both Aston and Whitehaven) are estimated to be approximately $67 million, of which approximately $57.0 million are the incremental transaction costs which will be incurred if the Scheme proceeds. The transaction costs, while significant, are relatively immaterial in the context of the combined market capitalisation of the Merged Group.

9.4 Investment Characteristics of Merged Group

Should the Scheme be implemented, the Merged Group will form one of Australia's largest listed coal companies and a major supplier of semi soft and PCI coals. Based on current share market values, the Merged Group will have a combined market capitalisation of more than $4.6 billion, JORC resources of more than 2,000 Mt (on an equity basis) and JORC reserves of more than 650 Mt.

Aston will benefit from the financial stability of Whitehaven, leveraging Whitehaven's existing cash flows for the expenditure and development of the Maules Creek Project as the mine progresses towards the operational stage of its life. In addition, Aston shareholders become eligible for potential cash flow streams stemming from dividends paid by the Merged Company, as a result of the expansion of the mining portfolio to include Whitehaven's producing mines.

The Merged Group will also benefit from the combined management experience of Aston and Whitehaven and in particular will be able to draw upon Whitehaven's considerable experience of operating mines in the Gunnedah Basin.

The investment characteristics of the Merged Group will be considerably more attractive than those of Aston on a standalone basis. In particular:

- The free float of the Merged Group is expected to be greater than 50% compared to the current Aston free float of 30%. Based on current share market value and the expected post completion free float of the Merged Group of approximately 57%, the free float adjusted market capitalisation of the Merged Group will be approximately $2.9 billion (based on closing prices as at 9 December 2011); and

- The constituents of the S&P/ASX index series are included based on float adjusted market capitalisation (upon satisfaction of other various conditions precedent). Listed entities place a premium on their membership in the S&P/ASX 100. The Merged Group would be expected to be included in the S&P/ASX 100 index on the basis of its free float adjusted market capitalisation. An increase in the free float adjusted market capitalisation should attract additional institutional support, whereby shares in the Merged Group could be more actively traded.

The table and graphs below provide insights into the correlation between free float adjusted market capitalisation and various mechanisms of liquidity:

Table 9.8: Average daily turnover of selected ASX-200 companies[15,16]

Free float adjusted market capitalisation ($ millions)	# of companies	Median daily turnover ($ millions)	Average daily turnover as % of market capitalisation
$500 to $1,500	72	4.0	0.5%
$1,500 to $5,000	48	13.6	0.5%
$5,000 and greater	34	55.6	0.4%

Source: Capital IQ and PwC Securities analysis

The above table demonstrates the relationship between free float adjusted market capitalisation and average daily turnover for S&P/ASX 200 constituents with a free float adjusted market capitalisation of greater than $500 million. The table shows that the larger capitalisation stocks are generally more actively traded on the

[15] Float adjusted market capitalisation is based on Capital IQ data as at 30 January 2012

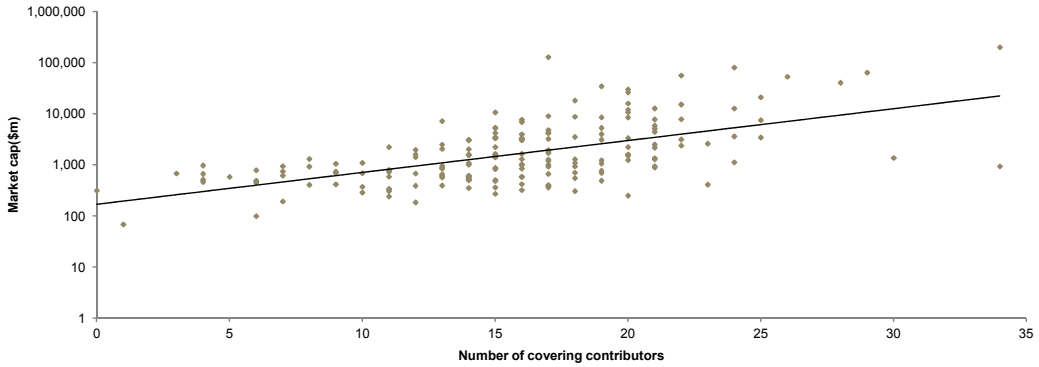
[16] Average daily turnover for ASX-200 listed companies based on the period 18 October 2010 to 30 January 2012

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ASX (on a gross $ turnover basis), although it is notable that when expressed as a % of the free float adjusted market capitalisation there are diminishing returns to the benefits at this scale. It is likely that shares in the Merged Group would be more actively traded on a turnover basis than Aston shares on a standalone basis.

Increased free float adjusted market capitalisation is also likely to attract additional broker and analyst coverage. We have summarised the extent of coverage and compared to the float adjusted market capitalisation in the chart below.

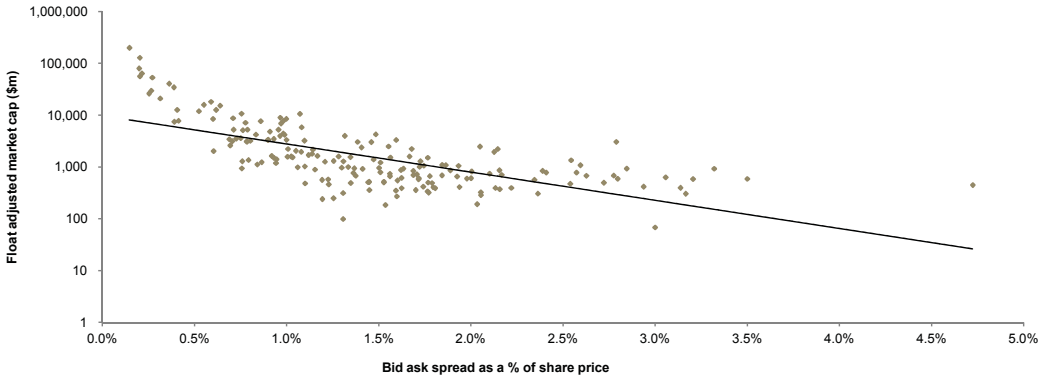
Figure 9.1: Number of analyst covering contributors



As shown above, there is a positive correlation between increases in free float adjusted market capitalisation and the number of analyst covering contributors. Higher levels of analyst coverage promote the trading profile of the Security, which can result in the generation of trading activity and increased liquidity. We have identified that Aston currently has 15 analyst covering contributors, and we consider it is likely that this number will increase for the Merged Group upon completion of the transaction.

In addition, increased free float adjusted market capitalisation is likely to reduce the bid-ask spread as a % of share price.

Figure 9.2: Bid/ask spread as a % of share price[17]



Bid ask spreads are typically a function of volumes traded. A large bid ask spread will exist when a share is not being actively traded. As discussed above, larger cap shares are more actively traded and attract higher levels of

[17] Average bid/ask spread average over the period 18 October 2010 to 30 January 2012

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analyst coverage. The result of this is a negative relationship between the float adjusted market capitalisation of a stock and the average bid ask spread associated with share trading of that stock. It is likely that shares in the Merged Group would trade at lower bid ask spreads than stand alone Aston shares.

As displayed, absolute levels of liquidity increase as float adjusted market capitalisation increases. This can be observed through the positive relationship between daily turnover and float adjusted market cap. Narrow bid/ask spreads and high levels of buy and sell side analyst coverage are characteristics unique to large cap companies which attract share trading activity;

- There is a realistic prospect of a positive market re-rating of the Merged Group over time although the timing and magnitude of any re-rating will depend on a variety of factors, including, but not limited to, future coal prices, exchange rates, operational issues and overall equity market sentiment;
- The Merged Group will have a substantial growth pipeline including ramp up of Narrabri, the development of the Maules Creek Project and Vickery, and a suite of exploration assets;
- The Merged Group will be controlled by a more experienced management team than available within Aston on a standalone basis. This provides shareholders and potential investors with enhanced confidence in the ability of the company to convert business opportunities into real cash flows and development projects into feasible, operating coal mines; and
- In our opinion, it is likely that the Merged Group will be viewed as no less attractive, and possibly more attractive, as a takeover target by potential foreign investors.

Aston shareholders will participate in a substantially larger, more diversified and less risky coal company, with more attractive investment characteristics than Aston in its current form.

Furthermore, the Aston shareholders will continue to have an opportunity to realise full underlying value (including a premium for control) for their interests to compensate for a passing of control.

9.5 Alternative proposals

The Directors of Aston have advised us that no alternative proposals have been received by Aston at the date of this independent expert's report.

9.6 Scheme not implemented

To the extent the Scheme is not implemented, Aston will incur incremental transaction costs of approximately $3 million above those brought to account as at 31 December 2011.

In addition, under the terms of the Call Option, Whitehaven have the right to acquire 19.9% of the issued share capital of Aston at an exercise price of 1.978 Whitehaven shares per Aston share, which is at a 15.0% implied premium to the Scheme. Details of the Call Option are set out in section 14.4 of the Scheme Booklet. Whitehaven may only exercise the Call Option over ARI's shares in Aston in the event of certain specified trigger events which relate to alternate control transactions arising before completion of the Scheme. The Call Option is intended to increase the certainty of the Scheme being implemented.

9.7 Disadvantages and risks

Aston Shareholders have no control over whether the Proposed Boardwalk Transaction completes. The choice for Aston Shareholders is between Aston continuing as a standalone entity and the Scheme as proposed.

While the Scheme does not appear to produce any significant disadvantages to Aston shareholders, we note that the completion of the Proposed Boardwalk Transaction is dilutive to Aston shareholders, when compared to the Scheme without this aspect.

Furthermore, Aston shareholders may seek an asset class with an investment profile which provides exposure to risks and returns influenced by coal type, the stage of development of a mine asset, the position on the cost curve, and the degree to which diversification of risks is available.

While Aston shareholders effectively diversify their risk exposure related to the development of the Maules Creek Project by gaining access to the portfolio of assets in the Merged Group, there are risks to future share

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price performance of the Merged Group which may result from uncertainties in the estimation of exploration targets and/or mineral resources, and variances in expected production and forecast cash flows to that actually achieved. In addition, there are risks, and possible additional costs, related to the successful development of the exploration stage assets being acquired by Whitehaven from Boardwalk. These risks may include the enactment of legislation, environmental regulations, title to existing tenements, and the obtainment of authorisations, licenses and other approvals.

The risks to the realisation of anticipated benefits to the Aston shareholders resulting from the Scheme include the long-term success of the Merged Group and the realisation of the estimated synergies will depend on, amongst other things, the abilities of management of the Merged Group and their success in integrating the respective businesses. As there is no guarantee that Aston and Whitehaven will be able to be integrated successfully, or over the expected time period or at the estimated implementation costs, there are risks that an integration of the businesses of Aston and Whitehaven may take longer than expected and that anticipated efficiencies and benefits of that integration may be less likely than estimated. These risks include possible differences in the management culture of the two groups, inability to achieve synergy benefits and cost savings and the potential loss of key personnel. Further information regarding the disadvantages and risks of the Scheme can be found in section 7 of the Scheme Booklet.

9.8 Overall impact of the Scheme

In our view the Aston shareholders are likely to be better off if the Scheme is implemented than if it is not for the reasons discussed above. For this reason, we consider the Scheme to be in the best interests of the Aston shareholders.

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Appendix A Statement of qualifications and declarations

Qualifications

PwC Securities, which is wholly owned by PricewaterhouseCoopers (PwC), holds the appropriate Australian Financial Services License. PwC Securities has had extensive experience in providing corporate financial advice and in the preparation of independent expert's reports. PwC Securities is a licensed dealer under the Corporations Act. The individuals responsible for the preparation of this report are Mr Richard Stewart and Mr Roger Port.

Mr Richard Stewart is a Fellow of the Financial Services Institute of Australasia (Senior), the Institute of Chartered Accountants and the Society of Certified Practising Accountants in Australia as well as a member of the Australian Institute of Company Directors. He is also an adjunct professor in Business Valuation at the University of Technology, Sydney. He holds a Bachelor of Economics and a Masters of Business Administration. Richard has 26 years experience with PwC, is a partner in PwC and an authorised representative of PwC Securities.

Mr Roger Port is a partner in PwC and an authorised representative of PwC Securities. Roger is a graduate of Macquarie University, a Fellow of the Institute of Chartered Accountants in Australia and Senior Fellow of the Financial Services Institute of Australasia. He holds a Graduate Diploma in Applied Finance and Investment from the Securities Institute of Australia and has completed the Company Directors Course Diploma with the Australian Institute of Company Directors. Roger has extensive experience in the preparation of corporate valuations, independent expert's reports and the provision of corporate financial advisory services to corporations involved in takeovers, capital raisings and mergers and acquisitions.

Declarations

Prior to accepting this engagement, we considered our independence with respect to Aston with reference to ASIC Regulatory Guide 112 *Independence of Experts*. In our opinion, we are independent of Aston and the outcome of the transaction.

Neither PwC Securities nor PwC has any interest in the outcome of the Scheme. PwC Securities is entitled to receive a fee of approximately $530,000 for the preparation of this independent expert's report based on time spent at our normal hourly rates for this type of work and will be reimbursed for out of pocket expenses incurred. The fee payable to us is payable regardless of the outcome of the Scheme. In addition, we have been indemnified by Aston in relation to any claim arising from or in connection with its reliance on information provided by Aston. None of PwC Securities, PwC, Mr Stewart nor Mr Port hold securities in Aston and have not held any such beneficial interest in the previous two years.

Purpose of report

This independent expert's report has been prepared at the request of the Directors of Aston and should not be used for any other purpose. In particular, it is not intended that this independent expert's report should serve any purpose other than an expression of our opinion on whether the Scheme is in the best interests of Aston shareholders. This independent expert's report has been prepared solely for the benefit of the Directors of Asont and for the benefit of the existing shareholders of Aston. Neither the whole nor any part of this independent expert's report nor any reference to it may be included in or attached to any document, circular, resolution, letter or statement without our prior written consent to the form and context in which it appears.

Special note regarding forward-looking statements and forecast financial information

Certain statements in this independent expert's report may constitute forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance and achievements of Aston, to be materially different from any future

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results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among other things, the following:

- General economic conditions
- The future movements in interest rates and taxes
- The impact of terrorism and other related acts on broader economic conditions
- Changes in laws, regulations or governmental policies or the interpretation of those laws or regulations to Aston in particular
- Other factors referenced in this independent expert's report.

Disclaimer and consents

In preparing this independent expert's report, Aston has indemnified PwC Securities, PwC and its employees, officers and agents against any claim, liability, loss or expense, cost or damage, including legal costs on a solicitor client basis, arising out of reliance on any information or documentation provided by Aston which is false and misleading or omits any material particulars or arising from a failure to supply relevant documentation or information.

In addition, Aston has agreed that if it makes any claim against PwC or PwC Securities for loss as a result of a breach of our contract, and that loss is contributed to by its own actions, then liability for its loss will be apportioned and is appropriate having regard to the respective responsibility for the loss, and the amount Aston may recover from PwC Securities will be reduced by the extent of its contribution to that loss.

APES 225 "Valuation Services"

This independent expert's report has been prepared in accordance with APES 225 "Valuation Services".

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Appendix B Sources of information

In preparing this independent expert's report, we have had access to and relied upon the following major sources of information:

- The SIA and other related transaction documents;
- The Scheme Booklet (including earlier drafts);
- ASX announcements for Aston, Whitehaven and other listed companies;
- Half Yearly Reports (reviewed) for the two years ended 31 December 2009 and 2010 for each of Aston, Whitehaven and Boardwalk;
- Discussions with management, and the advisers, of Aston, Whitehaven and Boardwalk;
- Life of mine cash flow models for Aston and Whitehaven provided by the respective management teams;
- Other information provided by management of Aston and Whitehaven including documents obtained from the virtual datarooms in relation to the Scheme;
- Information in relation to Boardwalk;
- Information obtained from Bloomberg, Capital IQ, mergermarket and IBISWorld Industry Reports;
- Other publicly available information including information from websites.

We have not performed an audit, review or any other verification of the information presented to us. Accordingly, we express no opinion on the reliability of the information supplied to us.

In forming our opinion has assumed that:

- Matters such as title, compliance with laws and regulations and contracts in place are in good standing and will remain so and that there are no material legal proceedings, other than as publicly disclosed;
- The information set out in the Scheme Booklet sent by Aston to its shareholders is complete, accurate and fairly presented in all material aspects;
- The publicly available information relied on by PwC Securities in its analysis was accurate and not misleading;

In addition, PwC Securities assumes no responsibility and offers no legal opinion or interpretation on any issue in respect of legal issues relating to assets, properties, or business interests or issues regarding compliance with applicable laws, regulations and policies.

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Appendix C Discount rate analysis

Overview

The discount rate applicable for fair market valuation purposes represents the required market rate of return for capital invested in the company or asset being valued. The cost of capital for a company reflects the opportunity cost of the funds employed. This means that a company must obtain sufficient return on its assets to cover the required return to equity and debt holders as reflected by the capital markets.

The expected rate of return for invested capital is conventionally derived using the Weighted Average Cost of Capital ("WACC") approach after considering available market evidence for the company being examined.

The cost of capital comprises a required rate of return on equity plus the current tax-effected rate of return on debt, weighted by the relative proportions of equity and debt comprising the financial structure.

For equity investors, the cost of equity capital has two components; an explicit opportunity cost such as dividend payments and an implicit opportunity cost in the form of an expected cash equivalent gain in share price. The expected return to debt investors (the cost of debt) represents the interest payments and the amortisation of any difference between the market value of debt and its face value.

Significant judgement is inherent in the selection of discount rates. Discount rates can be derived using a framework which is theoretically sound, however when determining required future rates of return, there is inherently a substantial degree of subjectivity involved in estimating variables, which by definition are unable to be observed.

The formulation of the WACC using modern finance theory and commonly accepted practice is derived in the first instance on a post-tax, nominal basis as the parameters comprising WACC are observable in the market on this basis.

The determinants of the WACC calculation are derived from observable market data for the select company (if listed) or a peer group, which is consistent with the definition of fair market value. The peer group companies are selected primarily on the basis of the industry and geographic region in which they operate. Considerations of size, asset quality, growth prospects and revenue sources are also taken into account

Cost of equity

The cost of equity is typically considered to be an estimate of an equity investor's required rate of return for a given risk level associated with an investment. The most commonly used tool to estimate the required rate of return on equity for a given level of risk is the Capital Asset Pricing Model ("CAPM") framework. Under CAPM, the expected return on equity is measured as the return on a risk free investment plus a premium for the non-diversifiable risk associated with the relevant asset or company.

The CAPM model states that:

$Ke = Rf + \beta e * (EMRP)$

where:

Ke = expected (or required) return on equity for investment

Rf = risk free rate

βe = equity beta for investment

EMRP = the equity market risk premium which is the expected return on a broad portfolio of stocks in the market less the risk free rate

Each of the above elements is described below.

Risk free rate

The risk free rate (Rf) used in the expression of CAPM for the Australian market is generally based on Australian Commonwealth Government 10 year bonds (Government Bonds).

The yield on Government Bonds at 31 December 2011 was 3.7% reflecting significant declines in government bond rates during the preceding year. Specifically, the yield at 31 December 2011 compares to yields of 5.2% at 30 June 2011 and 5.5% at 31 December 2010. Over 2011, the ASX 200 index declined from 4745 to 4056.

While lower equity market values in recent years reflect investor assessments of likely future cash flows, the current state of equity markets is not consistent with the view that the significantly lower Government Bond rates have fed through into a significantly lower cost of equity. Instead it appears that Government Bond rates in Australia (along with a number of other major markets including the USA and UK) are abnormally low reflecting "flight to quality" among investors in response to global economic uncertainty.

Accordingly, we consider that it is not necessarily appropriate to use the observed spot Government Bond rate in conjunction with the long term estimate of equity market risk premium of 6% for the Australian market at 31 December 2011.

Analysing an expected longer term level of risk free rate, we have considered the financial market estimate of inflation of 2.5% inherent in the yields on nominal and inflation linked Australian Government bonds (which is consistent with the long term target range for inflation in Australia).We have also reviewed the level of real risk free rates in Australia over the past five years. Apart from the second half of 2011, real risk free rates have typically been in the range 2% to 3%.

Combining the financial market estimate of inflation of 2.5% and a real risk free rate of 2.5% implies a longer term risk free rate for Australia in the order of 5.1% or 1.4% above the spot Government Bond yield at 31 December 2011.

In terms of adjustment to reflect the abnormally low level of Government Bond yields, this could arguably be made by:

- Adding an amount to the spot measure of Rf; or
- Adjusting the measure of EMRP used to reflect an additional short term component of risk over and above the depressed measure of Rf.

For the purposes of estimating the cost of equity, we have added an amount to Rf and retained the long term measure of EMRP.

Equity market risk premium

EMRP is a measure of the long term excess return earned on a diversified portfolio of equities inferred from comparison of long term equity returns and the returns available on risk free investments represented by Government Bonds. Inevitably this measure will be extremely volatile over short and medium term periods and hence estimates of EMRP typically refer to excess returns over very long periods.

Long term estimates of EMRP for the Australian market typically have been 6% as reflected in:

- The general adoption of the rate of 6% in more normal market conditions by Australian valuers
- Academic research covering the period 1883 to 2010 which indicates an EMRP in the order of 6% where no value is explicitly modelled for imputation credits

Based on adding an amount to Rf to adjust for the current low level of Government Bond yields, we have utilised the long term estimate for the EMRP relating to the Australian market.

Beta

Beta is a measure of systematic risk reflecting the sensitivity of a company's share price to the movements of the stock market as a whole. Whilst expected betas cannot be observed, conventional practice is to estimate an appropriate beta with reference to the historical betas for a company over a finite period. It is also appropriate to consider betas for comparable companies and sector averages as a proxy, particularly in the case where the subject company is not listed. Observed betas in the market place, known as equity betas, are affected by the gearing of the individual company. The beta for equity reflects the non–diversifiable or systematic risk of a company. Equity betas incorporate the operational risk of the underlying company assets and other financial

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risk associated with the financial structure of the company (i.e. the combination of debt and equity employed to finance the company assets), whereas asset betas reflect only the operational risk.

The beta of an investment represents relative risk, not a measure of the total risk of a particular investment. Under the CAPM framework, the greater a security's beta, the greater the required return. This is indicated by a beta greater than one, which implies that firms with higher volatility of returns (as measured by standard deviation) will have higher required returns due to greater risk, other things being equal.

As mentioned above, determination of a beta can be undertaken with reference to analysis of comparable companies. It is generally necessary to make adjustments to the observed equity betas in the market place to remove the impact of the different capital structures and levels of gearing in the companies examined. This process, known as de-levering, involves removing the gearing of the subject company to arrive at the asset beta and subsequently re-levering in line with the target level of gearing.

PwC Securities adopted the Harris Pringle formula to de-lever and re-lever the beta as follows:

Asset beta (un-geared) = Equity beta (geared) / [1 + (D/E)]

Equity beta (re-geared) = Asset beta (un-geared) x [1 + (D/E)]

where:

E = market value of equity

D = market value of debt

D/E = company's debt to equity ratio

The betas of the comparable companies have been calculated relative to the Australian share market by reference to the S&P/ASX 200 index.

Cost of debt

The cost of debt is the rate a prudent debt investor would require on interest-bearing debt after considering the appropriate capital structure and the nature and risks pertaining specifically to the company's operations. Since the interest on debt is deductible for income tax purposes, the WACC incorporates the after tax interest rate in the calculation. For the purpose of assessing WACC, the existing effective Australian corporate tax rate of 30% has been used.

In assessing an appropriate cost of debt, PwC Securities normally has regard to corporate debt issued by the company (where available) or its comparator group, the existing and expected future cost of debt provided by financiers, and current market conditions in debt markets. The yield of a corporate issued bond is typically higher than the yield on a Government bond, reflecting a premium for credit risk. The premium or debt margin is calculated as the difference or spread between the yield on a corporate and a Government bond with the same duration or maturity.

Capital structure

In order to calculate an appropriate post-tax cost of capital, it is necessary to determine the optimal or target level of debt funding (or debt and equity mix) for the subject company. Optimal capital structures are not readily observable. In practice, the existing capital structures of comparable companies are used as a guide to estimate the likely optimal capital structure for the company being valued, taking into consideration the specific financial circumstances of that company. Typically, the gearing changes over time and differs between comparable companies. In order to remove the impact of the fluctuations in the level of gearing over time, the five year average level of gearing of the comparable company set was considered in selecting an appropriate target debt and equity mix. This is consistent with the period over which betas have been observed and removes the effect of current market events such as depressed equity markets and lack of debt financing possibilities.

WACC

The cost of equity and the cost of debt are combined to arrive at the WACC using the following formula:

WACC = [Ke * E/(D+E)] + [Kd * (1-Tc) * D/(D+E)]

The key inputs are defined as follows:

Ke = the cost of equity

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E = the market value of equity

Kd = the cost of debt

Tc = the marginal effective tax rate

D = the market value of debt (net of surplus cash)

E = the market value of equity

The post tax nominal basis of the WACC is then converted to a real basis using the Fisher equation as follows:

r = [(1+n) / (1+i)] - 1

The key inputs are defined as

r = real discount rate (%)

n = nominal discount rate (%)

i = inflation factor (%)

Whitehaven and Aston discount rates

In this section we describe the theory behind the selection of an appropriate discount rate with which to apply to the DCF analysis. We have performed separate analysis for Whitehaven's mining operations ("Whitehaven WACC") and the Maules Creek Project ("Aston WACC").

We have determined a nominal post-tax discount rate of 11.0% for the Whitehaven WACC and 14.0% for the Aston WACC. These discount rates are converted to post-tax real discount rates using the fisher equation and an implied inflation rate of 2.5% and then applied to ungeared adjusted post-tax real cash flows for each project. PwC Securities considers the discount rates reflect the rate of returns investors would use in the current market in assessing the Whitehaven mining operations and Maules Creek Project respectively.

Risk free rate

The risk free rate for the Whitehaven and Aston WACC has been based on the real risk free rates observed on long term Government securities over the past five years, which have typically ranged between 2 % and 3% and the financial market estimate of inflation, which is 2.5% (based on the inherent yields of nominal and inflation linked Australian Government bonds). The financial market estimate for inflation is consistent with the long term target range for inflation in Australia.

Combining the financial market estimate for inflation of 2.5% and a real risk free rate of 2.5% implies a longer term risk free rate for Australia in the order of 5.1%, which we have adopted in our analysis.

Equity market risk premium

Widespread market practice for Australian company valuation has been to adopt an EMRP of 6.0%. This figure is within the range of generally accepted figures for the long term market risk premium applied to companies within the Australian capital markets and is consistent with empirical research[2].

The EMRP varies over time and economic cycles. In selecting the EMRP for use in the assessment of the relative merits of the Scheme, we have been mindful that the rate adopted should reflect the prospective estimate of EMRP over the timeframe of the cash flows modelled. This will include not just the current economic circumstances, but periods of both positive and negative returns experienced during various stages of future market cycles. The long term historical average EMRP is generally adopted as the most appropriate measure for this and as such PwC Securities has adopted 6.0% as the EMRP.

[2] Officer & Bishop (2008) and Grabowski and Damodaran (2009)

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Beta

In determining an appropriate beta range to adopt, PwC Securities has considered it reasonable to adopt different betas for the Whitehaven WACC and the Aston WACC given that the operational risk profiles of each company's mining operations are significantly different.

PwC Securities has considered the observed beta for ASX listed comparable companies to Whitehaven and Aston over a five year period. The companies within the peer group all operate within the coal industry sector.

For Whitehaven we have placed greater emphasis on companies with operational assets in Australia. We have also had reference to the betas observed for operational coal mining operations listed in the United States.

For Aston we have considered companies with interests in pre-development assets in Australia. Because there are limited comparable companies to Aston we have also observed the betas displayed by coal exploration companies, however noting that the operational risk profile of Aston is different to the operational risk profiles of pure exploration companies.

PwC Securities has used the current gearing to de-lever the observed betas of the companies in the peer group. The table below summarises the observed and de-levered betas for the comparable company set:

Company [1]	Equity Beta[2]	Market capitalisation ($ Million)[3]	5 year average debt / EV[4]	Asset beta[5]
Australian listed operational assets				
Whitehaven Coal Limited	1.66	2799.3	1.5%	1.64
Gujarat NRE Coking Coal Limited	1.03	183.7	17.4%	0.85
Gloucester Coal Ltd.	1.13	1682.1	0.6%	1.12
New Hope Corp. Ltd.	1.19	4733.3	0.0%	1.19
Coal and Allied Industries Ltd[6].	0.67	10,780.7	6.4%	0.62
Macarthur Coal Ltd[6].	1.78	4,836.5	11.0%	1.58
Cockatoo Coal[7]	1.13	388.1	0.2%	1.13
Median	**1.13**	**2799.3**	**3.9%**	**1.13**
Mean	**1.23**	**3629.1**	**6.2%**	**1.16**
Mean (excl. Gloucester and Macarthur)	**1.03**	**3553.6**	**6.1%**	**0.98**
US listed operational assets				
Peabody Energy Corp.	1.35	8,914.7	20.9%	1.07
Alpha Natural Resources Inc.	1.54	4,122.0	11.4%	1.36
CONSOL Energy Inc.	1.33	7,586.8	15.8%	1.12
Arch Coal Inc	1.56	2,901.4	31.9%	1.06
Natural Resources Partners LP	0.85	2,698.9	21.0%	0.67
Cloud Peak Energy Inc.	1.40	1,062.5	36.2%	0.89
Median	**1.38**	**3,511.7**	**20.9%**	**1.07**
Mean	**1.34**	**4,547.7**	**22.9%**	**1.03**
Pre-development and exploration assets				
Cockatoo Coal Limited[7]	1.14	396.2	0.2%	1.13

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Company [1]	Equity Beta[2]	Market capitalisation ($ Million)[3]	5 year average debt / EV[4]	Asset beta[5]
Bathurst Resources Ltd	1.25	458.7	15.8%	1.06
Rocklands Richfield Limited	2.10	115.3	19.5%	1.69
Resource Generation Limited	2.22	95.4	0.0%	2.22
Bandanna Energy Limited	1.79	327.7	0.0%	1.79
Coalworks Limited	1.75	89.5	0.0%	1.75
Rey Resources Limited	1.80	50.8	0.0%	1.80
Median	**1.79**	**115.3**	**0.0%**	**1.75**
Mean	**1.72**	**211.5**	**5.1%**	**1.63**

Notes:
1. Comparators chosen on the basis of industry sector and statistically sufficient number of beta observations

2.Equity betas derived from share price (monthly, 5 year where available, against local index, Bayesian adjusted)

3. Market capitalisation as at 1 February 2012 from Capital IQ

4. Equity betas have been unlevered using the formula discussed in Brealey and Myers "Principles of Corporate Finance", 5th Edition, Ch 9

5. Formula for unlevering equity betas: equity beta / (1 + debt / equity). Gearing derived from balance sheet (annual, 5 year where available)

6. Coal and Allied and Macarthur Coal were recently acquired and subsequently de-listed at the end of calendar year 2011. Therefore the data for these observations has been based on available market information immediately prior to de-listing.

7. Cockatoo Coal has one small operational mine, the Baralaba mine. The majority of their assets are exploratory and development assets. We have included it in the median and mean observations for both the operational assets and pre-development, exploration asset comparable companies.

We have adopted an asset beta for Whitehaven of 1.0. In forming this opinion we have had given particular consideration to the mean asset beta of Australian listed operational mining assets excluding Macarthur Coal and Whitehaven Coal. We have removed Macarthur Coal and Gloucester Coal from our mean as both companies' share price has displayed significant volatility over the measurement period of 5 years. This is in part due to significant levels of corporate activity in the companies including failed take-over offers and formal sales processes and significant volatility in underlying coal prices (in particular metallurgical coal varieties). Further whilst now being classified as operational coal mining companies, Gloucester Coal and Macarthur Coal have advanced from owners of predominantly pre development and exploration assets to operational coal miners over the 5 year measurement period. Further we have considered the betas displayed by coal mining companies listed on the New York Stock Exchange which on average were only marginally above 1.0.

For Aston we have adopted an asset beta of 1.5. In forming this opinion we have had reference to the betas observed for operational assets and development/exploration assets. We note that the majority of development/exploration companies listed above are at a less developed stage than Aston and therefore we do not consider it reasonable to base our beta estimate solely on the mean or median of the development/exploration companies solely. In forming our opinion we have also had regard to the betas displayed by each of Macarthur Coal and Gloucester Coal which have undergone similar transformations from development assets to operational assets over the past 5 year period to that required of Aston.

Cost of debt

In assessing an appropriate debt margin for this assessment we have considered a typical spread over a longer time period between yields on corporate issued bonds and long term Government bonds. We have not used the spot yields at 31 December 2011 due to the unusually low yields on Government securities being observed, as discussed above. On this basis and to be consistent with our approach to adjusting Rf we have assessed a reasonable debt margin to be 2.0% based on the anticipated capital structure and nature of Aston and Whitehaven. Our pre tax cost of debt capital is estimate at 7.1%.

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To reflect the tax shield advantage of debt in the cost of capital calculation, PwC Securities has applied the corporate tax rate anticipated to apply to cash flows over the life of the assets of 29%. This corresponds to a post-tax cost of debt of 5.0%.

Capital structure

In determining the appropriate level of gearing, PwC Securities has had regard to:

- The mean and median gearing levels of operational coal mines listed in Australia being 6.2% and 3.9% respectively.
- Aston does not have any outstanding debt facilities at the time of the valuation; and
- Whitehaven has net debt of approximately $106.0 million or 3.0% of enterprise value (non controlling interest basis)

Based on the above, PwC Securities has adopted an optimal gearing of 5.0% in determining the discount rates for Aston and Whitehaven.

WACC

Based on the above, PwC Securities has assessed the appropriate post tax real discount rates to apply to the Discounted Cash Flows of the Whitehaven mining operations and Maules Creek to be 8.3% and 11.2% respectively.

WACC	Whitehaven	Aston
Risk free rate	5.1%	5.1%
EMRP	6.0%	6.0%
Asset beta	1.0	1.5
Cost of equity	**11.4%**	**14.6%**
Debt margin	2.0%	2.0%
Tax	29%	29%
Cost of debt (post tax)	**5.0%**	**5.0%**
Gearing (D/D+E)	5%	5%
Nominal cost of capital	11.0%	14.0%
Inflation factor	2.5%	2.5%
Real cost of capital	**8.3%**	**11.2%**

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Appendix D Comparable companies

The following table provides analysis of the share trading multiples of coal producing companies with comparable activities to those of Whitehaven and coal developing companies with comparable activities to those of Aston and Boardwalk. The table also provides analysis of the share trading multiples of internationally based coal producing companies.

Table D.1: Trading multiples of listed coal mining companies on a minority basis

Company Name	Enterprise Value ($ million)[1]	Total reserves (Mt)[2]	Total resources (Mt)[3]	EV reserve multiple	EV resource multiple
Australian listed coal producing companies					
Gloucester Coal Ltd.	1602.9	275.0	1802.0	5.8	0.9
New Hope Corp. Ltd.	3119.4	711.0	2087.0	4.4	1.5
Gujarat NRE Coking Coal Limited	466.4	125.0	651.0	3.7	0.7
Whitehaven Coal Limited	2804.9	401.0	1493.0	7.0	1.9
Average				**5.2**	**1.2**
Median				**5.1**	**1.2**
Australian listed coal developing companies					
Aston Resources Limited	1812.6	272.0	509.0	6.7	3.6
Bandanna Energy Limited	285.1	146.9	1534.0	1.9	0.2
Cockatoo Coal Limited	364.8	74.0	1383.0	4.9	0.3
Nucoal Resources NL	152.3		525.5	n/a	0.3
Carabella Resources Limited	150.8		145.8	n/a	1.0
Aquila Resources Ltd.	2331.6	303.8	1086.0	7.7	2.1
Coal of Africa Limited	646.1	371.0	2114.0	1.7	0.3
Rocklands Richfield Limited	116.2		481.3	n/a	0.2
Guildford Coal Limited	356.8		1320.0	n/a	0.3
Stanmore Coal Limited	104.9	94.0	467.0	1.1	0.2
Endocoal Limited	67.8		348.5	n/a	0.2
Coalworks Limited	108.6		852.0	n/a	0.1
Rey Resources Limited	49.5		535.4	n/a	0.1
Coal FE Resources Limited	3.7		34.5	n/a	0.1
Metrocoal Ltd.	90.6		3783.0	n/a	0.0
East Energy Resources Limited	29.7		1200.0	n/a	0.0
Resource Generation Limited	72.3		6400.0	n/a	0.0
Acacia Coal Limited	38.9		150.0	n/a	0.3
Coalbank Limited	49.5			n/a	n/a
Blackwood Corporation Limited	29.4			n/a	n/a

Company Name	Enterprise Value ($ million)[1]	Total reserves (Mt)[2]	Total resources (Mt)[3]	EV reserve multiple	EV resource multiple
Average				**4.0**	**0.5**
Median				**3.4**	**0.2**
Internationally listed coal producing companies					
Yanzhou Coal Mining Co. Ltd.	16881.0	429.0	1637.0	39.3	10.3
PT Bumi Resources Tbk	9160.2	2860.0	10024.0	3.2	0.9
PT Adaro Energy Tbk	7407.9	938.0	4428.0	7.9	1.7
Alpha Natural Resources, Inc.	6456.6	5000.0		1.3	n/a
Patriot Coal Corporation	910.6	1900.0		0.5	n/a
China Shenhua Energy Co. Ltd.	82232.6			n/a	n/a
CONSOL Energy Inc.	10442.7			n/a	n/a
Arch Coal Inc.	6438.9	1928.0		3.3	n/a
Peabody Energy Corp.	14619.0	9013.0		1.6	n/a
Average[4]				**3.0**	**1.3**
Median[4]				**2.4**	**1.3**

Source: Capital IQ, Company announcements and websites, PwC Securities analysis

Notes:

1. Enterprise values as at 30 January 2012
2. Total reserves consist of Proved and Probable Reserves calculated on an equity basis
3. Total resources consist of Measured, Indicated and Inferred resources calculated on an equity basis, and are inclusive of reserves
4. Excludes Yanzhou Coal Mining Co. Limited

A brief overview of each of the comparable companies is provided below:

Australian listed coal producing companies

Gloucester Coal Ltd

Gloucester Coal Limited engages in the production and marketing of coking and thermal coals primarily in Australia, Japan, Singapore, and the United Kingdom. It holds interests inter alia, in the Stratford and Duralie mines, the Middlemount mine (a development mine located in Queensland's Bowen Basin), the Donaldson open cut mine situated near the Port of Newcastle and an exploration project in the Hunter Valley.

New Hope Corp Limited

New Hope Corporation Limited, an independent energy company, engages in the exploration, development, production, and processing of coal in Australia. Its projects include the New Acland project, the New Lenton Project, the Colton Project, and Elimatta, a thermal open cut coal deposit located in the northern Surat Basin. The company also operates an export coal loading facility with a capacity of 10 million tonnes per annum at the Port of Brisbane in south east Queensland. In addition, it is involved in grazing cattle; and growing grains and pastures adjacent to New Acland mine.

Gujarat NRE Coking Coal Limited

Gujarat NRE Coking Coal Limited engages in mining, producing, selling, and exporting coal. The company owns and operates the NRE No.1 Colliery underground coal mine located in the southern Coalfields of NSW; and the NRE Wongawilli Colliery underground coal mine located to the southwest of Wollongong, NSW. It also

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provides carriage and freight services. The company was formerly known as Gujarat NRE Minerals Limited and changed its name to Gujarat NRE Coking Coal Limited in February 2010.

Whitehaven Coal Limited

Whitehaven Coal Limited, together with its subsidiaries, engages in the development, production, and operation of coal properties in NSW. It holds interests in the Gunnedah Basin that comprises the Tarrawonga, Rocglen, Sunnyside and Werris Creek open cut mines; the Narrabri underground mine; and the Vickery open cut project.

Australian listed coal development companies

Aston Resources Limited

Aston Resources Limited engages in the coal mining, exploration, and development in Australia. It holds interest in the Maules Creek Project that contains reserves and resources of semisoft coking coal and premium thermal coal located in the Gunnedah Basin of NSW.

Bandanna Energy Limited

Bandanna Energy Limited engages in the exploration of coal in the Bowen and Galilee Basins in Queensland. The company primarily holds interests in the South Galilee, Arcturus, Springsure Creek, and Dingo West projects. It also holds interests in conventional oil and gas tenements, and other mineral tenements, including bentonite and oil shale in Queensland.

Cockatoo Coal Limited

Cockatoo Coal Limited engages in the acquisition, exploration, development, production, and operation of coal mining projects in Australia. The company focuses on producing metallurgical and thermal coal primarily in the Bowen and Surat Basins of central Queensland. Its primary assets include the Baralaba PCI coal mine in the Bowen Basin and Kingaroy projects in Queensland.

Nucoal Resources NL

NuCoal Resources NL engages in the exploration and development of coal in Australia. It owns a 100% interest in the Doyles Creek underground coal project located in the Hunter Valley in NSW. The company, through its subsidiary, Dellworth Pty Ltd, also holds two exploration licenses, EL 6812 and EL 6594 located near Jerrys Plains in NSW.

Carabella Resources Limited

Carabella Resources Limited engages in the exploration and development of coal projects in Queensland, Australia. It holds interests in a portfolio of coal exploration tenements Bowen, Mulgildie, Clarence-Moreton, and Eromanga Basins. The company is based in Newstead, Australia.

Aquila Resources Ltd.

Aquila Resources Limited, together with its subsidiaries, engages in the exploration of coal, iron ore, and manganese resources; and mining of coal resources primarily in Australia. The company holds interests in various properties located in Western Australia, Botswana, Indonesia, and South Africa. Aquila Resources Limited sells coal products in Japan, China, India, South America, Taiwan, Europe, and other Asian countries.

Coal of Africa Limited

Coal of Africa Limited, together with its subsidiaries, engages in the acquisition, exploration, development, and operation of thermal and metallurgical coal projects in South Africa. It principally owns 100% interests in the Vele Colliery, Makhado project, Mooiplaats project and Woestalleen Collieries. The company also holds two exploration and development stage coking and thermal coal complexes, the Chapudi Complex and Soutpansberg Complex.

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Rocklands Richfield Limited

Rocklands Richfield Limited engages in the exploration and development of coalfields in Australia. It primarily explores for coking coal in the Bowen Basin region of Queensland. The company holds a 100% interest in the Hillalong mineral development license, a 60% interest in the Rocklands project and a 60% interest in the Richfield coal projects located in the Bowen Basin region. Rocklands Richfield Limited is based in South Perth, Australia.

Guildford Coal Limited

Guildford Coal Limited engages in the exploration of coal projects. It has approximately 20,000 square kilometers of tenements area in Queensland, Australia; and 6 exploration licenses in Mongolia. The company's principal projects include the Hughenden Project in Galilee/Eromanga Basins, the Sierra Project in Bowen Basin, and the Kolan Project in Maryborough Basin in Queensland; and the South Gobi Project in South Gobi Basin, Mongolia. The company was incorporated in 2010 and is headquartered in Newcastle, Australia.

Stanmore Coal Limited

Stanmore Coal Limited engages in the identification, exploration, and development of export thermal, coking, and PCI coal deposits in eastern Australia. It holds 100% interests in 7 projects comprising The Range, Kerlong, Belview, New Cambria, Mackenzie, Tennyson, and Iron Pot Creek projects located in the Bowen and Surat Basins of Queensland. The company is based in Brisbane, Australia.

Endocoal Limited

Endocoal Limited engages in the exploration and development of hard-coking, thermal, and PCI coal projects in Australia. Its tenement portfolio includes 11 exploration permits for coal covering approximately 5,200 square kilometers in the Bowen Basin region, Queensland. The company was incorporated in 2008 and is based in Sydney, Australia.

Coalworks Limited

Coalworks Limited is focused on developing coking and thermal projects into production in Australia. It develops the Vickery South project in the Gunnedah Basin, the Ferndale project in the Hunter Valley, and the Oaklands project in the south-west of NSW. The company is based in North Sydney, Australia.

Rey Resources Limited

Rey Resources Limited, together with its subsidiaries, engages in the acquisition, exploration, and development of coal properties in Canning Basin, Western Australia. It primarily explores for thermal coal deposits in the Duchess Paradise project located on a pastoral station approximately 30 kilometers south of the Great Northern Highway between Derby and Fitzroy Crossing. The company also holds two petroleum exploration permits. Rey Resources Limited was incorporated in 2005 and is based in West Perth, Australia.

Coal FE Resources Limited

Coal FE Resources Limited, together with its subsidiaries, engages in the exploration and development of coal and iron in Indonesia. It holds interests in the Kilisuci project and an exploration license over 1,337 hectares adjoining the land near the city of Bengkulu; the Pancaran Abadi project and the Palapa project. The company also has exploration licenses for iron ore concessions in central and west Sumatra. Coal FE Resources Limited was incorporated in 2006 and is based in Victoria Park, Australia.

Metrocoal Ltd.

Metrocoal Limited engages in holding and exploring coal tenements in Australia. It holds coal exploration tenements covering approximately 4,000 square kilometers in the Surat Basin in south east Queensland. The company is based in East Brisbane, Australia. Metrocoal Limited is a subsidiary of Metallica Minerals Limited.

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East Energy Resources Limited

East Energy Resources Limited engages in the acquisition, exploration, and exploitation of coal deposits in Australia. Its coal projects consist of two exploration permits for coal (EPC), including Blackall-EPC 1149 tenement covering a total area of approximately 900 square kilometers; and Capella-EPC 1066 comprising 179 sub-blocks both located in central Queensand. The company is based in Perth, Australia.

Resource Generation Limited

Resource Generation Limited engages in the exploration and development of coal reserves primarily in South Africa and Tasmania. It holds interests in various coal deposits located in South Africa and Australia, as well as uranium deposits in Cameroon. The company is based in Sydney, Australia.

Acacia Coal Limited

Acacia Coal Limited engages in the exploration and development of coal properties. It has a 100% interest in 5 granted coal tenements covering approximately 1,900 square kilometers located in Bowen Basin, Queensland. The company was formerly known as Newland Resources Limited and changed its name to Acacia Coal Limited in December 2011. Acacia Coal Limited is based in Chatswood, Australia.

Coalbank Limited

Coalbank Limited engages in the exploration of resource properties in Australia. It explores for base metals, coal, coal seam gas, and convention oil and gas. The company holds interests in the Tambo Coal and Gas prospect located in the Upper Surat Basin; and Moreton Energy Coal prospects in the Clarence-Moreton Basin. Its mineral projects include the Mount Morgan District project situated near Rockhampton; and the Limestone Creek copper-gold prospect located north-west of Cairns, Queensland. Coalbank Limited was founded in 1996 and is based in Brisbane, Australia.

Blackwood Corporation Limited

Blackwood Corporation Limited engages in the development and exploration of coal properties in Queensland, Australia. Its portfolio of holdings cover approximately 3,200 square kilometers of land located in various coal-bearing basins, including Bowen Basin, Surat Basin, Clarence-Moreton Basin, and Galilee Basin of Queensland, Australia. Blackwood Corporation Limited is based in Brisbane, Australia.

Internationally listed coal producing companies

Yanzhou Coal Mining Co. Ltd.

Yanzhou Coal Mining Company Limited, together with its subsidiaries, engages in the mining, preparation, and sale of coal in China, Australia, Japan, and South Korea. It involves in manufacturing, washing, processing, and selling steam coal used in power plants; and coking and pulverized coal used in metallurgical mills for blast furnace injections. Yanzhou Coal Mining Company Limited also owns and operates a railway transportation network in Jining City of Shandong Province; produces and sells coal chemicals, including methanol to chemical producers; owns and operates eight power plants, and has one power plant under construction; and manufactures and sells heat. The company was founded in 1973 and is based in Zoucheng, the People's Republic of China.

PT Bumi Resources Tbk

PT Bumi Resources Tbk, through its subsidiaries, engages in the exploration, exploitation, mining, and sale of coal deposits primarily in Indonesia. The company was formerly known as PT Bumi Modern Tbk. and changed its name to PT Bumi Resources Tbk in September 2000. PT Bumi Resources Tbk was founded in 1973 and is headquartered in Jakarta, Indonesia.

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PT Adaro Energy Tbk

PT Adaro Energy Tbk and its subsidiaries engage in mining and trading coal products, and coal hauling activities in Indonesia, Asia, Europe, and the Americas. The company also engages in workshop activities; and offers mining contractor services, infrastructure, coal logistics, and power plant services, as well as provides mining services, including coal handling and barging services; and maintenance and building management services. PT Adaro Energy Tbk was founded in 2004 and is headquartered in Jakarta, Indonesia.

Alpha Natural Resources, Inc.

Alpha Natural Resources, Inc., together with its subsidiaries, engages in the production, processing, and sale of coal in the United States. The company offers metallurgical coal for use in the steel-making process; and thermal coal to electric utilities and manufacturing industries. The company sells coal to electric utilities, steel and coke producers, industrial customers, and energy traders and brokers. Alpha Natural Resources, Inc. was founded in 2004 and is based in Abingdon, Virginia.

Patriot Coal Corporation

Patriot Coal Corporation engages in the mining, production, and sale of thermal coal primarily to electricity generators in the eastern United States. It has operations and coal reserves in the Appalachia and the Illinois Basin coal regions. The company also involves in the production of metallurgical quality coal and sells it to steel mills and independent coke producers. Patriot Coal Corporation is based in St. Louis, Missouri.

China Shenhua Energy Co. Ltd.

China Shenhua Energy Company Limited, together with its subsidiaries, engages in the production and sale of coal; and the generation and sale of power in the People's Republic of China. The company operates coal mines, as well as an integrated railway network and seaports that are primarily used to transport its coal sales. It sells coal primarily to power plants and metallurgical producers. The company also involves in the generation and sale of coal-based power to provincial/regional electric grid companies. The company was founded in 2004 and is headquartered in Beijing, the People's Republic of China.

CONSOL Energy Inc.

CONSOL Energy Inc. engages in the production of multi-fuel energy and provision of energy services primarily to the electric power generation industry in the United States. The company involves in the mining, preparation, and marketing of steam coal primarily to electric power generation industry; and metallurgical coal to steel and coke producers. It also produces pipeline-quality coalbed methane gas from its coal properties in the Northern and the Central Appalachian Basin; and oil and gas from properties in the Appalachian and Illinois Basins. The company was founded in 1991 and is based in Canonsburg, Pennsylvania.

Arch Coal Inc.

Arch Coal, Inc. engages in the production and sale of steam and metallurgical coal from surface and underground mines located throughout the United States. Arch Coal, Inc. sells its products to coal-fueled power plants, industrial facilities, and steel mills worldwide. The company was founded in 1969 and is headquartered in St. Louis, Missouri.

Peabody Energy Corp.

Peabody Energy Corporation, through its subsidiaries, engages in the exploration, mining, and production of coal. The company mines and sells thermal coal to electric utilities and metallurgical coal to industrial customers. It owns interests in 28 coal operations located in the United States and Australia, as well as owns joint venture interests in a Venezuelan mine. The company was founded in 1883 and is headquartered in St. Louis, Missouri.

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Appendix E Comparable transactions

The table below shows recent transactions for operating and ramp-up stage coal mining companies and mines in Australia.

Table E.1: Transaction multiples of operating coal mining companies and assets

Date	Target	Acquirer	Interest acquired	Type of mine	Coal type	Consideration ($m)	$/Reserve	$/Resource
Dec-11[18]	*Gloucester*	*Yanzhou*	*100.0%*	*OC, UG*	*SHCC, TC*	*2,100.0*	*7.64*	*1.17*
Aug-11	Syntech	Yanzhou	100.0%	OC	TC	202.5	0.46	0.28
Jul-11	Macarthur	Peabody	100.0%	OC	PCI	4,994.0	31.02	3.05
May-11	Donaldson	Gloucester	100.0%	OC,UG	TC	625.1	4.11	0.71
Aug-10	Middlemount	Gloucester	50.0%	OC	CC, PCI	437.5	15.35	7.14
Jul-10	Centennial	Banpu	80.1%	OC, UG	TC, CC	2,317.1	7.12	1.17
Aug-09	Felix	Yanzhou	100.0%	OC, UG	TC, PCI, SSCC	3,277.0	8.50	2.38
Feb-09	Gloucester	Noble	66.0%	OC, UG	SHCC , TC	380.0	15.14	2.75
Jul-08	Macarthur	POSCO	10.0%	OC	CC, PCI	424.3	40.26	3.73
Jun-08	Macarthur	ArcelorMittal	5.0%	OC	CC, PCI	212.2	40.27	3.73
May-08	Macarthur	ArcelorMittal	14.9%	OC	CC, PCI	632.4	40.27	3.73
Dec-07	Foxleigh	Anglo American	70.0%	OC	PCI	721.0	17.17	3.56
Dec-07	Resource Pacific	Xstrata	100.0%	UG	SSCC, TC	1,064.5	9.55	4.29
Dec-07	Macarthur	Noble	10.0%	OC	PCI	49.0	n/a	0.94
Nov-07	Werris Creek	Whitehaven	60.0%	OC	PCI, TC	48.0	4.02	2.06
Sep-07	Austral Coal	Xstrata	100.0%	UG	CC, SSCC, TC	557.4	7.12	2.45
Jul-07	Sojitz	Moolarben	10.0%	OC, UG	TC	90.0	3.85	1.46
Jul-07	Macarthur	CITIC	8.4%	OC, UG	CC, PCI	112.9	13.36	1.18
Apr-07	Sonoma	Cliffs Natural Resources	45.0%	OC	CC, TC	109.0	n/a	2.50
Nov-06	Yarrabee	Coal Resources	49.0%	OC	PCI, TC	68.0	10.51	5.51
High							**40.27**	**7.14**
Low							**0.46**	**0.28**
Average							**15.32**	**2.69**
Median							**10.03**	**2.48**

Source: Capital IQ, company announcements and websites, PwC Securities analysis

[18] Consideration for Gloucester sourced from various broker reports. This transaction is yet to be completed. Gloucester shareholders have been offered a $700 million special dividend and capital reduction, worth approximately $3.20 a share.

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The table below shows recent transactions for predominantly metallurgical coal exploration and development stage companies and mines in Australia with JORC reserves and/or resources as at the date of the announcement of the respective transactions.

Table E.2: Transaction multiples of metallurgical exploration and development stage assets

Date	Target	Acquirer	Interest acquired	Type of mine	Coal type	Consideration ($m)	$/Reserve	$/Resource
Oct-11	Maules Creek	J-Power	10.0%		SSCC, TC	370.0	11.25	5.45
Sep-11	Hancock Coal	GVK Group	90.0%		TC, CC	1,235.0	n/a	0.19
Sep-11	Hunnu Coal	Banpu	87.6%		TC, CC	420.2	n/a	0.57
Aug-11	Northern Energy	New Hope	19.2%	OC	HCC, PCI, TC	50.1	n/a	0.46
Dec-10	Riversdale	Rio Tinto	100.0%		CC	3,923.0	7.81	0.30
Dec-10	Maules Creek	ITOCHU	15%	OC	SSCC, TC	345.0	6.46	3.77
Nov-10	Caledon Resources	Guandong	100.0%		CC, TC	401.7	n/a	0.25
Aug-10	MDL162	Macarthur	90.0%	OC	PCI, SHCC	334.4	n/a	1.68
Jul-10	Sutton Forest	POSCO & Cockatoo	100.0%	UG	CC, TC	72.0	n/a	0.63
Feb-10	Broughton Project	Resource Portfolio	90.0%	OC	CC, TC	8.5	n/a	0.31
Nov-09	Maules Creek	Aston Resources	100.0%	OC	SSCC, TC	480.0	n/a	1.21
Oct-09	Northern Energy	New Hope	82.2%	OC	HCC, PCI, TC	195.3	2.12	0.46
Oct-09	Vickery Project	Whitehaven	100.0%	OC, UG	SSCC, TC	31.5	n/a	0.11
Jul-08	New Saraji	BMA	100.0%	UG	HCC, PCI	2,450.0	n/a	3.55
Dec-07	Middlemount	Macarthur	70.0%	OC	CC, PCI	275.0	n/a	3.89
Jul-07	Belvedere	Vale	51.0%	OC	CC	123.5	n/a	0.06
High							**11.25**	**5.45**
Low							**2.12**	**0.06**
Average							**6.91**	**1.43**
Median							**7.14**	**0.52**

Source: Capital IQ, company announcements and websites, PwC Securities analysis

In addition to the above, we note the heads of agreement entered into by NuCoal, which although not yet completed, is relevant to the Scheme in regards to the timing of this transaction and the conditions of the Australian coal market at the date of the announcement. Specifically, NuCoal has agreed to acquire the Plashett Exploration Licence 6705 in the NSW Upper Hunter Valley from Big Ben Holdings Pty Ltd, part of the Bloomfield Group. The project is located on 942ha of land, based approximately 170km southeast of Gunnedah, NSW. The project has an exploration target of between 89Mt and 300Mt of semisoft coking coal and thermal coal. The project is strategically located between NuCoal's Doyles Creek and Delworth projects, and is in close proximity to the Bayswater power station and rail lines. Bloomfield Group Managing Director, John Richards, is to become non-executive director of NuCoal.

The acquisition is to be funded by an initial share issue worth $10.5 million (35 million shares), and second and third share issuances of $29.25 million and $36.25 million upon the proving up of coal resources, and is expected to provide considerable development, operational and financial synergies.

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The table below shows recent transactions for predominantly thermal coal exploration and development stage companies and mines in Australia with JORC reserves and/or resources as at the date of the announcement of the respective transactions.

Table E.3: Transaction multiples of thermal exploration and development stage assets

Date	Target	Acquirer	Interest acquired	Type of mine	Coal type	Consideration	$/Reserve	$/Resource
Jan-12	Metrocoal	DADI	5.1%	UG	TC	4.5	n/a	0.02
May-11	Codrilla	KC Resources	19.7%		TC	126.1	12.80	8.00
May-11	Ellemby	Gloucester	100.0%		TC	30.0	n/a	0.10
Aug-10	Linc Energy	Adani Enterprises	100.0%		TC	500.0	n/a	0.06
Jul-10	Anglo Coal (Taroom)	Cockatoo Coal	100.0%	OC	TC	105.5	n/a	0.53
Apr-10	South Australian Coal	White Energy	100.0%		TC	87.5	n/a	0.17
Aug-09	Narrabri	Korean Consortium	7.5%	UG	TC	125.0	10.62	4.90
Jul-08	Narrabri	EDF Trading	7.5%	UG	TC	129.0	18.11	5.47
Jul-08	Narrabri	Electric Power Development Company	7.5%	UG	TC	125.0	17.54	5.30
Feb-08	Narrabri	Upper Horn Investment	7.5%	UG	TC	68.0	8.83	2.07
High							**18.11**	**8.00**
Low							**8.83**	**0.02**
Average							**13.58**	**2.66**
Median							**12.80**	**1.30**

Source: Capital IQ, company announcements and websites, PwC Securities analysis

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Appendix F Glossary

Term	Description
$	Australian dollars
ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
AFSL	Australian Financial Services Licence
AMCI	AMCI International AG
AME	AME Consulting Pty Limited
AME Report	Coal Market Supplementary Report prepared by AME
ARI	Aston Resources Investments Pty Limited
ARTC	Australian Rail Track Corporation
ASIC	Australian Securities and Investments Commission
Aston	Aston Resources Limited
ASX	Australian Securities Exchange
AUD	Australian dollars
BBSY	Bank Bill Swap Bid Rate
BFS	Bankable Feasibility Study
Boardwalk	Boardwalk Resources Pty Ltd
Call Option	Call option agreement entered into between Whitehaven and ARI
CAPM	Capital Asset Pricing Model
CAPM	Capital Asset Pricing Model
CC	Coking coal
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CHPP	Coal handling and preparation plant
Coalworks	Coalworks Limited
Corporations Act	Corporations Act 2001 (Cth)
CPRS	Carbon Pollution Reduction Scheme
CY	Calendar Year
DCF	Discounted Cash Flow
Dingo	The Dingo project
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
EL	Exploration Lease
EMRP	Equity Market Risk Premium
EPC	Exploration Permit for Coal
EV	Enterprise Value
Farallon	Farallon Capital Management, LLC
Ferndale	The Ferndale coal project

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Term	Description
FSG	Financial Services Guide
FY	Fiscal Year
Gloucester	Gloucester Coal Limited
HCC	Hard coking coal
HV	High volatile
HVRN	Hunter Valley rail network
ICRAV	ICRA Vickery Pty Ltd
Initial Shares	The 85.89 million Whitehaven shares being exchanged for all of the shares and other issued securities in Boardwalk
IPO	Initial Public Offering
IT	Information Technology
ITOCHU	ITOCHU Corporation
JORC	Joint Ore Reserves Committee
JV	Joint Venture
LTIP	Long Term Incentive Plan
LV	Low volatile
Maules Creek Project	The Maules Creek coal project
Merged Group	The combined group comprising Whitehaven, Aston and Boardwalk
Milestone Shares	An additional sum of Whitehaven shares being issued as consideration in the event of certain milestones being reached
ML	Mining Lease
MMC	Minarco-MineConsult
MMC Report	The Technical Specialists Report prepared by MMC
Monto	The Monto project
MRRT	Minerals Resource Rent Tax
Mt	Million tonnes
Mtpa	Mt per annum
Narrabri	The Narrabri mine
NCIG	Newcastle Coal Infrastructure Group
Noble	Noble Group Limited
Oaklands North	The Oaklands North project
OC	Open cut
Option Shares	A sum of shares in Aston over which Whitehaven has an option to acquire under the Call Option Agreement
Orpheus	Orpheus Energy Limited
Pacific National	Pacific National Pty Ltd
PCI	Pulverised coal injection
Proposed Boardwalk Transaction	Agreements separate to the SIA under which Whitehaven will acquire all of the shares and other issued securities in Boardwalk
PwC	PricewaterhouseCoopers

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Term	Description
PwC Securities	PricewaterhouseCoopers Securities Ltd
PWCS	Port Waratah Coal Services
QR National	QR National Limited
RIC	Rail Infrastructure Corporation
Rocglen	The Rocglen mine
ROM	Run of mine
RSPT	Resource Super Profits Tax
Scheme	The Scheme of Arrangement under which Aston and Whitehaven agreed to merge
Scheme Booklet	Notice of Meeting and Explanatory Memorandum
Scheme Meeting	A general meeting of Aston's shareholders to be held in April 2012
SHCC	Semi-hard coking coal
SIA	Scheme Implementation Agreement
Sienna	The Sienna project
SSCC	Semi-soft coking coal
Sunnyside	The Sunnyside mine
T4	Terminal 4
Tarrawonga	The Tarrawonga mine
TC	Thermal coal
Tinkler Group	Entities controlled by Mr. Nathan Tinkler
UG	Underground
USD	US Dollars
Vickery	The Vickery coal project
Vickery South	The Vickery South coal project
VWAP	Volume Weighted Average Price
WACC	Weighted Average Cost of Capital
Werris Creek	The Werris Creek mine
Whitehaven	Whitehaven Coal Limited
Whitehaven Special Dividend	A fully franked special dividend of $0.50 per share to existing Whitehaven shareholders conditional on the Scheme proceeding
Yancoal Australia	Yancoal Australia Limited

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Part B – Financial services guide

PRICEWATERHOUSECOOPERS SECURITIES LTD
FINANCIAL SERVICES GUIDE

This Financial Services Guide is dated 6 March 2012

1 About us

PricewaterhouseCoopers Securities Limited (ABN 54 003 311 617, Australian Financial Services Licence no 244572) (PwC Securities) has been engaged by Aston Resources Limited (Aston) to provide a report in the form of an independent expert's report in relation to the Scheme for inclusion in the Scheme Booklet dated 6 March 2012

2 This Financial Services Guide

This Financial Services Guide (FSG) is designed to assist retail clients in their use of any general financial product advice contained in the Report. This FSG contains information about PwC Securities generally, the financial services we are licensed to provide, the remuneration we may receive in connection with the preparation of the Report, and how complaints against us will be dealt with.

3 Financial services we are licensed to provide

Our Australian financial services licence allows us to provide a broad range of services, including providing financial product advice in relation to various financial products such as securities, interests in managed investment schemes, derivatives, superannuation products, foreign exchange contracts, insurance products, life products, managed investment schemes, government debentures, stocks or bonds, and deposit products.

4 General financial product advice

The Report contains only general financial product advice. It was prepared without taking into account your personal objectives, financial situation or needs.

You should consider your own objectives, financial situation and needs when assessing the suitability of the Report to your situation. You may wish to obtain personal financial product advice from the holder of an Australian Financial Services Licence to assist you in this assessment.

5 Fees, commissions and other benefits we may receive

PwC Securities charges fees to produce reports, including this Report. These fees are negotiated and agreed with the entity who engages PwC Securities to provide a report. Fees are charged on an hourly basis or as a fixed amount depending on the terms of the agreement with the person who engages us. In the preparation of this Report our fees are charged on an hourly basis and as at the date of this Report amount to approximately $530,000.

Directors or employees of PwC Securities, PricewaterhouseCoopers, or other associated entities, may receive partnership distributions, salary or wages from PricewaterhouseCoopers.

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Darling Park Tower 2, 201 Sussex Street, GPO BOX 2650, SYDNEY NSW 1171
T: +61 2 8266 0000, F: +61 2 8266 9999, www.pwc.com.au

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7 Complaints

If you have a complaint, please raise it with us first, using the contact details listed below. We will endeavour to satisfactorily resolve your complaint in a timely manner. In addition, a copy of our internal complaints handling procedure is available upon request.

If we are not able to resolve your complaint to your satisfaction within 45 days of your written notification, you are entitled to have your matter referred to the Financial Ombudsman Service (FOS), an external complaints resolution service. FOS can be contacted by calling 1300 780 808. You will not be charged for using the FOS service.

8 Contact Details

PwC Securities can be contacted by sending a letter to the following address:

Richard Stewart
Darling Park Tower 2,
201 Sussex Street,
GPO BOX 2650,
SYDNEY NSW 1171

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9 TECHNICAL EXPERT'S REPORT



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Specialist's Report Prepared For Aston Resources Limited

IMPORTANT INFORMATION ABOUT THIS DOCUMENT

1. Our Client

This report has been produced by or on behalf of Minarco MineConsult, a trading division of Runge Limited (MMC) at the request of the Directors of Aston Resources Limited (Client) for the purpose of inclusion in the Independent Expert"s report being prepared by PricewaterhouseCoopers Securities (PwCS) in relation to a proposed merger (via a scheme of arrangement) between Aston and Whitehaven Coal Limited ("WHC", or "Whitehaven"), and the proposed acquisition by WHC of the assets of Boardwalk Resources ("Boardwalk").

2. Client Use

The Client"s use and disclosure of this report is subject to the terms and conditions under which MMC prepared the report.

3. Notice to Third Parties

MMC prepared this report for the Client only. If you are not the Client, then to the extent permitted by law:

- MMC has prepared this report having regard to the particular needs and interests of the Client, and in accordance with the Client"s instructions. It did not draft this report having regard to any other person"s particular needs or interests. Your needs and interests may be distinctly different to the Client"s needs and interests, and the report may not be sufficient, fit or appropriate for your purposes.
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- MMC does not authorise you to rely on this report. If you choose to use or rely on all or part of this report, then any loss or damage you may suffer in so doing is at your sole and exclusive risk.

4. Inputs, subsequent changes and no duty to update

- MMC has created this report using data and information provided by or on behalf of the Client [and Client"s agents and contractors]. Unless specifically stated otherwise, Runge has not independently verified that data and information. MMC accepts no liability for the accuracy or completeness of that data and information, even if that data and information has been incorporated into or relied upon in creating this report (or parts of it).
- The conclusions and opinions contained in this report apply as at the date of the report. Events (including changes to any of the data and information that MMC used in preparing the report) may have occurred since that date which may impact on those conclusions and opinions and make them unreliable. MMC is under no duty to update the report upon the occurrence of any such event, though it reserves the right to do so.

5. Mining Unknown Factors

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond MMC"s control and that MMC cannot anticipate. These factors include, but are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalize the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.

Suite 1501, Level 15, Australia Square, 264-278 George Street, Sydney, NSW, Australia 2000; PO Box H170, Australia Square, NSW 1215
Telephone: +61 2 8248 1555, +61 2 8248 1500, Facsimile: +61 2 8248 1544, Website: www.minarco-mineconsult.com
A.B.N. 20 053 417 799

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minarco mineconsult

Ref: *ADV-SY-03865 grm/lf*

29 February 2012

The Directors
Aston Resources Ltd
AMP Place
10 Eagle Street
Brisbane, QLD
4000

Dear Sirs,

RE: TECHNICAL SPECIALIST REPORT
ON WHITEHAVEN, ASTON AND BOARDWALK

This report has been prepared by Minarco-MineConsult (MMC) at the request of the Directors of Aston Resources Limited ("Aston" or AZT) for inclusion in the Independent Expert"s report being prepared by PricewaterhouseCoopers Securities (PwCS) in relation to a proposed merger (via a scheme of arrangement) between Aston and Whitehaven Coal Limited ("WHC" or "Whitehaven"), and the proposed acquisition by WHC of Boardwalk Resources ("Boardwalk").

The report"s purpose is to:

a) confirm Resource and Reserve estimates and to assess the fairness of mine production budgets and forward estimates of Aston and WHC, to allow PwCS to prepare an independent valuation of Aston and WHC as standalone businesses as well as a valuation of the merged business; and

b) confirm the Resource and Reserves estimates, and estimate a value range for the assets of Boardwalk.

MMC has conducted its technical review in recognition of the requirements of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (December 2004) published by the Joint Ore Reserves Committee ("JORC") of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia (the "JORC Code") and also with the requirements of the Code and Guidelines for Assessment and Valuation of Mineral Assets and Mineral Securities for Independent Expert Reports as adopted by the Australasian Institute of Mining and Metallurgy (the "Valmin Code").

The Aston asset (Relevant Asset) comprises the Maules Creek Project consisting of mining lease CL375 and exploration authority A346, located north of and abutting the Boggabri Coal Mine, 18 km northeast of Boggabri in the Gunnedah Basin of NSW.

MMC concludes from the AZT review that:

- Maules Creek"s Reserves and Resources have been estimated in accordance to the JORC code;
- Total JORC Resources are 679 Mt (including 237 Mt of Inferred Resources) as at 31 March 2011;
- Total JORC Recoverable Reserves are 362 Mt as at 6th April 2011;
- The Maules Creek Definitive Feasibility Study (DFS) includes a total of 333 Mt of ROM coal being mined at a maximum 13 Mt per annum rate over 30 years;
- The Maules Creek mine plan has made appropriate and reasonable allowances for overburden removal quantities, coal mining losses and dilution, production rate estimates and yields in the washing plant for the determination of the quantities of product coal;
- The assumptions used in estimating operating costs are, in the main, appropriate and reasonable, covering the spectrum of mining, processing, transport, administration, marketing and government levies and charges associated in mining the coal through to the point of sale. MMC has reviewed these costs against industry standards and current contractor rates and has recommended minor changes in rates for waste removal, coal mining, and coal handling;
- The capital costs associated with the development of Maules creek are appropriate to support the development and planned production in the LOM plan;
- Equipment and infrastructure that is suitable for the production forecasts is planned to be in place for the open cut operations;

Suite 1501, Level 15, Australia Square, 264-278 George Street, Sydney, NSW, Australia 2000. PO Box H170, Australia Square, NSW 1215
Telephone: +61 2 8248 1555. +61 2 8248 1500. Facsimile: +61 2 8248 1544. Website: www.minarco-mineconsult.com
A.B.N. 20 053 417 795

- Although contracted Newcastle port capacity is in deficit of sales forecasts from FY2015, the growth of capacity at the port should provide the opportunity to balance sales and shipments;
- Based on the current schedule there is some potential for port take or pay liabilities in the short term; and
- The Maules Creek deposit contains approximately 237 Mt Inferred Open Cut JORC Resources that are not included in the current mine plan and have the potential to be mined at some unspecified time in the future. MMC estimate the value of these Resources to be between $0.10 and $0.27 per in situ tonne.

WHC"s assets ("Relevant Assets") include:

- Tarrawonga open cut;
- Rocglen Project open cut;
- Sunnyside Project open cut;
- Werris Creek open cut;
- The tenements and proposed open cut mine for the Vickery project;
- Narrabri North underground mine;
- Proposed Narrabri South underground; and
- Numerous exploration tenements.

MMC concludes from the WHC review that:

- WHC"s coal Resources and Reserves have been estimated in accordance with the JORC Code;
- Total JORC Resources are 1,771.5 Mt (inclusive of 807.9 Mt of Inferred Resources);
- Total JORC Reserves are 479.8 Mt of recoverable coal.
- An expansion plan to increase total production to 16.0 Mtpa ROM by 2018 can be supported by JORC Reserves;
- The 2012-2050 WHC business model requires 410.3 Mt to be produced, of which 385.9 Mt are JORC Reserves. Production from Narrabri North underground is based on Inferred Resources from FY2034, and from Vickery open cut from FY2043. It is reasonably expected that these Inferred Resources will be upgraded by future infill exploration drilling;
- An estimated 19.2M ROM tonnes of production for Tarrawonga open cut will be sourced from areas that are not included in WHC"s reported Reserves, including Boggabri"s CL368 and the boundary corridor. MMC recommends that a formal Reserves estimate be prepared for the entire Tarrawonga pit shell;
- Equipment and infrastructure is in place or planned to be in place for the open cut operations that is suitable for the production forecasts;
- The implementation of the planned Tarrawonga 3 Mtpa ROM expansion and the commencement of the Vickery open cut mine in FY2014 rely on the timely commissioning of the Boggabri CHPP. This appears to be achievable;
- The plan to increase the proportion of metallurgical product coal from the Tarrawonga and Vickery Reserves by increasing the proportion of ROM coal that is washed, is considered by MMC to be reasonable and achievable;
- The proposed production rate up to 6.5 Mtpa ROM for the planned Narrabri underground mines working a five day week will be at the higher end of productivity for underground mines in Australia. MMC considers that the planned increase in rostered shifts to a seven day production period should be sufficient to support the planned production rates. Furthermore, where seam ash increases in the west of the resource a 7 day production week is deemed essential to compensate for lower coal yields. WHC has allowed for two additional weekend day shifts;
- Narrabri South has a JORC reserve estimate based on a preliminary mine plan arrangement. Planning for the mine development and the expected mine commencement is yet to be confirmed. Currently the project will potentially be a continuation of Narrabri North that is scheduled to be completed after 23 years. MMC considers a valuation method based on value per Resource tonne to be appropriate for this project;

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- The WHC mine plans have made appropriate and reasonable allowances for overburden removal quantities, coal mining losses and dilution, production rate estimates and yields in the washing plant for the determination of the quantities of product coal. MMC has recommended some changes to the original Narrabri underground model to reflect recent information regarding higher in situ ash and energy levels in the west of the mine lease;
- Further borehole sampling and analysis of coal quality data is considered necessary for the western resource area of the Narrabri underground to confirm a suitable bypass and washing split. The upper limit of 400 tph for the wash plant feed capacity will influence the PCI product fraction when higher ash ROM coal is produced. MMC has adjusted the WHC model by reducing the PCI fraction from 37% to 20% in the west area;
- The assumptions used in estimating operating costs are, in the main, appropriate and reasonable, covering the spectrum of mining, processing, transport, administration, marketing and government levies and charges associated in mining and delivering the coal to the point of sale. Forecast life of mine operating costs have been either based on historical performance or in the case of future projects are derived from planning estimates that appear soundly based. MMC have recommended minor downward changes to modelled waste ratios for Sunnyside and Tarrawonga open cuts, and minor additional operating costs for Narrabri North underground;
- The capital costs associated with the ongoing business and the development of future mines are, in general, reasonable and appropriate allowances have been included for ongoing capital where necessary. An additional allowance of $2.00/ROMt has been recommended for sustaining capital for the Vickery open cut;
- Although contracted Newcastle port capacity is in deficit of sales forecasts from FY2015, the growth of capacity at the port should provide the opportunity to balance sales and shipments;
- There is a possibility for port take or pay liabilities in the short term;
- There are no significantly adverse environmental conditions imposed on the operations: however certain common conditions in the sites" Environmental Protection Licences may need modification to reduce the risk of non-compliance;
- Following an environmental prosecution sentence handed down against Werris Creek in July 2009, any recurring non-compliances throughout WHC such as exceeding TSS limit conditions for discharges and noise/blasting emissions present a future prosecution risk if non-compliances are not adequately addressed and, where appropriate, licence conditions modified; and
- There are 631 Mt and 292 Mt of identified additional Underground and Open Cut JORC Resources that have the potential to be mined at some unspecified time in the future. These Resources can be valued at between $0.70 and $1.53 per Resource tonne for open cut Resources and between $0.56 and $0.95 for underground Resources respectively.

Boardwalk"s assets ("Relevant Assets") include the following exploration tenements:

- Ferndale EL7430;
- Sienna EPCs 1033 and 2089;
- Dingo EPCs 862, 863 and1063; and
- Monto EPC1220;

MMC concludes from the Boardwalk review that:

- Boardwalk"s tenements are generally well located with respect to coal prospectivity and existing logistics infrastructure;
- With the exception of Ferndale, there is as yet insufficient geological certainty for the estimation of a JORC Resource in conformance with the JORC Code; and
- MMC estimates that the attributable value of the Boardwalk assets is between $50.2M and $144.4M.

MMC were asked to comment at a high level the synergies if the two businesses were merged. The following points summarise our comments:

- Head Office - Currently in both the WHC and AZT business models there are substantial corporate overheads, for which significant scope for reduction exists in a merged company;

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- Production Balance and equipment rationalization – The possibility may exist of rationalizing mobile equipment and labour between mining operations to meet changing levels of production on an as-required basis: this may be possible between Tarrawonga and Maules Creek;
- Mining Costs - Due to increasing scale of the total operations, the ability to negotiate price reductions in major consumables is likely;
- Coal Blending - The coal quality of Maules Creek and WHC are complementary and may allow for improvement in product blending and CHPP yield optimisation;
- Marketing - Significant scope exists for a merged entity to use its position as the major supplier of Gunnedah branded coals to negotiate from a stronger market position;
- Port and Rail Allocation - If faced with limitation in port or rail allocation a combined company has the scope to choose the highest margin source coal to meet shipment requirements;
- There may be an opportunity to optimise production and Reserves tonnages at Maules Creek by cooperative development with Boggabri at the adjoining south boundary of CL375. The tonnage affected has not been quantified by MMC;
- There may be an opportunity to optimise environmental permitting and compliance management by improved co-ordination among Gunnedah Basin operations especially in the Maules Creek-Boggabri-Tarrawonga precinct; and
- There may be increased flexibility in the region for managing coal road haulage quantities and routes, rail accessibility (Maules Creek and Tarrawonga), and maintaining options for waste reject disposal areas.

The signatory to this letter, Mr. Gregory Maiden, BE (Mining) MAIMM CP, is a Member of the Australasian Institute of Mining and Metallurgy, and is an employee of Runge Limited, the parent company of MMC. He has forty years" experience in the mining industry with significant experience in technical reviews, audits and due diligence assessments of mining assets. He has sufficient experience which is relevant to the style of mineralization and types of coal deposits under consideration, and to the activity he is undertaking, to qualify him as a Competent Person (as defined in the 2004 Edition of the JORC Code).

MMC has been paid, and has agreed to be paid, professional fees, by AZT for its preparation of this Report. None of MMC or its directors, staff or specialists who contributed to this report has any interest or entitlement, direct or indirect, in the Company, the relevant Assets; or the outcome of this report.

Yours sincerely,



Greg Maiden
Executive Consultant
minarco mineconsult

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1. INTRODUCTION

1.1 Key Outcomes

- This report has been prepared at the request of the Directors of Aston Resources Ltd ("AZT" or "Aston") for inclusion in the Independent Expert"s report.
- The Independent Expert"s report by PricewaterhouseCoopers Securities (PwCS) is being prepared in relation to a proposed merger (via a scheme of arrangement) between Aston Resources and Whitehaven Coal Limited ("WHC", or "Whitehaven"), and the proposed acquisition by WHC of the assets of Boardwalk Resources ("Boardwalk").
- The report"s purpose is to confirm Resource and Reserve estimates and to assess the fairness of mine production budgets and forward estimates to allow PwCS to prepare an independent valuation of WHC as a standalone business and also prepare a valuation of the merged business.
- Valuation estimate of Resources that are net of the Life of Mine Plans (LOMPs) for the Aston and WHC mines and projects.
- Valuation estimate of the exploration tenements in which Boardwalk has a direct interest.

1.2 Purpose of Report

This report has been prepared by Minarco-MineConsult (MMC) at the request of the Directors of Aston Resources Ltd for inclusion in the Independent Expert"s report being prepared by PricewaterhouseCoopers Securities. The Independent Expert"s report is being prepared in relation to a proposed merger (via a scheme of arrangement) between Aston Resources and Whitehaven Coal Limited, and the proposed acquisition by WHC of the assets of Boardwalk Resources.

The report"s purpose is to confirm Resource and Reserve estimates and to assess the fairness of mine production budgets and forward estimates to allow PwCS to prepare an independent valuation of WHC as a standalone business and also prepare a valuation of the merged business. Both AZT and WHC provided a "Business Model" in the format of an Excel workbook. This Excel workbook summarised the physical quantities, operating & capital costs in a series of linked spreadsheets. MMC brief was to confirm the veracity and reasonableness of the quantities & costs in the Business Model.

MMC has also used appropriate valuation techniques as recognised in the Valmin Code to estimate value range for the additional resources within the WHC assets and the estimated Resources and coal targets within the Boardwalk exploration areas.

1.3 Scope of Work

MMC carried out the following scope of work for the Technical Specialist Report:

- Site visits for inspection, familiarisation, data collection and interviews with senior personnel;
- A review of the geological reports, Resources, estimation methods, geotechnical factors, and coal quality;
- Assessment of Resource and Reserve statements for JORC compliance and commenting on geological implications for mining and coal product types;
- A review of mine planning and operations at the various sites including mine strategy, mine plan layouts, mining method, operating schedules, workforce and management, productivity assumptions, operating cost assumptions, capital cost assumptions, construction schedule and mining risks;
- Assessment of critical environmental and community issues and the potential impact these issues may have on AZT"s, WHC"s and Boardwalk"s operations;
- A review of current and planned infrastructure including the CHPP, rail infrastructure and port facilities;
- Review and commenting on the reasonableness of the Business Plan models (and the assumptions made on project capital, sustaining capital, operating cost, and ex-mine costs such as transport, port, royalties, and head office) prepared by management which will be relied upon by PwCS in its assessment; and
- Writing a formal Technical Specialist Report.

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1.4 Location of Project Areas

This report evaluates the assets of AZT and WHC which are located in close proximity in the Gunnedah Basin of Central New South Wales. The location of the main assets of AZT and WHC are shown in **Figure 1.1**.

The primary asset of AZT is the proposed Maules Creek mine, located due east of Boggabri approximately 320 km north west of Newcastle.

The main assets of WHC consist of:

- Three open cut coal mines (Tarrawonga, Rocglen and Sunnyside) and the proposed Vickery open cut mine, that feed the Gunnedah Coal Preparation Plant;
- The Werris Creek open cut coal mine; and
- The Narrabri underground coal project and coal preparation plant.

The assets of Boardwalk are exploration tenements located in New South Wales and Queensland. The locations are shown in **Figure 1.2**. They include:

- The Ferndale tenement EL7430;
- The Sienna tenements EPC1033 and EPC 2089;
- The Dingo tenements EPC 862, EPC 863, and EPC 1063; and
- The Monto tenement EPC 1220.

This report reviews the assets of AZT and WHC separately before assessing the synergies created as a result of a possible merger. The Boardwalk assets are reviewed and evaluated individually.

1.5 Capability and Independence

This report was prepared on behalf of MMC by the signatory to this report, assisted by the subject specialists whose qualifications, experience and contribution to the report are set out in **Annexure C** to this report.

MMC operates as an independent technical consultant providing resource evaluation, mining engineering and mine valuation services to the Resources and financial services industry. MMC has carried out assignments for both AZT and WHC in the last three years. MMC believes its independence has in no way been compromised.

MMC has been paid, and has agreed to be paid, professional fees for its preparation of this report. However, none of MMC or its directors, staff or sub-consultants who contributed to this report has any interest in:

- AZT, WHC, Boardwalk, relevant parties or companies associated with AZT, WHC or Boardwalk; or
- The mining assets reviewed; or
- The outcome of the PwCS report.

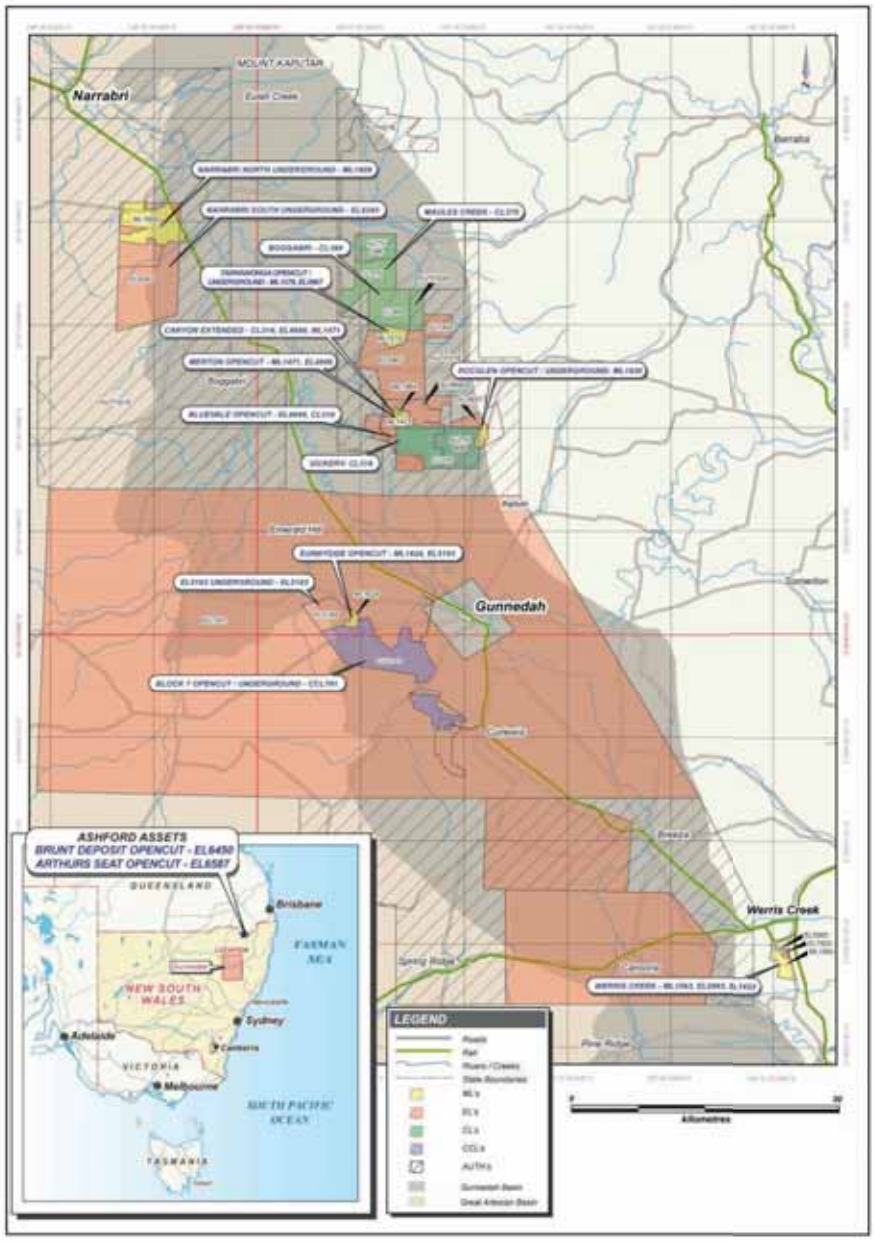
Drafts of this report were provided to AZT, WHC and Boardwalk, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in the report.

The Specialists who contributed to the findings within this Report have each consented to the matters based on their information in the form and context in which it appears.

Information in this report that relates to Mineral Resources or Ore Reserves is based on JORC Code compliant Resource and Reserve Statements prepared by Competent Persons as defined by the JORC Code. This report conforms in all aspects, unless an aspect is specifically excluded, with the requirements of the Code and Guidelines for Assessment and Valuation of Mineral Assets and Mineral Securities for Independent Expert Reports as adopted by the Australasian Institute of Mining and Metallurgy (the “Valmin Code”).

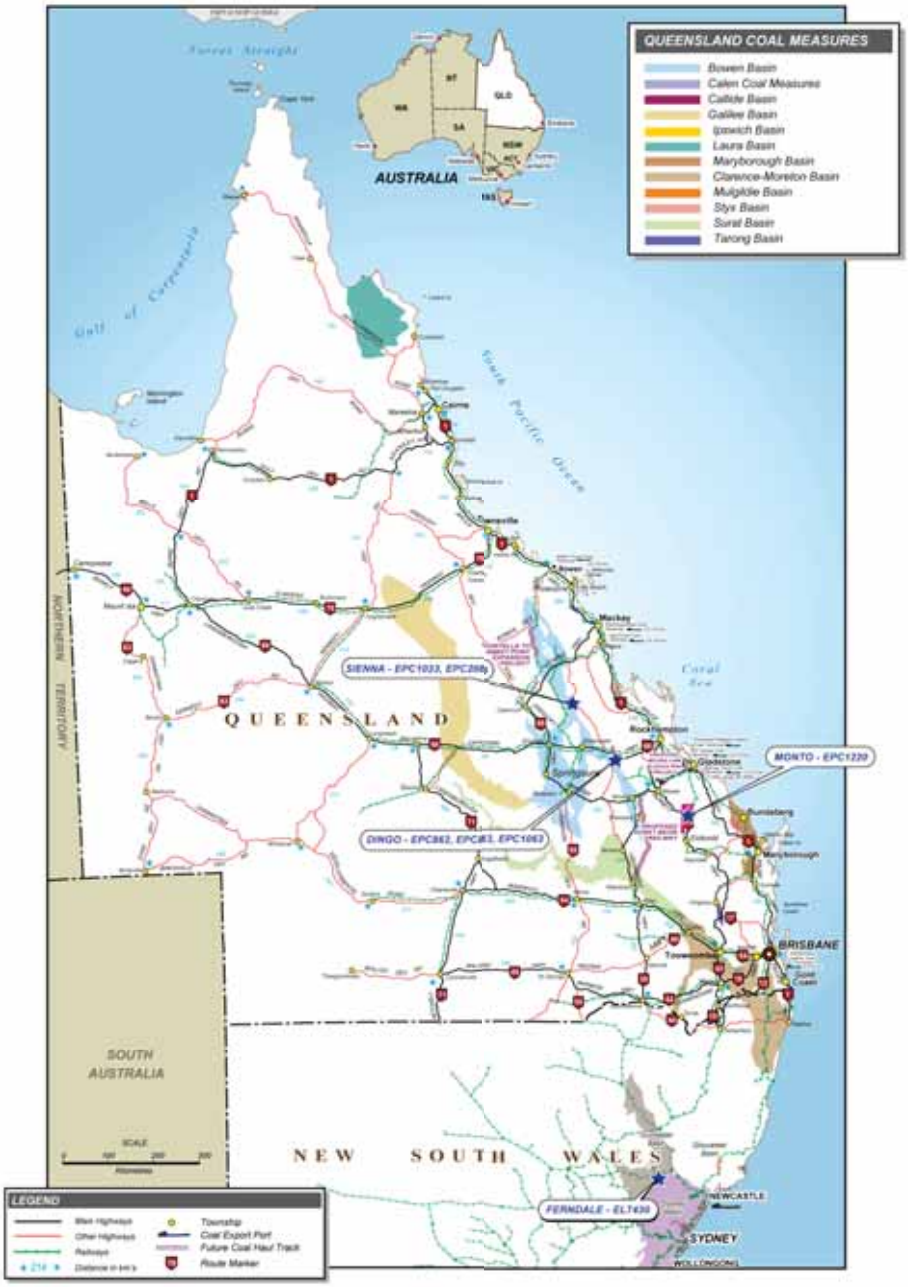
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Figure 1.1 – Location of Aston and Whitehaven Mining Assets



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Figure 1.2 - Location of Boardwalk Exploration Assets



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1.6 Methodology

The assumptions used in the Business Plan forecast models provided by AZT and WHC were the subject of this technical review. These cover the annual mining rate, stripping ratio, washplant yield, product quality; transport, cost of production and capital expenditure. Financial aspects such as loans, cashflow, profit and loss, balance sheet, valuation and revenue were not examined as part of this technical review.

The following points cover the main areas of focus and a brief description of the methodology used:

- Operational Status: Key members of the study team visited the mines on January 11th and 12th 2012 and were given presentations by senior site management. Team members inspected mining operations, infrastructure and coal handling preparation plants. No site visits were undertaken to exploration tenements;
- Resources and Reserves: The JORC estimation process was reviewed and then the JORC totals were cross referenced to the ROM and sales tonnes in the Business Plan models;
- Mine Plan: Production assumptions, mining rate and coal preparation yields were reviewed and matched against the Business Plan model inputs;
- Environmental & Approvals: The status of environmental approvals and licensing of the mines was reviewed and environmental constraints assessed to ensure that mine plans appropriately managed environmental regulatory requirements and operational risks;
- Capital and Operating Costs: operating costs estimates were examined against both historical unit costs and feasibility study estimates and then adjusted for anticipated changes in mine operating conditions in order to validate the cost inputs to the Business Plan models. Capital expenditure was reviewed and a view was formed regarding the validity of these costs; and
- Key Project Issues Important issues which may have a material impact on the outcomes presented in the Business Plan models were identified during the review.

All material revisions to the assumptions in the original business models have been provided to PwCS for incorporation into their valuation.

1.7 Site Inspection

Personnel within MMC team of technical specialists visited the WHC operations and Vickery project site on the 11th January and the AZT Maules Creek project site on the 12th January, 2012.

1.8 Limitations and Exclusions

This Report specifically excludes all aspects of legal issues, commercial and financing matters, land titles, agreements, and Native Title excepting such aspects as may directly influence technical, operational or cost issues. MMC has not undertaken an evaluation of marketing or coal pricing or exchange rate forecasts.

MMC has relied on the veracity and accuracy of the data presented by WHC, AZT and Boardwalk, supplemented by a two-day site visit and independent enquiry by MMC of the companies and of available public sources over the period 3 January to 20 January 2012. In respect of Boardwalk"s Ferndale exploration asset, the report also includes comment relating to the subsequent statement of Resources that was publicly released by Coalworks Limited on 17 February 2012. In MMC"s opinion, the information provided by AZT, WHC and Boardwalk was reasonable and nothing discovered during the preparation of this report suggested that there was any significant error or misrepresentation in respect of that information. Information generated by third parties, consultants or contractors to AZT, WHC and Boardwalk has not been independently validated by MMC through the generation of new work or new data. MMC has relied upon the accuracy of this information for this report.

MMC accepts no liability for the accuracy or completeness of data and information provided to it for the purposes of the preparation of this Report, even if that data and information has been incorporated into or relied upon in creating this report. The report has been produced by MMC in good faith using information that is available to MMC as at the date stated on the cover page. This report contains forecasts, estimates and findings that may materially change in the event that any of the information supplied is inaccurate or materially changes in any way. This Report cannot be relied upon in any way if the information provided to MMC changes. MMC is under no obligation to update the information contained in the Report at any time.

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1.9 Materiality

MMC has adopted the Australian Society of Accountants" Standard AASB 1031 which proposes that "the materiality" of information or data can be assessed in terms of the extent to which its omission or inclusion could lead to changes in total value:

- Equal to or less than five percent – immaterial;
- Between five and ten percent – discretionary; and
- Equal to or greater than ten percent – material.

All years referred to in the report are year ending 30 June unless otherwise stated and all currency is Australian Dollars ("AUD") unless otherwise stated. In respect of Maules Creek the years are calendar years.

1.10 Inherent Mining Risks

Coal mining is carried out in an environment where not all events are predictable.

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond MMC"s control and that MMC cannot anticipate. These factors include, but are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalize the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.

Whilst an effective management team can identify the known risks and take measures to manage and mitigate those risks, there is still the possibility for unexpected and unpredictable events to occur. It is not possible therefore to totally remove all risks or state with certainty that an event that may have a material impact on the operation of a coal mine, will not occur.

1.11 Information Sources

Key data provided by AZT for the review included:

- Statement of Open Cut Coal Reserves for the Maules Creek Open Cut Coal Mine as at 6 April 2011;
- Statement of the Insitu JORC Coal Resources within CL375 at Maules Creek as at 31 March 2011;
- Maules Creek Coal Definitive Feasibility Study of July 2011;
- Geological model; and
- Environmental approvals, licences, management plans and related documentation.

Key data provided by WHC for the review included but was not limited to:

- The Geology and Coal Resources of the Whitehaven group, WHC Powerpoint presentation, 2011;
- JORC Resources Report Narrabri Coal Project, December 2009;
- Coal Resource Report for the Tarrawonga Open Cut Coal Mine and Adjacent Exploration Area, Coal Tenements ML1579, EL5967 August 2010;
- Coal Resource Report for the Tarrawonga Open Cut Coal Mine and Adjacent Tarrawonga North Exploration Area, Coal Tenements ML1579, EL5967 August 2011;
- Tarrawonga Open Cut and EL5967 Statement of Open Cut Coal Reserves as at 31st March 2011;
- Tarrawonga Underground Project Statement of Underground Coal Reserves as at 31st May 2009;
- Tarrawonga Open Cut Coal Mine 2011 Life of Mine Plan;
- Coal Resource Report for the Werris Creek Coal Project ML1563, EL5993, ELA3727 August 2011;
- Werris Creek Statement of Open Cut Coal Reserves as at 31st March 2011;
- Werris Creek Open Cut Mine Life of Mine Plan November 2010;
- Sunnyside Open Cut Mine Life of Mine Plan April 2010;
- Coal Resource Report for the Sunnyside Mine and Exploration Licence 5183, Gunnedah Coalfield, NSW, ML1624, EL5183, August 2009;

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- Open Cut Coal Resources - Sunnyside Mine (ML1624) and Rosmar Project (EL5183): correspondence 4 July 2011;
- Sunnyside and Rosmar Open Cuts Statement of Open Cut Coal Reserves as at 31st March 2011;
- Coal Resource Report for the Rocglen Open Cut Coal Mine ML1620 August 2011;
- Rocglen Open Cut Statement of Open Cut Coal Reserves as at 31st March 2011;
- Rocglen Open Cut Mine Life of Mine Plan November 2009;
- An Estimate of the In Situ Coal Resources at Vickery CL0316 23 August 2010;
- An update of the Estimate of the In Situ Coal Resources at Vickery CL0316 29 July 2011;
- Statement of Open Cut Coal Reserves Vickery Project CL316 February 2011;
- Statement of Coal Resources Gunnedah Coal Project, March 2010;
- Statement of Coal Resources Block 7, Gunnedah Colliery, CL701, January 2009;
- Coal Resources Report for the Blue Vale – Pine Hill Prospect, Gunnedah Coalfield, NSW, CL316, EL4699, October 2009;
- Coal Resources Report for the Merton Project, Gunnedah Coalfield, NSW, ML1471, EL4699, February 2011;
- Coal Resources Report for the Canyon West and Canyon South Projects, EL4699, CL316, ML1471, February 2011;
- Independent Geologist JORC Compliant Resource Statement, Revision of Coal Resources EL6450 Brunt Pod, September 2009;
- Independent Geologist JORC Compliant Resource Statement, EL6587 Arthurs Seat, November 2009;
- Geological models; and
- Environmental approval, licenses, management plans and related documentation.

Key data provided by Boardwalk for the review included:

- Boardwalk Resources Independent Technical Experts Report, September 2011;.
- Geological models of the exploration tenements; and
- Memorandum - Ferndale Coal Project Wittingham and Newcastle Seams Coal Resource Estimation, 15 February 2012.

2. ASTON RESOURCES OVERVIEW

2.1 Key Outcomes

- The Maules Creek mining project is Aston"s primary asset; it consists of a proposed open cut coal mine located on CL375 18 km northeast of Boggabri.
- A Definitive Feasibility Study has been undertaken for a mine producing up to 13 Mtpa ROM coal and 11 Mtpa product coal commencing FY2013. Initial production has been delayed to 2014;
- The mine has 679 Mt of Resources inclusive of 362 Mt of Reserves;
- The product split is 20% thermal coal and 80% metallurgical coal; and
- The mine is expected to commence railing in CY2013.

2.2 Location and Background

Maules Creek is a shallow-dipping multi-seam coal deposit located in CL375, 18 km northeast of Boggabri and 380 km North of Newcastle in the Gunnedah Basin of New South Wales (**Figure 1.1**). the deposit contains a large delineated Resource of 697 Mt inclusive of 362Mt of Recoverable Coal Reserves.

Significant exploration and studies have been undertaken on the project by the previous owners since the 1980"s. During that time detailed mine planning was undertaken, but development of the mine was halted in the late 1990"s due to adverse market conditions.

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AZT purchased the Maules Creek tenements from Namoi Valley Coal Ltd., a subsidiary of Coal and Allied, in February 2010. Significant study has been undertaken to prove the coking properties of the coal seams in order to maximise the value of the deposit.

AZT published a DFS for the project in July 2011 with the project being at an advanced stage with design, preparation and approvals to develop a 30-year, 13 Mtpa ROM mine based on conventional contract truck-excavator bench mining.

The mine is expected to commence in CY2013, with saleable production capacity of 11 Mt per year, with approximately 20% low ash thermal coal and 80% metallurgical coal.

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3. MAULES CREEK GEOLOGY, RESOURCES & RESERVES

3.1 Key Outcomes

- Maules Creek"s Resources and Reserves have been estimated in accordance with the JORC code.
- Total JORC Resources are 679 Mt (including 237 Mt of Inferred Resources) as at 31 March 2011.
- Total JORC Recoverable Reserves are 362 Mt as at 6th April 2011.
- MMC have reviewed the Resources and considers the Resource tonnages to have been generated correctly and to industry standard.
- The Maules Creek recoverable Reserves have been correctly estimated and conform to JORC standard.
- It is expected that that future exploration drilling will increase the Reserves by conversion of 155 Mt of Inferred Resources contained in the 517 Mt planned pit shell.
- The Maules Creek Marketable Reserves should be revised to incorporate the DFS assumptions regarding washing strategy.

3.2 Geology

The Maules Creek Resources occur within the Early Permian Maules Creek Formation in the Maules Creek Sub-basin of the Gunnedah Basin. Within CL375 the Formation contains 15 seam groups which split into 39 plies. Splitting increases towards the north east.

The Regional stratigraphy of Maules Creek is included in **Figure 3.1**. The coal measures dip gently to the south-east at 1 to 7 degrees, with a flattening of dip in the south east corner of CL375. In the west the seams lap on to the basement Boggabri Volcanics resulting in the absence of some seams in these areas. Depth of weathering averages 25 m and ranges from 6-113 m.

There are no significant major faults within the project area, although minor faults may exist.

3.3 Exploration Methods and Adequacy

Extensive exploration and mapping has been undertaken in the vicinity of CL375 since 1948. Objectives of the various exploration drilling activities have been to assess the quality, quantity and overall extent of the coal resource. The historical drilling programme at the Maules Creek Coal Project prior to the transfer of the existing mining authorities to AZT are summarised as follows:

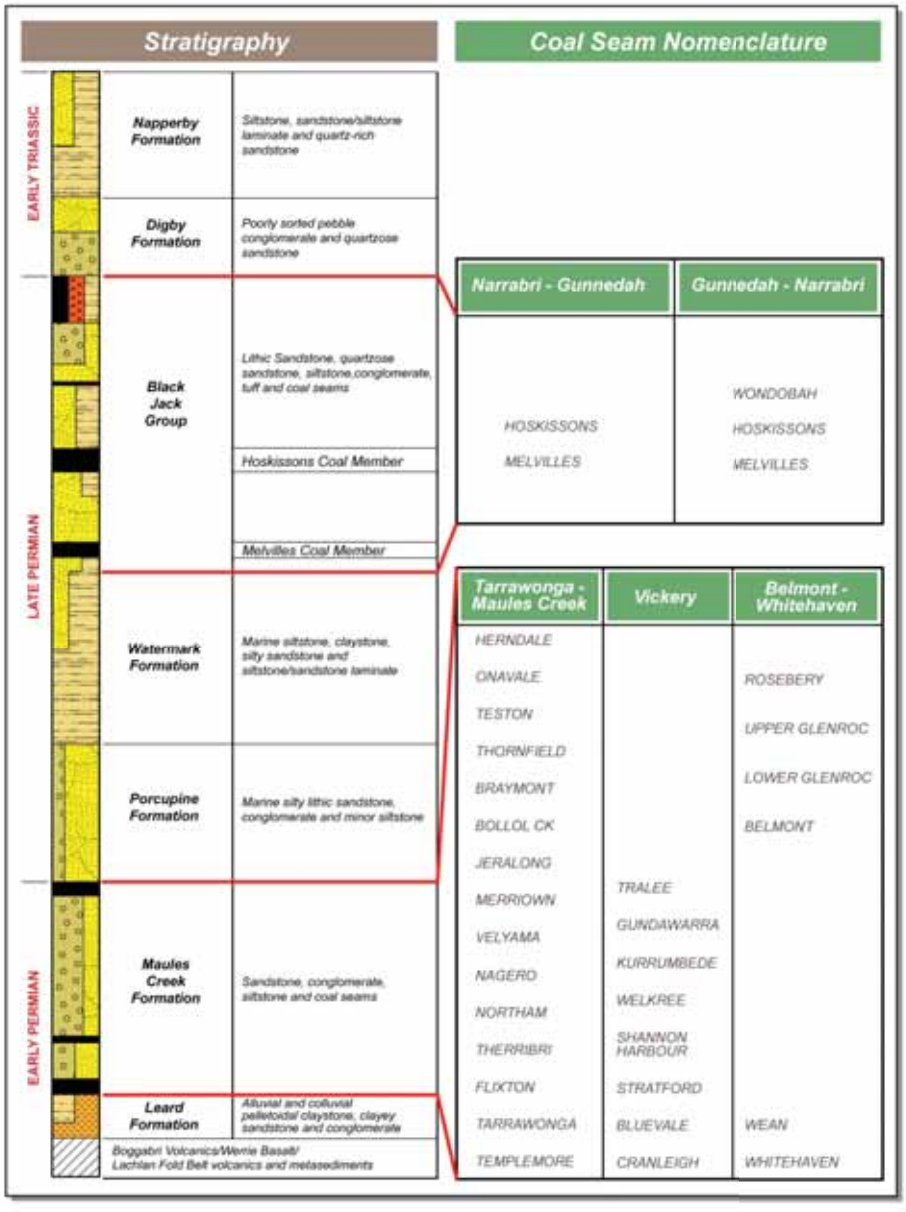
- NSW Geological Survey Department conducted surface geological mapping (1948 to 1950) within Exploration Permit No. 4;
- NSW Geological Survey Department conducted initial drilling of seven boreholes located within A354 and A346 (1974 to 1975);
- Kembla Coke and Coal Pty Limited conducted an exploration drilling programme, consisting of 316 boreholes totalling approximately 60,422 m (1980 to 1988); and
- Novacoal Australia Pty Limited conducted exploration drilling to improve the geological knowledge within CL375 (1996).

A drilling program conducted by Aston Resources in 2010 consisted of 106 drillholes; to improve the definition of the subcrop of the Braymont Seam (the largest proportion of the Resources); to provide additional coal quality data, and to improve knowledge of the surface of the underlying Boggabri Volcanics basement.

There are currently 777 holes in the Maules Creek geological database, 148 of which have quality data: 46 of these holes are outside CL375.

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Figure 3.1– Maules Creek Regional Stratigraphy



3.4 Coal Resources

The Statement of Coal Resources for Maules Creek was prepared by Mr. Phillip Sides of JB Mining Services (JBMS) in March 2011. The 2011 Resource polygons were changed to reflect updated drilling information and a review of the raw coal assay intervals. The total Resource increased from 610 Mt to 679 Mt since the previous estimate.

Coal Resources have been estimated within CL375 and A346 by JBMS and are summarised in **Table 3.1**.

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Table 3.1 – Maules Creek Summary of Open Cut Coal Resources as at March 2011

Seam	Measured (Mt)	Indicated (Mt)	Meas. + Ind. (Mt)	Inferred (Mt)	Total (Mt)
Herndale Seam	1.6	5.6	**7.2**	4.0	**11.2**
Onavale Seam	7.6	6.8	**14.4**	-	**14.4**
Teston Seam	23.3	14.0	**37.3**	5.0	**42.3**
Thornfield Seam	6.5	3.1	**9.6**	2.0	**11.6**
Braymont Seam	56.0	64.7	**120.7**	49.0	**169.7**
Jeralong Seam	30.2	23.8	**54.0**	15.0	**69.0**
Merriown Seam	19.3	33.4	**52.7**	20.0	**72.7**
Velyama Seam	13.2	16.4	**29.6**	19.0	**48.6**
Nagero Seam	12.7	14.0	**26.7**	17.0	**43.7**
Upper Northam Seam	12.0	16.4	**28.4**	7.0	**35.4**
Lower Northam Seam	1.4	17.5	**18.9**	13.0	**31.9**
Therribri Seam	13.4	15.5	**28.9**	24.0	**52.9**
Flixton Seam	-	5.3	**5.3**	8.0	**13.3**
Tarrawonga Seam	-	7.9	**7.9**	46.0	**53.9**
Templemore Seam	-	-	**-**	8.0	**8.0**
TOTALS	**197.2**	**244.4**	**441.6**	**237**	**678.6**

Sources: Maules Creek – March 2011, Phillip Sides

MMC has reviewed the Maules Creek structural and quality models and considers that they have been created correctly and to industry standards.

Resources have been estimated using cored holes with quality data, geophysical logs and core recovery greater than 95% as Points of Observation.

Tonnages have been adjusted to an in situ moisture basis (estimated at 7%) using the Preston Sanders formula to adjust RD from the air dried value. No minimum thickness or quality limits were set to constrain Resources.

The following distances between boreholes have been used to estimate Resources:

- Measured – 500 m
- Indicated – 1,000 m
- Inferred – 4,000 m

MMC has regenerated Resources for a number of seams at Maules Creek using Resource classification polygons provided within the JBMS geological model. No major discrepancy was found compared to the reported Resource tonnages. MMC could not check the conversion to a 7% in situ moisture basis as no moisture grids were supplied as part of the geological model.

3.5 Coal Quality

A key attribute of the Maules Creek deposit is its claimed high quality. The project is described in the DFS as low ash, low sulphur, high volatile bituminous coal with a high calorific value capable of producing a high quality thermal coal without washing, or a large proportion of low ash metallurgical coal with washing. The DFS incorporates a strategy of washing 94% of the ROM coal on a selective seam by seam basis to produce a product stream which averages 84% metallurgical coal.

In situ coal quality for the Measured and Indicated Resources within the Maules Creek project area is summarised in **Table 3.2**. This illustrates the very high contribution that the low ash seams such as the Braymont make to the Resource.

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Table 3.2 – Maules Creek In Situ Coal Quality

Seam	Contribution to 21-year mine ROM	IM	Ash	VM	FC	SE		TS	RD
	% by weight	% (adb)				MJ/kg	kcal/kg	%	
Herndale	3.45	3.6	14.1	36.9	45.4	27.2	6,486	0.80	1.36
Onavale	4.31	3.6	8.9	39.3	48.3	29.8	7,118	1.82	1.32
Teston	10.55	3.8	10.0	38.4	47.9	29.2	6,969	0.48	1.33
Thornfield	2.30	3.7	10.1	38.8	47.4	28.7	6,855	0.45	1.33
Braymont	29.70	3.7	8.9	35.5	52.0	29.6	7,070	0.36	1.33
Jeralong	8.54	3.4	10.4	34.9	51.3	29.1	6,952	0.36	1.33
Merriown	10.52	3.4	7.6	35.0	53.9	30.3	7,227	0.38	1.32
Velyama	5.64	3.2	10.2	36.6	50.0	29.4	7,014	0.39	1.33
Nagero	5.13	2.9	8.8	34.9	53.4	29.9	7,153	0.34	1.32
Upper Northam	5.19	3.0	10.8	35.6	50.5	29.1	6,948	0.38	1.35
Lower Northam	3.29	3.1	12.1	36.6	48.2	28.4	6,792	0.40	1.35
Therribri	7.04	2.9	9.5	39.0	48.7	29.6	7,069	0.40	1.32
Flixton	1.32	2.8	16.8	38.6	41.8	26.7	6,388	0.44	1.42
Tarrawonga	2.95	2.5	16.2	37.7	43.7	27.8	6,637	0.48	1.40
Templemore (*Inferred*)	0.07	-	-	-	-	-	-	-	-
Average	**100.00**	**3.4**	**9.7**	**36.2**	**50.7**	**29.4**	**7,019**	**0.44**	**1.33**

Source: Maules Creek DFS Table 5.1, Table 5.3

The DFS does not detail the product testing that has been undertaken historically, but does describe the recent work commissioned by AZT to obtain detailed knowledge of the coking potential of the individual seams.

The coal quality data provided by AZT indicate that the raw coal can be processed as either direct by-pass coal, washed coal or combinations of by-pass coal and washed coal to produce a SSCC, PCI coal or export thermal coal.

The DFS specifies the Maules Creek products as a mix of SSCC/PCI coal of 7% ash and a thermal coal of 9%. MMC has not sighted the quality source data; however, this strategy is supported by the report to Rio Tinto by EDI Downer Engineering (February 2010) "Preparation and Interpretation of the Maules Creek Coal Quality Data Base", which considers that these products can be reasonably expected to be produced from Maules Creek. Australian Laboratory Services (ALS) in their report "Summary of Coking Behaviour of Maules Creek Coal Plies" of August 2011 state that a competent coke can be expected from the Braymont, Jeralong, Merriown, Teston, Velyama and Nagero Seams.Other coal seams may have some coking potential but may be limited by the higher calcium levels.

Some good coking coal properties, sufficient to be potentially classified as a semi soft coking coal, are indicated. Inconsistencies in the coking coal properties are indicated; namely correlations between the Crucible Swelling Number with other coking coal indicators. MMC does not consider this a significant issue.

Relying on the recent testwork, AZT has scheduled the seams with coking potential to contribute 84% of the CPP feed; this is in alignment with internal Aston report, "Aston Resources Maules Creek Product Mix Derivation" (August 2011), discussing coking potential and the product mix ratios.

The insitu raw ash reported in the DFS is 9.7% and the DFS makes allowance for mine dilution that results in average ash of 12.8% with a range of 11% to 14% ash. This is considered reasonable and within normal industry parameters and would not be considered to adversely affect plant recoveries.

The average CPP yield is 85%. MMC considers that this is a reasonable estimate based on the F1.60 test results reported by A.B.Mylec in July 2011.

Taking into account the proportion of seams with coking potential in the CPP feed as well as the CPP yield the AZT estimate of 80.4% of SSCC in the Product Mix is considered by MMC to be reasonable.

3.6 Coal Reserves

Table 3.3 is a summary of the Reserves for the Maules Creek project as at 6th April 2011 prepared by Mr Doug Sillar of Minarco MineConsult. Mr. Sillar was not involved in the specialist team for this Technical Specialist Report.

MMC has reviewed the reserving methodology and on the basis of the available data confirm that the Reserves are based on the underlying Resources and that the appropriate methodology for applying the modifying factors has been applied. The Reserves have been calculated for a single open cut pit shell covering both CL375 and A346. The pit shell

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on which the Reserves have been based contains a total of 517 Mt of ROM coal of which 155 Mt are based on underlying Inferred Resources.

MMC notes that the Reserves estimate assumes that 67% of the ROM coal is washed, giving 51% metallurgical product and an average plant yield of 85%. This is significantly different to the proportion adopted by the July 2011 DFS; however it is consistent with the timing of the reports and of the latest quality testwork previously discussed and suggests that the Reserving assumptions need to be updated.

Table 3.3 - Maules Creek Open Cut Coal Reserves and Marketable Coal Reserves (Mt)

	A 346			CL 375			TOTAL		
	Proved	Probable	**Total**	Proved	Probable	**Total**	Proved	Probable	**Total**
Recoverable Reserves									
COAL RESERVE	**0**	**40.9**	**40.9**	**171.1**	**149.6**	**320.8**	**171.1**	**190.6**	**361.7**
Marketable Reserves									
Premium 7% Ash	0	16.2	**16.2**	70.9	81.2	**152.1**	70.9	97.4	**168.4**
Thermal 9% Ash	0	21.0	**21.0**	70.3	69.1	**139.5**	70.3	90.2	**160.5**
TOTAL Marketable	**0**	**37.3**	**37.3**	**141.3**	**150.4**	**291.6**	**141.3**	**187.6**	**328.9**

Notes: Estimate has been rounded to reflect accuracy.
Moisture is at 9% (ar) for Coal Reserves and 11% (ar) for Marketable Coal Reserves
Sources: Data Room Reference No. 07.01.00359 - Statement of Open Cut Coal Reserves - Doug Sillar

MMC considers the Maules Creek Reserves have been correctly estimated and conform to JORC standard, and recommends that the next round of Reserves be revised to reflect the latest washing strategy for the deposit.

4. MAULES CREEK MINING OPERATIONS

4.1 Key Outcomes

- The Maules Creek open cut mine consists of a planned single pit extending from Coal Lease 375 into Authorisation 346 (A346).
- Mining is proposed by contractors providing the majority of the mining equipment (not the large capacity fleet), with maintenance facilities being provided by the mine as part of the MIA.
- The DFS plan has a single contiguous pit throughout the mine life with significant initial out of pit (OOP) waste disposal followed by haul-back in pit dumping and progressive rehabilitation.
- The DFS plan produces 333 Mt of ROM coal at a nominal rate of 13 Mtpa over 30 years.
- The DFS mining method, mine plan and sequence are appropriate and competently conceived.
- The production quantities have year to year variability of product railing and shipping tonnage which will probably be rationalised with subsequent detailed scheduling.

4.2 Maules Creek Mine Plan

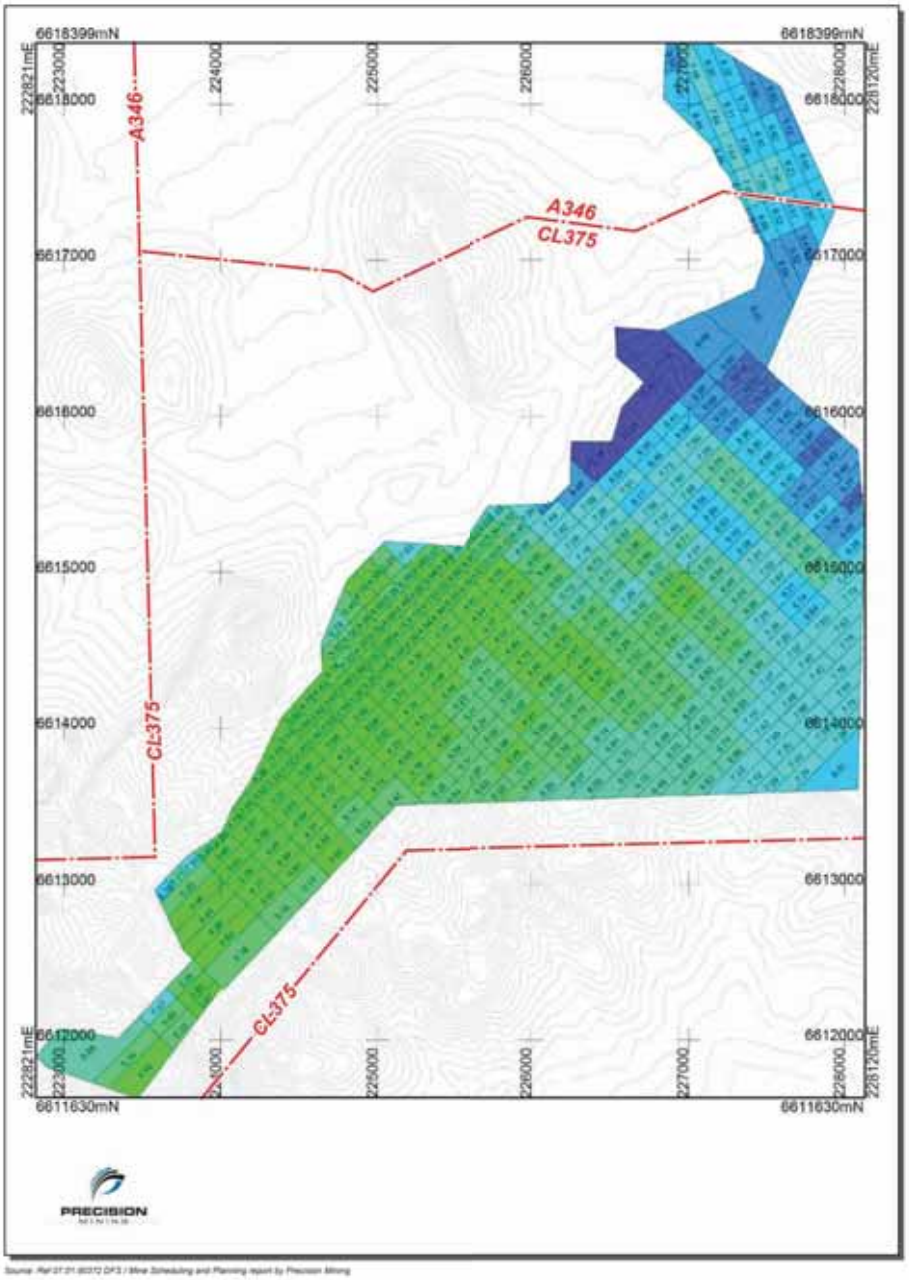
The Maules Creek Project is located within CL375 and A346. The proposed mine abuts Idemitsu"s Boggabri open cut mine to the south and is in close proximity to WHC"s Tarrawonga open cut (**Figure 1.1**). The mine will be connected to markets by a proposed rail spur connecting to the Gunnedah to Newcastle rail system, with an 8 km section of rail spur shared by joint venture with Boggabri.

MMC has reviewed the mine plan as detailed in the Maules Creek DFS of July 2011: the review has made allowance for subsequent minor modifications and updates to project timing that are incorporated into the AZT Business Model.

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The block layout for the DFS open cut mine is shown in **Figure 4.1**. This does not include a large area of the pit shell which was used for the estimation of the Reserves; this area remains as a possible extension to the north in A346.

Figure 4.1 - Maules Creek Mine Block Layout



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4.2.1 ***Bench Layout and Sequence***

The mine is planned to be a traditional truck-shovel or truck-excavator benching operation with the mining of strips consecutively down dip of the sub crop of the coal seams. Individual coal seams will be mined selectively as they are exposed on each bench. The DFS document and the associated report by Precision Mining (Precision Mining - Planning and Scheduling Report) describe the method for the deep multi seam operation required. The full sequence of seams will be uncovered and mined within the width of about two strips, minimising requirements for parallel berm haulroads. This allows early access to the completed pit floor for mining and in pit dumping. The pit floor dips to the south east.

The mine plan takes into account geotechnical considerations, with highwall and end-wall batters of 55°, and access ramps within each advancing strip. It appears to be competently conceived and has considered the appropriate key design parameters.

The mine boxcut commences at the centre ramp adjacent to the MIA and develops to establish a working area down dip to the east of the ramp before progressively extending to the southern end of the pit. Over the 30-year planning period of the DFS the mine progresses to the north and south extents of the Reserves in CL375 at a nominal mining rate of 13 Mt ROM coal per year with mining commencing in A346 in the final year of production. The mine will extract 333 M ROMt during this period.

MMC have reviewed the planned mining method, block layout and sequence and considers that they are appropriate to the deposit and to the selected method of mining.

4.2.2 ***Waste Disposal***

Initial waste disposal is to out of pit dumps with boxcut material being used in the construction of level areas for the MIA, as well as dumps to the west of the boxcut either side of the central ramp. A separate larger dump is to be created to the north of the MIA on the western side of the future boxcut limit, extending north into the project area covered by A346. A total of 420 Mlcm of dump volume is available in these out of pit dumps, which is 16% of the total 30 year waste mining volume. Allowance has been made in the planned dump volumes for material swell.

4.2.3 ***Mining Method and Major Equipment***

Mining is based on a contract truck-shovel/excavator operation: all mining equipment, except for a large capacity fleet, will be owned by the contractor with workshop and support facilities provided by the mine. An estimate of the DFS equipment fleet capacity by fleet size is shown in **Table 4.1**.

The mine plan presented in the DFS is appropriate to the scale of equipment described.

Table 4.1 - Maules Creek Mining Fleet Capacity

Unit	Annual Capacity kbcm p.a.	Number of units	Annual Fleet Capacity kbcmpa	Number of units	Annual Fleet Capacity kbcmpa
		DFS Year 3		DFS Year 18	
52 cm - 980 t. Shovel	17,600	3	52,800	3	52,800
326 t. RD truck	3,114	17	52,938		
	2,712			20	54,240
34 cm - 650 t. Excavator	10,800	2	21,600	3	32,400
230 t. RD truck	1,964	10	19,640		
	1,693			15	25,398
22 cm. - 359 t. Excavator	7,600	1	7,600	1	7,600
22 cm. - 250 t. Excavator	4,600	1	4,600	1	4,600
190 t. RD truck	1,676	6	10,056		
	1,453			10	14,527
Loading Capacity		**7**	**86,600**	**8**	**97,400**
Truck Indicative Capacity		***33***	***82,634***	***45***	***94,164***

Source: Excavators Data DFS Table 9.25; Truck productivity is a generic estimate with initial 3 km haul, 100 m lift, and 4 km haul 100 m lift at year 18. Truck numbers are indicative and not based on a detailed *analysis.*

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A brief analysis of fleet requirements has been undertaken by MMC to check whether the anticipated scale of the fleet is realistic, and the likely impact on contract mining costs.

The initial excavator fleet (Year 3) has a nominal capacity of 87 Mbcm per year. The combined waste and coal haulage requirement has a maximum of 95.5 Mbcm and an average of 82.1 Mbcm. The initial loading capacity is not exceeded until year 18 (CY2030) and this is satisfied with an additional 650 tonne excavator to give a combined fleet capacity of 97 Mbcm.

As a contract operation, the capital requirements would be met by the contractor and absorbed into the estimated unit cost of production.

The truck capacities quoted above are indicative estimates based on haul distances approximated from the mine plan at the two points of time to demonstrate that the mine plan and equipment specification seems reasonable. More trucks will be required in the first two years when the majority of dumping is out of pit: from there the truck fleet varies year by year to meet the haulage requirements of volume, distance and elevation. MMC has not undertaken detailed haulage analysis to validate these estimates, but note that this fleet would match the excavators and be capable of achieving the initial 86 Mbcm annual production level in reasonable circumstances. In the later stages of the mine a larger proportion of haulage will be back-haul to in pit dumps.

The nature of a contract operation is that a major contractor can bring in additional trucks and operators for peak periods, and the cost is absorbed into the unit rate; although the contract rates will normally have a haul cycle related variable component, and a mobilisation – demobilisation charge for incremental capacity.

MMC conclude that the fleet size presented in the DFS is reasonable and that the pit configuration is appropriate to support the scale of operation.

A higher unit rate has been incorporated into the Business Model in the first two years for waste removal, and in the first and later years for coal mining corresponding to longer hauls to the ROM dump station.

4.3 LOM Production Schedule

AZT have provided a Business Model for review by PwC. The model is based on the Maules Creek DFS, with minor variations and changes in timing. MMC has reviewed the schedule, informed by the DFS document.

Two schedules are referred to in the DFS – a 21 year schedule for the mine lease applications and environmental assessment and a 30 year schedule for economic evaluation. This review has relied on additional detail from the 21 year schedule, with current estimates of start-up timing and tonnage to adjust the initial tonnage and provide details of product split and plant yield.

Table 4.2 presents the DFS scheduling quantities, adjusted by MMC to allow for these changes. The quantities presented do not include the capitalized boxcut excavation which is carried out in 2012 and the first part of 2013, and is costed separately as a capital item.

This report has accepted the start-up timing and initial ROM mining quantity presented by AZT to the review team on 9th January 2012 as the basis for the 2013 production. This specified 1.7 Mt sales (0.8 Mt Thermal coal and 0.9 Mt SSCC Coal) which is estimated to require 1.93 Mt of ROM coal. MMC have revised the coal uncovery rate to balance the DFS coal inventory level and the stripping rate to maintain the DFS inventory of stripping in advance.

Bypass percentage and plant yield have been estimated on a year by year basis from the 21 year schedule presented in the spreadsheet "SSCC Mix Justification 110807": default values of 6% bypass and 85% yield have been adopted when values are not available from that source.

The proportion of metallurgical product (SSCC sales) is taken from the presentation of 9th January 2012 (which only specifies the first 8 years); thereafter it has been derived from the 21 year schedule referred to above and otherwise as a default value of 80%.

MMC notes that the Business Plan schedule runs to CY2045, which is beyond the CY2042 30-year duration of the DFS. The mine plan is unlikely to stop at 30 years, but will probably continue north into the remaining JORC Reserves pit shell. MMC has advised PwC to continue the remaining 3 years of the Business Model at the incremental waste ratio of 8.0 bcm per ROMt.

Variability of Scheduled Quantity

The quantities resulting from the production schedule exhibit year-on-year variation which would be smoothed by more detailed planning. A more conventional scheduling approach would have the following steps:

- Target constant product tonnes within the constraint of maximum washplant feed tonnage by varying bypass proportion if possible to achieve the target product tonnage; ROM tonnes mined would vary slightly to accommodate bypass and plant yield variations; and
- Manage waste quantity by stepped increases in excavation and trucking capacity and fluctuating manageable levels of Stripping in Advance (SIA) inventory.

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It is not within the scope of this review to recommend major revisions to the mine schedule and it is not certain that any such changes would have a material impact on project valuation, but it would appear more reasonable to have such stability for optimum planning and use of rail and port allocations.

It is reasonable that some additional Reserves would be achieved and that some extension of mine life would result, therefore it is not likely that the operation would taper to closure immediately at the end of the 30 year period considered.

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Table 4.2 – Maules Creek LOM Production Schedule

Year	ROM (Mt)	Waste (Mbcm)	Waste Ratio	Bypass (Mt)	Bypass (%)	Plant Feed (Mt)	Plant Product (Mt)	Plant Yield (% ar)	SSCC Product (Mt)	Thermal Product (Mt)	Total Shipped (Mt)
CY2013	1.9	13.1	6.8	0.4	18.2%	1.6	1.3	85.5%	0.9	0.8	1.7
CY2014	6.5	50.3	7.7	1.6	25.2%	4.9	4.2	86.0%	4.5	1.4	5.8
CY2015	12.0	72.9	6.1	0.8	6.7%	11.2	9.6	86.1%	8.8	1.6	10.4
CY2016	12.8	72.7	5.7	1.6	12.5%	11.2	9.8	87.3%	9.5	1.9	11.4
CY2017	12.5	74.5	6.0	1.3	10.4%	11.2	9.7	86.4%	9.1	1.8	11.0
CY2018	12.0	74.6	6.2	1.3	10.8%	10.7	9.3	87.1%	8.7	2.0	10.6
CY2019	12.5	74.4	6.0	1.3	10.4%	11.2	9.8	87.3%	8.9	2.2	11.1
CY2020	12.5	74.4	6.0	1.3	10.5%	11.2	9.8	87.5%	8.9	2.2	11.1
CY2021	12.5	74.3	5.9	1.3	10.4%	11.2	9.7	86.7%	8.3	2.7	11.0
CY2022	12.5	74.5	6.0	1.3	10.4%	11.2	9.7	86.3%	9.4	1.6	11.0
CY2023	12.0	74.5	6.2	0.8	6.7%	11.2	9.8	87.3%	9.3	1.3	10.6
CY2024	11.5	74.4	6.5	0.3	2.6%	11.2	9.7	86.6%	8.3	1.7	10.0
CY2025	12.5	74.4	6.0	1.3	10.4%	11.2	9.8	87.5%	9.6	1.5	11.1
CY2026	12.5	74.5	6.0	1.3	10.4%	11.2	9.8	87.6%	10.0	1.1	11.1
CY2027	11.5	74.3	6.5	0.3	2.6%	11.2	9.7	86.5%	8.1	1.9	10.0
CY2028	10.9	74.3	6.8	1.3	11.6%	9.6	8.4	87.4%	8.2	1.5	9.7
CY2029	12.5	74.5	6.0	1.3	10.4%	11.2	9.8	87.2%	9.4	1.7	11.1
CY2030	12.5	85.7	6.9	1.3	10.4%	11.2	9.7	87.0%	10.1	0.9	11.0
CY2031	12.5	85.8	6.9	1.3	10.4%	11.2	9.7	86.8%	9.0	2.0	11.0
CY2032	13.0	85.3	6.6	1.8	13.8%	11.2	9.8	87.6%	10.0	1.6	11.6
CY2033	12.5	85.4	6.8	1.3	10.4%	11.2	9.7	86.9%	9.6	1.4	11.0
CY2034	10.0	85.3	8.5	0.6	6.0%	9.4	8.0	85.0%	6.9	1.7	8.6
CY2035	9.2	85.5	9.3	0.6	6.0%	8.6	7.4	85.0%	6.3	1.6	7.9
CY2036	13.0	85.4	6.6	1.8	13.8%	11.2	9.5	85.0%	9.1	2.3	11.3
CY2037	11.8	85.3	7.2	0.7	6.0%	11.1	9.4	85.0%	8.1	2.0	10.1
CY2038	11.0	85.2	7.7	0.7	6.0%	10.3	8.8	85.0%	7.6	1.9	9.4
CY2039	11.0	83.1	7.6	0.7	6.0%	10.3	8.8	85.0%	7.6	1.9	9.4
CY2040	10.8	69.7	6.5	0.6	6.0%	10.2	8.6	85.0%	7.4	1.9	9.3
CY2041	6.0	64.8	10.8	0.4	6.0%	5.6	4.8	85.0%	4.1	1.0	5.2
CY2042	8.7	47.5	5.5	0.5	6.0%	8.2	6.9	85.0%	6.0	1.5	7.5
TOTAL	**333.1**	**2,210.4**	**6.6**	**31.0**	**10.2%**	**302.1**	**261.1**	**86.4%**	**241.5**	**50.5**	**292.1**

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5. MAULES CREEK ENVIRONMENT AND MINING PERMITS

5.1 Key Outcomes

- The Maules Creek project holds an appropriate tenement CL375 for mining.
- Planning application expected to be determined in Quarter 2, CY2012.
- The project is not significantly constrained by land ownership and land use factors.
- Key environmental factors are expected to be appropriately managed and will not provide fatal flaws or critical risks to project success.

5.2 Leases, Titles and Approvals

Aston acquired the Maules Creek Coal Project (the **Project**) from Namoi Valley Coal Pty Limited on 18 February 2010. The renewal application to Industry & Investment NSW by Aston dated 1 June 2011 for the key tenement CL 375 outlines the background to the tenement and project status which is referred to in this section.

The Maules Creek project:

- Comprises the mining authorities CL 375 and A 346; and
- Interests in related contracts, approvals and licences, including water licences; and
- Has now been augmented by Aston"s acquisition of areas of freehold (and some leasehold) land in the vicinity of the mining authorities.

Table 5.1 lists the mining tenements associated with Maules Creek open cut project.

Table 5.1 – Maules Creek Lease and Mining Titles

Tenement	Expiry Date	Area (ha)	Description
Mining Leases			
Coal Lease CL 375 MLA 404 [& MLA 400]	4/6/2012	4154	Largely covers Leard State Forest area; Title transferred to Aston Coal 2 Pty Ltd and ICRA MC Pty Ltd; Only MLA 404 is listed on TASMAP database, indicating that Aston Coal 2 Pty Ltd applied for MLA 404 on 30/5/2011; Possibly MLA 400 referred to in data room information may have become ELA 4408 (?);
Exploration Licenses			
Authorisation A 346 ELA 4408	Renewal Pending (last expiry date 27/2/2011)	1662	Covers the between north Leard State Forest and north to Maules Creek; I&I NSW acknowledged receipt of application in letter 4/2/11; A406 is in respect of the surface and land below to a depth of 20 m and overlays the sub-surface portion of CL 375; Transferred to Aston Coal 2 Pty Ltd and ICRA MC Pty Ltd. Applied for 20/10/2011; covers the area abutting the northwest corner of CL 375;

Grant of CL 375
CL 375 was granted on 4 June 1991 to Coal Cliff Collieries Pty Limited for a period of 21 years. The coal lease:

- Has a total area of 4,154 ha;
- Is in respect of the surface and land below to an unlimited depth over an area of 2,492 ha; and
- Excludes the surface and land below to a depth of 20 m (but is otherwise to an unlimited depth) over an area of 1,662 ha.

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At the time CL 375 was granted, A 346 was modified to retain surface exploration rights over the surface of the land which overlays the sub-surface portion of CL 375. On 11 July 2003 the (then) Minister for Mineral Resources approved the addition of petroleum to CL 375.

Condition 24 of CL 375 is a special condition whereby the licence holder must make every reasonable attempt, and be able to demonstrate their attempts, to enter into a cooperation agreement with any overlapping titleholder(s). This appears to relate to overlapping petroleum titles whereby the relevant petroleum tenements in the Vickery area are PEL 1 in the eastern majority of the area held by Australian Coalbed Methane Pty Limited which expires on 10 February 2015 and PEL 464 in the western part of the Vickery project area held by Macquarie Energy Pty Ltd which expired on 22 November 2011. No details were sighted in relation to management activities relating to Condition 24.

No mining has been conducted within CL 375 to date.

Renewal of CL 375
CL 375 expires on 4 June 2012. In accordance with section 113(2)(c) of the Mining Act, the renewal application for CL 375 was lodged at least one year prior to the expiry date.
Aston sought renewal of CL 375:

- Over its entire area;
- For a period of 21 years; and
- In respect of coal only.

The renewal application for CL 375 included a cost estimation of maximum rehabilitation requirements in the period of a forthcoming Mining Operations Plan period. Using standard methodology, the estimated rehabilitation cost (for premature closure) was calculated to be $122,380,000 ($122M).

Aston seeks to have petroleum removed from the application of CL 375.

Grant of A 346
A 346 is the only remaining exploration authority associated with the Maules Creek Coal Project. A 346 was originally granted on 28 February 1984 and expired on 27 February 2011. An application seeking renewal of the entire area of A346 for a period of five years was lodged on 4 February 2011. The authority continues to have effect pursuant to section 117(1) of the Mining Act. A 346 covers an area of 1,662 hectares (ha), is in respect of the surface and land below to a depth of 20 m and overlays the sub-surface portion of CL 375.

The planning consent for the Maules Creek project dates back to1990 whereby the Minister for Local Government and Minister for Planning was the consent authority for the development application that was originally submitted to Narrabri Shire Council and then "called in" under s101 of the *Environmental Planning and Assessment Act 1979*. A new and comprehensive State level planning application is currently underway.

Table 5.2 lists the State level development consent for Maules Creek mine.

Table 5.2 - Maules Creek Development Consent

Development Consent No.	Consent Authority	Approval Date	Approved Operations
DA 85/1819	Minister for Planning	12/6/1990	Construction and operation of a surface and underground coal mine, associated transport and coal loading facilities and railway spur line. (Project described in full in EIS dated 8/10/1999)
MP10_09747	Minister for Planning delegated to the Planning Assessment Commission (PAC)		Project application lodged under Part 3 A of the EP&A Act on 16/8/2010 (original designation as 10_0138)

Grant of Development Consent
The (then) Minister for Planning granted DA 85/1819 to Kembla Coal and Coke Pty Ltd on 12 June 1990 under Part 4 of the *Environmental Planning and Assessment Act 1979* NSW (**EPA Act**) (**1990 Consent**).

The 1990 Consent has been physically commenced. It remains in effect (until 5 June 2012) and authorises the „construction and operation of a surface and underground coal mine, associated transport and coal loading facilities and railway spur line".

The rights under the1990 Consent have to date not been exercised by project owners and, accordingly, coal production has not progressed after the commencement of the development consent.

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Current Planning Application
Aston lodged a project application with the Director-General of the Department of Planning (**DP&I**) under Part 3A of the EPA Act on 16 August 2010. An environmental assessment report was subsequently lodged and exhibited for public and agency review and comment. A Planning Assessment Commission panel is conducting a review of the project which included a public hearing session in Boggabri on 23 November 2011. The PAC panel is understood to have targeted a completion date in late February 2012 for its review report. The PAC report will be placed on public review and submissions may be called for from stakeholders. The DP&I will prepare a Director-General"s Assessment report which will form part of the consideration of the project by another panel from the PAC which will determine the project as the consent authority (delegated by the Minister for Planning and Infrastructure).

While there are no set timeframes for this stage of final project assessment and approval, it is expected that the project would be determined in 2Q 2012.

Environment Protection Licence
The then project mine owner (Namoi Mining Pty Ltd, a subsidiary of Coal & Allied) applied to the Environment Protection Authority (EPA) on 7 February 2003 for the site"s Environment Protection Licence (EPL5112) to be surrendered. This was approved on 14 March 2003 and, accordingly, there is no EPL in place nor required for the project at this time.

5.3 Land Ownership and Land Use

All land to be directly affected by the project (mining and infrastructure) is either in ownership of Aston, another coal company, or is under option to purchase by Aston. The project will be located predominantly within the Leard State Forest. Under the *Brigalow and Nandewar Community Conservation Area Act 2005* NSW, the value of the coal resource within Leard State Forest was recognised by including the forest within Zone 4 which facilitates the purposes of, amongst other things, mineral extraction.

Several properties have been purchased in the northern section of CL 375 and along the western boundary of the mining authorities to facilitate the development of the Project and related infrastructure. A number of properties are under option or otherwise are being purchased but are yet to be finalised which amount to a total areas of approximately 5,000 ha. These comprise buffer zone properties as well as properties in the region for potential conservation offset purposes.

The surrounding properties in the region involve mainly cattle grazing and some cropping on the lower slopes. The area is not regarded as part of the high value Liverpool Plains alluvial lands that have dominated the agricultural land protection issue in recent years.

The project is not significantly constrained by land ownership and land use factors.

5.4 Key Environmental Factors

The project has been closely scrutinised through a public assessment and review process as part of the current approvals regime. The key issues arising from this process are:

- Managing biodiversity impacts and establish scientifically sound conservation offsets strategy;
- Minimising amenity impacts on the nearest residences due to noise, blasting, dust and visual impacts;
- Understanding the impacts on groundwater conditions and surface flow connectivity (if any) for the mine alone as well as from the cumulative impacts from the cluster of mines in the district;
- Land ownership and land use impacts (including agricultural and forestry);
- Local social transformation from new workforce and housing, with pressure on local services;
- The effects of the mine(s) on surface water Resources, water availability/supply through the relevant water sharing plans, and agricultural water use patterns (including competition for water);
- Maximise rail haulage of coal;
- Proper management of waste, including tailings, and control of pollution risks;
- Greenhouse emission management; and
- Landscape management and rehabilitation.

It is considered that each of these factors can be appropriately managed with in accordance with environmental management plans and will not provide fatal flaws or critical risks to project success.

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6. MAULES CREEK SITE INFRASTRUCTURE

6.1 Key Outcomes

- The Maules Creek CHPP facility is designed with site preparation and construction to commence once final approvals are in place. A stage 2 coal handling system to allow concurrent bypass operation and better stockpile management and train loading is planned to be implemented when the plant reaches capacity in year 3.
- Current and planned site infrastructure is considered adequate to support current and future mining operations based on the provided information.
- The MIA includes heavy equipment workshops and support facilities provided by the mine owner for use by the contractor.

6.2 Overview

The Maules Creek mine is planned to be self-contained with a dedicated mine infrastructure area including CHPP, rail loadout and rail loop leading to a spur line onto the main Gunnedah rail corridor. The rail spur will be partly shared with the neighbouring Boggabri mine.

6.3 Coal Handling and Preparation Plant

Sedgman Limited have undertaken the design of the Maules Creek CHPP, as well as the equipment selection and capital forecast.

It is proposed to build the CHPP in two stages:

- Stage 1 will consist of a CPP of two 800 tph modules, each consisting of a dense medium cyclone and two reflux classifiers with appropriate raw coal handling, product coal, and reject handling systems, an 1,800 tph raw coal bypass system and a simplified train load out system.
- Stage 2 will add more flexibility to the coal bypass system, and an upgraded product handling and train load out system.

In Stage I the CPP and bypass system cannot be operated simultaneously; hence to obtain the maximum flexibility and to reach to the 13 Mtpa production output Stage 2 should be implemented.

No washability data or plant modelling was available to be reviewed by MMC. However, based on industry experience the CHPP design parameters appear to be adequate.

Sedgman have outlined yield expectations shown in **Table 6.1**.

Table 6.1 – Maules Creek Yield Estimates – Sedgman

	Primary DMC (ad%)	Reflux Classifier (ad%)
Maximum	90	90
Nominal	75	75
Minimum	60	60

Predicted plant yield (for coal washed) from the mine plan averages 86.4% based on a separation density of 1.6.

No data on tailing settling and consolidation rates and costs were sighted by MMC.

A review of the flow sheet, selected equipment and material flows indicated a sound approach and MMC has identified no obvious concerns: however without consideration of washability data and plant modelling this is a limited view.

The proposed 1,600 tph CHPP has an annual capacity of 11.2 million ROM tonnes per annum (using the DFS annual operating hours of 7,000) and the by-pass coal system is designed for concurrent throughput of 1,800 tph (12.6 Mtpa). While the total theoretical throughput is high (23.8 Mtpa), the DFS and other documents have indicated a nominal bypass percentage of 6%. This would restrict maximum throughput to 11.9 Mtpa.

Discussion has been held with AZT personnel, who have indicated that they expect that:

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- The bypass percentage will be greater than 6%;
- The CPP operating hours will average 7,200 per year; and
- The CPP rate of 1,600 tph will be exceeded.

The mooted increase in capacity is quite possible given the following considerations:

- The increase in plant operating hours from 7,000 hours per annum to 7,200 hours per annum reflects that expected from normal well run plants; and
- On considering the capacity of the plant"s key separation equipment; the main screens are 4.3 m wide (where 3.6 m screens could have been used for the 800,tph modules), the 1,400,mm diameter heavy medium cyclones have more than adequate capacity and the flexibility offered with four reflux classifiers there is confidence the plant has the potential to exceed design capacity.

It is MMC"s view that it is reasonable to expect the CHPP to handle 13.0 million ROM tonnes per annum.

It is noted however, that support for an increase in washplant capacity is not documented in the DFS or design documents. In the 30 year quantity schedule incorporated in the Maules Creek DFS, the proportion of bypass ranges from 1.5% (Yr12) to 25% (Yr2) with an average of 6.4%.

For the purpose of the Business Model, MMC has recommended a revised quantity schedule (**Table 4.2**) based on a maximum of 11.2 Mtpa plant feed with the remainder of the coal mined going to bypass. This gives an average of 10.2% bypass and will achieve the annual process requirements.

Given that 17.3% of the total product is designated as thermal coal, it is felt that this approach is both more conservative, and unlikely to have a material impact on value.

6.4 Power and Water

High Voltage reticulation of power to the site will originate from the existing TransGrid 132 kV powerline at the point where it crosses the Kamilaroi Highway, with approximately 8.5 km of new 132 kV powerline across the Namoi floodplain to a new TransGrid/Aston 132/22 kV substation.

Maules Creek has an extensive water management plan, with provision to capture and utilise site water as well as managing runoff and pit water in accordance with environmental requirements. The main supplementary source of water to ensure continuity of operations and meet requirements for potable, process and industrial water is a proposed pipeline delivering water from the Namoi River to the mine industrial area. A 3,000 ML Water Access Licence has been secured. The 8.9 km pipeline will deliver water from a pump station on the river, connecting with the rail and transport corridor and following the railway line for the last 4.5 km into the mine.

6.5 Mine Industrial Area (MIA)

A comprehensive MIA, CHPP, Stockpile and Rail Loadout are grouped on the central Western side of the project area (towards the northern part of the existing CL375), serviced by the mine access corridor to the south west. The mine access corridor contains the railway spur line, the sealed mine access road, the raw water pipeline, 22 kV (and subsequent 132 kV) power lines, as well as communications lines servicing the mine.

The MIA includes heavy vehicle workshops and support facilities suitable for the proposed mine equipment fleet, and for use of the contract mining operator. The review notes that provision of these facilities should have a positive (beneficial) impact on contract rates, and is a contributor to projected contract rates for the operation which could otherwise by higher.

7. MAULES CREEK OPERATING AND CAPITAL COSTS

7.1 Key Outcomes

- MMC believes the assumptions used in estimating operating costs in Aston"s LOM plan are, in the main, appropriate and reasonable.
- The capital costs included in the DFS and the evaluation model are consistent subject to timing differences, and are appropriate to support the development and planned production in the LOM plan.
- MMC recommends minor changes to coal mining and CHPP operating costs.
- MMC recommends a minor increase to Maintenance Capital.

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7.2 Operating Costs

Future operating cost estimates were provided in the the DFS and summarised at a high level in the AZT Business Model. The DFS costs are comprehensive and cover the mining, processing, transport and government charges in getting the coal to the port.

As a developing project, no cost history is available to check operating cost assumptions and MMC has therefore cross referenced unit costs against similar sized operating mines elsewhere.

In MMC"s opinion, cost trends within the Company"s model reflect the key cost drivers in the mine plan. Where, in MMC"s assessment of costs there appears to be a material issue MMC has made appropriate adjustments to the Business Model input assumptions.

In some cases the proposed costs appear on the low end of the current industry range, but MMC consider that in the main the rates listed are achievable. After completing the analysis of operating cost, MMC recommends the following adjustments to operating costs in the Business Model:

- Increase coal mining cost to an average $3.50/ROMt; and
- Increase CHPP costs by between $0.25 to $0.30 per ROMt.

7.3 Capital Expenditure

The capital expenditure for the Maules Creek project valuation model consists of three components.

1. Initial capital expenditure to establish the project to first delivery of coal. This includes land acquisition and approvals, infrastructure and operations establishment, capitalised boxcut development, working capital (estimated as two months of operating costs between delivery and receipt of payment) and project contingency.
2. Stage 2 CHPP expenditure including duplication of the ROM receival and sizing systems to allow concurrent operation of the bypass handling, addition of two 300,000 tonne stockpile areas and mechanised (bucket wheel) reclaim for train loadout operation.
3. Sustaining capital for minor equipment replacement and additions and capitalised infrastructure refurbishment over the mine life, commencing after start of operations.

Initial Capital Expenditure

The initial capital expenditure is estimated at various stages of the project development and detailed in the DFS as $719M. This number has been changed and reconciled during the project design and development stages as capital estimates have been developed and adjusted. The Business Model has an estimate of $728M, including $548M expenditure in CY2011 and CY2012. The model includes an estimate for expenditure to date (Calendar Year 2011) and so is in the position of becoming a record of expenditure and reforecast against budget. The difference between the DFS and the Business Model values is $9 M, or +1.3% and is not considered material.

The capital cost forecast for the CHPP Stage 1 is $236M (plus earthworks and contingency). This is consistent with other 2011 capital cost forecasts for similar CHPP facilities.

The estimates provide for the establishment of a transport corridor including a 16 km rail spur and rail loop connecting with the Gunnedah rail system near the existing Boggabri rail loop. This rail spur includes 51.92% share of a joint venture with Boggabri Coal covering 7.9 km of railway and a significant viaduct (1.1 km of elevated track at a height of up to 18 metres across the Namoi River flood plain). The cooperative development of the rail spur provides a major improvement in regional coal transport, eliminating road haulage for significant quantities of coal by Maules Creek, Boggabri and Tarrawonga through their joint venture with Boggabri.

MMC have not checked the cost estimates for this capital; however, MMC have reviewed the capital elements for completeness with respect to mine requirements, and for consistency with general industry levels for these types of expenditure. They appear comprehensive and reasonable.

Stage 2 CHPP Expansion

The stage 2 CHPP expansion, providing the CHPP with a second coal sizing system, a second stacker and second reclaim line and with bucket wheel reclaimer is a relatively sophisticated and thus expensive for a minesite system compared with for instance a covered reclaim conveyor with coal valve reclaiming. It does however provide a number of pertinent advantages:

- Significant stockpile area and blending capability relevant to the project aspiration of achieving a high proportion of metallurgical coal;
- High train loading rates necessary to minimise rail costs and maximise capacity on a relatively constrained rail network; and
- Low operating costs with the potential for unmanned operation of the stacker and reclaim system.

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This review considers that to achieve production levels of 13 Mtpa ROM, to manage the multiple coal types and blending at this level, and to achieve acceptable train loading performance, this additional expenditure is prudent.

Sustaining Capital

The ongoing maintenance and support capital provides annual expenditure for replacement and addition of light vehicles, workshop and management equipment and facilities, and recurring major refurbishment expenditure for the CHPP and workshop facilities on a seven year period. MMC has not reviewed the requirement and level of this expenditure in detail but considers the magnitude to be consistent with industry practice.

After completing the analysis of capital costs, MMC recommends the following adjustments to operating costs in the Business Model:

- Revise Maintenance Capital to $1.5 M per year (5 months of 2013); and
- Allow an additional $10 M every seven years for major refurbishment, commencing CY2019.

8. VALUATION OF RESIDUAL MAULES CREEK RESOURCES

8.1 Key Outcomes

- A total of 237 Mt of Inferred Resources remain outside the mining model for Maules Creek.
- The estimated value is $23M to $46M.

8.2 Unscheduled Maules Creek Resources

MMC has undertaken an estimate of the value of the Resources which have not been included in the Maules Creek mine plan or Maules Creek Business Plan model.

The Maules Creek LOM plan and associated open cut pit shell have been laid over the total Measured and Indicated Resource polygons defined in the Resources Report, within the CL 375 and A 386 tenements. Based upon the area of the remaining polygons, MMC has estimated the remaining JORC Resources beyond the LOM model to be 237 Mt of Inferred Resources based on the resource estimates shown in **Table 3.1.**

In deriving a value for these Resources MMC has reviewed a number of recent coal property transactions to ascribe appropriate value modifiers for the Resources depending on their classification, status of possible reserves inclusions and potential for latent exploitation (refer **Appendix A**). For the residual Inferred Resources MMC has estimated a unit value range of $0.10/t to $0.27/t resulting in a value on a 100% basis for the remaining Maules Creek Resources of between $24M and $65M.

9. WHITEHAVEN OVERVIEW

9.1 Key Outcomes

- Four open cuts and one underground in operation.
- One new open cut being planned.
- Expanding from 5.2 Mtpa to 16.0 Mpta of ROM coal by FY2018.
- Some coal is washed with the balance bypassed.
- Coal will be loaded onto trains from 4 locations and will be railed to Newcastle for shipment.
- The coal is sometimes blended from second sources to smooth out quality variations.

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9.2 Location and Background

The Gunnedah Coalfield is located to the northwest of the Hunter Coalfield in New South Wales. This area has been extensively explored and has a history of mining over many decades. The Whitehaven Coal assets are centred within the Gunnedah to Narrabri area and are shown on **Figure 1.1**. Gunnedah is approximately 320 km by rail to the Port of Newcastle where the majority of coal is dispatched for export.

The mines, projects and exploration areas together with their status within the Gunnedah region in which Whitehaven Coal has an interest are detailed in **Table 9.1**.

Table 9.1 – Status of Whitehaven Coal Assets

Asset	Equity	Mining Title	Status	Mining Method	Coal Type
Canyon	100%	ML1464, ML1471	Under Rehabilitation	n.a	n.a
Tarrawonga O/C	70%	ML1579, EL 5967	Operating	Truck and shovel	Thermal, PCI, SSCC
Sunnyside	100%	ML 1624, EL5183	Operating	Truck and shovel	Thermal
Rocglen O/C	100%	ML 1620	Operating	Truck and shovel	Thermal
Werris Creek O/C	100%	ML1563, EL5993, EL7422	Operating	Truck and shovel	Thermal, PCI
Narrabri North U/G	70%	ML1609	Operating	Underground Longwall	Thermal, PCI
Narrabri South U/G	70%	EL6243	Project	Underground Longwall	Thermal, PCI
Tarrawonga U/G	100%	EL5967, ML5967	Project	Underground Bord & Pillar	Thermal, PCI
Vickery O/C	100%	CL316	Project	Truck and Shovel	Thermal, PCI, SSCC
Vickery U/G	100%	CL316	Exploration	-	Thermal, PCI, SSCC
Canyon Extended	100%	CL316, EL4699, ML1471	Exploration	Truck and shovel	Thermal, PCI, SSCC
Blue Vale O/C	100%	EL4699, CL316	Exploration	Truck and shovel	Thermal, PCI, SSCC
Merton O/C	100%	ML1471, Ml1474, EL4699	Exploration	Truck and shovel	Thermal, PCI, SSCC
Sunnyside Extension OC & Block 7 OC	100%	EL5183, CCL701	Exploration	Truck and shovel	Thermal
Sunnyside Extension UG & Block 7 UG	100%	EL5183, CCL701	Exploration	Underground Bord & Pillar	Thermal

Note: The Canyon, Blue Vale, Sunnyside Extension, Block 7, Vickery U/G and Tarrawonga U/G exploration areas are not described in this report.

Whitehaven also has an interest in two deposits in the Ashford area north of Inverell in northern New South Wales (**Figure 1.1**). The deposits and their status are shown in **Table 9.2**. These areas are not described in this report.

Table 9.2 – Ashford Assets

Asset	Equity	Mining Title	Status	Mining Method	Coal Type
Brunt Pod	100%	EL6450	Exploration	Open cut	Metallurgical
Arthurs Seat	100%	EL6587	Exploration	Open Cut	Thermal, Metallurgical

9.3 Production Philosophy

WHC currently operates the following mines:

- Tarrawonga and Rocglen open cut mines near Boggabri;

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- Sunnyside near Gunnedah;
- Werris Creek mine north of Quirindi;
- An underground mine south of Narrabri referred to as the Narrabri North Underground; and
- The Gunnedah Coal Handling and Preparation Plant (CHPP) and rail loader.

WHC is also developing a major open cut mine at Vickery, due west of the Rocglen mine.

The general operating philosophy for Whitehaven coals is to maximise yield by bypassing certain coals and washing the balance such that desired cargo tonnages and product specifications are optimised. A range of products is sold and careful planning is required to ensure the correct mix of coals becomes available as a shipment is being prepared.

Because the WHC open cuts are generally of small to moderate scale by current industry standards, the coal seams can be mined "clean" without too much dilution included with ROM coal, offering higher bypass potential.

The coal mined from the Tarrawonga, Rocglen and Sunnyside mines is trucked to the central Gunnedah CHPP, where the coal can either be washed in the processing plant, or loaded into trains as raw/bypassed product. The Vickery mine will also use the central Gunnedah CHPP.

Coal produced at Werris Creek is crushed and screened and directly trucked to the product stockpiles adjacent to the Werris Creek train loadout, with the vast majority of product loaded into trains on site and railed directly to Newcastle. The balance is supplied to domestic markets. Werris Creek coal can be marketed as a stand-alone product or can be blended into cargo shipments with other WHC products. For the Narrabri project, coal is processed and loaded onto trains on site and there is likely to be the opportunity for blending with other WHC coals undertaken at the port.

The WHC corporate plan for the development of the Gunnedah mines is to increase production by the development of the Narrabri mine to full production, expand production from Tarrawonga open cut to 3 Mtpa and introduce a new open cut at Vickery. Tonnage from the Vickery open cut will replace tonnage from the Rocglen and Sunnyside mines.

9.4 LOM Production Schedule

WHC has supplied MMC with an Excel Business Model which includes a Life of Mine (LOM) production schedule which accumulates production from each of the projects mentioned above, finishing at FY2050. The supplied model has been reviewed by MMC and checked for:

- Adequate definition of Coal Resources and Coal Reserves;
- A mine plan;
- Appropriate equipment and infrastructure;
- Coal quality and product yields; and
- Rail and port capacity.

MMC have reviewed the production schedule in the WHC Business Model, and made minor adjustments to the Narrabri underground production schedule, and recommended changes to CHPP yield in this mine to reflect higher in situ ash levels between FY2023 and FY2032.

Figure 9.1 and **Table 9.3** illustrate the Adjusted Product Coal Schedule recommended by MMC. **Figure 9.1** compares the total with that of the original WHC Business Model.

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Figure 9.1 – WHC Adjusted Product Coal Schedule

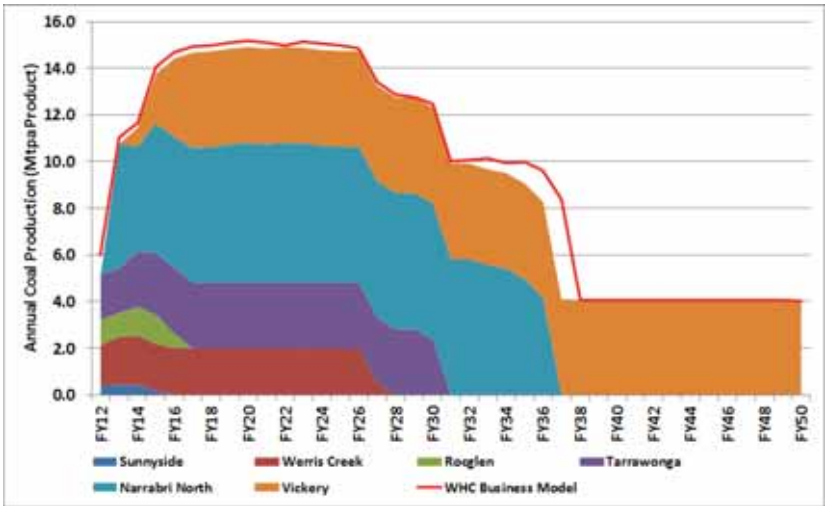


Table 9.3 – WHC Adjusted Production Schedule: Product Coal

	Vickery OC (Mt)	Rocglen OC (Mt)	Sunnyside OC (Mt)	Tarrawonga OC (Mt)	Narrabri North UG (Mt)	Werris Creek OC (Mt)	Total WHC (Mt)
2012	-	1.1	0.4	1.9	-	1.7	5.2
2013	-	1.0	0.4	1.9	5.4	2.1	10.8
2014	0.8	1.2	0.4	2.4	4.5	2.1	11.4
2015	2.1	1.3	0.2	2.6	5.6	2.0	13.8
2016	3.4	0.6	-	2.8	5.6	2.0	14.4
2017	4.1	-	-	2.8	5.8	2.0	14.7
2018	4.1	-	-	2.8	5.8	2.0	14.7
2019	4.1	-	-	2.8	5.9	2.0	14.8
2020	4.1	-	-	2.8	6.0	2.0	14.9
2021	4.1	-	-	2.8	5.9	2.0	14.8
2022	4.1	-	-	2.8	6.0	2.0	14.9
2023	4.1	-	-	2.8	6.0	2.0	14.9
2024	4.1	-	-	2.8	5.9	2.0	14.8
2025	4.1	-	-	2.8	5.8	2.0	14.7
2026	4.1	-	-	2.8	5.8	2.0	14.7
2027	4.1	-	-	2.8	5.8	0.5	13.2
2028	4.1	-	-	2.8	5.8	-	12.8
2029	4.1	-	-	2.8	5.8	-	12.7
2030	4.1	-	-	2.4	5.8	-	12.3
2031	4.1	-	-	-	5.8	-	9.9
2032	4.1	-	-	-	5.8	-	9.9
2033	4.1	-	-	-	5.6	-	9.7
2034	4.1	-	-	-	5.4	-	9.5
2035	4.1	-	-	-	5.0	-	9.1
2036	4.1	-	-	-	4.2	-	8.3
2037	4.1	-	-	-	-	-	4.1
2038 - 2050	52.8	-	-	-	-	-	52.8
TOTAL	**145.2**	**5.3**	**1.4**	**50.6**	**135.0**	**30.4**	**367.9**

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10. WHITEHAVEN GEOLOGY, RESOURCES AND RESERVES

10.1 Key Outcomes

- WHC"s Reserves and Resources have been estimated in accordance with the JORC code.
- Total JORC Resources are 1,771.5 Mt (including 807.9 Mt of Inferred Resources) as at August 2011.
- Total JORC Reserves are 479.8 Mt as at August 2011.
- There are sufficient Resources and Reserves to support the Business Model production profile.
- A proportion of the Tarrawonga Life of Mine plan includes tonnage that lies in the tenement of Idemitsu"s adjoining Boggabri mine. This is not included in the Tarrawonga Reserves.
- Thermal SSCC and PCI coals are produced.
- The various coal seams from different pits allow for flexibility and blending to meet specific shipments.
- Some coal is able to be sold unwashed.
- Adjustments have been made by MMC in the Narrabri CHPP yield and proportion of PCI to reflect ROM coal quality predictions and allow for quality variations over time.

10.2 Whitehaven Regional Geology

The Whitehaven Precinct is located within the Gunnedah Coalfield. The Gunnedah Coalfield is located in the Gunnedah Basin of the Sydney – Gunnedah – Bowen Basin system and covers an area of approximately 5,000 km^2.The Gunnedah Basin is a structural trough forming the central part of the larger Sydney – Bowen Basin which extends for approximately 1,700 km along the eastern margin of Australia from central Queensland in the north to the edge of the continental shelf in south-eastern New South Wales. The Gunnedah Basin occupies approximately the northern half of the New South Wales portion of the Sydney – Bowen Basin.

The Gunnedah Basin is bounded by a regional unconformity surface over the Lachlan Fold Belt to the west and by the New England Fold Belt to the east along the Hunter – Mooki Fault System, and is continuous with the Bowen Basin to the north. The Basin contains sediments of Permian and Triassic age. The northern boundary of the Gunnedah Basin is defined by the Moree High and the southern boundary by the Mount Coricudgy Anticline.

In the Late Carboniferous to Early Permian a significant change in the tectonic pattern occurred due to a major plate reorganisation. From this time onward, subsidence in the developing Sydney – Bowen Basin system occurred simultaneously with major tectonic events in the New England Orogen and therefore these events had a significant effect on the processes operating within the basin. The Bowen, Gunnedah and Sydney Basins were initiated as part of a single basin system in a back-arc tectonic setting.

The basement of the Gunnedah Basin comprises the Early Permian acid Boggabri Volcanics and the basic volcanics of the Werrie Basalts in the central and eastern parts, and predominantly low grade metamorphic rocks, including slate, phyllite and meta-sandstone of the Early to Middle Palaeozoic Lachlan Fold Belt in the west.

The basement comprises a series of sub-parallel approximately north-south trending troughs and highs, being, from west to east, the Gilgandra Sub-basin, the Rocky Glen Ridge, the Mullaley Sub-basin, the Boggabri Ridge and the Maules Creek Sub-basin. The general geology of the sub basins are depicted in **Figure 10.1**.

The coal measure sequences in the Gunnedah Basin are located in the Maules Creek Formation (contained in the Maules Creek Sub Basin) and Black Jack Group (located in the Mullaley Sub Basin). These two sub basins are separated by the north-south trending basement Boggabri Ridge. Whitehaven"s coal assets are situated in both these stratigraphic sequences. The Werris Creek project is situated in a small isolated basin just to the east of the Mooki Fault.

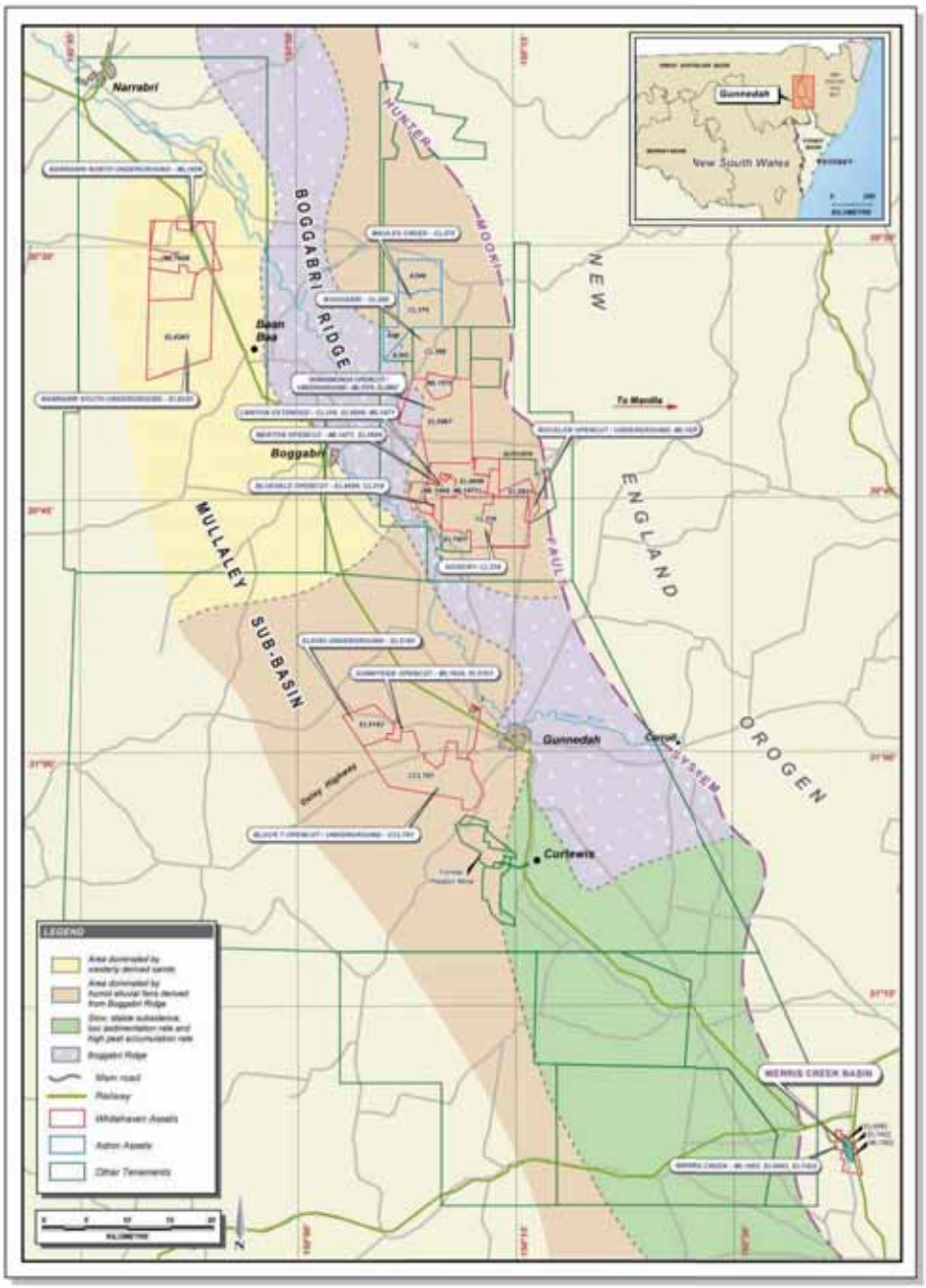
The Maules Creek Formation in the Maules Creek Sub-basin is considered to have been deposited in an alluvial-fluvial coal bearing environment in which clastic sedimentation was dominated by braided streams. The Maules Creek Formation thickens rapidly to the east and northeast and is over 800 metres thick against the Mooki Thrust in the northeast.

In the Mullaley Sub-basin, the formation was also deposited in an alluvial-fluvial environment. The coal seams are located in the Late Permian Black Jack Group which consists of claystone, siltstone, conglomerate, coal and sandstone. It contains several coal seams including the Melvilles and Hoskissons Seams. These seams are persistent over large areas of the Mullaley Sub-Basin. The Hoskissons Seam is the main seam with economic potential.

The stratigraphy of the coal measure sequences in which the Gunnedah region mines and projects are located is shown in **Figure 10.2**.

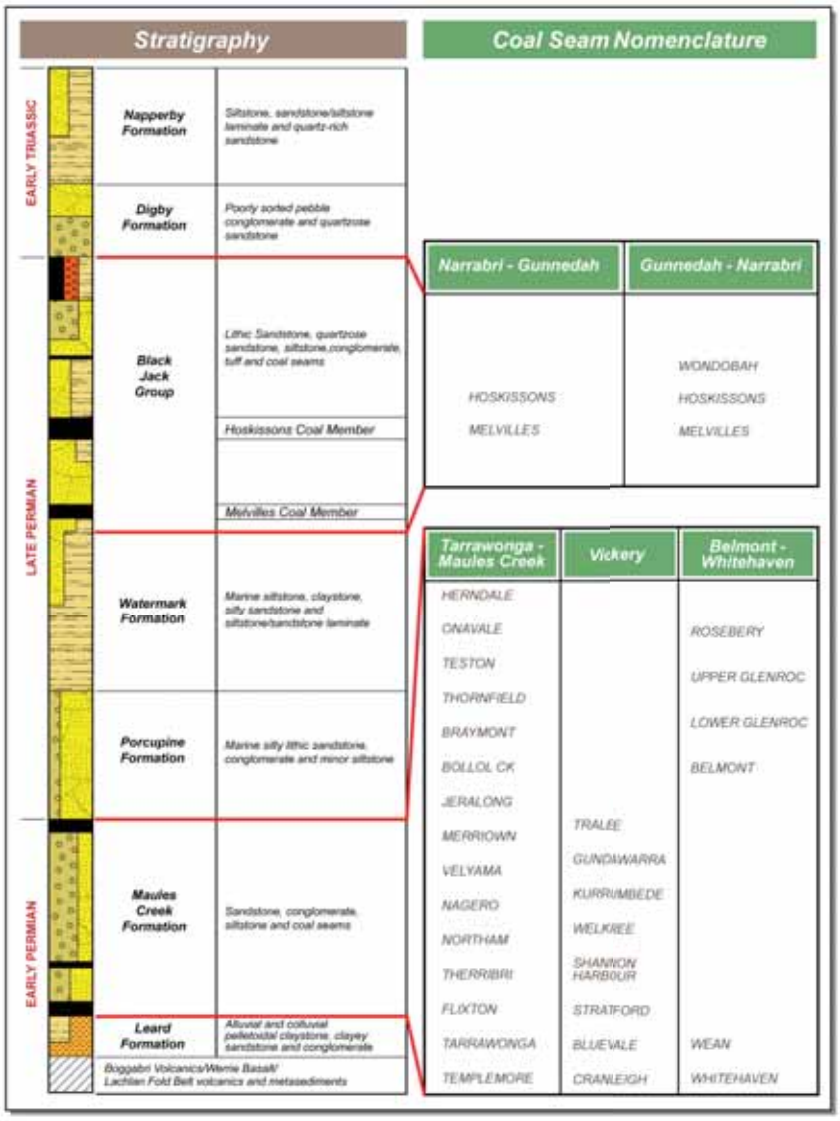
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Figure 10.1 – Gunnedah Basin Regional Geology



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Figure 10.2 – WHC Regional Stratigraphy by Mining Area



10.3 JORC Resources and Reserves

Resources and Reserves statements have been prepared for all of the WHC mines and projects.

Resource and Reserve estimates are supported by JORC compliant statements, which were prepared by various parties and references are listed in **Section 1.11** of this report.

Table 10.1 is a summary of the Measured, Indicated and Inferred Resources for WHC as summarised on 23rd August 2011. **Table 10.2** summarises the corresponding coal Reserves of WHC.

Details of the estimates are addressed on an individual basis by mine, in the following sections.

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Table 10.1 - WHC Total Managed Resources as at August 2011

Pit Name	Lease	Measured Resources (Mt)	Indicated Resources (Mt)	Total Measured and Indicated Resources (Mt)	Inferred Resources (Mt)	Total Resources (Mt)	Report Date
Open Cut							
Sunnyside	ML1624	6.8	3.4	10.2		**10.2**	Jul-11
Sunnyside	EL5183	12.8	44.0	56.8	22.9	**79.7**	Aug-09
Sub-Total Sunnyside		**19.6**	**47.4**	**67.0**	**22.9**	**89.9**	
Blue Vale - Pine Hill	EL4699	4.3	3.4	7.7	0.7	**8.4**	Oct-09
Blue Vale - Pine Hill	CL316	4.5	2.3	6.8	0.4	**7.2**	Oct-09
Sub-Total Blue Vale - Pine Hill		**8.8**	**5.7**	**14.5**	**1.1**	**15.6**	
Merton	ML1471 & ML1464	0.0	0.0	0.0	8.9	**8.9**	Feb-11
Merton	EL4699	0.0	0.0	0.0	102.8	**102.8**	Feb-11
Sub-Total Merton		**0.0**	**0.0**	**0.0**	**111.7**	**111.7**	
Rocglen	ML1620	11.7	6.1	17.8	1.5	**19.3**	Aug-11
Sub-Total Rocglen		**11.7**	**6.1**	**17.8**	**1.5**	**19.3**	
Block 7	CCL701	0.0	0.0	0.0	1.4	**1.4**	Jan-09
Sub-Total Block 7		**0.0**	**0.0**	**0.0**	**1.4**	**1.4**	
Brunt Pod	EL6450	0.0	2.6	2.6	0.3	**2.9**	Sep-09
Arthurs Seat	EL6587	0.0	0.0	0.0	1.7	**1.7**	Nov-09
Sub-Total Ashford		**0.0**	**2.6**	**2.6**	**2.0**	**4.6**	
Canyon West	ML1471	0.0	0.0	0.0	0.4	**0.4**	Feb-11
Canyon West	CL316	0.0	0.0	0.0	0.3	**0.3**	Feb-11
Canyon West	EL4699	0.0	0.0	0.0	3.2	**3.2**	Feb-11
Canyon South	CL316	0.0	0.0	0.0	1.2	**1.2**	Feb-11
Sub-Total Canyon		**0.0**	**0.0**	**0.0**	**5.1**	**5.1**	
Werris Creek	ML1563	18.8	4.5	23.3	1.1	**24.4**	Aug-11
Werris Creek	EL5993	4.3	3.6	7.9	1.4	**9.3**	Aug-11
Werris Creek	EL7422	0.2	0.2	0.4	0.1	**0.5**	Aug-11
Sub-Total Werris Creek		**23.4**	**8.3**	**31.6**	**2.6**	**34.2**	
Tarrawonga	ML1579	11.2	9.1	20.3	0.1	**20.4**	Aug-11
Tarrawonga	ML1579	4.3	5.7	10.0	1.2	**11.2**	Aug-10
Tarrawonga	EL5967	14.7	5.6	20.3	0.2	**20.5**	Aug-11
Tarrawonga	EL5967	0.4	7.7	8.1	12.9	**21.0**	Aug-10
Sub-Total Tarrawonga		**30.7**	**28.0**	**58.7**	**14.3**	**73.0**	
Vickery	CL0316	46.9	165.0	211.9	95.0	**306.9**	Jul-11
Sub-Total Vickery		**46.9**	**165.0**	**211.9**	**95.0**	**306.9**	
Other Gunnedah Resources		0.0	13.0		123.2	136.2	Mar-10
Sub-Total Other Gunnedah Resources		**0.0**	**13.0**	**0.0**	**123.2**	**136.2**	
Underground							
Narrabri North	ML1609	169.4	171.0	340.4	135.0	**475.4**	Dec-09
Narrabri South	EL6243	45.2	114.0	159.2	220.0	**379.2**	Dec-09
Sub-Total Narrabri		**214.6**	**285.0**	**499.6**	**355.0**	**854.6**	
EL5183 Underground	EL5183	0.0	7.2	7.2	32.2	**39.4**	Aug-09
Sub-Total EL5183 Underground		**0.0**	**7.2**	**7.2**	**32.2**	**39.4**	
Rocglen	ML1620	0.0	2.2	2.2	1.6	**3.8**	Aug-11
Sub-Total Rocglen		**0.0**	**2.2**	**2.2**	**1.6**	**3.8**	
Block 7	CCL701	0.0	12.9	12.9	2.5	**15.4**	Jan-09
Sub-Total Block 7		**0.0**	**12.9**	**12.9**	**2.5**	**15.4**	
Tarrawonga	ML1579	6.3	9.6	15.9	0.0	**15.9**	Aug-11
Tarrawonga	EL5967	4.6	4.3	8.9	8.1	**17.0**	Aug-11
Tarrawonga	EL5967	0.0	0.0	0.0	6.7	**6.7**	Aug-10
Sub-Total Tarrawonga		**10.9**	**13.9**	**24.8**	**14.8**	**39.6**	
Vickery	CL0316				21.0	**21.0**	Jul-11
Sub-Total Vickery					**21.0**	**21.0**	
TOTAL COAL RESOURCES		**366.4**	**597.2**	**950.6**	**807.9**	**1771.5**	

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Table 10.2 - WHC's Total Managed Coal Reserves as at August 2011

Pit Name	Lease	Recoverable Reserves			Marketable Reserves			Reserves Date	Report Date
		Proved	Probable	Total	Proved	Probable	Total		
Open Cut									
Sunnyside	ML1624, EL5183	6.60	21.10	27.70	5.80	18.90	24.70	March 2011	August 2011
Blue Vale	EL4699, CL316	3.33	6.42	9.75	3.09	5.98	9.07	October 2009	October 2009
Rocglen	ML1620	9.20	3.80	13.00	7.60	3.10	10.70	March 2011	August 2011
Werris Creek	ML1564, EL5993, EL7422	21.50	7.60	29.10	21.50	7.60	29.10	March 2011	August 2011
Tarrawonga	EL5967, ML1579	21.70	22.20	43.90	20.30	20.70	41.00	March 2011	August 2011
Vickery	CL316	37.90	91.10	129.00	30.20	74.30	104.50	August 2011	August 2011
Total Open Cut		**100.23**	**152.22**	**252.45**	**88.49**	**130.58**	**219.07**		
Underground									
Narrabri North	ML1609	66.0	67.40	133.40	66.00	67.40	133.40	Jan 2010	Feb 2010
Narrabri South	EL6243	24.70	61.50	86.20	19.40	47.10	66.50	Jan 2010	Feb 2010
Tarrawonga	EL5967, ML1579	-	3.70	3.70	-	3.10	3.10	May 2009	Sept 2009
Block 7	CCL701	-	4.00	4.00	-	4.00	4.00	May 2009	August 2009
Total Underground		**90.70**	**136.60**	**227.30**	**85.40**	**121.60**	**207.00**		
Total Coal Reserves		**190.93**	**288.82**	**479.75**	**173.89**	**252.18**	**426.07**		

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11. NARRABRI NORTH AND SOUTH UNDERGROUND MINES

11.1 Key Outcomes

- The Narrabri North underground project is a Greenfield development planned to produce approximately 6.5 Mtpa of ROM coal from one longwall mining operation.
- Project development is well advanced; the coal handling and preparation plant is undergoing commissioning; the first longwall panel development is near completion; the longwall equipment is on site and coal has been railed to the port of Newcastle.
- Narrabri North contains JORC Resources of 475 Mt, with Narrabri South containing another 379 Mt.
- There are a number of risks associated with Narrabri which have been recognised by management and mitigation methods are in place to minimise these risks to production outcomes.
- Whitehaven assumes constant coal quality and yields over the life of mine; MMC recommends a reduction in coal quality to reflect evidence suggesting higher ash coal will be mined in the mature years. It is estimated that process yields may reduce from 95% to as low as 72%. On average approximately 40% of Narrabri ROM coal is planned to be washed.
- Additional working shifts are proposed to enable a further 750 kt of production when mining the west area to compensate for lower yields in the higher ash coal.
- Labour shortages over the short term may impact on the longwall development schedule. Narrabri North is proactively recruiting and training personnel to raise employment to the budget requirements.

11.2 Overview

The Narrabri project consists of the Narrabri North underground mine and the adjacent South project area held under an exploration title. The mine is located in the Gunnedah Basin of New South Wales approximately 25 km south of the town of Narrabri and adjacent to the Kamilaroi Highway between the towns of Turrawan and Baan Baa. The mine is connected by rail to the port of Newcastle.

The underground mine commenced coal development in 2010, with longwall production expected to commence in April 2012. It is planned to produce up to 6.5 Mtpa from a modern high capacity longwall face and multiple continuous miner development sections. The coal mined at the Narrabri Project will be partially washed before being railed to the Port of Newcastle for sale.

11.3 Geology and Resources

11.3.1 *Geology*

The Narrabri project is located in the northern part of the Gunnedah Basin in the Mullaley Sub-basin, and south of the township of Narrabri. The coal resource contained in the Hoskissons Seam is located in the Permian age Black Jack Group that laps onto the Boggabri Ridge to the east of the project area as shown in **Figure 10.1**. The Black Jack Group is overlain by the Digby Formation which forms a low angle unconformity cutting off the coal measures at a depth of approximately 160 m.

The targeted Hoskissons seam is between 8 m to 10 m thick, dipping gently to the west to a depth of greater than 350 m. The seam is divided into two plies; the upper ply (HC1) is higher in ash containing claystone bands and the lower ply (HC2) having a lower ash content. The HC2 ply will be targeted for mining which when processed will be suitable as an export thermal product (raw ash 8 – 13 %). The HC2 section varies in thickness between 2.0 m and 4.2 m over the exploration area with the thinner section occurring along the east unconformity. In the proposed mine area it is consistently 4.2 m thick, allowing for thick seam longwall extraction. The upper unmined ply will form a coal roof against the conglomerates of the Digby Formation which is a conglomerate section between 12 m to 24 m thick consisting of hard rock clasts of pebble to cobble size exceeding 100 mm within a matrix of variable strength. Overall this formation which is present across the mine area is considered competent with poor caving ability. In places a dolerite sill 5 m to 25 m thick occurs approximately 50 m above the Hoskissons Seam.

Faulting was interpreted by SRK Consulting from examination of airborne magnetometer surveys to be trending in a northwest direction. These were mainly in the east area of the mine and the mine plan has been laid out to avoid known structural trends in the initial northern longwall panels. Some minor faulting has been intersected in the roadway development presenting no difficulty to mining.

No igneous intrusions have been delineated by exploration activity to date.

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Coal seam gas varies from 3.8 to 10.6 m^3/t with carbon dioxide being the dominant gas at greater than 75%. Pre-drainage of the seam gas is required.

The coal is hard presenting excellent mining conditions. The floor of the seam is mudstone that can deteriorate on exposure to water and mine traffic, therefore approximately 100 mm of coal is left during roadway development.

11.3.2 *Exploration Methods and Adequacy*

From 1982-1986 the NSW Department of Mineral Resources drilled 11 fully cored holes within EL6243. In 2004 Whitehaven commenced drilling and to the end of 2009 approximately 200 holes had been drilled including approximately 95 cored holes within ML1609 and EL6243With the majority of holes having been geophysically logged.

The current geological model contains 260 holes.

11.3.3 *Coal Quality*

11.3.3.1 Narrabri North Coal Quality

Ninety-five bore cores have been analysed for coal quality over the Narrabri North and South underground areas with the majority in the Narrabri North area. The available data from slim cores provides raw coal quality and limited washability information as shown in **Table 11.1**. The bore cores are concentrated around the eastern side of the proposed underground area. Cores show a trend to poorer washability towards the west.

Table 11.1 – Narrabri North – Hoskissons Seam Average Coal Quality

Ply	Inherent Moisture % ad	Ash % ad	Volatile Matter % ad	Calorific Value MJ/kg	Total Sulphur % ad	Relative Density	CF1.45 Yield %	CF1.45 Ash %	CF1.60 Yield %	CF1.60 Ash %
HC1	4.5	26.6	24.5	23.1	0.32	1.57	53.0	11.5	68.6	14.6
HC2	4.6	11.3	27.6	28.3	0.35	1.43	86.4	7.3	93.6	8.2

The proposed yield projections presented for Narrabri North in the WHC Business Model are constant across every year, with 40% of the coal washed (at 95% yield) and 60% of coal bypassed. This is to be achieved through bypassing the -16 mm raw coal and only washing the coarse +16 mm material. Therefore, the high yields presented are achievable but this will ultimately depend on the raw coal sizing (split to bypass/wash), the level of dilution included with raw coal and the product ash that is to be targeted. On this basis there is significant risk the projected yields will not be achieved over the life of mine unless higher product ashes are accepted as the mine progresses. Seam ash values indicate that there will be a trend to poorer washability coal being extracted (higher raw ashes and higher washed ashes) as the mine progresses to the west.

The Business Model projects a product split of 40% to PCI and 60% to export thermal coal. Although this is considered feasible initially in the better washability area, as the mine progresses west there is a likelihood that the product mix will become biased towards more thermal coal. Generally, the projected yield and product split values appear optimistic for the life of mine and are believed to be more akin to the first five to seven years of mine life when extracting coal from the lower ash better washability areas.

After the first seven longwall panels product ashes will likely increase by up to 2% and in the far west product of the project area ashes may be 5% higher at an equivalent washing cut-point. The CPP proposed will offer the ability to reduce ash somewhat through dense medium processing of the +16 mm coal, but with 60% of raw coal will be bypassed as -16 mm raw coal limits the ability to significantly reduce ash. This will possibly manifest as an inflexibility when lower ashes are required to meet specification. The fraction of PCI coal product will need to decrease.

11.3.3.2 Narrabri South Coal Quality

Narrabri South is not currently included in the Business Plan model. Based on the data available it appears the Narrabri South area displays higher raw ashes and generally poorer washability compared to Narrabri North. On this basis, the projected yields and production approach for Narrabri North are not considered suitable for Narrabri South, unless different product specifications (higher ash and lower energy) are acceptable. Narrabri South would possibly demand the washing of all coal (no bypass) if the same product specifications were to be carried on from Narrabri North.

11.3.3.3 Coal Quality Risks

For Narrabri North the available data indicates a trend of poorer washability heading west. The proposed CPP for the Narrabri site consists of dense medium washing the +16 mm coal with the -16 mm bypassed raw and as such there is less opportunity to reduce ash relative to a "full wet wash" plant. As a result, yields will stay high across the life of mine, but product ash will increase heading to the west, impacting on as delivered product energy and revenue, and importantly the ability to maintain 40% of product as low ash PCI product.

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11.3.4 ***Geological Model***

MMC has reviewed the geological model for Narrabri and considers that the modelling techniques used are suitable for the deposit. Mined out areas have been excluded from the model by means of limiting masks.

11.3.5 ***Resources***

A Resource estimate for the Narrabri North and South areas was completed in December 2009 (Hanna Consulting) and is presented in **Table 11.2**. Approximately half (238.8 Mt) of the total coal Resources at Narrabri North are contained in the lower half or HC2 ply that contains the lower ash coal (raw coal ash 8 – 13%)

Table 11.2 - Coal Resources Narrabri North

TENEMENT	SEAM	RESOURCES (Mt)			
		MEASURED	INDICATED	INFERRED	TOTAL
ML1609	HC1	49.6	92.0	95.0	236.6
	HC2	119.8	79.0	40.0	238.8
TOTAL		**169.4**	**171.0**	**135.0**	**475.4**
HC - HOSKISSON SEAM					

Source:JORC Resources Report Narrabri Coal Project, Hanna Consulting Services December 2009

Table 11.3 - Coal Resources Narrabri South

TENEMENT	SEAM	RESOURCES (Mt)			
		MEASURED	INDICATED	INFERRED	TOTAL
EL6243	HC1	-	29.0	145.0	174.0
	HC2	45.2	85.0	75.0	205.2
TOTAL		**45.2**	**114.0**	**220.0**	**379.2**

Source:JORC Resources Report Narrabri Coal Project, Hanna Consulting Services December 2009

Resources have been estimated using the following Points of Observation:

- Boreholes with quality data; and
- Boreholes with no quality data but with geophysical log data.

The justification for using holes without quality data is that the geophysical characteristics for both types of holes is the same, and that the HC2 ply is very consistent in thickness and quality (except where thinned in the east against the unconformity).

Tonnages are estimated using air dried RD and a minimum thickness of 1.5 m for the HC2 ply has been applied.

The following distances between boreholes have been used to estimate Resources:

- Measured – 700 m
- Indicated – 1,400 m (note that the Resources report erroneously states the distance as 1,200 m)
- Inferred – 4,000 m

MMC has checked the Resources against the geological model and the numbers are correct. MMC believes that the Resource classification is suitable for the borehole density and level of information available.

No updated reporting has been completed following the commencement of mining. MMC considers the impact to be immaterial to the available Resources.

11.4 Reserves

A coal Reserves estimate of 133.4 Mt was completed in February 2010. Since this estimate, the first six longwall panels have been reduced slightly in length to avoid fault structures. Beyond LW8 there are areas of Inferred Resources that

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have been included in the mine plan. MMC considers this a reasonable projection as there are surrounding Indicated Resources that provide a reasonable confidence in seam continuity and quality trends.

There is some risk that seam washing characteristics are not as well understood in the western section of the lease due to wide spaced sampling. It is known that ash contents increase to above 15% in this area and washed yields will most probably be lower than provided in the WHC Business Plan models.

11.5 Underground Environment and Geotechnical Considerations

A number of geotechnical and general seam hazards have been identified, the combination of which is unique to Narrabri. These present an element of risk to the underground operations and extensive studies have been undertaken and risk management assessments implemented to develop a set of hazard management plans to mitigate the potential risk to the mine operations. The main areas of identified risk are:

- High seam gas content and outburst potential;
- Spontaneous combustion;
- Rapid collapse of roof causing windblast; and
- Strata weighting and cyclic loading on the longwall face.

11.5.1 *Seam Gas*

Coal seam tests show a variation in seam gas content across the lease varying from 4.7 m^3/t in the south to greater than 9 m^3/t in the north. The seam gas is predominantly carbon dioxide. Results from borehole coal sample tests show that the gas does not follow a linear trend with depth, with the higher range of results in the north and decreasing to the south and southwest. The initial ten years of mining will be in the higher gas regime.

Risks associated with the gas are outbursts when the content is above a nominated threshold of 6.2 m^3/t and potential for reduced oxygen in the working environment.

Narrabri has in place comprehensive management plans to control the gas including:

- Pre-drainage of the seam using surface to in-seam (SIS) long drainage holes flanking development and also within the longwall block;
- Underground in seam drainage (UIS) to complement the SIS system;
- Surface vacuum pumps connected via surface piping to the complex of the SIS holes and vertical wells;
- A high quantity ventilation system to assist in diluting residual gas emissions from mining;
- A proposed goaf drainage arrangement using vertical wells; and
- Compliance drilling ahead of development mining to test that the gas is below the threshold. Where faults are present the frequency of compliance drilling is increased.

The drainage pattern is progressing well in advance of the future mine operations, with many holes in service for more than 18 months. Results to date show that the gas is below the outburst threshold.

11.5.2 *Spontaneous Combustion*

Testing has demonstrated that the coal has a high (Class IV) to very high (Class V) propensity to spontaneously combust. The risk of an event is compounded by the thick seam conditions and the leaving of the caved top section (HC1) of the Hoskissons Seam in the mined out goaf area behind the longwall.

The mine has a Spontaneous Combustion Management Plan in place for the development phase of mining up to the introduction of the longwall. This requires revising with further controls and action response plans in place for the increased risk when longwall production is in place.

MMC understands that Narrabri is aware of the risk in leaving an abundant amount of coal within the goaf. A number of proactive measures are planned, including:

- A gas inertisation plant for pressure balancing a nitrogen chamber against goaf seals;
- A site based chromatograph for gas sampling;
- Installation of a tube bundle gas sampling system; and
- Removing an earlier ventilation design incorporating bleed shafts behind the longwalls.

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A comprehensive risk assessed management plan incorporating all controls and trigger response actions will be implemented.

The option of using a longwall top coal caving method of coal extraction potentially reduces the risk by reducing the amount of coal remaining in the goaf.

MMC agrees that the proposed systems will be conformable with typical industry standards.

11.5.3 *Strata Conditions*

The coal is firm and stands well after mining with no fracturing or slumping in roadway development. Rib support is installed due to the 3.4 m roadway height. Similarly the coal roof (HC1 section) does not fracture under normal weighting conditions.

Narrabri has commissioned studies to determine the influence of longwall extraction and stress re-distribution on the mine roadways, and a comprehensive strata support bolting pattern together with the use of long tendons is in place to permit roadways to remain in trafficable condition as the longwall retreats without the need for passive support. In general MMC considers that the supporting methods are industry standard for thick seam conditions.

The seam floor is a mudstone that is reasonably firm, however to remove the risk of degradation from water approximately 300 mm of the coal is left unmined.

11.5.4 *Cyclic Loading and Windblast*

The overlying Digby Formation conglomerate is a strong and competent section of approximately 45 Mpa (unconfined compressive strength). Geotechnical studies and modeling of the potential behavior of the strata following longwall extraction has shown that the strata will hang up for a considerable distance following the start of the longwall and following the initial fall will cause a cycle of high and relieved face pressures. The risks identified are:

- A windblast caused from a rapid fall of material when the initial goaf is formed; and
- High face loading at cycles of approximately 10 – 20 m as the face retreats (PowerPoint presentation by PDR Engineers confirmed the conclusions from earlier geotechnical studies carried out by Mining Geotechnical Services (Pty) Ltd).

The above will have a significant impact on longwall productivity without mitigating measures in place.

To mitigate the risks and enable the longwall to remain productive a series of vertical holes have been drilled from the surface into the conglomerate and following the insertion of high pressure water at a number of horizons has enabled the conglomerate to be fractured into thinner layers with less ability to bridge the extracted area.

Operationally the mine has implemented a number of engineering designs into the longwall equipment to reduce the exposure of personnel to the risks. These include placing the face controls and walkways behind the support legs; remote control availability of the face, and high pressure set hydraulics to assist in controlling the cyclic loading events.

MMC considers that the methods adopted to reduce the risk to production interruptions and maintain a safe environment are state of the art and have been well implemented.

11.6 Underground Mine Operations

11.6.1 *Mine Plan*

The mine is accessed by three drifts at a grade of 1:8 and approximately 1,000 m in length. The drifts are for transport, coal conveying and the third drift which has served as a return airway will be converted to a third intake following the commissioning of a shaft and fan in mid-January 2012.

The layout of the mine is simple with main roadways extending towards the west boundary and longwall panels to the north and south from these main headings. The arrangement takes advantage of better quality lower ash coal in the north by extracting longwall panels (LW1 – LW13) first and then retreating from the west boundary extracting the southern longwall panels.

Although high ash coal near the western boundary will be mined in approximately the tenth year the sequence simplifies the transfer of longwall equipment and allows the mine to retreat up dip in the final years to assist in water management.

The seam dip results in an increasing depth from 160 m to 370 m for the first 13 longwalls and then progressively reduces as the southern side panels are extracted back towards the mine drifts. The size of the standing coal pillars increases relative to the depth to control strata loading as the longwalls extract. In the main headings the roadways are splayed from the central conveyor road to accommodate the increase in the pillar dimensions required.

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11.6.2 ***Mining Method & Equipment***

The mine has four wide head continuous mining machines (CM) in place to advance the roadways for the first longwall section. The equipment is deemed suitable for the conditions. The roadways are cut at a height of 3.5 m and a width of 5.4 m.

The longwall is designed for a block width of 300 m and an operating height of 4.2 m (HC2 section of seam). The equipment is considered state of the art incorporating extensive monitoring, automation, proximity detectors and face cameras to assist in face management.

The roof supports are 2.05 m wide and are rated to assist in minimising adverse face conditions in the event of a cyclic loading event. The capacity of the coal clearance is in excess of 4,200 tph.

To maximize the rate of retreat and production the face will operate in a bi-directional mode with the full face height being cut on each pass by the shearer producing approximately 1,750 tonnes per shear. There will be a ramp down of the roof at the face ends to correspond with the roadway height.

A prototype roof support has been tested for the equivalent LOM cycle to provide confidence in the structural integrity of the design. All other longwall equipment will be replaced during the LOM at periods relating to tonnes produced.

MMC considers the equipment to be well specified and suitable for the mine conditions.

11.6.3 ***Mine Production Estimates***

Mine development rates to date have been less than planned resulting in a reforecast of the longwall start from December 2011 to April 2012.

Reported reasons for the shortfall in metres advanced are:

- Manning shortfall to operate all unit shifts;
- Diesel equipment for roadway clean up and material supply having poor availability;
- Additional compliance drilling where faults have been intersected; and
- Personnel being involved in longwall training.

MMC has been advised that development rates are typically 160 m/week in gateroads (tandem unit) and 100 m/week in the Mains headings.

The initial plan assumed three development units five days per week with 14 available unit shifts per week operating at the rates shown in **Table 11.4**. In recognition of the lower rates of development the mine is considering various shift and roster options to increase development over a seven day period. MMC considers the planned metres to be excessive and alternative advance rates are shown in the table.

Table 11.4 – Development Unit Rates

Gateroad Development	Rate (m/shift)	Rate (m/week)	MMC Estimate (m/week)
Single CM	15	210	150
Tandem CM	20	280	225
Mains Development			
Single CM		140	100
Tandem CM		180	145

In reviewing the WHC production schedule MMC understands that the rates have been down rated to a more reasonable expectation.

11.6.4 ***Longwall Productivity***

The WHC production model has the longwall panel producing between 5.3 to 6.0 Mtpa over the life of the mine with a reduced production of 4.4 Mt scheduled in 2014 reflecting a lag in mine development.

The originally planned longwall production rates of 6.0 to 6.8 Mt for a five day production week were examined by Palaris Mining Pty. Ltd. ("Project Hereford", August 2011) as to their reasonableness by reviewing estimated cutting hours per week, proposed mining rates and benchmarking these against Australian and USA longwalls. Critical elements to the analysis were:

- Comparative depths of cover, and
- Mining block volume (size of longwall block and seam height).

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Palaris used longwall production outcomes from 2001 to 2010, which may not truly represent the more recent longwall installations with modern equipment and higher capacity coal clearance systems. Mining conditions at Narrabri and the block dimensions indicate that the longwall should have hourly production rates similar to the best performing longwalls.

The results from the Palaris report demonstrate that for the shallower part of the resource to approximately 325 m depth the initially proposed production rates could be reasonably achieved. For the deepest longwall panels at Narrabri the rates may be optimistic. However, the ability to consistently produce at the higher end of Australian longwall production has been questioned by MMC and the WHC model has been adjusted to a maximum 6.0 Mtpa.

This is verified by the forecast operating times based on a 60% utilisation of the available 86 hours per week after allowing for scheduled downtime and non production times and a mining rate of 2,250 tph giving a weekly production of 117 kt or an annual 6 Mtpa when no longwall relocation occurs.

MMC considers that the revised production rate is a reasonable expectation based on the geotechnical risk and a more reasonable average rate of coal cutting. MMC therefore concurs that the Narrabri longwall production rate should be able to be achieved providing the geotechnical risks are managed.

Provision has been made by WHC to increase the number of longwall shifts per week as the mine depth increases towards the west. This is to compensate for the potential loss of productivity identified in the Palaris benchmark study as the mine deepens, and also to compensate for a decrease in product yield as the seam ash content increases. An estimated two additional day shifts are proposed increasing the annual production by approximately 750 kt. MMC concurs with this production scenario for a period of up to nine years when mining the west and south longwall areas.

There is an ability to further enhance the production rate with Narrabri investigating alternative shift roster systems to permit production over a 24 hour seven day cycle. This opportunity of production increase must be examined in conjunction with the development performance.

11.6.5 *Mine Labour*

Narrabri has been experiencing a shortage of skilled and operations labour. The majority of the underground work crews are contracted with as many as three companies providing labour. The difficulty in the coordination and management of these personnel with each group of contractors under different shift roster arrangements appears to detract from the development performance.

The mine is progressively recruiting personnel to fill both staff and operations positions. The industry wide shortage of experienced miners, trades and in particular deputies is being countered by employing local inexperienced persons to undergo training.

The current labour position is 319 persons on site of which the majority are contractors compared to the forecast of 360. Not all rostered shift crews are fully manned and until this can be rectified development rates will remain less than necessary for longwall continuity.

MMC is of the opinion that the ongoing difficulty in recruiting personnel may detract from mine production performance over the short term.

Palaris makes the following observation that with wages employees being engaged in longwall training and for crewing the longwall face, the use of contractors will continue for development while there remains a labour shortage. MMC has been advised by WHC that to facilitate this, WHC has funded an accommodation contractor to provide all necessary accommodation for contractors from other regions.

11.7 Narrabri CHPP

The Narrabri CHPP has been designed with annual throughput capacity of 7.2 Mtpa, capable of washing 2.9 Mtpa and bypassing 4.3Mtpa. The wash plant has been designed and constructed by Sedgman Limited.

The CHPP has been designed to process a PCI product ash of 7% to 8%, along with a bypassed export thermal coal of approximately 12% ash. This will be achieved more easily when processing coal from the initial mining area because of the coal quality deterioration toward the southwest where the raw ash content is expected to increase from 8% to 20% and as result in situ calorific values also reduce. Bypass opportunities will decrease over time and CPP requirements will increase. Total yields will decrease and the CPP costs may increase along with reject disposal quantities.

Raw coal will be reclaimed from the ROM stockpile at 1,000 tph, crushed and dry screened at 16 mm which will divert around 60% of the coal direct to thermal product. The 400 tph of large coal will be conveyed to the CPP where a high cut-point dense medium bath will remove the high ash material. The bath product will either be fully diverted to thermal product or can be rewashed in a dense medium cyclone (DMC) to process a low ash PCI product. In this two product rewash scenario the DMC underflow will report to thermal product.

The increase in ROM production up to a rate of 7 Mt when operating in the west of the mine (to compensate for a lower coal yield) requires further washing and sizing analysis to be undertaken to optimise the bypass split for the west resource area. Reducing the bypass fraction may result in a required wash circuit feed rate in excess of 400 tph. MMC has down rated the PCI product fraction when mining this area of the resource to compensate for a higher ash feed while maintaining a total product of 5.8 Mtpa to 6.0 Mtpa.

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For the CHPP it has been reported that LIMN simulations have been undertaken for the bottom of seam and combined full seam channel samples. The reported performance is shown in **Table 11.5**.

Table 11.5 – Narrabri LIMN Simulation Data

	Channel Sample Location and Section			
	10 CT[1] H2 Bottom Section Yield %	**10 CT H2 Bottom Ash (% adb)**	**10-11CT Full H2 Section Yield %**	**10-11CT Full H2 Section Ash (% adb)**
ROM Feed	100.0	10.6	100.0	12.3
Bypass (screen u/size)	60.1	11.2	59.1	12.2
CPP Feed	39.9	9.8	40.9	12.4
Bath Product	39.9	9.8	38.1	9.2
DMC PCI Product	36.1	7.8	33.4	8.0
Thermal Product	61.2	11.2	63.5	12.7
Total Product	97.3	10.0	96.9	11.0.

Note: 1: CT – cut through location in development panel.

From the data presented the overall yield of thermal and PCI coal is around 97%. This is a high result and it is not known if any mining dilution was taken into account during the modelling.

There is also some uncertainty regarding the moisture holding capacity of the product coal. Narrabri Coal is reported to be currently modelling its moisture holding capacity assumptions and the impact this may have on specific energy.

The impact of coal quality variations will need to be monitored and may be seen as a medium term issue impacting on product coal forecasts.

The plant is in the first stages of operation and the initial performance data should give some indication of actual yield, ash and total moisture outcomes.

In November 2011 WHC reported a number of issues with the plant that are causing it to perform below expectation:

- Rotary Breaker capacity to handle 1,000 tph;
- Moisture control; and
- Crusher performance.

No further update on these issues is available at the time of writing.

Discussions with site personnel indicate the plant has yet to consistently reach the design throughput of 1,000 tph, mainly operating at 900 tph although it should be noted at this stage the CHPP has processed 217,000 ROM tonnes of development coal. Further issues identified during these discussions were:

- Thickener performance;
- Belt press filter performance; and
- Concerns over the performance of dry screening efficiency with wet fine coal or coal with higher dilution levels.

Given the simplicity of the plant, the stage of development and the nature of the issues, it is the opinion of MMC they are likely to be addressed and not influence the long term performance of the Narrabri CHPP.

In general with the simple CPP process the overall Narrabri CHPP costs can be expected to be low. The $3.96 per tonne feed used in the WHC Business Model is considered to be reasonable.

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11.8 Environment

11.8.1 *Leases, Titles and Approvals*

Table 11.6 lists the approvals and mining tenements associated with the Narrabri North Underground Coal Mine. The mine is currently operated by Narrabri Coal Pty Ltd.

Table 11.6 - Narrabri Leases, Titles and Approvals

	Expiry Date	Area (ha)	Description
Development Consent			
PA05_0102	26/07/2011	Not Specified	Development and operation of the Narrabri Stage 1 Project
PA08_0144	26/07/2031	Not Specified	Development and operation of the Narrabri Stage 2 Project
Environment Protection Licence			
12789	N/A	Not Specified	For mining of coal up to 3.5Mtpa and coal works up to 5Mtpa
Mining Leases			
ML 1609	18/01/2029	5 298	Issued 18/01/2008 for prospecting and mining coal; Security deposit of $100,000. Includes the Narrabri North underground.
Exploration Licences			
EL 6243	20/05/2014	1 102	Exploration Licence. Security deposit of $50,000. The Narrabri South area.
Mining Purposes Lease			
MPL 343	26/03/2011		Sub-lease of Mining Purposes Lease (overlies ML1525).

Since the initial approval was granted for Stage 1 in November 2007 (Project Approval PA05_0102) there has been one modification (26/03/2010) which enabled the commencement of some construction activities with relatively long lead times for the Stage 2 Project and updated noise criteria for the project. An application to fully develop Stage 2 of the Narrabri Underground Coal Mine was subsequently approved on the 26 July 2010. The initial approval (PA05_0102) must be surrendered within 12 months of the granting of the project approval, ie by 25 July 2011. Based on the information supplied, PA05_0102 had not been surrendered.

From an operational perspective, the current project approval (DA08_0144), which will remain for 21 years from the 26 July 2010 (to 26 July 2028), allows for the extraction of up to 8 Mtpa ROM and transportation of product coal from site by rail. The transportation of coal reject from the site is not allowed under the project approval.

Based on the documentation provided coal production at the Narrabri Underground Coal Mine commenced on the 28 June 2010.

From a review of Annual Environmental Management Reports all the above operational conditions are currently being satisfied.

11.8.2 *Land Ownership*

Narrabri Coal has acquired ten rural properties covering an area of approximately 4,000 ha within or adjacent to ML 1609. These acquired properties are specifically centred on and around the mine infrastructure area within ML 1609. Native title considerations have been completed for these limited areas that lie within the mining lease and an agreement has been established with the Gomeroi people.

11.8.3 *Key Environmental and Land Management Issues*

WHC has evaluated the key environmental and other project risks as part of its preparation of the Environmental Assessment report and the MOP. Key issues include:

- **Water Management** – Water management issues have been subject to stringent assessment and management planning, including brine management and are considered to provide only low environmental risk;

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- **Flora and Fauna** – Although much of the eastern side of the tenements has been cleared, the lease area includes threatened and endangered species and vegetation communities and endangered ecological communities (EECs) while other threatened species are considered to be potentially present in the area. A comprehensive biodiversity offsets strategy has been developed to compensate for any clearing and direct or indirect disturbance; and
- **Noise, Blasting and Dust** – Conditions in approvals and the EPL as well as relevant management plans suitably address the risks of impacting the amenity of private residences and any noise sensitive locations.

12. TARRAWONGA OPEN CUT

12.1 Key Outcomes

- Multi Seam steeply dipping deposit mined by open cut using conventional truck and hydraulic excavators.
- 1.6 Mtpa ROM production with plans to increase to a maximum of 3 Mtpa ROM production by 2016.
- 50% of coal is washed.
- Projected yields and associated product qualities should be achievable.
- The planned expansion of the mine relies on timely commissioning of the Boggabri CHPP.
- Projected product coal split to SSCC/PCI to be increased from current 50% to 82% when coal is treated through the Boggabri CHPP.
- Business model production totals 53.9 Mt ROM, which will deplete 34.7Mt of WHC JORC Reserves and 19.2Mt of coal contained in neighbouring CL368 and unreserved boundary corridor.
- Recommend that a formal Reserve estimate be undertaken for the pit shell used for the 2011 LOM Plan.
- Current mine life is 20 years until 2030.
- Current mining consents last until 2017.
- Application for expansion of the Tarrawonga Project to 3.0Mtpa has been lodged in 2011.

12.2 Overview

The Tarrawonga Open Cut was formerly referred to as the East Boggabri Mine. It is located 16km northeast of Boggabri and is centred on shallow subcropping seams along the eastern edge of the Boggabri Ridge. Part of the adjacent Idemitsu lease CL368 to the north has been annexed to the targeted open cut mine area under a joint venture agreement to recover additional shallow reserves. The mine is managed by WHC under a Joint Venture agreement between WHC and Idemitsu. WHC has 70% equity in the project. The mine commenced operations in September 2006 and produces 1.6 Mtpa of ROM coal, which is crushed onsite and then trucked 40kms to the Gunnedah CHPP, with around 50% of the raw coal washed with the balance bypassed to product. PCI and thermal coal is produced and railed to the Port of Newcastle for sale.

WHC plans to increase production from the Tarrawonga open cut to 3.0 Mtpa of ROM coal, ramping up from 2012 through 2016 and increasing the mine life until 2030. This plan includes transporting the coal to a new CHPP at Idemitsu's Boggabri mine and railing the processed coal from the Idemitsu rail loadout.

The expansion plan relies on mining coal from both the Tarrawonga lease and the adjoining Boggabri lease, coordinating the coal handling, processing and transport through Boggabri facilities, and rationalising the placement of waste across the adjoining tenement boundary.

The expansion plan is currently under consideration by the regulator.

12.3 Geology and Resources

12.3.1 *Geology*

The deposit is located towards the western flank of the Maules Creek Sub-basin, part of the Gunnedah Basin, as shown in **Figure 10.1.** This sub-basin contains coal seams, sedimentary and volcanic rocks, mainly of Early Permian age. Large parts of the sub-basin are covered by recent alluvial deposits, particularly in the centre and to the east.

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The Maules Creek Formation contains a multi seam coal resource. The coal seams are generally thicker and closer together along the western side of the basin. To the east and southeast the coal seams are split by an increasingly thicker section of clastic rocks. The Resources are contained within approximately 15 coal seams in the Maules Creek Formation which directly overlies the Boggabri Ridge Volcanics.

Individual coal seams can range up to 4 m thick but generally average 1.5 m. These are the same coal seams that extend to the north into Idemitsu's Boggabri project. There is a significant midburden (40 metres thick) that separates the coal measure sequence into two groups located between the Nagero and Lower Northern Seams as shown in **Figure 10.2**.

The Tarrawonga resource area is separated by a west northwest trending rise in the basement volcanics where the coal has been deposited into a northern and southern area. The drilling interpretation suggests that the southern resource area is generally free of any faulting. In the northern resource area there is a north trending fault with a throw of 10 to 15 metres, east side up. There is also a zone of compressional or compactional faulting along the northern side of the basement ridge. This zone is between 50 and 100 m wide. In the northern block the coal seams generally dip gently to the east-north-east.

The depth of weathering generally ranges from 10 to 25 m, but increases to a maximum of 130 m where the coal measures are overlain by unconsolidated recent alluvium.

12.3.2 *Exploration Methods and Adequacy*

EL5967 was previously held as part of exploration permit EPTA-1, which was held by an AMAX-BHP joint venture. Regional drilling of fully cored holes at approximately 4 km centres was conducted over the area before closer spaced drilling concentrated in the portion of the tender area that ultimately became the Boggabri Coal Lease. The remainder of EPTA-1 was relinquished and taken up by WHC as EL5967 in 2002.

Exploration by WHC has resulted in 269 holes being drilled, including rotary percussion, 61 mm (HQ), 100 mm and 200 mm partly cored holes. Under a data sharing arrangement with Boggabri Coal, data for several cored holes is included in the Tarrawonga database. There are currently 329 holes in the geological database.

A ground magnetic survey was undertaken to define the basement ridge and fault intersecting the deposit.

12.3.3 *Coal Quality*

Coal quality data is available from 52 bore cores for the Tarrawonga deposit (including 7 holes from the Boggabri tenement area). Samples have been analysed raw for proximate analysis, and float tested at 1.60.

The coal seams are low ash thermal, PCI and soft coking coal. Raw ash values of less than 5% are common, and specific energy generally ranges from 29-31 MJ/kg. The seams are medium to high volatile matter (30-35% ad) and low sulphur (<0.5%). CSN ranges from 1 to 6 Yields at float 1.60 for the target mining seams are generally greater than 95% with a product ash less than 5%.

Raw coal data presented by WHC indicate a raw ash range of 4.5% to 24.1 % for the main seams mined, with sulphur less than 0.4%, phosphorous less than 0.2%, CSN range 1-5, volatiles range 33-40%, and low to medium fluidities with a maximum 800ddpm. The major portion of this seam is bypassed with recent bypass percentages between 56% and 61% Coal from this deposit is processed to produce a low ash PCI coal and an export thermal coal. The recent actual CPP yield is 86% and the overall recovery from the mine is 94%.

The projected PCI split for the Tarrawonga coal once it is treated through the Boggabri CHPP is 82%. MMC has not sighted data relating to the Boggabri CHPP, but the available seam by seam coal quality suggests the projected yields and associated product qualities should be achievable on average. Depending on the mix of coals available at any time, periods may exist where some Jeralong Seam coal needs to be washed, or alternatively, more product can be split to thermal coal rather than lower ash PCI. Given the complexity of this multi seam operation, with some variability in the coal, coal quality will need close management.

12.3.4 *Geological Model*

MMC has reviewed the geological model which was created by WHC in July 2010. The Resources quoted in this MMC report are current to August 2011; however a previous resource report was written in August 2010 using the July 2010 geological model. MMC assumes the 2011 geological model will have been constructed to the same standard as the 2010 model. MMC considers that the model has been created competently and the modelling techniques used are suitable for the deposit.

12.3.5 *Resources*

Resources for 73.0 Mt, including 14.3 Mt of Inferred Resources, were estimated by Mr. Colin Coxhead in August 2011. MMC has reviewed the Resource estimation methodology.

Resources have been estimated using cored holes with quality data, geophysical logs and core recovery greater than 90% as Points of Observation.

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Tonnages have been calculated using air dried RD, a minimum thickness of 0.2m for open cut coal and 1.8 m for underground coal, and a maximum raw ash of 35% ad. Open cut Resources have been restricted to an overburden ratio of 15:1 bcm/tonne.

The following distances between boreholes have been used to estimate Resources:

- Measured – 500 m
- Indicated – 1,000 m
- Inferred – 4,000 m

MMC has checked the 2010 Resources against the 2010 geological model and the numbers are correct. It is therefore assumed that the 2011 Resources will match the 2011 geological model. MMC believes that the resource classification is suitable for the borehole density and level of information available.

12.4 Reserves

The Reserves for Tarrawonga were estimated by Mr. Doug Sillar of MMC in August 2011, and are current to 31 March 2011. Mr. Siller was not a member of the MMC ITR team.

Reserves total 43.9 MROMt of coal, of which 34.7 MROMt are contained within the 55.5M ROMt pit shell utilised for the LOM Plan. MMC have reviewed the reserving methodology and on the basis of the available data confirm that the Reserves are based on the underlying Resources and that the appropriate methodology for applying the modifying factors has been applied. The estimated Marketable Reserve is 41.0 Mt, a nett product yield of 93.4%. No indication is given of the product split.

MMC considers the Tarrawonga Reserves have been correctly estimated and conform to JORC standard.

MMC has reviewed the Reserves described in the documentation provided. The methodology has been reviewed for adequacy and completeness and the quantum checked for reasonableness. MMC make the following observations:

- The Reserves are based upon the underlying geology model which forms the basis for the JORC Resources;
- Allowance has been made for the appropriate modifying factors applying to the Tarrawonga open cut;
- The Reserves appear to have been competently estimated in conformance with the JORC Code;
- The 2011 Reserves include both the Tarrawonga Pit and Tarrawonga South Pit, a total of 43.9M ROMt;
- The Tarrawonga North Pit contains 34.7M ROMt of JORC Reserves, and is consistent with the 2009 Reserves estimate of 37.4M ROMt;
- The Tarrawonga South Pit contains 9.2M ROMt of JORC Reserves and is not included in the Life of Mine (LOM) Plan;
- The Business Model contains 53.9M ROMt of coal from the Tarrawonga 2011 LOM Plan pit shell: this includes 19.2M ROMt of coal from outside the Tarrawonga North JORC pit shell. This is a combination of tonnage from areas including Boggabri's CL368, the boundary corridor and small amounts of Inferred Resource ("Inventory") coal; and
- The methodology used for the generation of the LOM Plan and of the JORC Reserves has been reviewed. Although MMC has not undertaken reconciliation, the difference in tonnage appears consistent with the differences in pit shells: MMC recommends that a formal JORC Reserve estimate be prepared for the pit shell covering the 2011 LOM plan, to support the veracity of the Business plan.

12.5 Mining Operations

The mining operations at the Tarrawonga coal mine are generally described as follows:

- Mining commenced in September 2006;
- The existing mining operation is approved for 2 Mtpa ROM. Consent is being sought to expand production to 3 Mtpa ROM;
- The northern boundary of the mining lease abuts mining leases for the Boggabri coal mine, owned and operated by others; if consent is given for expansion of the mine to 3Mtpa ROM then the north boundary of the Tarrawonga mine will be extended and the waste dumping operations merged with those of Boggabri;
- Remaining reserves at March 2010 are 43.9 Mt ROM coal, consisting of 34.7 Mt ROM in the existing pit area, and 9.2 Mt ROM in the South Pit;

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- Reserves in the expanded North Pit are scheduled to be exhausted in 2030;
- A multi seam steeply dipping deposit;
- Mining is by conventional open cut, truck and hydraulic excavator, bench mining methods assisted by dozer push of lower interburden;
- 555 Mbcm of overburden and interburden will be excavated over the remaining life of the mine at an average strip ratio of 10.3 bcm/ROMt as at FY2012;
- All mining has been undertaken by WHC as owner-operators;
- Careful scheduling of the coal is required in order to meet blending requirements; and
- Mine design is being coordinated with the adjacent Boggabri lease CL368 to optimise dump profiles.

MMC inspected Tarrawonga coal mine on 11th January 2011.

The mine appeared to be competently managed and operated, and was operating in accordance to the sequence of the current LOM plan.

The mine is currently resourced for a 2Mtpa production rate, operating 10.5 hour per shift, 5.5 days per week. On this basis, the current truck-excavator fleet on the site is required to handle a total volume of approximately 24 M bcm per year. The stated installed capacity is approximately 25 M bcm per year, and the mine is utilising dozer push and cast blast on the bottom parting of the Nagero Seam to supplement the waste production fleet.

In order to ramp up production to 3Mtpa capacity, an additional 600 tonne excavator and truck fleet has been ordered, which should be sufficient to reach the required 35Mbcm/a.

12.6 Site Infrastructure

The current coal handling and transport includes:

- Coal excavation and transport using mining haul trucks to a ROM coal stockpile;
- Coal reclaim and feed to a coal crushing plant for sizing;
- Coal reclaim and transport approximately 40 km to the Gunnedah CHPP; and
- Reclaim and loading into rail cars for transport to Newcastle.

The existing handling and transport systems through the use of Toll Holdings as the road haulage contractor are working satisfactorily.

When the expanded mine plan commences, ROM coal will be transported by road to a new CHPP being constructed at Boggabri, on a toll washing arrangement. A new ROM pad and access road will be built for this purpose and product coal transport will be via the Boggabri facilities. The planned expansion is dependent on the commissioning of the Boggabri plant.

Expansion of the mine will require re-alignment of Goonbri Road and Dripping Rock Road, the diversion of Goonbri Creek and construction of an associated hydraulic cut-off wall by 2025. These activities are subject to the current application for extension of the mine.

12.7 Coal Preparation

In WHC"s Business Model assumptions, a significant increase in the percentage of PCI/SSCC in the product mix occurs in the first three years, increasing from 62% to 82%. The washplant recovery averages 87%.

MMC have considered a number of aspects in forming a view on the reasonableness of this change.

1. The change coincides with the increase in Tarrawonga ROM tonnage from 2.0 Mtpa to 3.0 Mtpa. This increase, based on the data provided, comes mainly from the low in situ raw ash Bollol Creek, Jeralong, Velyama and Nagero Seams. The impact of this is to reduce the overall ROM ash being fed to the plant.
2. The Tarrawonga LOM Plan report indicates a ROM ash range of 8.2% to 9.6% for the years 2012 through to 2029, with an average of approximately 9.2%. Based on the Premium PCI ash of 5.5% and assuming a reject ash 25 %, a rudimentary ash balance suggests a yield of around 76%. If the PCI ash is raised to 7.5% the rudimentary ash balance results in PCI recovery of 90%
3 The LOM Plan assumes that the Lower Jeralong Seam and Lower Merriown Seam will be almost entirely bypassed. The remaining seams will be 53 % bypassed and 47% washed, with the CPP yield assumed at 87%.

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On this basis, MMC consider the planned PCI/SCC: thermal product mix of 82% to be reasonable.

A key consideration in assessing the reasonableness of the product mix is the CPP yield of 87%. Although no washability data was available for MMC consideration, the existing Gunnedah plant has an overall October FY12 YTD yield of greater than 90%: it would be expected that the Tarrawonga coals, with the exception of the Merriown Lower and Jeralong Lower Seams, to be all washing at that yield or better given their low in situ raw ash. This supports the 87% yield assumption.

The key uncertainty for MMC"s analysis is the proposal to process the Tarrawonga coals through the future Boggabri CHPP. No plant design data, design parameters, proposed circuit or equipment selection were available for review by MMC. Notwithstanding this, it can be said that new plant has a significant advantage in that the Gunnedah CHPP historical plant feed sizing data for the feed coals from Tarrawonga can be used to inform circuit design, equipment selection and sizing: if this is the case, it would eliminate one of the key plant design risks.

The Gunnedah CHPP is a straightforward plant with the +1.4 mm material being washed in dense medium cyclones and the -1.4 mm + 0.10 mm material processed by spirals, there is no treatment of ultrafine material. In discussions with the plant personnel it was reported that Tarrawonga coal is relatively easy to wash – it is described as a "black and white" separation. This comment is supported by visual examination of the material discharging onto the reject screens during the plant inspection by MMC. Given the availability of actual ROM feed sizings from historic Gunnedah plant performance data, MMC would expect that a competent process engineer would ensure that the design of the Boggabri CHPP would be adequate to treat Tarrawonga coal.

The overall conclusion formed by MMC is that for the Tarrawonga product range represented in the WHC Business Model, and based on the limited information reviewed, current mining practices being maintained and the Boggabri plant design being adequate and managed by competent operators, the yields and product split used in the WHC Business Model are reasonable.

12.8 Environment and Mining Permits

12.8.1 *Leases, Titles and Approvals*

Table 12.1 lists the mining tenements associated with the Tarrawonga mine.

Table 12.1 - Tarrawonga Lease and Mining Titles

Tenement	Expiry Date	Area (ha)	Description
Mining Leases			
Mining Lease ML 1579	3/4/2027	656.1 ha	Issued on 3/4/2006 to Whitehaven Coal Mining Limited and Idemitsu Boggabri Coal Pty Limited for a period of 21 years. Includes an area excised from CL 368 which will be transferred back to this lease on mine closure and relinquishment of the mining lease. Original $100,000 ML security bond extended to +$3M in most recent MOP.

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Table 12.3 - Tarrawonga Lease and Mining Titles *Continued*

Exploration Licences			
EL 5967	23/7/2012	5,298 ha	Security deposit $30,000. Covers the area from Tarrawonga south to the Canyon open cut. EL 5967 was renewed on 4 October 2007.
Mining Purposes Lease			
CL 368			Note: Part of CL 368 excised for the approved Boggabri Coal Project and which is currently awaiting approval for an extension. CL 368 also includes part of Leard State Forest.
Mining Lease Applications			
MLA 1			MLA 1 represents a part of the current EL 5967 which relates to the current Part 3A project application for coal expansion ("Tarrawonga Coal Project") and extends to the east and southeast of the current mine workings in ML 1579.

In addition to these titles, Tarrawonga"s Mining Operations Plan (MOP) was approved by the former Department of Primary Industries – Mineral Resources (now Division of Minerals and Energy) on 9 May 2006 and will expire on 28 February 2012.

Table 12.2 provides the basic details of the current State level Development Consent for the Tarrawonga mine.

Key conditions of the original consent which lasts until 9/11/2017 include:

- Original approval for extraction of a total of approximately 12.4 Mt ROM (see below) by open cut at rates up to 2 Mtpa;
- Coal haulage along on a private haul road;
- Preparation of 13 relevant management plans, strategies and programs including a Biodiversity Offset Strategy;
- Receiving and emplacing coal rejects from the Gunnedah CHPP;
- Air and noise management and performance requirements, with land acquisition triggers applying;
- Community Consultative Committee; and
- Independent environmental audits (every 3rd year).

The original consent was updated following an approved s75W modification for mine extension in October 2010. This modification enabled a further 4 Mt ROM to be extracted (to a total 16.4 Mt ROM) but retain the original 8-10 year mine life and maximum annual extraction rate of 2 Mtpa. Consequential increases in disturbance area, coal crushing and handling infrastructure, overburden handling quantity and height of overburden dumps were approved as well as modified haulage routes for certain domestic deliveries including public roads.

Table 12.2 – Tarrawonga Existing Development Consents

Development Consent No.	Consent Authority	Approval Date	Approved Operations
DA-88-4-2005	Minister for Planning	9 November 2005	Approval for producing up to 2Mtpa ROM coal for 12 years (to 9 November 2017). References to EIS and other documentation dated May 2005 prepared by RW Corkery & Co.
S75W modification to DA-88-4-2005	Minister for Planning"s delegate (DoP)	15 October 2010	Increased total extraction to 16.4 Mt ROM, coal crushing and other infrastructure, increased overburden handling & dump height, additional truck haulage route options.

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12.8.2 ***Summary of the proposed project in current project application***

The proposed extension to the Tarrawonga Coal Mine will involve mining to the east into Exploration Licence (EL) 5967 and to the north into Coal Lease (CL) 368. The key components of the proposed Project as described in the project application documentation of 6th April 2011 (document 07-02-47) are summarised below and these will be subject to assessment of relevant social and environmental effects as part of the approval and conditioning process.

- Increase in the total life of mine coal production from 16.4 Mt to approximately 55 Mt;
- Increase in the total mine life by approximately 13 years (i.e. 8-10 years to 23 years);
- Increase in the ROM coal production rate from 2 to 3 Mtpa;
- Increase in the mining fleet to facilitate the ROM coal production rate increase;
- Increase in the coal road transport movements from the mine site to the Whitehaven CHPP associated with the increased ROM coal production rate;
- Extension of the open cut by approximately 1,500 m and 400 m to the east and north of Mining Lease (ML) 1597, respectively;
- Integration of Tarrawonga Coal Mine and Boggabri Coal Mine final landforms at the cessation of operations;
- Increase in the total waste rock production from 123.3 to approximately 562 Mbcm;
- Extension of the existing Northern Emplacement, Southern Emplacement and open cut infill areas;
- Relocation of the current coal crushing and screening facilities, as well as the administration and workshop areas to the south-east corner of the mine site;
- Optional construction and use of a coal conveyor linking the Project with the Boggabri Coal Mine CHPP to the north west which if constructed may reduce the need for coal haulage to the Whitehaven CHPP.
- Construction and use of new soil stockpile areas;
- Construction and use of dams, channels, dewatering bores and other control measures to manage groundwater and surface water within and around the mine site, including construction of a Goonbri Creek diversion to the east of the mine site;
- Realignment of Goonbri Road and Dripping Rock Road to the south and east of the mine site, respectively;
- Use of a mobile crushing and screening plant to generate approximately 300,000 cubic metres of gravel materials per annum for direct sale to customers (i.e. collection at the mine site gate); and
- Direct sale of up to approximately 450,000 t of domestic coal to customers (i.e. on-site crushing and screening and collection at the mine site gate).

MMC notes that the description given in the application implies that the use of the Gunnedah CHPP with associated increased road haulage is required for the expansion: the use of the Boggabri CHPP is optional. The project has evolved since that time and WHC has advised MMC that the Boggabri CHPP strategy will be incorporated in the environmental assessment. Refinements and amendments to the project description can be undertaken during the project application phase, which is still under way. Because use of the Boggabri CHPP would remove the need for additional road haulage (dot point 5) MMC considers that any such amendment to the current project application for mine extension would not present any additional risk for gaining project approval.

The Commonwealth Department of Sustainability, Environment, Water, Populations and Communities (SEWPaC) determined that the proposed development is a "controlled action" under the Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act). The EPBC Act Part 3, Division 1 controlling provisions are sections 18 and 18A (Listed threatened species and communities), and 20 and 20A (Listed migratory species). The project application will be assessed under Part 3A of the NSW Environmental Planning and Assessment Act 1979 which is an accredited assessment process under section 87 of the EPBC Act and provides a simpler and more efficient assessment process.

An Environment Protection Licence (EPL) No. 12365 for the Tarrawonga Mine is held by Tarrawonga Coal Pty Ltd. The most recent EPL annual return dated 3 March 2011 for the year up to 8 January 2011 indicated several non-compliances with water quality discharges in 2010 (March, August, September, November and December) and insufficient monitoring samples taken at other locations, as outlined below:

> Limit Condition L3.3: A persistent problem became evident during relatively wet weather conditions throughout the reporting year with exceedances of Total Suspended Solids (TSS) associated with the site"s wet weather discharges. Persistent wet weather resulted in excess dirty water which could not be contained in site storages

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despite these being appropriately sized to handle the specified design storm as required by the EPL (i.e. sufficient capacity to store runoff from a 38.4 mm, 5 day rainfall event which equates to a 5 day 90%ile rainfall depth for Gunnedah). The excess water was beyond the ability to be used in site operational demands or to have been effectively treated by the routine flocculation process in the water treatment system. However, it is noted that the licence limit of 50 mg/L TSS was commonly exceeded in the wet weather natural watercourse flow upstream of the discharge points which would indicate that there was nil or very little potential for environmental harm. While the exceedances are technically prosecutable under relevant legal provisions, it is expected that the risk of a prosecution (as opposed to a Penalty Infringement Notice) would be very small.

It is recommended that the mine apply for a revision to EPL conditions to insert a revised rainfall design event criterion for limit conditions as well as to have the TSS and other water quality limits make sensible reference to receiving water quality. The need for improvement will increase with proposed mine expansion applications.

Monitoring Condition M2.1: At three locations only one of the required water samples for lead testing was undertaken instead of the required two. The second water sampling run was unable to be conducted due to inaccessibility during extreme wet weather events and the next monitoring run was outside the EPL annual reporting period.

Monitoring Condition M2.1: Only one of the required four quarterly samples of mine void water was undertaken while at three other locations only one of the required water samples for lead testing was undertaken instead of the required two. This non-compliance arose because there was no mine void water present during three of the four quarterly monitoring runs.

Monitoring Condition M2.1: Only 58 of the required 60 samples at Monitoring Point 18 were collected due to power failure and only 48 of the required 60 samples at Monitoring Point 15 were taken due to the laboratory not supplying filter paper for this unit.

It is unlikely that any prosecution would arise from these instances of minor non-compliance in the previous period. The mine has since instigated new procedures to ensure sufficient sampling and to seek to improve water discharge management. No details were sighted for performance in the current year: however it is understood that the wet weather discharge licence conditions have not been changed and therefore TSS exceedances may be expected to persist in prolonged wet weather periods. Additional storage capacity and/or additional clean water diversions allied with modifications or upgrade to the water management monitoring/alert system may also be beneficial in reducing water quality discharge risks.

There were a total of eight complaints registered against the mine operations during the last licence reporting period. It is noted that variations to noise monitoring conditions in the EPL commenced in July 2011.

The EPL is next due for review in January 2014.

Land Ownership

The joint venture partners own all freehold land within the mine site, namely:

- "Thuin" – approximately 400 ha of this 450 ha property falls within the mine site;
- "Nagero" – approximately 210 ha of tis 620 ha property falls within the mine site; and
- "Forest View" – approximately 51 ha of this 180 ha property falls within the mine site.

In addition, Whitehaven Coal Limited has acquired the adjoining properties of "Bollol Creek", "Templemore", "Green Hills", "Blair Athol School House", and "Matong" as a buffer to its operations. Whitehaven Coal has also entered into binding agreements with the landholders of the "Ambardo", "Kyalla" and "Pine Grove" properties in relation to noise levels from coal haulage at those properties. The majority of the haul route is also owned by the mine or its joint venture partner. The Crown public roads south and within Lot 25 DP 754940 and Crown road reserve west of Lot 31 DP 754940 are not held under enclosure permit. This level of land ownership limits nearby private land ownership and therefore assists in minimising amenity impacts on residences surrounding the operation.

Rehabilitation Costs

The MOP outlines that at the time of maximum land disturbance in Year 6 the rehabilitation security deposit (calculated using the DPI-MR"s workbook entitled "Calculation of Security Deposit for NSW Mining Operations") is $3,510,786. The security deposit will increase as a result of the most recent consent modification in 2010 and will significantly increase with the much larger disturbed land footprint that will follow the extended mining operations under the current proposed mine expansion application.

12.8.3 *Key Environmental Management Issues*

Cumulative Impact Management – The Tarrawonga-Boggabri-Maules Creek (and Goonbri) chain of mining operations and prospects is increasingly being regarded by regulators as a single mining precinct requiring co-ordinated operations and management strategies to minimise impacts on the environment and community.

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Agricultural Land – The proposed post-mining conceptual landform envisages some re-establishment of Class III capability land similar to that of pre-mining areas. Final slopes of the backfilled open cut areas will be 10 degrees or less which will allow for the resumption of grazing activities over the northern part of the site. The importance of protecting and managing agricultural land has been heightened by recent policy and emerging regional strategic plans.

Water Management – Water management will continue to be a key environmental risk that will require close attention, as evident from the need to ensure that recent licenced discharge non-compliances are prevented. The proposed major expansion of the operation will involve an increased demand for dust suppression water supply and include a diversion to Goonbri Creek.

Groundwater – Ongoing operations and monitoring have established groundwater conditions and variability such as pit water make. As well as normal extension of depressurisation and groundwater table drawdown as mining progresses, a key groundwater issue being planned for and costed (around $13M) is the construction of a low permeability barrier to limit the hydrological connectivity between the future mining pit and gravel alluvial areas around Year 12 of the proposed mine expansion.

Rejects and Tailings Disposal - Tarrawonga development consent allows for receiving and emplacing coal rejects from the Gunnedah CHPP and the proposed expansion will maintain options for waste handling and transport. Like the well understood overburden geochemistry at the minesite, the fine and coarse reject materials have been characterised and are considered to present a low environmental risk.

Noise and Dust – Although noise complaints arise with current operations, noise and dust issues represent medium and manageable level of environmental risk at the mine which are guided by approved management plans and assisted by buffer lands in mining company ownership.

Flora and Fauna - Threatened flora species and endangered ecological communities have increased in terms of importance for local environmental management and establishment of biodiversity offsets to allow clearing associated with open cut mining. Tarrawonga is continuing to develop an appropriate offset agreement. Aquatic ecological studies are proposed to be undertaken to determine appropriate impact mitigation and management strategies.

Heritage – Heritage issues are currently soundly addressed by relevant management plans. However it noted that there has been a marked escalation in the potential number of indigenous stakeholder groups that demonstrate an interest in the heritage studies and initiatives advertised by mining operations which may portend more complex and difficult heritage management challenges into the future.

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13. ROCGLEN OPEN CUT

13.1 Key Outcomes

- Multi Seam steeply dipping deposit mined by open cut using trucks and hydraulic excavators.
- 1.5 Mtpa ROM production – 50% of coal washed.
- Projected yields and associated product qualities should be achievable.
- The projected product coal split is predominantly low ash thermal product.
- Life of Mine plan tonnes are supported by JORC Reserves of 13.0 Mt.
- LOM Plan mine life is 10 years until 2021, but tonnage will be replaced by Vickery open cut post-2016.
- Current mining consents last until 2020.

13.2 Overview

The Rocglen Project is located 28 km north of Gunnedah and to the east of the Vickery State Forest. Rocglen produces up to 1.5 Mtpa of ROM coal which is crushed onsite and then trucked to the Gunnedah CHPP for processing. A CHPP yield of 83% is planned post-2011 to produce a thermal product which will be railed to the port of Newcastle for export. The Rocglen project is wholly owned by WHC.

Although sufficient coal remains at Rocglen to last until 2021, it is planned to replace the Rocglen tonnage with coal from the planned Vickery open cut when it commences production in 2014. Approximately 6.7 M ROMt will remain at Rocglen by that time.

13.3 Geology and Resources

13.3.1 *Geology*

The Rocglen coal resource is located in the Maules Creek Sub-basin, a structural subdivision of the Gunnedah Basin. The coal seams occur within the Early Permian Maules Creek Formation.

The coal seams present at Rocglen have been named, in ascending order, the Belmont, Lower Glenroc, Upper Glenroc and Rosebery Seams. Non-coal lithologies are mostly lithic conglomerates, sandstones and mudstones. The general strata section is shown in **Figure 10.2**.

Structurally the Rocglen deposit straddles an asymmetric NNW trending anticline that plunges to the south. The strata dip gently to the west at up to 10° and more steeply to the east at up to 20°. To the northeast the deposit remains open and to the east it is constrained by the Belmont Fault. In the west the Glenroc and Belmont seams dip beneath higher ground into the neighbouring Vickery coal lease.

In the core of the anticline, weathering has removed the Rosebery and Glenroc Seams. The Belmont Seam is also completely or partially weathered locally. East of the anticline a favorable depositional environment, perhaps influenced by underlying structure, has allowed thick coals to accumulate with minimal intervening sediment.

The Rosebery Seam averages 1.7 m thick, the Upper Glenroc 4.2 ms, the Lower Glenroc 2.3 m, and the Belmont 7.1 m.

To the east of the anticline the interburden between the Belmont and Lower Glenroc seams is approximately 20 m, whilst to the west it increases to 45 m.

The coal seams are banded and moderate to high ash (20% to 30%), low sulphur (<0.5%) and low swell (1.5 to 3.0). The seams can be washed to an export grade product.

No igneous intrusions have been identified from drilling, however a dolerite dyke was encountered in the initial boxcut.

Depth of weathering generally ranges from 35 m to 50 m.

13.3.2 *Exploration Methods and Adequacy*

From 1993-1998 the area was held as part of EL4501 by Novacoal Australia Pty Ltd and 23 open holes were drilled. Since 2001 Whitehaven have drilled 192 holes, including 13 partially cored holes. Additionally, 55 exploratory holes have been drilled by the blasthole rig.

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13.3.3 ***Coal Quality***

Thirteen slim cores have been analysed for coal quality over the Rocglen deposit, with most cores situated within the central part of the mine. The available data consists of:

- Raw ply analysis including moisture, ash, total sulphur and relative density;
- Ply float-sink at densities 1.45, 1.60 and 1.80 (partial); and
- Section CF1.45 and CF1.60 clean coal analysis including proximate analysis, specific energy, total sulphur, CSN, HGI, ultimate analysis and ash analysis. Ash fusibility analysis was undertaken for CF1.60 composites.

Table 13.1 – Rocglen – Average Coal Quality

Seam	Average Thickness m	Relative Density	Inherent Moisture % ad	Ash % ad	Volatile Matter % ad	Total Sulphur % ad	Specific Energy MJ/kg	CF1.45 Yield %	CF1.45 Ash %
U Glenroc	4.22	1.45	3.4	21.2	35.4	0.41	29.03	78.5	6.9
L Glenroc	2.26	1.49	3.7	24.7	31.3	0.35	24.30	75.6	9.0
Belmont	7.14	1.45	3.5	21.8	32.7	0.41	25.08	69.5	7.6

The upper and lower Rocglen and Belmont Seams are mined. The coal is crushed to minus 50 mm on site before being trucked to the Gunnedah CHPP where the coal, depending on the raw ash, is either washed or bypassed direct to the product stockpiles.

Two products have been produced; one a 9% ash, low sulphur is PCI coal and a 13% to 14% ash, low sulphur export thermal export. The WHC Corporate Model plans a future 100% thermal coal from Glenroc.

The product quality is supported by train load analysis from bypass coal loaded at the Gunnedah CHPP facility, which shows a low sulphur thermal export coal with an ash of 12%.

13.3.4 ***Geological Model***

MMC has reviewed the Rocglen geological model and believes the modelling techniques used are suitable for the deposit.

13.3.5 ***Resources***

Resources of 19.2 Mt, including 1.5 Mt of Inferred Resources, were estimated by Mr. Colin Coxhead in August 2011. MMC have reviewed the Resource estimation methodology.

Resources have been estimated using cored holes with quality data, geophysical logs and core recovery greater than 90% as Points of Observation.

Tonnages have been calculated using air dried RD. Open cut Resources have been restricted to an overburden ratio of 10:1 bcm/tonne.

The following distances between boreholes have been used to estimate Resources:

- Measured – 500 m
- Indicated – 1,000 m
- Inferred – 2,000 m

MMC has checked the Resources against the geological model and believes that in general the Resource estimation is correct and the classification is suitable for the borehole density and level of information available: however, for the Upper Glenroc Seam the classification could have been more conservative.

13.4 Reserves

The Reserves for Rocglen were estimated by Mr. Doug Sillar of MMC, in August 2011 and are current to 31 March 2011. Reserves total 13.0 M ROMt and 10.7 M Product tonnes.

MMC have reviewed the reserving methodology and on the basis of the available data confirm that the Reserves are based on the underlying Resources and that the appropriate methodology for applying the modifying factors has been applied.

MMC considers the Rocglen Reserves have been correctly estimated and conform to JORC standard.

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13.5 Mining Operations

The mining operation for the Rocglen coal mine is described in the November 2009 Life of Mine Plan, and is generally described as follows:

- Mining has been undertaken continuously since 2008 and is operating to a LOM Plan approved in October 2010;
- Recoverable Reserves as at March 2011 are 13.0 Mt ROM coal;
- The seams are steeply dipping on either side of a central anticline, limited to the east by upthrust faulting;
- Coal dips generally between 10 and 20 degrees;
- Mining is by conventional open cut, truck and shovel mining methods;
- The mine is structurally challenging, with numerous faults and stratigraphic features complicating production; and
- The average strip ratio is 7.6 bcm/t.

MMC inspected Rocglen coal mine on 11th January 2012.

The mine appeared to be competently managed and operated, and operating in accordance to the sequence of the November 2009 LOM plan.

The fault line that marks the eastern boundary of the reserve has resulted in up-thrust coal. A number of examples of intrusion in the seam were evident, but a wide heat effect is not evident and is claimed not to be a quality issue.

The relatively complex mining layout and steep dips create tight conditions for spoil room and this is reflected in the layouts in the LOM Plan. The installed capacity of the truck-excavator fleet on the site is sufficient to handle the total volume of approximately 11Mbcm per year required by the Corporate Model.

13.6 Site Infrastructure

The coal handling and transport includes the following steps:

- Coal excavation and transport to a ROM coal stockpile;
- Coal reclaim and feed to a coal crushing plant for sizing;
- Coal reclaim and transport by road approximately 30 km to the Gunnedah CHPP; and
- Reclaim and loading into rail cars for transport to Newcastle.

The existing handling and transport systems through the use of Toll Holdings as the road haulage contractor are working satisfactorily.

13.7 Environment and Mining Permits

13.7.1 *Leases, Titles and Approvals*

Project approval for the Rocglen project (originally known as Belmont) was initially granted by the Minister for Planning on 15 April 2008 (PA 06_0198). The approval was for a period of 12 years from the grant of the mining lease and coal extraction is limited to 1.5 Mtpa of ROM from the site. A later project approval for extended mining and overburden emplacement in the northeast and of the operations was issued on 27 September 2011 (PA 10_0015). This approval enables mining operations up to 1.5.Mtpa until the end of December 2022. By the end of September 2012, or as otherwise agreed by the Director-General, the original project approval for the Rocglen Coal Mine (PA 06_0198) is to be surrendered.

On 21 December 2011 Rocglen received approval under the Environmental Protection and Biodiversity Conservation Act (EPBA Act) from the Commonwealth Government (SEWPaC) for to its controlled action in relation to listed threatened species and communities as well as listed migratory species. This approval expires on 16 November 2025.

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Table 13.2 lists the mining tenements associated with Rocglen mine.

Table 13.2 - Rocglen Lease and Mining Titles

Tenement	Expiry Date	Area (ha)	Description
Mining Leases			
ML 1620	9/6/2029	365.2	ML 1620 issued on 10 June 2008 following MLA 309 and includes part of CL316 held by Namoi Valley Coal Pty Ltd. WCM established an agreement with the leaseholder (now owned by WCM) to excise the surface portion of this lease contained within MLA309.
Exploration Licences			
EL 5831	5/4/2013	474.3	Renewed on 11/11/2008 and reduced in area from previous 778 Ha. (See note below re this EL"s Conditions 30 and 48).

Condition 30 of EL 5831 provides for a single security deposit of $100,000 for the purposes of ensuring the fulfilment of obligations under EL 5831 and WHC"s other adjacent exploration tenements to the south, EL 4699 and EL 5967. Condition 48 is a special condition whereby the licence holder must make every reasonable attempt, and to be able to demonstrate their attempts, to enter into a cooperation agreement with the holder(s) of any overlapping petroleum title(s). The relevant petroleum tenement in the Rocglen area is PEL 1 held by Australian Coalbed Methane Pty Limited which expires on 10 February 2015. No details were sighted in relation to management activities relating to Condition 48.

The MOP is for a period of 7 years, until May 2014, and the agreed financial assurance under the current MOP arrangements is set at $3.98M.

An Environmental Protection Licence (EPL 12870) for the Rocglen mine was issued to WCM by then Department of Environment and Climate Change (DECC, now EPA) on 4 March 2008 and has since been varied to clarify water discharge limits, noise conditions and monitoring requirements.

Land Ownership

The land directly affected by the Rocglen mine and much of the surrounding buffer zones is fully owned by Whitehaven Coal. WHC owns the properties of "Glenroc", "Belmont" and that part of "Roseberry" located within the boundaries of ML 1620. WHC also owns the properties of "Yarrawonga", "Yarrara", "Belay", "Brentry" and "Stratford" in the surrounding area. The Vickery State Forest is located immediately to the west of the mine boundary.

Environmental Management Performance

A comprehensive and independent environmental audit report in July 2011 was undertaken in accordance with the project approval condition requiring such audits are required every three years. The key issues and recommended actions identified by Umwelt consultants to ensure compliance included:

- WCM to prepare and submit to DP&I a Landscape Management Plan (now termed Landscape and Rehabilitation Management Plan in the latest approval) which should incorporate Flora and Fauna Management Plan, Bushfire Management Plan, Mine Closure Plan and Final Void Design and Management Plan;
- Non-compliances and their notifications in relation to the EPL to be addressed (also see below);
- Consider conducting an independent review of water management capabilities and the ability of the discharge system to meet compliance expectations;
- Measure mine inflow quantities in addition to mine inflow water quality;
- Review hydrocarbon storage arrangements by contractors;
- Review alluvial groundwater monitoring strategy; and
- Fencing required in the regional biodiversity offset area by the time of site Biobanking registration.

In relation to Environment Protection Licence EPL 12870, ongoing exceedances of wet weather discharge water quality in relation to TSS have been reported by WCM to the regulator. These non-compliances indicate the potential need for revision to the EPL and/or for changes to site water management arrangements. Isolated non-compliances have also been recorded in relation to noise, blasting and air quality. Several instances of incomplete monitoring activity occurred

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whereby less than the required number of samples was taken in the reporting period but it is understood that WHC"s monitoring protocols have since been revised.

A key requirement of the State and Federal approvals is the need to establish a formalised and binding conservation offset. Part of a dedicated regional biodiversity offset area to the east of Rocglen owned and established by WHC and comprising the "Yarrari" and "Belah" properties has been allocated to meet this requirement as well to meet offset requirements set out under the primary State project approval. The conservation offset strategy is still being finalised as it relates to multiple WHC properties but it has been subject to ongoing negotiation with the regulator and supported by scientific investigations.

14. SUNNYSIDE OPEN CUT

14.1 Key Outcomes

- Single seam dipping deposit selectively mining by open cut using truck and hydraulic excavators.
- 0.5 Mtpa ROM production with +50% of coal washed.
- The product coal is 100% thermal product.
- Mine life finishes in FY2015.
- Business model tonnes are supported by the Reserves and a LOM Plan, but the waste ratio in the model should be reduced from 7.6 bcm/ROMt to 5.5 bcm/ROMt.

14.2 Overview

The Sunnyside Project is located approximately 15 km southwest of the Gunnedah CHPP and includes the abandoned Gunnedah No. 5 Underground Mine in the southern part of the project area. Sunnyside commenced operation at the end of 2008 at a production rate of 300,000 ROM tpa, and is planning to expand up to 500,000 ROM tpa by 2014. ROM coal is trucked to the Gunnedah CHPP for crushing and processing before being railed to the Port of Newcastle for export as thermal coal. The coal lease and exploration area over which the mine will be established is wholly owned by Whitehaven Coal.

14.3 Geology

The Sunnyside area is located towards the eastern side of the Mullaley Sub-basin southwest of the township of Gunnedah. The coal resource contained in the Hoskissons Seam is located in the Late Permian Black Jack Group that laps onto the Boggabri Ridge to the east as shown in **Figure 10.1**. Unconsolidated Quaternary alluvial sands and gravels that fill in the incised palaeo-topography overlie the Permian strata. The Quaternary cover and depth of weathering (in the Permian) controls the subcrop line of the Hoskissons Seam at depths up to 50 m, but averaging 25 m to 30 m.

The Hoskissons Seam in the Sunnyside area ranges from 6 m to 9 m thick and can be split into three sections. The lower section (plies A-B), approximately 2.5 to 4 metres thick, has minor coking properties and is lower in raw ash (10 – 16 %). The middle layer (ply C) is heavily banded, is 1.4 m to 3 m thick, and has a high raw coal ash (40 – 50%). The upper section (plies D-E), is 1 m to 2 m thick, and is also high in inherent raw coal ash (18 – 25%) but is less banded.

The Hoskissons Seam subcrops in the east of the tenement and dips gently to the west.

Thick igneous intrusions occur throughout large areas of the area and either heat affect or destroy the Hoskissons Seam. In the northern part of the Sunnyside deposit, the Hoskissons Seam is intruded by a sill about 3 m thick. It tends to expand rather than replace the coal seam, and coal affected by this sill is categorised separately as low volatile coal.

Faulting in generally a northeast- southwest direction displaces the Hoskissons Seam at various places along the subcrop line.

14.3.1 *Exploration Methods and Adequacy*

The area was previously held as an Authorisation (A139) by the former owners of the Gunnedah Colliery.

Four cored drill holes were drilled near the Hoskissons Coal subcrop in 1979-80. In 1982-83 17 part-cored holes and 17 open holes were drilled, and ground magnetics and resistivity surveys were completed.

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In February 1997 a staged exploration program was devised by Namoi Mining Pty Ltd. The objective of Stage 1, comprising 19 wireline logged open holes, was to infill the 1982-83 drilling in the potential open cut zone, bringing drill hole spacing down to 500 m x 250 m. Provision was made to proceed to lox line definition drilling, and to take one or two cores if results were encouraging.

Although the southern part of the potential open cut resource was severely affected by near surface or subcropping igneous rock, a 1.5 km^2 area in the north appeared free of igneous activity and relatively shallow oxidation depths of around 30 m to 35 m were indicated.

Stage 2 drilling included lox line, infill and core drilling, and was completed by May 1997. A zone of deep weathering, probably structurally controlled, was identified between the 500 metre spaced Stage 1 drilling.

An interpretation of available aeromagnetic data was commissioned through Encom Technology Pty Ltd to assess the potential to interpret igneous sill and intrusive rocks particularly in the potential open cut area. The EL was also included in an aerial photographic and topographic mapping survey flown over other exploration areas in the Gunnedah region. These two studies were reported in the 2003 annual report.

Exploration drilling between 2005 and 2008 included 85 open and partially cored holes to improve the categorization of the resource in the Sunnyside deposit and the southern part of EL5183. Between 2009 and 2011 72 open holes were drilled in the Sunnyside mine area to better delineate intrusions and faults ahead of mining operations. The total number of holes in the geological model is 227.

A ground magnetic survey was carried out in 2010 to assist in the interpretation of igneous intrusions and geological structures.

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14.3.2 *Coal Quality*

Eight slim cores with coal quality data lie within the Sunnyside pit area. The supplied information consists of Hoskissons Seam data as follows:

- Raw ply analysis including proximate analysis, total sulphur, relative density and specific energy;
- Ply float-sink at densities 1.45 and 1.60; and
- Section CF1.45 and CF1.60 clean coal composite analysis including proximate analysis, specific energy, phosphorus and CSN. Ash fusibility and ash analysis were undertaken on the CF1.60 composites.

The Hoskissons Seam can be mined in several passes with the higher ash bands selectively removed and discarded. The selective mining process results in a lower ash coal (~12% raw ash) sourced from the base of seam and higher ash coal (~27% to 35% raw ash) sourced from the upper part of the seam. The quality of the high ash coal can be controlled by selective removal of higher ash plies, particularly from the very top of seam where ply ash greater than 35% exist, or by washing.

The coal is crushed and sized before being trucked to the Gunnedah CHPP. Over 50% of the coal is bypassed at the CHPP depending on the ash of the ply being mined: the bypass is generally from the top two plies. The coal from this mine is processed to produce a 13/14% ash, high volatile export thermal coal. The actual recent CPP yield of the top plies is 75%. Actual recent overall recovery from this mine is 90%.

14.3.3 *Geological Model*

MMC has reviewed the geological model and believes the modelling techniques used are suitable for the deposit. Mined out areas have been excluded from the model by means of limiting masks.

14.3.4 *Resources*

Resources of 89.9 Mt, including 22.95 Mt of Inferred Resources, were estimated by Mr. Colin Coxhead in July 2011 and are current to March 2011. Of this, only 10.2 Mt is in the Sunnyside open cut, the remainder being in the neighbouring Rosmar project area. MMC have reviewed the Resource estimation methodology.

Resources have been estimated using cored holes with quality data, geophysical logs and core recovery greater than 90% as Points of Observation.

Tonnages have been calculated using air dried RD. Open cut Resources have been restricted to an overburden ratio of 12:1 bcm/tonne.

The following distances between boreholes have been used to estimate Resources:

- Measured – 500 m
- Indicated – 1,000 m
- Inferred – 3,000 m

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MMC has checked the Resources against the geological model and the numbers are correct. MMC believes that the Resource classification is suitable for the borehole density and level of information available.

14.4 Reserves

The Reserves for Sunnyside were estimated by Mr. Doug Sillar of MMC, in August 2011 and are current to 31 March 2011. Reserves total 27.7 M ROMt and 24.7 M Product tonnes. Of this, 2.5 M ROMt is contained in the Sunnyside pit shell, and 25.1 M ROMt in the adjacent Rosmar pit shell. Rosmar is not included in the Sunnyside LOM Plan, or in the WHC Business model. The overburden ratio for Sunnyside Reserves is estimated to be 5.5 bcm/ROMt. It is noted that the overburden ratio for Sunnyside LOM Plan is 4.9 bcm/ROMt, and that used in the WHC Business model averages 7.65 bcm/ROMt.

MMC have reviewed the Reserving methodology and on the basis of the available data confirm that the Reserves are based on the underlying Resources and that the appropriate methodology for applying the modifying factors has been applied.

MMC considers the Sunnyside Reserves have been correctly estimated and conform to JORC standard.

14.5 Mining Operations

The Sunnyside mine was inspected by MMC on 11 January 2012. The mining operations are generally described as follows:

- Remaining recoverable coal is approximately 1.6 Mt ROM coal;
- Reserves are scheduled to be extinguished in 2015, to make way for production from the Vickery open cut;
- Mining is by conventional open cut, truck and shovel mining methods; and
- The mining fleet is generally rented equipment, supplemented with an additional contract fleet.

It is noted that the waste ratio quoted by the site manager of the mine is 5.0 bcm/ROMt, which is in accordance with the LOM Plan and close to the Reserves estimate.

14.6 Site Infrastructure

The coal processing operations for the Sunnyside coal mine are generally described as follows:

- Coal excavation and transport to a ROM coal stockpile and ROM bin;
- Coal reclaim and transport approximately 15 km to the Gunnedah rail loader;
- Coal reclaim and feed to a coal crushing and sizing plant; and
- Reclaim and loading into rail cars for transport to Newcastle.

The coal handling and transport arrangements present no risk to the Sunnyside mine.

14.7 Environment and Mining Leases

14.7.1 *Leases, Titles and Approvals*

Table 14.1 lists the mining tenements associated with Sunnyside mine.

Table 14.1 - Sunnyside Lease and Mining Titles

Tenement	Expiry Date	Area (ha)	Description
Mining Leases			
ML 1624 CCL 701	5/11/2029	233.9	ML in name of Namoi Mining Pty Ltd (NMPL) in former Gunnedah Colliery area. Originally issued 23/12/1996, re-issued 5/11/2008 for 21 years. Security held $3,175,000.
Exploration Licences			
EL 5183	22/12/2007	1582	Part of the previous 1700 Ha exploration area excised for part of ML 1624 and an area of 95 Ha cancelled on 5/11/2008. Formerly held as Authorisation A319 by NMPL, former owners of Gunnedah Colliery.

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A lease covering the mine area including surface lands was obtained following the project approval on 24 September 2008 from the Minister for Planning.

ML 1624 and the mine site area adjoins the southern portion of EL 5183 and the northern portion of CL 701 both held by NMPL.

Condition 31 of ML 1624 is a cooperation agreement condition whereby the licence holder must make every reasonable attempt, and to be able to demonstrate their attempts, to enter into a cooperation agreement with the holder(s) of any overlapping petroleum title(s). The relevant petroleum tenement in the Sunnyside area is PEL 1 held by Australian Coalbed Methane Pty Limited which expires on 10 February 2015. No details were sighted in relation to management activities relating to Condition 31.

Table 14.2 lists the details of the State level project approval and environmental protection licence associated with Sunnyside mine.

Table 14.2 - Sunnyside Approvals and Environmental Permits

Approval	Approval Authority	Issue Date	Expiry Date	Area (ha)	Description
Project Approval					
PA 06_0308	Minister for Planning	24/9/2008	5/11/2013	233.9	7 year approval to Namoi Mining Pty Ltd from grant of ML 1624. Mining of up to 1 Mtpa ROM; Coal haulage route specified to Whitehaven Siding CHPP; Restricted operational hours. $100,000 community enhancement projects funding;
Environmental Protection Licence					
EPL 12957	Office of Environment and Heritage (OEH, EPA)	15 December anniversary date			Part of the previous 1700 Ha exploration area excised for part of ML 1624 and an area of 95 Ha cancelled on 5/11/2008.

An Environmental Protection Licence (EPL127957) was issued by DECC on 14 August 2008 and other necessary licences and approvals appear to be appropriately in place, including water licences.

14.7.2 *Land Ownership*

The land directly covering the pit, surface waste dumps and infrastructure is owned by Whitehaven Coal. Adjacent properties to the mining activities have been purchased or are under negotiation for purchase.

14.7.3 *Key Environmental Management Issues*

Based on available project environmental assessment and performance information, there appear to be no significant environmental issues associated with the project.

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15. WERRIS CREEK OPEN CUT

15.1 Key Outcomes

- Multi Seam steeply dipping deposit mined by open cut using truck and hydraulic excavators.
- The mine produces 2.0 Mtpa ROM production.
- The coal is not washed and has a dedicated load out facility.
- The projected product coal split is typically 22% to PCI, 78% to thermal product.
- Business model tonnes of are materially supported by JORC Reserves (29.1 Mt).
- Werris Creek has the potential to increase production by 0.5 Mtpa ROM subject to approvals.

15.2 Overview

The Werris Creek Open Cut is located approximately 4 km south of the township of Werris Creek in the northwest of New South Wales. The mine is permitted to produce up to 2.5 Mtpa of PCI and thermal coal and is currently producing approximately 2.0 Mtpa: it plans to maintain this rate. All coal is crushed on site and transported 2 km via road trains to the rail loading facility. The majority of the coal is then railed 250 km to the Port of Newcastle for export. A small proportion amounting to 180 ktpa is sold to the domestic market, which is PCI equivalent coal.

15.3 Geology and Resources

15.3.1 *Geology*

The coal seams occur within an isolated occurrence of Early Permian Coal Measures, the Werris Creek Coal Measures that are preserved in a northwest trending syncline within the Werrie Basin. Within the syncline the Werris Creek Colliery operated as an underground mine from 1925 until 1963.

The Werris Creek Coal Measures, also known as the Great Coal Measures and the Willow Tree Formation, contain nine coal seams designated A through to G Seam – G Seam being the lowermost coal horizon. The coal seams range in depth from 10 m at subcrop to 180 m in the centre of the syncline. Individual coal thicknesses are up to 8 m but more commonly in the 3 m to 4 m range. The base of weathering ranges from 10 m to 50 m, and in general increases from southeast to northwest across the deposit.

Waste material is variable between low to high strength. The floor strata of some seams are weak. Dips near the subcrop are up to 60 degrees and flatten out towards the centre of the basin. A number of small faults are present in the basin with interpreted displacements of less than 10 m.

Average dips to the northwest become steeper, the weathering is deeper and waste ratios are higher.

A dyke was intersected in the old underground Werris Creek Colliery: however, the extent of heat affected coal is not presently known.

15.3.2 *Exploration Methods and Adequacy*

During 2003, 29 open holes and 5 cored holes were drilled, focusing on outlining a resource in the south of the syncline.

Early in 2004 four open holes drilled in the northern parts of the basin confirmed similar coal measure sequences but at less favourable waste to coal ratios. Two cored holes were drilled to collect waste samples for acid generation potential and to increase the confidence in coal quality estimates. Two additional open holes were drilled within the abandoned Werris Creek Colliery to identify the mined seam and obtain groundwater samples. Thirty six open holes were drilled to delineate the lox line of the lowermost seam (G Seam).

In 2006 60 open holes were drilled, whilst in 2007 four cored holes and 10 open holes were drilled. In 2008 9 fully cored holes were drilled. In 2009-2011 55 open holes and 10 cored holes were drilled. These drilling programs were designed to increase confidence in the resource status and allow the majority of the resource to be categorised as measured.

The total number of drillholes in the database is currently 245, of which 28 are cored with coal quality data. All holes have been geophysically logged (unless blocked).

15.3.3 *Coal Quality*

The coals seams at Werris Creek lie within an isolated syncline in the Willow Tree Formation which is a lateral equivalent of the Greta Coal Measures, which are typically low in ash and low in sulphur. The average raw ash content is

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approximately 10% but the coal is generally separated out into high or low ash product for blending at the train loadout area. The coals are non–swelling to very weakly caking and are suited to PCI and export thermal products.

The seams currently being mined are D (18% ash), E (7.5% ash), F (12% ash), F rider (18% ash), and G (8% ash), with the bulk of the ROM tonnage sourced from E, F and G. Seam C will also provide a significant resource as the mine progresses.

Werris Creek is a raw coal only operation and therefore no washability testing is required nor has been undertaken. Available coal quality data from exploration drilling has enabled Whitehaven personnel to define a trend of higher ash to the north, and it is thought that product ash will increase as the mine progresses to the north, although this would not be expected to continue for the life of mine.

The model indicates two products are to be produced from Werris Creek over the life of mine, namely 8.0% ash PCI coal and 13% ash export thermal coal. Currently there are still a few small tonnage boutique products being sold, such as "sized" coal and high ash thermal (20%). A review of recent train load out analyses indicates the coal is a low sulphur, medium to high volatile export thermal coal with an ash of 12%. The life of mine plan product mix projected is 13% PCI and 87% export thermal

15.3.4 *Geological Model*

MMC has reviewed the geological model and believes the modelling techniques used are suitable for the deposit. The number of holes in the model differs from that reported in the JORC Resources report.

15.3.5 *Resources*

Resources of 34.2 Mt, including 2.6 Mt of Inferred Resources, were estimated by Mr. Colin Coxhead in July 2011 and are current to March 2011. MMC have reviewed the Resource estimation methodology.

Twelve of the 14 coal plies are considered to have open cut resource potential. Resources have been estimated using cored holes with quality data, geophysical logs and core recovery greater than 90% as Points of Observation.

Tonnages have been calculated using air dried RD, a minimum coal thickness of 0.3m and a maximum raw ash of 35% (ad).

The following distances between boreholes have been used to estimate Resources:

- Measured – 500 m
- Indicated – 1,000 m
- Inferred – 2,000 m

MMC has checked the Resources against the geological model and the numbers are correct. MMC believes that in general the resource classification is suitable for the borehole density and level of information available.

15.4 Reserves

The Reserves for Werris Creek were estimated by Mr. Doug Sillar of MMC, in August 2011 and are current to 31 March 2011. Reserves total 29.1 Mt and 29.1 M Product tonnes. The overburden ratio for Werris Creek Reserves is estimated to be 5.3 bcm/ROMt, which is consistent with the 2010 LOM Plan. The WHC Business model plans to mine 30.3 Mt from FY2012: This suggests that the pit shell includes a small proportion (4%) of Inferred Resources.

MMC have reviewed the Reserving methodology and on the basis of the available data confirm that the Reserves are based on the underlying Resources and that the appropriate methodology for applying the modifying factors has been applied.

MMC considers the Werris Creek Reserves have been correctly estimated and conform to JORC standard.

15.5 Werris Creek Mining Operations

MMC inspected the Werris Creek mine on 11 January 2012.

Werris Creek is a discrete basin where mining operations have started at the southern end and are progressing to the north. The mine has reached the highest ratio area (5.6 bcm/ROMt) and excavation is in balance with the inpit dump. Rehabilitation is well advanced on the boxcut spoil.

The coal is mined primarily from five seams with dips from 0 to 40degrees.

Mining is by conventional open cut truck and shovel equipment. A point noted is the size and type of graders, dozers, excavators and haulage trucks is similar to the other operations allowing for interchangability. Also, the layback is such that additional equipment could be utilised should this be necessary. Steep seam conditions on the edges of the basin have created a need for through-seam blasting.

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The current JORC Reserve and approval has been limited by the underground workings in the D and E Seams. These have been allowed for in the Resources and Reserves estimates, and operating procedures are in place to facilitate safe mining of the remnant coal in these seams.

The mine appears orderly and well managed.

15.6 Site Infrastructure

Coal handling and transport includes the following steps:

- Coal excavation and transport using haul trucks to a ROM coal stockpile;
- Coal reclaim and feed to a coal crushing plant for sizing;
- Coal reclaim and transport approximately 2 km to the rail loading facility: it is planned to build a new rail loop in the future and relocate the crushing plant closer to the rail load-out; and
- Reclaim and loading into rail cars for transport to Newcastle.

Infrastructure is in place for the Werris Creek mine operations and is considered adequate for the forecast production schedule and mine life.

15.7 Environment and Mining Leases

15.7.1 *Leases, Titles and Approvals*

Table 15.1 lists the mining tenements associated with Werris Creek mine.

Table 15.1 - Werris Creek Lease and Mining Titles

Tenement	Expiry Date	Area (ha)	Description
Mining Leases			
ML 1563	23/3/2026	678.5	Issued 23/3/2005 for prospecting and mining coal; Security deposit of $50,000. Special conditions relating to native vegetation protection/offsets and rehabilitation.
Exploration Licenses			
EL 5993	17/9/2013	97	Exploration Licence originally issued 18/9/2002 $10,000 security deposit
EL 7422*	26/11/2011	31	EL issued for two years only, with $10,000 security. Now part of current MLA*.
Relevant Mining Lease Applications			
MLA 407 MLA 408 MLA 409			Werris Creek Coal Pty Limited Creek Resources Pty Ltd & Betalpha Pty Ltd Werris Creek Coal Pty Limited

The initial Mining Operations Plan (MOP) for the project was prepared for Werris Creek Coal Pty in April 2005 and, following a MOP extension application, was extended until 31 August 2008. A Life of Mine MOP application dated 1 November 2011 was approved on 29 November 2011 by Division of Minerals and Energy. The MOP lasts for 7 years and expires on 31 August 2018 and it covers the first stage of the life of mine project approval obtained on 25 October 2011.

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Table 15.2 lists the State level approval stages for the Werris Creek mine.

Table 15.2 - Werris Creek Planning Approvals

Development Consent No.	Consent Authority	Approval Date	Expiry Date	Approved Operations
DA-172-7-2004*	DA-172-7-2004*	18/2/2005	7/4/2020	Approval for producing up to 2 Mtpa ROM coal for 15 years over an 80 ha area.
Modification to DA-172-7-2004 (MOD 1)*	Minister for Planning by delegation	19/10/2005	7 4/2020	Approval granted to allow until 31 January 2006 for the construction of the mine access road.
Modification to DA-172-7-2004 (MOD 2)*	Minister for Planning by delegation	6/3/2007	7/4/2007	Approval was granted for alternative management of the Aboriginal heritage „Narrawolga Site", as well as, mining an additional 280,000 tonnes of coal and moving about 1.34 million bank cubic metres of overburden.
Modification to DA-172-7-2004 (MOD 3)*	Minister for Planning by delegation	17/9/2008	7/4/2020	Approved to increase road haulage from 30 Ktpa to 50 Ktpa; establish a new 35 ML pit dam; increase coal stockpile to from 20 Kt to100 Kt and to 15m high.
Modification to DA-172-7-2004 (MOD 4)*	Minister for Planning by delegation	17/9/2008	7/4/2020	Approval was given to construct a precursor storage facility (prill and emulsion) and modify the biodiversity offset strategy.
Modification to DA-172-7-2004 (MOD 5)*	Minister for Planning by delegation	6/10/2009	7/4/2020	Approval to modify open cut and emplacement layout; construct up to 4 dams for dewatered groundwater; modify biodiversity offsets strategy. New conditions: Revised noise control conditions; establishing 362 Ha of biodiversity offset area; Energy Savings Plan required.
PA 10_0059	Minister for Planning	25/10/2011	31/12/2032	Increased production to 2.5 Mtpa; increased stockpile to 250 Kt; Community enhancement funding to $300 K.

**Note: to be surrendered by 12 October 2012*

The original Development Consent by the Minister for Planning was issued for the project in 2004 (DA172-7-204). In 2008 a modification to the consent was issued. The modified consent was superseded by a new "life of mine" project approval in December 2011 (PA 10_0059). By the end of October 2012, or as otherwise agreed by the Director-General, the previous development consent (DA 172-7-2004) for the Werris Creek mine needs to be surrendered.

The Werris Creek Coal LOM development covers an area of 910ha including ML1563, EL5993, EL7422 and Mining Lease Application (MLA) areas. The focus area of the MLAs is the northeastern areas of future open cut extraction, overburden emplacement, material handling, rail loop and rail loading areas.

The Werris Creek mine holds Environment Protection Licence EPL 12290 whose review was completed on 14 April 2008. The EPL has had a number of variations mainly in response to company applications to amend monitoring requirements.

15.7.2 *Land Ownership*

Werris Creek Coal owns the majority of the freehold land within ML 1563 including the properties "Narrawolga" (379 ha, entirely contained within the ML), "Eurunderee" (476 ha, of which 40 ha lies within the ML) and 47 ha of the "Cintra" property upon which the rail load-out road and product coal storage area are sited. Land not owned by the company

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includes a 20 metre section of a public Crown road traversed by the rail load-out road, up to eight unformed roads and formed Crown and Council-controlled roads, a small parcel of land owned by ARTC and a gravel quarry owned by Tamworth Regional Shire Council. The company has recently extended its existing bank of surrounding buffer land which has reduced the constraints upon the mining operation arising from environmental conditions.

15.7.3 *Environmental Performance*

The Werris Creek mine is inherently environmentally constrained particularly due to its topography, proximity to the township of Werris Creek and to surrounding rural residences.

While numerous complaints are frequently registered by the mine, many of these alleged incidents were later found to be actions that were in full compliance with the mine"s operating conditions or were a result of an activity not occurring on the mine site (such as train operations at Werris Creek yards instead). However, some legitimate exceedances of noise and blasting limits at nearby residences have been measured and reported as well as isolated other non-compliance incidents such as discharge water quality.

The company was prosecuted by the EPA (Office of Environment and Heritage, then DECC) in August 2008 in relation to offences on 16-17th July 2007 for non-compliant discharge water quality. This prosecution action signalled the seriousness of the licence breach in the view of the regulator. The sentence was handed down on 31 July 2009 and Werris Creek mine was ordered to pay $49,000 towards the rehabilitation of Quipolly Dam and to publicise details of the offence in the Sydney Morning Herald and Financial Review. Also, it was ordered to pay investigation costs of $2,764.72.

In terms of amenity issues such as noise, blasting and dust, the mine will continue to be constrained as it is becoming less topographically shielded as it heads northwards and closer to Werris Creek.

In general, the environmental risks associated with operating this open cut coal mine appear challenging but manageable, provided that all environmental management strategies and plans are applied diligently and the commitments given are implemented. Good operational performance and compliance practice at the mine will be needed to ensure that the mine avoids any new onerous conditions such as restrictions on operating hours for particular activities.

16. VICKERY OPEN CUT

16.1 Key Outcomes

- Multi Seam deposit mined by open cut using truck and hydraulic excavators.
- The project is still undergoing feasibility study.
- Vickery is planned to produce 4.6 Mtpa ROM production, commencing FY2014.
- The coal is planned to be washed at the Gunnedah CHPP using existing plant capacity.
- The projected product coal split is 55% to PCI, 45% to thermal product.
- Business model tonnes are supported by JORC Reserves (129 Mt) until FY2043, but rely on 36 Mt from Inferred Resources through to FY2050.
- No substantial issues have been identified that threaten implementation of the mine.

16.2 Overview

The Vickery project includes Authorisation 406 and CL316 and is well located for development in conjunction with a number of neighbouring WHC assets: these are the operating Rocglen mine to the East, Pine Hill / Bluevale open cut Resources to the west, and the rehabilitated Canyon mine and Merton Resource area to the north (**Figure 1.1**).

The tenement has been previously mined and rehabilitated. The original tenant holders Rio Tinto commenced mining in 1986 with a small underground operation which continued until March 1991. Between 1991 and 1998 approximately 4 million tonnes of coal was subsequently extracted using open cut mining methods. Mining operations at the former Vickery Coal Mine ceased in May 1998, when rehabilitation works commenced. Since that time, further coal exploration continued and the rehabilitated site was placed in care and maintenance. The tenement was purchased by WHC from Rio Tinto (Coal & Allied) in February 2010.

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It is WHC"s intention to recommence open cut mining at Vickery at a rate of 4.7 Mtpa ROM, commencing in CY2014, with all coal from the mine being washed at the Gunnedah washplant to produce a mix of PCI and thermal coal products. Coal from the Vickery mine will displace production from the Rocglen and Sunnyside mines.

The project is currently at a feasibility planning stage. The Vickery Coal Project Preliminary Environmental Assessment (PEA) was lodged on 4 November 2011.

16.3 Geology and Resources

16.3.1 *Geology*

The Vickery coal Resources occur within the Maules Creek Formation (refer **Figure 10.2**). Over most of the lease area the sediments dip to the east, but in the west the seams onlap on to the Boggabri Ridge. There are six seams with economic potential in the area as listed in **Table 16.1**.

Table 16.1 – Vickery - Seam Statistics

	Average Thickness (m)
Gundwarra	1.4
Kurrumbede	0.86
Shannon Hill	3.6
Stratford	2.7
Blue Vale	2.7
Cranleigh	2.5

Depth of weathering averages 27 m, but ranges from 7 m to-75 m.

16.3.2 *Exploration Methods and Adequacy*

Sunshine Gold Pty Ltd (later called Vickery Coal Pty Limited) undertook the early exploration in A151 and A157, which later became CL316, and from 1973-1979 83 fully cored holes were drilled.

From 1981 coal exploration was managed by Kembla Coal & Coke, a subsidiary of Rio Tinto. The majority of holes drilled during this time were geophysically logged.

16.3.3 *Coal Quality*

Typical average coal quality is summarised in **Table 16.2**.

Table 16.2 – Vickery – Average Coal Quality

	Yield %	Inherent Moisture % ad	Ash % ad	Volatile Matter % ad	CSN	Total Sulphur % ad	Specific Energy MJ/kg
Raw		2.8	12.2	34.7	2	0.53	28.70
F1.60	91.3		7.5	36.3	2.5	0.43	30.70

To assess the product assumptions used in the WHC model, MMC have reviewed the data provided by WHC and public information including that for Vickery South, the adjoining tenement owned by Coalworks Limited. The data indicate good floats 1.6 recoveries with product ashes that satisfy the target range. The data also indicate the presence of coking properties (CSN from 1-4). No data on volatile matter or phosphorus was available to consider and only very limited calorific value data. The Coalworks data reports the proposed quality as a SSCC product of 7.7% ad ash (83% of product tonnes) and an export thermal product is reported as 5.9 % ad ash (17%) or (through reviewing other information) this is most probably a 15% ash product. The calorific energy level of the terminal coal is also reported as 7,424 kcal/kg: however this thought to be more likely to be 6,280 kcal.kg GAD. The overall average yield is reported to be 84%, although Engenicom (Engenicom presentation 11 November 2010) report it as marginally lower at 81.5%.

16.3.4 *Geological Model*

A structural model has been prepared for the Vickery resource using Vulcan software, and this forms the basis for the Resources estimates. In MMC"s opinion the methods used for creating the model conform to industry standard. MMC has visually checked a number of seam structure grids and their associated mapfiles, and considers that the Vickery structural model has been created competently.

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MMC considers the Vickery quality model has been created correctly and the methods used conform to industry standard.

16.3.5 ***Resources***

Resources of 306.9 Mt, including 95.0 Mt of Inferred Resources, were estimated by Mr. Greg Jones of JBMS in July 2011. MMC have reviewed the Resource estimation methodology.

The Resources have been estimated using cored holes with quality data, geophysical logs and core recovery greater than 95% as Points of Observation.

Tonnages have been calculated to in situ moisture (of 8%) using the Preston-Sanders equation and a minimum seam thickness of 0.3 m. Open cut Resources have been restricted to an overburden ratio of 20:1 bcm/tonne. Underground Resources are restricted to the Stratford Seam where it is greater than 2m thick

The following distances between boreholes have been used to estimate Resources:

- Measured – 500 m
- Indicated – 1,000 m
- Inferred – 4,000 m

MMC has not checked the selection of Points of Observation or construction of Resource polygons as these were not provided. As a result MMC has also not been able to re-generate Resources for the Vickery deposit.

It is MMC"s opinion that the Vickery Resource has been generated in accordance with industry standard.

16.4 Reserves

The Reserves for Vickery were estimated by Mr. William Dean of UGM Australia. Reserves total 129 Mtt of coal, which is contained within the pit shell utilised for the Vickery feasibility study. MMC has reviewed the Reserving methodology and on the basis of the available data confirm that the Reserves are based on the underlying Resources and that the appropriate methodology for applying the modifying factors has been applied. The estimated Marketable Reserve is 104.5 Mt, a net product yield of 81%. No indication is given of the product split.

MMC considers the Vickery Reserves conform to JORC standard.

16.5 Vickery Mining Operations

A mine plan has been developed for the Vickery mine based on a conventional truck-excavator benching operation, similar to those currently used by WHC in its other thin-seam operations in the Gunnedah region. The adopted pit shell has been used for the estimation of the mineable Reserve, with pit limits defined by a combination of tenement boundaries, a fault cut-off to the west, and an approximate 12:1 bcm/ROMt insitu strip ratio cutoff to the east. The Vickery project footprint including the pit shell is shown in **Figure 16.1**.

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Figure 16.1 – Vickery Project Footprint



A description of the mining assumptions used in the pit shell design and layout is briefly described in the 2011 Vickery Reserves report. MMC has reviewed the assumptions and they appear to be reasonable.

Details of the pit quantities have been sourced from the 40-year "base case" schedule supplied by WHC to MMC for the purpose of compiling the Vickery Feasibility Study report.

The contained pit quantities are summarised in **Table 16.3**. The pit data is compared with the quantities generated from the same source for the "Base Case V7A2T" schedule, which finishes in 2043: this year coincides with the depletion of the Reserves, which are 129 Mt.

Table 16.3 – Vickery Pit Shell Data

Item	Units	Pit Shell	Base Case Schedule to 2043	WHC Business Model to 2050
Waste Volume	MBCM	1,635.3	1,312.3	1,651.4
Mineable Coal	Mt ROM	163.7	130.4	165.0
Prime Waste ratio	bcm/ROMt	10.0	10.01	10.01
Product Tonnes	Mt	122.7	111.9	145.2
Met Coal	Mt	115.9	35.2	79.4
Thermal Coal	Mt	6.8	76.8	65.8
Met Coal %	%	94.0	31.0	55.0
Net Product Yield	%	75.0	85.8	88.0
Bypass %	%	na	43.8	44.0
Plant Yield	%	na	75.3	78.6

The WHC Business Model quantities slightly exceed the pit shell quantities, although not materially.

It is notable that the net product yield and product split are inconsistent between the Reserves estimates, the pit shell quantities and the WHC Business Model. The 2011 Reserves report states that "Recoverable Reserves were calculated from the Mineable Reserves by applying modelled coal yields to the ROM coal. The modelled coal yield data is to produce an optimum product at a F1.60 density. In order to simulate the efficiency of the CHPP, adjustment factors were

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applied to the model yield and ash data. Dilution material was given a default yield value. It is assumed that some waste dilution is recovered in the washing process".

The product split has been generated within XPAC software and MMC has not sighted the underlying assumptions that were used. It appears that the assumptions used for product split and plant settings have been revised for the feasibility study and again for the WHC Business Model. MMC are aware from WHC presentations that the product strategy is heavily aligned toward optimising both of these and the assumptions are discussed in **Section 16.7**.

A description of the mining operation currently under consideration for the feasibility study was presented to MMC by the Project Manager for the Vickery project in Powerpoint format (Vickery Coal project: general Information, October 2011). The general arrangement of the operation and deployment of mining activities, equipment and manpower were described. A general layout of the mine is illustrated in **Figure 16.2**.

The mining approach and arrangement, as well as the scheduled sequence of operations as presented appear to be competently conceived and conform to the stated mining assumptions.

The metrics of the operation have been developed by a combination of an XPAC quantities schedule combined with an Excel model ("Base Case V7A2T") of the required Resources for the mine - equipment, labour, productivity – and the capital and operating costs. The Excel model is the "Base Case" schedule, which uses a 7-day continuous roster. The major equipment and labour numbers at full production (4.5Mtpa) in FY2020 are shown in **Table 16.4**.

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Figure 16.2 - Vickery Mine Layout Year 5

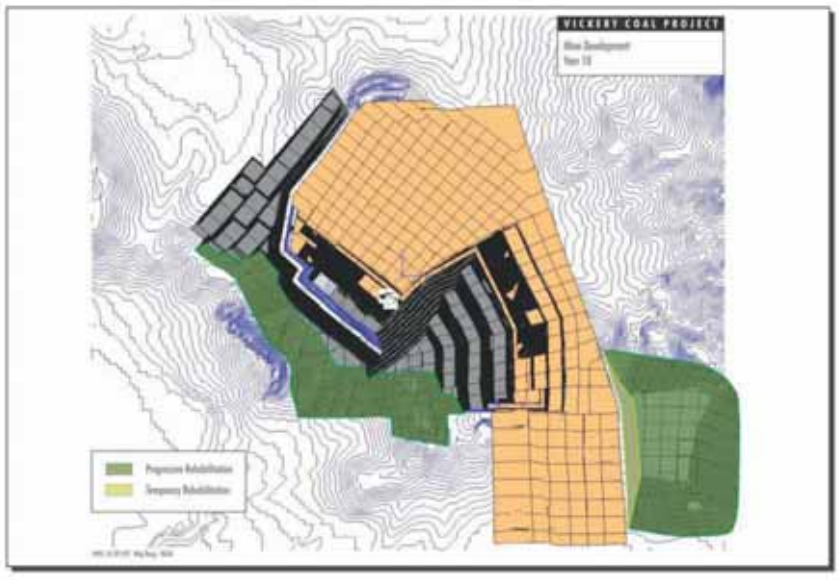


Table 16.4 – FY Year 2018 Mining Data

Item	Units	Value
Waste Quantity	Mbcm	43.3
Mined Coal	Mt	4.5
Product Coal	Mt	3.9
Employees	No.	379
Waste Excavators – 500t/250t	No.	4.0/1.5
Coal Excavators – 250t	No	1.0
Waste Trucks – 240t/190t	No	21/6
Coal Trucks – 190t	No	4
Reject Truck	No	1

WHC have not yet made a decision on the final schedule and rostering arrangement for the project.

MMC has reviewed the mining and cost assumptions, underlying logic and inclusions that are contained within the planning model and confirm that the model is comprehensive, and that the underlying assumptions regarding cost, equipment allocation, and productivity are reasonable.

The WHC Business Model has been compared with the Feasibility Study model to check that the underlying assumptions are supported by the planning data. It is noted that the Base Case model differs slightly from the WHC Business Model in respect of the following:

- The WHC Business Model mine schedule lags the Feasibility Study schedule by up to one year;

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- The WHC Business Model ROM production is 4.6 Mtpa, compared to 4.5 Mtpa for the feasibility case. The increase in ROM is matched by a corresponding increase in waste production volumes;
- The plant yield is 78.4%, compared to 74.9%;
- Product split is 55% metallurgical coal, compared to 31%; and
- Product coal averages 4.4% greater tonnage over the life of the Base case schedule (30 years).

In all other respects, the schedules are matching and the estimated FOB costs match closely on a year-by-year basis.

Allowing for the different scale of equipment, the mining operating costs that have been calculated within the Vickery Excel model are reasonable and compare favourably with those of the other WHC open cut operations.

The capital costs were also compared for the two models. It is noted that the treatment of sustaining capital differs between the two models. WHC utilise a "sustaining capital" entry for equipment replacement based on a flat $2.00 per ROM tonne, whereas the feasibility model estimates replacements from first principles on a replacement cycle basis. The feasibility approach yields an average value of $4.19/ROMt. In all other respects there is reasonable correspondence and all of the major equipment items appear to have been accounted for. MMC recommend that the value of $4.00/ROMt be adopted for sustaining capital in the WHC model.

MMC have not reviewed the costs of the underlying components of the non-equipment capital items.

Based on the data available, there is evidence that the Vickery project team is actively pursuing project approvals and procurement of the critical lead items including mobile equipment and tyres. MMC consider that the project is well positioned to proceed as planned, subject to any unplanned delays in approvals.

16.6 Site Infrastructure

The coal from Vickery will be processed in the existing Gunnedah CHPP, utilizing road haulage under the current haulage approvals for 4.5 Mtpa. It is noted that the planned production rate of 4.66 Mtpa slightly exceeds this rate, but WHC advises that this is subject to further planning: in any case, loss of this tonnage due to this cause would be immaterial in the scale of the operation.

16.7 Coal Preparation

The deposit was previously owned by Kembla Coal and Coke and during the period up to the early 1990s coal was washed and loaded out through a train load out facility at the present Gunnedah CHPP site. It is proposed that all of the coal from the rejuvenated Vickery project will be trucked to the existing WHC Gunnedah washplant and integrated into the WHC washing strategy and marketing stream. The main issues considered by MMC for coal preparation for the Vickery deposit were the WHC assumptions for plant yield, plant capacity and product mix.

MMC have reviewed data presented by WHC including production studies which indicate plant yields of either 75% or 78.6 %. These were considered along with the CPG report (CPG-QCC Whitehaven Vickery Project Notes: Coal Quality and Coal processing – April 2011) and the information in the WHC presentations that the expected PCI product would have an ash of 7.2 %. The CPG report modelled various bypass coal and plant configurations options for the CPP feed: however, given the decision has been made to use the Gunnedah CHPP the only configuration reviewed from their report was the dense medium cyclone/spiral circuit consistent with the Gunnedah CHPP circuit. The cut points noted in the CPG report are quite high and suggest the ash levels can easily be attained. Also the quality in the plies shows low insitu ash coal indicating the opportunity for selective mining for bypass coal.

While the CPG report indicates some variability in the CPP yield from this data, on the basis of the reviewed data MMC consider the average yield of 78.4% used in the WHC Corporate model to be reasonable.

The WHC Corporate model targets a ROM production rate of 4.66 Mtpa, with 44% of the ROM being bypass coal. If the current Gunnedah CHPP operating roster is maintained, this would require a plant with a feed rate of 420 tph, well within the existing plant"s capacity of 550 tph. Should a new CHPP be required capital in the order of $70 million would be expected. There is insufficient detail in the quality information reviewed to form a view on the reasonableness of the bypass percentage: however, the report by CPG provides a commentary on each seam"s capacity for bypass. Although the information available is limited, MMC consider that the CPG view on bypass potential is a reasonable assessment.

The product mix will initially be 39% of SSCC/PCI and the remainder thermal coal for the first two years of production, and this percentage increases to a constant level of 55% for the remainder of the 30-year mine life. The data provided by WHC to support the Business Model does not present the yield and product quality assumptions, but based on the bypass and coking potential results published in the CPG report, MMC considers that the assumptions adopted by WHC for the project are not unreasonable.

The coal preparation strategy and CHPP costs shown in the WHC Corporate model are consistent with the current Gunnedah CHPP washing strategy and cost structure.

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16.8 Environment and Mining Leases

16.8.1 *Leases, Titles and Approvals*

The Vickery Project would involve open cut mining activities within CL 316 and the adjoining Mining Lease (ML) 1471 as well as mining related activities in Mining Lease Application (MLA) areas 1, 2 and 3.

Table 16.5 lists the mining tenements associated with Vickery mine.

Table 16.5 – Vickery Lease and Mining Titles

Tenement	Expiry Date	Area (ha)	Description
Mining Leases			
CL 316	15/6/2012	4780	Issued on 15/6/1988; Conditions upgraded following transfer from NMPL to WCM and s96(1A) modification approval in September 2008.
M 1471	6/9/2021	385.4	Lease for Canyon mine now under care and maintenance following recent rehabilitation but part of which will be impacted by western overburden emplacement.
Exploration Licence			
EL 4699	22/9/2013	3145	Lies to north of CL 316 and is partly encroached by MLA 1;
Authorisation A406	18/11/2011	2493	A406 renewal sought; Approved for transfer from NMPL to Whitehaven Coal Mining Limited. A406 is located in east side of CL 316.
Mining Lease Applications			
MLA 1 / MLA 2 /MLA 3			These MLAs relate to specific areas in the north, west and east that are peripheral and contiguous to CL 316 tenement.

While ML 316 has been noted to have been extended to 15/6/2012 following the September 2008 s96(1A) modification approval, it is not demonstrated that the expiry date of A405 was also similarly extended.

Condition 48 is a special condition whereby the licence holder must make every reasonable attempt, and to be able to demonstrate their attempts, to enter into a cooperation agreement with the holder(s) of any overlapping petroleum title(s). The relevant petroleum tenements in the Vickery area are PEL 1 in the eastern majority of the area held by Australian Coalbed Methane Pty Limited which expires on 10 February 2015 and PEL 464 in the western part of the Vickery project area held by Macquarie Energy Pty Ltd which expired on 22 November 2011. No details were sighted in relation to management activities relating to Condition 48.

Table 16.6 lists the State level development consent and current planning application for Vickery mine.

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Table 16.6 - Vickery Development Consent

Development Consent No.	Consent Authority	Approval Date	Approved Operations
81_1924	Minister for Planning	Application 18/10/1986; Approval 23/7/1987	21 year approval commencing from the issue of CL 316, up to 15/6/2009 [DA 81_1924 relates to Application No. 23_96 Gunnedah Council & Application No. 18_86 Narrabri Council]
s96(1A)* to amend DA 81_1924.	Minister for Planning by delegation	26/9/2008	Modified consent DA 81_1924 approved to extend the approval to15/6/2012.
Application to DP&I No. SSD_5000	(Will be Minister for Planning, delegated to Planning Assessment Commission)	n/a	Director-General"s Requirements (DGRs)have been issued by the D-G of DP&I for scoping the EIS to accompany a future development application to be lodged with DP&I (target 3Q/4Q 2012).

**Note: there were 3 minor modifications to DA 81_1924 between 1987 and 1990.*

The key components of the proposed Vickery project, which is the subject of a development application in preparation, are summarised below:

- Use of conventional mining equipment, haul trucks and excavators to remove waste rock and coal from the planned open cut;
- ROM coal production of up to 4.5 Mtpa;
- Mine life of approximately 30 years;
- Total life of mine coal production of approximately 140 Mt;
- Total waste rock production of approximately 1,400 Mbcm;
- Development of external waste rock emplacements to the west and east of the planned open cut (i.e. Western Emplacement and Eastern Emplacement);
- Development of an infrastructure area including coal crushing and screening facilities;
- Construction and use of new soil stockpile areas;
- Construction and use of new dams, channels, dewatering bores and other control measures in addition to existing water management infrastructure to manage groundwater and surface water within and around the mine site;
- Transport of ROM coal by haulage trucks to the Gunnedah CHPP, approximately 20 km to the south of the open cut;
- Realignment of sections of Blue Vale Road and Shannon Harbour Road to the east and south of the open cut; and
- Construction of an approximately 1 km section of private haul road (including an overpass over the Kamilaroi Highway) between Blue Vale Road and the Whitehaven CHPP.

16.8.2 *Land Use and Land Ownership*

The project"s preliminary environmental assessment report noted that the majority of the project mining area is comprised of previously cleared agricultural areas and rehabilitated open cut workings from prior mining activities. The

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area is now predominately used for cattle grazing. Rainfed crop production would most likely have occurred historically on the flatter areas within the north-western part of CL 316.

Rainfed cropping and grazing of cattle is conducted to the north and south of the Project mining area on lands classified as Central Mixed Soil Floodplains. Irrigated and rainfed crop production is conducted on the Central Black Earth Floodplains to the west of the Namoi River.

16.8.3 ***Key Environmental Issues***

Key factors expected to be raised during the project assessment and consent phases will likely include:

- Surface and groundwater impacts (water quantity and quality) including aquifer interference effects and site discharge arrangements;
- Effects on any productive agricultural land (and land use); Consideration needs to be given to emerging catchment, regional and State strategic land use policies;
- Establishing on-site and offsite biodiversity conservation offsets components;
- Potential amenity impacts (noise, blasting, dust) on any surrounding sensitive receptors/residents;
- Following the construction of a realigned haul road and Kamilaroi Highway overpass, there will be reduced risks and traffic safety impacts;
- Conceptual landscape and rehabilitation proposals throughout the project and in relation to mine closure;
- Workforce establishment and training as well as the potential for social and infrastructure impacts associated with housing for outside personnel to fill skills shortages.
- Potential cumulative impacts in relation to surrounding mining operations, and
- Stakeholder consultation strategy and the need to identify and manage landowner and special interest group positions.

There are uncertain implications of a future development application and subsequent consent coming well after the expiry date of the current consent date in June 2012. Given that it will be late 2012 before an EIS is lodged with Department of Planning and Infrastructure (DP&I) to support the Vickery development application and possibly 12 months for development consent (estimated late 2013) there would appear to be at least some period where an approval and therefore a mining lease may not be current. Special arrangements by the DP&I may need to apply including a further extension of the existing consent and mining lease until these are replaced by new instruments.

17. GUNNEDAH COAL HANDLING AND PREPARATION PLANT

17.1 Key Outcomes

- Current and planned site infrastructure is considered adequate to support the planned mining operations based on the provided information.

17.2 Coal Preparation Plant Flowsheet

The CHPP, which has been in operation for approximately 5 years, is a conventional dense medium cyclone (DMC) and spirals circuit configuration. It is located on the outskirts of the town of Gunnedah but is sufficiently away from the main roads to have a relatively small visual impact. The CPP is a central processing facility for raw coal from Whitehaven Coal"s Gunnedah operations and is processing feeds from RocGlen, Sunnyside and Tarrawonga mines, and will ultimately also process the feed from the Vickery mine.

Table 17.1 summarises the recent performance for the Gunnedah CHPP.

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Table 17.1 – Gunnedah CHPP Performance

	Tarrawonga	Rocglen	Sunnyside	Total
FY 2012 Year to Date				
Wash Input	336,506	376,676	75,116	788,298
Wash Output	286,995	275,090	57,405	619,490
Ave Yield	85.0%	73.0%	76.4%	
Bypass	535,462	200,410	124,468	860,340
Overall Yield	94.3%	82.4%	91.1%	89.8%
Railings				
Washed	283,184	254,286	58,991	596,461
Bypass	510,504	198,532	105,778	814,814
Total	**793,688**	**452,818**	**164,769**	**1,411,275**
FY 2011				
Wash Input	696,019	903,140	124,178	1,713,336
Wash Output	602,867	637,757	92,549	1,328,696
Ave Yield	86.7%	70.6%	74.5%	77.6%
Bypass	892,857	308,116	189,623	1,390,596
Overall Yield	94.1%	78.1%	89.9%	87.7%
Railings				
Washed	630,675	646,544	93,243	1,370,462
Bypass	915,473	316,161	213,700	1,445,334
Total	**1,546,148**	**962,705**	**306,943**	**2,815,796**

Source:WHC internal document – Cost Analysis and Availability

There is limited raw coal storage capacity ahead of the washery because the operating philosophy at the CHPP is to process all raw coal as soon as it is delivered.

Coal which is to be washed is delivered to a pad from which a front-end loader loads to feed the plant, the feed is crushed to ensure the nominal 50 mm top size is met. The coal is then processed at 550 tph through the CHPP. The minus 50 +1.4mm (ww) coal reports to a single dense medium cyclone (DMC). The minus 1.4 mm(ww) coal, once deslimed, reports to a single bank of triple start spirals.

No detailed washability data has been reviewed by MMC: however from available data and discussion with the CHPP Manager the ROM coal has little or no near gravity material and is generally seen a “black and white” separation. Inspection of the reject screens oversize supports this view. The CHPP is essentially removing contaminant non-carbonaceous material and does not require a high level of precision regarding the cut-point of the DMC.

The current bypass facility has a capacity of 2,500 tph limited by the main conveyor, although there are plans in place to upgrade this system within the next 12 months.

The plant has been recently upgraded from 350 tph to 550 tph: however, the plant has yet to operate at the upgraded rate for extended periods. The main constraint appears to fine coal product dewatering capacity. Further capacity is planned to be installed within in the first quarter of 2012 to overcome this limitation. Spiral over loading maybe an issue however given the clean cut point this may not be a concern. There is sufficient space available to install an additional spiral bank if required.

Although no online analysis is used there are sufficient daily samples taken to ensure adequate quality control for the various coal sources.

17.3 Product Coal and Yield

The product coal from the CHPP is conveyed to a radial stacker which has a slinger positioned at the head end of the stacker conveyor. By rotating the position of the radial stacker, the various grades of product coal can be segregated. The stockpile is situated directly over a reclaim tunnel housing the train loading conveyor feeding a bin with a load out capacity is 3,000 to 3,500 tph. .

There is a small screening plant which is operated occasionally to produce sized coal for some domestic customers.

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17.4 Tailings and Rejects Disposal

The thickened tailings from the high-rate tailings thickener are pumped a short distance to a tailings dam which is situated adjacent to the CHPP.

The dam has been constructed with a number of cells. Once the contents of a cell are dry, the dried cake is extracted with a long-reach excavator and loaded into trucks. The cycle of delivery, drying and extraction is managed so that there is always a cell available with the necessary capacity within the dam to receive fresh tailings.

The trucks delivering the ROM coal are back loaded with coarse reject which is also interred with the overburden at the open cut mines.

18. GUNNEDAH REGION TRANSPORT INFRASTRUCTURE

18.1 Key Outcomes

- Permitted road capacity to Gunnedah CHPP is adequate for current production forecasts – assuming trucking is included in the new Vickery approval.
- ARTC"s Gunnedah Basin rail network upgrade plans appear capable of keeping network capacity in excess of producer demand.
- Potential for some port take or pay liabilities in short term - especially if planned production ramp-up is not achieved.
- Contracted Newcastle port capacity is in deficit of sales forecasts from FY2015 – but the growth of capacity at the port should provide the opportunity to balance sales and shipments.

18.2 Road

Whitehaven currently transports coal by road from the Rocglen, Sunnyside and Tarrawonga projects to the Gunnedah CHPP for treatment and rail loading. Narrabri and Werris Creek have rail loading facilities at site and do not require road transportation.

The extension of the Tarrawonga Joint Venture with Boggabri Coal will result in the cessation of road haulage from Tarrawonga as all coal from Tarrawonga will be washed and loaded to rail at the new Boggabri CHPP. This facility is expected to become operational in early 2014.

Vickery will require coal to be trucked to the Gunnedah CHPP when the mine is re-opened.

Maules Creek will have a dedicated CHPP, rail spur and coal loading facilities.

Whitehaven has a trucking contract with Toll North running until January 2014 for the haulage of 4.4 Mtpa to the Gunnedah CHPP.

Whitehaven have current Development Consents in place that enable 4.5 Mtpa of trucking to the Gunnedah CHPP on combinations of public and private roads. These approvals are comprised of 2 Mtpa trucking from Tarrawonga (75W Modification of DA88-4-2005 dated 15 October 2010), 1.5 Mtpa from Rocglen (DA10_0015 dated 27 September 2011) and 1 Mtpa from Sunnyside (DA06-0308 dated 24 September 2008).

Whitehaven also commenced the Department of Planning & Infrastructure development application process for Vickery on 4 October 2011. The Preliminary Environmental Assessment describes an operation seeking approval for trucking 4.5 Mtpa of coal to the Gunnedah CHPP along a similar route to Tarrawonga and Rocglen (plus an additional 150 ktpa to other domestic customers).

The intent is that Vickery will be developed by Whitehaven in a timeframe that coincides with the phasing down of the other truck haulage operations and therefore ensuring that the current total current road limit to Gunnedah CHPP is not exceeded. **Table 18.1** shows the current planned coal haulage profile and indicates that the current road haulage ceiling is maintained. However, the Vickery project and the necessary trucking allowance have not been approved at this stage (currently anticipated for early 2013).

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Table 18.1 – Whitehaven Coal Trucking Requirements

	Fin Year Ending:	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Rocglen	kt	1,156	1,307	1,275	1,500	1,500	750	0	0	0	0
Sunnyside	kt	314	412	486	482	174	0	0	0	0	0
Tarrawonga	kt	1,642	1,991	2,170	1,500						
Vickery	kt	0	0	0	913	2,583	3,830	4,660	4,660	4,660	4,660
Total	**kt**	**3,113**	**3,710**	**3,931**	**4,395**	**4,257**	**4,580**	**4,660**	**4,660**	**4,660**	**4,660**

18.3 Rail

All export coal from the Gunnedah Basin is railed to the port of Newcastle. WHC is currently operating three loading points – Gunnedah, Narrabri and Werris Creek. The Maules Creek loading point is planned to be commissioned by ARL in 2013 and the expanded Boggabri loading point in 2014 will load Tarrawonga coal.

The Australian Rail Track Corporation (ARTC) has responsibility for managing the Hunter Valley coal rail network and since August 2011, this has also included the track north from Werris Creek through the Gunnedah Basin. The Hunter Valley coal network consists of a dedicated double track coal line between Port Waratah and Maitland, a shared double track line with some sections of third track from Maitland to Muswellbrook, and a shared single track with passing loops from that point north and west.

Most of the Hunter Valley coal network is capable of handling rolling stock with 30 tonne axle loadings (i.e. 120 gross tonne wagons), but the corridor from just past Muswellbrook to the Gunnedah Basin is only rated for 25 tonne axle loads (100 tonne wagons).

The Muswellbrook to Gunnedah line is a single track with various passing loops located along its length. Current coal traffic is constrained by:

- Use for grain, cotton, flour, freight and passenger traffic;
- Short lengths of passing loops;
- The grades over the Liverpool Range requiring banking locomotives which must be returned along the single track;
- Speed limits; and
- Track foundations restricting wagon axle loads to 30 tonnes.

ARTC estimates have coal volumes on the Muswellbrook to Gunnedah line growing from the current 6Mtpa to ~50 Mtpa by 2018 assuming the increase from Whitehaven and the development of Maules Creek, Caroona and Watermark. The rail line would need to be capable of accommodating ~23 rail paths per day by this time.

ARTC have a $284M programme on ongoing upgrades to the track over the Liverpool Range which provides a staged series of track duplications designed to increase system capacity in steady increments and ensure capacity is sufficient to meet ongoing demand. The first two components of this upgrade are underway and due to be completed in 2012.

WHC and AZT have entered into a long term agreement with ARTC for provision of direct access to the ARTC rail network.

WHC have contracted with Pacific National to haul up to 9.5Mtpa of coal through to 2014. Pacific National currently use two Pacific National trains and one WHC-owned train for this purpose.

In MMC"s opinion, there does not appear to be any rail constraints for the planned mine projects and proposed production increases assuming that ARTC"s proposed rail capacity upgrades are completed in line with their current schedule.

18.4 Port

All coal exported from the Gunnedah Basin is shipped through the port of Newcastle.

Over recent years the port of Newcastle has experienced capacity constraints and extensive shipping delays resulting in significant demurrage costs to the mine owners. Recent capacity increases have come from expansions of both the

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existing Port Waratah Coal Services (PWCS) Kooragang Island facilities and the construction of the Newcastle Coal Infrastructure Group (NCIG) facilities. NCIG is owned by a consortium of NSW coal producers.

PWCS previously operated under a common user system where essentially all producers could gain access to some proportion of the terminal‟s shipping capacity (but not necessarily the full capacity required to match their production/sales requirement). This system was generally seen as not providing the appropriate mechanism to facilitate expansion of port facilities in a timely manner. Since January 2010, PWCS has operated under a long term take or pay contractual arrangement where contracted port capacity is either used or paid for by each contracted shipping customer (unless another user for the capacity can be identified). Mechanisms are in place that facilitate where possible, capacity surpluses and deficits to be matched between customers.

NCIG operates under a similar long term take or pay contractual arrangement (primarily with its shareholders).

PWCS have ongoing expansion plans in place to lift 2011"s nameplate capacity of 113 Mtpa to:

- 133 Mtpa in early 2012;
- 145Mtpa with the completion of Project 145 in December 2012; and
- Terminal 4 (T4) project planned to commence shipments in late 2015 (T4 is still undergoing the NSW Government planning process and could be delayed considerably). T4 is potentially a 120Mtpa facility to be implemented in a number of phases.

PWCS shipped ~98Mt in calendar 2011.

NCIG was officially opened in May 2010 and had shipped 20Mt by October 2011. Planned nameplate capacity is:

- 30Mtpa from late 2011 following the completion of a dredging programme;
- 53Mtpa in mid 2012 following the completion of Stage 2A; and
- 66Mtpa in mid 2013 following the completion of Stage 2F.

NCIG shipped ~16Mt in calendar 2011.

MMC"s estimate of the total Newcastle port nameplate capacity growth profile is shown in **Table 18.2.** It should be pointed out that actual port coal throughput has consistently been below nameplate capacity due to overall coal chain inefficiencies and commissioning delays (Calendar 2011 shipments were 114 Mt versus nameplate capacity of ~140 Mt at Dec 2011). In addition the timing and capacity profile of T4 could change substantially depending on the NSW Government approval timeline and the growth of contractual commitments from producers. It is considered highly likely that the T4 schedule forecasting first shipments in late 2015 will be delayed. Nevertheless the currently committed projects at PWCS and NCIG are providing a large increase in capacity through to FY2014.

Table 18.2 – Newcastle Port Capacity Growth

Mtpa	At end of	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
PWCS	Mt	113	133	145	145	145	145	145	145
T4	Mt						30	70	95
NCIG	Mt	15	30	53	63	63	63	63	63
Total	**Mt**	**128**	**163**	**198**	**208**	**208**	**238**	**278**	**303**

Both Whitehaven and Aston have secured port allocation going forward to largely balance their shipping requirements through long term contractual arrangements.

Whitehaven"s contracted tonnage includes:

- An 11% shareholding in NCIG which entitles Whitehaven to an 11% allocation of NCIG capacity after allowing for the 12Mtpa from Stage 2A that was made available to non-NCIG shareholders;
- Capacity purchased from another NCIG shareholder for FY2012 to FY 2016;
- A current long term contract with PWCS for 3.6 Mtpa; and
- An additional contract with PWCS from the new T4 terminal for 2.4 Mtpa.

Aston"s contracted tonnage includes:

- Capacity purchased from another NCIG shareholder for FY2014 to FY 2016;

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- A current long term contract with PWCS for 1.7 Mtpa; and
- Contracts in three tranches with PWCS from the new T4 terminal for 6.8 Mtpa (it is assumed that this capacity is all from the Stage 1 of T4).

The existing port offtake arrangements and balance against sales forecasts for both Whitehaven and Aston are shown in **Table 18.3.**

Table 18.3 – Port Offtake Contracts vs Sales Forecasts

Mtpa		FY12	FY13	FY14	FY15	FY16	FY17
Whitehaven							
NCIG		2.5	4.5	5.6	5.9	5.9	5.9
NCIG (acquired)		0.2	2.0	2.5	2.0	1.4	
PWCS		3.6	3.6	3.6	3.6	3.6	3.6
	T4					2.4	2.4
	Other (Idemitsu)	0.2	0.4	0.4	0.4	0.4	0.4
Total		**6.5**	**10.5**	**12.1**	**11.9**	**13.7**	**12.3**
Sales		6.0	11.0	11.7	14.1	14.7	14.9
Surplus (+) / Deficit (-)		0.5	-0.5	0.4	-2.1	-1.0	-2.6
Aston							
	NCIG (acquired)			3.1	2.7	1.3	
	PWCS		0.9	1.7	1.7	1.7	1.7
	PWCS Other						
	T4					1.0	6.8
Total			0.9	4.8	4.4	4.0	8.5
Sales[(1)]				4.3	7.9	10.3	10.1
Surplus (+) / Deficit (-)		0.0	0.9	0.5	-3.5	-6.3	-1.6
Total Surplus (+) / Deficit (-)		**0.5**	**0.4**	**0.9**	**-5.7**	**-7.3**	**-4.2**
		Liability	Liability	Liability	Shortfall	Shortfall	Shortfall

Note 1: Aston tonnage based on calendar year converted to equivalent financial years: Source ARL presentation of November 2011

In the short term (to FY14), the aggregate shipping position for Whitehaven + Aston is a modest surplus port capacity – if this surplus cannot be traded or deferred it will result in a take or pay liability. There are mechanisms in place to facilitate swaps of unmatched port capacity between shippers and also some deferral capability at NCIG that could potentially reduce this liability if surplus capacity does eventuate. However any further delays in either the Narrabari longwall achieving targeted production levels or Maules Creek being brought into production would magnify the shipping surplus and the resulting port contractual liabilities.

Post FY2014, substantial deficits in currently contracted port capacity are apparent for both Whitehaven and Aston – the magnitude of this port deficit would increase further if the T4 timetable was delayed. Conversely, the magnitude of these deficits would decline if either producer"s planned project profile is not achieved. Both companies are of the opinion that the combination of the rapid increase in port capacity going forward from 2011 and the well-publicised substantial delays being incurred by a number of large projects that have contracted this expanding port capacity will result in adequate port capacity becoming available. MMC accepts this strategy, while having some level of risk, is not unreasonable especially as it does limit the committed port contractual exposure given the uncertainty in the precise pattern of production/sales growth from both companies.

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19. WHITEHAVEN OPERATING AND CAPITAL COSTS

19.1 Key Outcomes

- Operating costs within the WHC business model reflected key items for mining, processing and transport and are in the main appropriate and reasonable.
- MMC recommends the underground variable unit mining be adjusted to include ground fracturing costs.
- MMC recommends the CHPP cost for Rocglen and sustaining capital allowance for Vickery be increased marginally.
- Capital costs within the WHC Business Plan model reflected the key items at each coal mine and project.
- MMC recommend that waste ratio for Sunnyside and Tarrawonga be marginally decreased: this will lower waste cost.

19.2 Operating Costs

Future operating cost estimates were provided in the WHC business model. This model was comprehensive and for each project site covers the mining, processing, transport and government charges in getting the coal to the port.

The operation for each of the open cut mines is predominantly undertaken by the mine owner. The cost history for each mine was included in the Business Model for 2010 to October YTD 2011, and this has been used by MMC as one basis to check the operating cost assumptions in the Business Model.

In MMC"s opinion, cost trends within the Business model reflected the key cost drivers at each coal mine and project. Where, in MMC"s assessment of costs there was a material difference, MMC made appropriate adjustments to the cost model input assumptions.

After completing the analysis of Narrabri North operating cost, MMC recommends the following adjustments to underground operating costs in the WHC Business Plan business model:

- Reduce Narrabri North Underground gates development rate by 2,020 m per year through to 2016;
- Increase Narrabri North Underground gates and mains development costs by $900 per metre;
- Lower the Narrabri washplant yield by approximately 11%, and the proportion of PCI coal by 1.5% to allow for entry into the higher-ash areas of the seam;
- Replace the 8.2% open cut coal royalty with 7.2% royalty for the underground coal;
- Add an allowance for Narrabri North Underground of $1.35/tonne for strata fracturing costs.

After completing the analysis of the open cut operating costs, MMC recommends the following adjustments in the WHC Business Plan business model:

- Reduce Sunnyside strip ratio to a LOM average of 5.5 bcm/ROMt;
- Reduce Tarrawonga strip ratio to a LOM average of 9.6 bcm/ROMt;
- Increase RocGlen CHPP cost to $5.00/ROMt; and
- Allow a total allowance of $4.00/ROMt at Vickery for sustaining capital, in line with the anticipated fleet replacement schedule.

Coal mining, and particularly underground coal mining, can be affected by geological hazards and uncertainties that cause variances from cost forecasts. MMC is of the view that the WHC Business Plan model is reasonable in its accommodation of operating cost risk.

19.3 Capital Costs

Future Capital cost estimates were provided in the WHC business model. Following on from the site visit WHC also provided a more detailed breakdown of capital costs covering key items for mining, processing and transport.

In MMC"s opinion, Capital costs within the Company"s model reflected the key items at each coal mine and project and are reasonable. Only minor adjustments to timing have been recommended for Narrabri North.

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20. WHITEHAVEN COAL RESIDUAL RESOURCE AND PROJECT VALUE ESTIMATES

20.1 Key Outcomes

- A total of 923.1 Mt of miscellaneous JORC Resources containing a total of 225.5 Mt of JORC Reserves remain at the conclusion of the WHC Corporate Model mining schedule in 2050.
- Of these Resources, 716.7 Mt are extensions to currently producing assets: 282.5 Mt are open cut Resources and 434.0Mt are underground Resources.
- There are 206.4 Mt of Exploration Resources remaining: 9.6 Mt are open cut Resources and 196.8Mt are underground Resources.

20.2 Unscheduled Resources and Reserves

A list of the WHC Resources and the associated included Reserves which remain unscheduled at the conclusion of the WHC Corporate Model mining schedule is shown in **Table 20.1**.

MMC has valued these assets separately.

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Table 20.1 – Total Remaining Resources

Tenement Name	Tenement No.	Remaining Resources (Mt)			Remaining Reserves (Mt)[1]			
					Recoverable		Marketable	
		Measured	Indicated	Inferred	Proved	Probable	Proved	Probable
OPEN CUT ASSETS – Late Extension to Producing Assets								
Bluevale Open Cut	EL4699/CL316	8.8	5.7	1.1	3.3	6.4	3.1	6.0
Vickery Open Cut	CL316	0.0	16.0	16.0				
Merton Open Cut	ML1471/ML1464/EL4699	0.0	0.0	111.7				
Canyon Extended	CL316/EL4699	0.0	0.0	5.1				
Rocglen Open Cut	ML1620	2.5	2.3	1.5	3.5	2.0	2.9	1.6
Tarrawonga Open Cut	EL5967/ML1579	4.8	13.4	14.0	0.0	9.2	0.0	8.5
Sunnyside Open Cut	ML1624/EL5183	12.8	44.0	22.9	4.5	20.6	4.0	18.4
		28.9	**81.4**	**172.3**	**11.3**	**38.2**	**10.0**	**34.5**
				282.6				
OPEN CUT ASSETS – Exploration Assets								
BLOCK 7 Open Cut	CCL701	0.0	0.0	1.4				
Other Gunnedah Resources	CCL701/OC	0.0	2.2	1.4				
Brunt Deposit Open Cut	EL6450	0.0	2.6	0.3				
Arthurs Seat Open Cut	EL6587	0.0	0.0	1.7				
		0.0	**4.8**	**4.8**				
TOTAL OPEN CUT ASSETS		**28.9**	**86.2**	**177.1**	**11.3**	**38.2**	**10.0**	**34.5**
				292.2				
UNDERGROUND ASSETS – Late Extension to Producing Assets								
Narrabri South Underground	EL6243	45.2	114.0	220.0	24.7	61.5	19.4	47.1
Tarrawonga Underground	EL5967/ML1579	10.9	13.9	14.8	0.0	3.7	0.0	3.1
BLOCK 7 Underground	CCL701	0.0	12.9	2.5	0.0	4.0	0.0	4.0
Vickery Underground	CL316	0.0	0.0	21.0				
		56.1	**140.8**	**237.3**	**24.7**	**69.2**	**19.4**	**54.2**
				434.2				
UNDERGROUND ASSETS – Exploration Assets								
Rocglen Underground	ML1620	0.0	2.2	1.6				
EL5183 Underground	EL5183	0.0	7.2	32.2				
Other Gunnedah Resources	CCL701/UG - Hoskisson Seam	0.0	10.8	5.0				
Other Gunnedah Resources	CCL701/UG - Melville Seam	0.0	0.0	116.8				
		0.0	**20.2**	**176.6**				
	TOTAL UNDERGROUND ASSETS	**56.1**	**161.0**	**413.9**	**24.7**	**69.2**	**19.4**	**54.2**
				631.0				
TOTAL REMAINING RESOURCES		**84.9**	**247.2**	**591.0**	**36.0**	**107.4**	**29.4**	**88.7**
				923.1				**225.5**

1. *Remaining Reserves are included in Remaining Resources*

20.3 MMC Valuation of Residual Resources

In estimating a valuation range for the WHC residual Resource assets, MMC has reviewed a number of coal asset transactions published by the Australian Stock Exchange to derive a suitable range of values per resource tonne that can be reasonably expected in a transaction between a willing buyer and willing seller in an "arm"s length" transaction. These are shown in **Appendix A.**

MMC has applied the modifying factors to the median of the values per resource tonne for each of the WHC residual resource assets. The unit value has been adjusted downwards where the percentage of Inferred Resources within the total resource estimate is higher than the average of the transactions.

A maximum and minimum trend relative to the proportion of Measured and Indicated Resources provides a reasonable upper and lower range for value estimates. The trend line is also shown in **Appendix A**.

MMC has further adjusted these values depending on the presence of reserves estimates for the WHC deposits and whether they are extensions of existing mines or remote areas.

The estimated value range for the projects is presented in **Table 20.2**. Based on the potential timing of these areas to proceed to development, MMC considers that a value towards the lower valuation limit would be appropriate.

Table 20.2 – Whitehaven Assets Estimated Value Range

Asset Class	Resources JORC (Mt)	Low (A$mil)	Avge ($/t)	High (A$mil)	Avge ($/t)
Open Cut areas associated with Projects	282.5	201	0.71	434	1.54
Open cut area exploration deposits	9.6	3	0.31	12	1.25
Total Open Cut areas	**292.1**	**204**	**0.70**	**446**	**1.53**
Attributable Open Cut areas		**194**		**432**	
Narrabri South	379.2	262	0.69	427	1.13
Underground extension area	55.0	67	1.22	106	1.93
Underground exploration deposits	196.8	25	0.13	65	0.33
Total Underground Areas	**631.0**	**354**	**0.56**	**598**	**0.95**
Total Managed	**923.1**	**557**	**0.60**	**1,044**	**1.13**
Total Attributable		**469**		**903**	

21. SYNERGIES

MMC were asked to comment at a high level the synergies if the two businesses, WHC and AZT were merged. The following points summarise MMC"s comments:

Head Office

Currently in both the WHC and AZT business models there is a substantial combined corporate overhead. In a merged company significant scope exists to reduce this amount.

Mining Costs and Production Balance

There are possible synergies relating to the ability to share mobile equipment and labour between mining operations, where the mines are closely located and cross-country transfer of heavy equipment is easily undertaken. This may be possible between Tarrawonga and Maules Creek.

Due to increasing scale of the total operations, the ability to negotiate price reductions in major consumables is likely.

Coal Blending

The coal quality of Maules Creek and WHC are complementary as the energy levels and metallurgical properties may allow for improvement in product blending and CHPP yield optimisation.

Significant scope may exist for the coal marketing group within a merged entity to combine the significant tonnages of AZT/WHC Gunnedah coals as a coherent brand and negotiate from a stronger market position.

Port and Rail Allocation

If faced with limitation in port or rail allocation a combined company has the scope to choose the highest margin source coal to meet shipment requirements.

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Cooperate with Boggabri in Maules Creek Mine Planning

In a similar fashion to the Tarrawonga-Boggabri strategy of optimizing dump capacity and sharing coal Reserves, an opportunity may exist for a similar approach at the Maules Creek-Boggabri boundary to unlock reserves in the barrier pillar at the south boundary of CL375. The tonnage affected has not been quantified by MMC.

Improved Water Resource Management

Opportunities are likely to exist for future water sharing between operations, particularly in the Maules Creek-Boggabri-Tarrawonga precinct in to smooth out water balances among the operations" internal water management systems. Infrastructure connectivity and water swapping could rationalise water supply importation needs and better manage discharges by optimizing available water storages and infrastructure.

Other Environmental and Social Co-ordination

With increasing focus by regulators on regional approaches, monitoring needs could be streamlined and conservation offset strategies and Biobanking properties could be enhanced for better corporate/commercial and environmental outcomes. Workforce management, labour retention, placement flexibility and training initiatives could benefit from an increased regional corporate presence.

A more centralised, rather than fragmented, approach to high level interaction with State regulators, local government and other key stakeholders may prove advantageous in strategic planning and development matters due to increased leverage.

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22. BOARDWALK OVERVIEW

22.1 Introduction

Boardwalk Resources Limited (Boardwalk or Company) is an unlisted public company that has a direct interest in three exploration projects located in Queensland; Sienna, Dingo and Monto. The company also has an indirect interest in a portfolio of three exploration areas; Ferndale, Oaklands and Vickery South located in New South Wales through its 19.9% holding in Coalworks Pty Ltd. In addition to these interests the company has farm in agreements for an increasing equity position in the Dingo and Ferndale deposits.

This report reviews the assets in which the company has or will have a direct holding and therefore does not include the Oaklands and Vickery South assets.

22.2 Relevant Assets

The locations of the Boardwalk assets are shown in **Figure 1.2** and the ownership and general description included in **Table 22.1**. The ownership at Ferndale and Dingo is a progressive farm in arrangement following an agreed expenditure for exploration and mining pre-feasibility studies.

Table 22.1 – Boardwalk Controlled Assets

Asset	Ferndale	Sienna	Dingo	Monto
Attributable Ownership	18.4% increasing to 58.5%[2]	100%	51% increasing to 70%[1]	100%
Coal Basin	Sydney, NSW	Bowen, Qld	Bowen, Qld	Mulgildie, Qld
Coal Type	TC, SSCC	HC, PCI, TC	CC, PCI, TC	TC
Mine Type	OC/UG	OC/UG	OC	OC
Rail Infrastructure	Adjacent to rail	18 km to rail	Intersected by rail	8km to rail
Port Infrastructure	Newcastle – 125 km	Abbot Point– 440 km Dudgeon Point 285 km	Gladstone – 225 km	Gladstone – 160 km

Source: Boardwalk Company Presentation October 2011

Notes:
1. Boardwalk entered a farm in agreement with Cockatoo Coal Limited for Joint Venture participation with ownership progressing up to 70% following committed exploration expenditure. As at December 2011 Boardwalk has 51% of the JV and is likely to reach the 70% milestone in Q1 2012.
2. Boardwalk has 19.9% interest in Coalworks Limited which through a 100% owned subsidiary has 92.5% of Ferndale. Boardwalk can earn up to 50% direct interest in the Project upon an expenditure of $25 million for exploration and mining studies.

TC – thermal coal; SSCC – semi soft coking coal; CC – coking coal; HC – hard coking coal; PCI – pulverised injection coal. WICET – Wiggins Island Coal Export Terminal..

22.3 Summary and Key Findings

Minarco MineConsult (MMC) has reviewed the relevant Boardwalk assets and undertaken a value estimate in accordance with industry accepted methods for exploration areas where no Resources have been determined. The key findings of this review are presented in **Table 22.2**.

Table 22.2 – Key Findings

Asset	Attributable Interest (%)	Coal Resource (Mt)	Coal Target (Mt)		Value (100% basis) A$M	
			Low	High	Low	High
Ferndale	18.4	743	-	-	51.4	184.0
Sienna	100.0	-	14	565	20.4	30.6
Dingo	51.0	-	82	462	39.5	53.2
Monto	100.0	-	0	1,832	0.2	52.7
Total		**743**	**96**	**2,859**	**111.4**	**320.6**
Attributable					**50.2**	**144.4**

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The attributable value range for the Boardwalk interest in the projects is $50.2 to $144.4 million.

22.4 Tenements

The exploration tenements in which Boardwalk has an interest and their respective status are listed in **Table 22.3.** Where there may be overlapping minerals or petroleum licences or surface land restrictions which represent at least 10% of the tenement area these have been listed as potential encumbrances.

Table 22.3 – Boardwalk Exploration Tenement Status

Tenement	Project	Interest	Area (ha)	Expiry Date	Potential Encumbrances
EL 7430	Ferndale	18.4%[1]	3,742	18 Dec 2014	Potential Goulburn River alluvial land setbacks
EPC 862	Dingo	51%		3 May 2014	
EPC 863	Dingo	51%	25,600	11 Apr 2014	
EPC 1063	Dingo	51%		17 Sep 2012	
EPC 1033	Sienna	100%		19 Mar 2011[2]	Potential Restricted Area (RA384) and proximity to Middlemount; Ecological buffer zones in central band of EPC1033
EPC 2089	Sienna	100%	10,800	30 May 2014	
EPC 1220	Monto	100%	29,600	7 Apr 2011[2]	State forest approximately 20% of area; SCL likely in Target 1 area

Notes: 1 Boardwalk has a 19.9% interest in Coalworks which in turn has a 92.5% relevant interest in Ferndale.
2 Under renewal application

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23. FERNDALE

23.1 Key Outcomes

- Ferndale is well located with respect to infrastructure and rail to the port of Newcastle.
- The tenement has prospectivity for export thermal and semi soft coking coals from the Wittingham and Newcastle Coal Measures.
- Exploration is at an advanced stage in the northern area of the tenement where shallow open cut coal targets have been identified.
- Exploration over the remainder of the tenement and within deeper coal measures is at an early stage: the underground areas have higher uncertainty than the open cut areas.
- Additional data is required for underground structural interpretation and confirmation of the product quality.
- Underground mining in the southern part of the tenement will be influenced by the irregular shape and dimensions of the tenement.
- The main environmental limitations on mining are likely to be protection of the local drainage and underground water systems, including setbacks from the Goulburn River alluvial lands and possible impacts on the adjacent Wollemi National Park.
- An estimate of coal Resources for Ferndale was released by Coalworks on 17 February 2012; this totals 743 Mt of Inferred Resources for the combined open cut and underground coal. The Resources are purported to be estimated according to JORC Code standard, but the estimate could not be verified by MMC. The Resource estimate has been adopted by MMC for valuation with appropriate discounts for uncertainty.

23.2 Location and Description

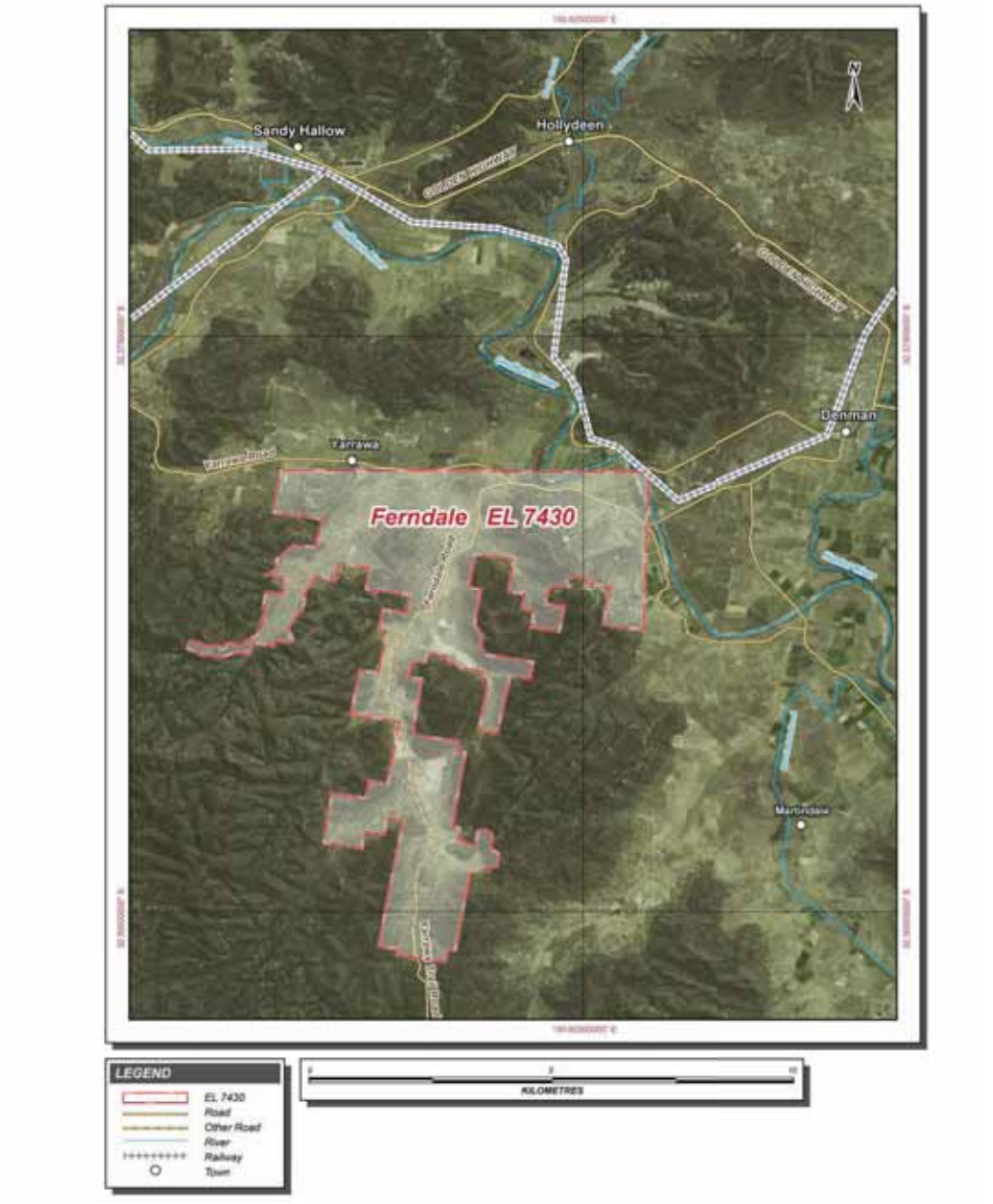
The Ferndale Project is located in the Hunter Valley Coalfield at Yarrawa approximately 8 km southwest of Denman in New South Wales. The exploration area EL7430 covers 3,742 ha and is surrounded to the south, west and east by the high slopes and ridges of the Wollemi National Park creating an irregular tenement boundary. The project location and tenement area is shown on **Figure 23.1**.

The northern part of EL7430 is relatively flat and lies within the Goulburn River valley. The Sandy Hollow to Ulan rail line is adjacent to the northeast corner of the EL7430 on the northern side of the river.

The site is approximately 125 km by rail to the port of Newcastle.

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Figure 23.1 – Ferndale Tenement Location



23.3 Regional Operations

The project is near to a number of producing open cut mines shown in **Table 23.1**. These are large open cut operations and have resource areas sufficient to support high production rates. MMC considers that the nature of the Ferndale tenement boundary and prospective coal seams would not support a similar capacity mine. This is further discussed in Section 23.8.

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Table 23.1 – Ferndale Nearby Mines

Mine	Owners	Coal Type	Commenced Production	Target Production (Mtpa)	Marketable Reserves (Mt)	Resources (Mt)	Distance from Ferndale (km)
Mangoola	Xstrata	Thermal	Sep 2010	9	120	1,420	13
Bengalla	Coal & Allied	Thermal	1999	6	137	1,999	27
Mt Arthur	BHP	Thermal	1995	12	1,095	3,110	27

23.4 Exploration History

Prior to EL7340 being obtained by Coalworks in 2009 the exploration tenement and surrounding areas had been drilled sufficiently with 24 boreholes of which 11 had been cored, to enable a general structural definition of the coal seams to be assessed. This demonstrated a stratigraphic sequence containing the Upper Hunter and Newcastle seams over a depth in excess of 600 m.

Subsequent drilling including 17 core holes and 6 open holes with geophysical logs has identified numerous splits of the seams across the tenement and has enabled an upgrading of potential coal targets for both open cut and underground mining. Further coal testing is being finalised. As at November 2011 the third stage of the drilling campaign was underway to confirm the open pit area.

In addition to the drill hole exploration a 2D seismic survey was undertaken in 2008 and fault interpretation and seam correlation undertaken by Velseis in 2010. This study indicated that the area has relatively simple structure with minor faulting and continuous seams. Dip is gentle at about 4 degrees to the north.

23.5 Geology

EL7430 lies near the northern margin of the Sydney Basin. In this area there are three sequences of Permian Coal Measures – the early to mid-Permian Greta Coal Measures, late Permian Wittingham Coal Measures (WCM) and Newcastle Coal Measures (NCM). The latter two contain the coal seams likely to be economically viable in this area.

The Great Northern and Fassifern Seams are a potential open cut resource in the north of the lease together with a number of lower seams within the Newcastle Coal Measures down to the Hartley Seam as a possible target. The upper near surface seams are partly eroded and not continuous across the area with the full sequence of the Newcastle Coal Measures occurring in the northern part only. Seam cross sections are shown in **Figure 23.2**. The Great Northern and Fassifern Seams are mined at Mangoola and washed to a typical benchmark export thermal coal. Lower seams within the NCM are not generally mined in the Hunter Valley but have been extracted at mines south of Newcastle mainly for domestic markets.

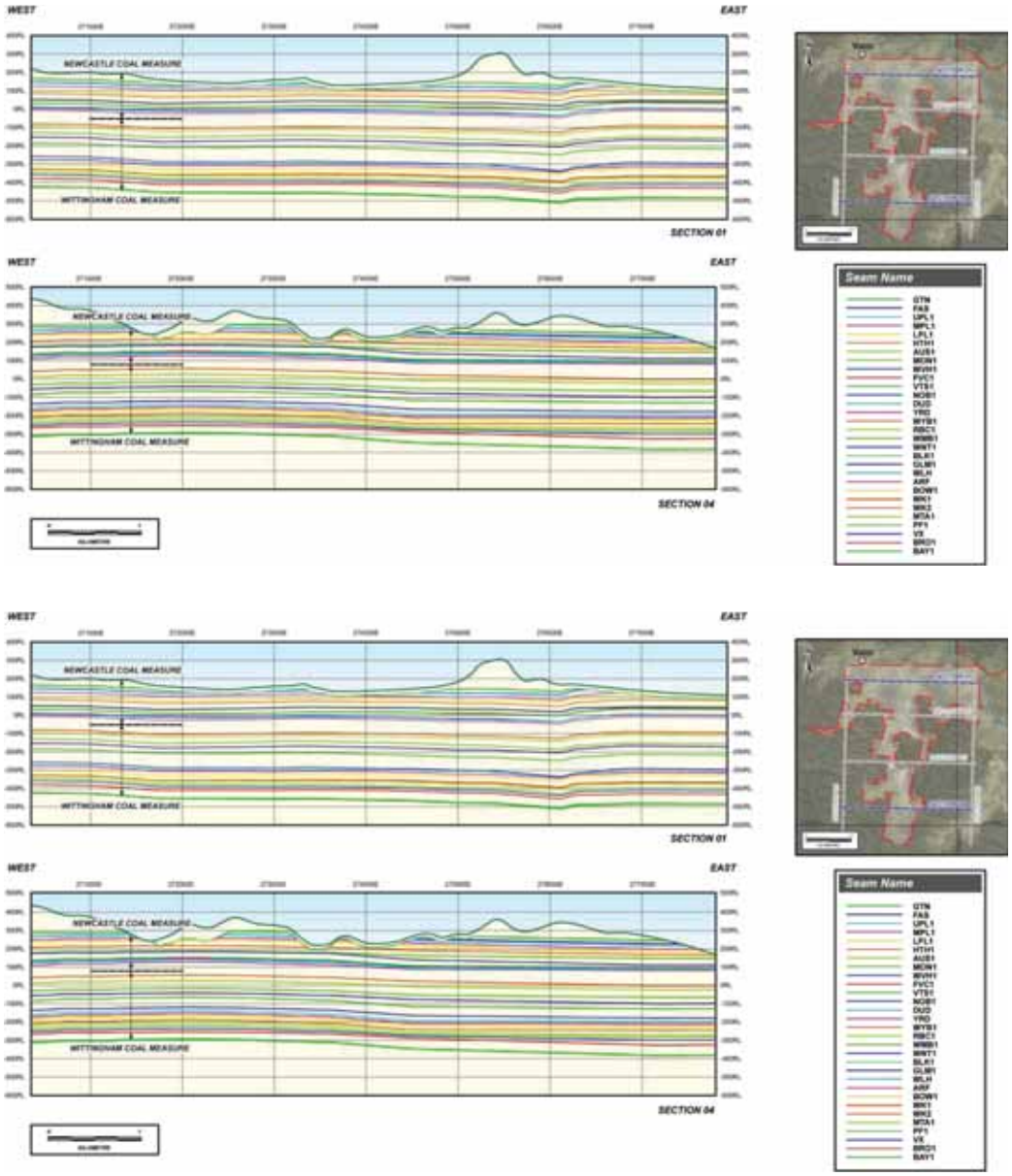
Pre-feasibility studies are yet to be completed to confirm an open cut pit shell and economic cut off depth..

Numerous coal seams and associated upper and lower plies have been identified in the WCM but most appear to be variable in thickness with thinning to less than 1.5 m. The Whynot and Blakefield Seams may provide underground Resources having potential working sections greater than 1.8 m in thickness. The Whynot Seam lies at 375 m depth (in the south) to 325 m depth (in the north), whilst the underlying Blakefield Seam is 30-40 m deeper. The Bayswater Seam is also thick but occurs at greater than 500 m depth increasing to beyond 600 m in the north. The remainder of the seams appear to be too thin to provide underground mining targets.

There are regional intersections of igneous intrusions to the southeast of the tenement and also in the Mangoola area. Several boreholes have intersected some evidence of igneous intrusions of various thickness within the project area and further infill drilling needs to be completed to identify the zones affected. In general the effect of igneous activity on the coal seams is not known at this stage.

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Figure 23.2 – Ferndale Cross Sections



23.6 Coal Quality

Preliminary coal quality results show the seams that are likely to be targeted for open cut mining to be high in ash. Moisture and total sulphur levels are acceptable and upon washing the coal should present as a medium ash thermal coal.

A review of the coal quality data in Coalworks ASX announcements from 30 October 2010 to 11 April 2011 on coal quality results from exploration programmes and the Coalworks – Investor Road Show of November 2011 indicates that the expected product from the Wittingham and Newcastle Coal Measures would be export thermal and semi soft coking coals. The coal seams within the NCM have stone bands and the Palaris Report (Boardwalk Resources Independent Technical Expert Report, September 2011) indicates a raw coal ash of between 17-30% for the likely open cut target

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seams, indicating that coal processing will be required to produce an export product. The amenability of the coal to washing is supported by preliminary washability testing results (see below).

Not all coal quality sampling tests or washing test results and interpretation are completed and therefore some uncertainty remains as to the mining depths and possible seams that may be targeted.

Table 23.2 shows the raw coal quality reported for open cut coal and **Table 23.3** shows preliminary results from coal sampling for underground target seams..

Table 23.2 – Typical Coal Seam Quality – Likely Open Cut Resource Seams

Seam	Thickness (m)	Ash (%ad)	M (%ad)	VM (%ad)	TS (%ad)	Caloric Value (kcal/kg ad)
Great Northern	2.0	22.0	5.9	26.8	0.54	5,653
Fassifern	1.2	26.1	5.0	26.6	0.54	5,524
Upper Pilot	1.0	23.6	4.8	27.3	0.36	5,601
Hartley Hill 1	0.7	28.5	3.8	28.6	0.42	5,262
Hartley Hill 2	1.1	25.5	4.3	30.1	0.56	5,540
Wave Hill 2	1.4	30.2	4.9	27.2	0.38	5,019

Table 23.3 – Typical Coal Seam Quality – Likely Underground Target Resource Seams

Seam	Thickness (m)	Ash (%ad)	M (%ad)	VM (%ad)	TS (%ad)
Redbank Creek		22.5	4.8	28.3	0.42
Wambo		28.3	3.8	27.9	0.36
Whynot	2.1	27.8	3.3	27.6	0.60
Blakefield	2.6	19.6	5.6	26.7	0.36
Bayswater	4.4 – 8.6	17.1	2.2	26.7	0.47

Boardwalk has indicated an expected product quality from the Ferndale open cut area shown in **Table 23.4**. A review of the washability spreadsheet presented by Boardwalk (20111122 AB3106 Ferndale Raw Washability DB_GJ) supports the expectation of achieving this thermal coal product quality, with yields that will vary between 52% and 74% at a F1.50 separation on – 32mm coal. MMC has not been provided with the context or assumptions forming the basis for the washing data and has not undertaken further analysis of the possible washing performance.

The Boardwalk data reviewed by MMC indicates that Boardwalk intends to mine the Hartley Hill 1 and Hartley 2 seams; from a coal quality and yield perspective the Hartley Hill 3 should also be considered for its mining potential (F1.50 yield range of 73.6% to 84.1% for an ash range of 13.1% to 12.3%).

Table 23.4 – Possible Thermal Product

	Coal Type	IM (%adb)	Ash (%adb)	VM (%adb)	FC (%adb)	TS (%adb)	Phos. (%adb)	HGI	Cal. Val. (kcal/kgGAD)
Expected	Thermal	4.0	16.0	25	55.0	0.40			6,230
Mangoola	Thermal	5.5	11.8	30.0	53.0	0.40	0.01	46	6,400

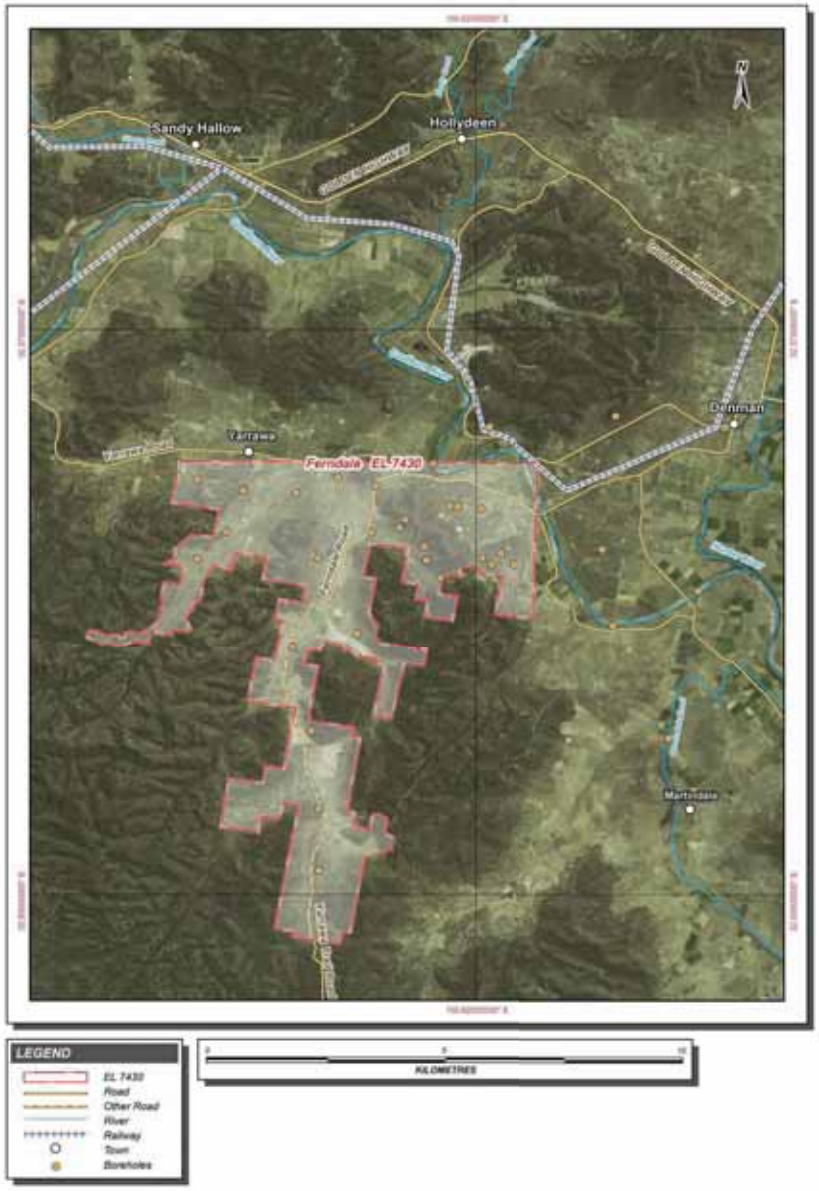
23.7 Resources and Coal Targets

An exploration target tonnage range of 350 Mt to 530 Mt was published in August 2011 by Coalworks, of which the open cut comprised 50 Mt to 80 Mt. No basis has been provided for this estimate.

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A further estimate was undertaken for Boardwalk by Palaris in September 2011 based on a preliminary Vulcan geology model prepared by JBMS. **Figure 23.3** shows the borehole locations located in the Ferndale area which are included in that model.

Figure 23.3 – Ferndale - Borehole Location Plan



Palaris considered that insufficient information existed in September 2011 to support a Resource estimate. Palaris analysed the borehole data to assess which seams had suitable thickness and quality over a reasonable area to justify an exploration target. Polygon areas were created around the chosen targets for each seam, which were then combined

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with an average thickness and default RD. Open cut targets were limited to a minimum thickness of 0.3 m and underground targets were limited to 1.8 m. Palaris estimated a total Exploration Target Range of 99 – 453 Mt.

An estimate of the coal Resources of Ferndale was subsequently undertaken by Ravensgate Mineral Industry Consultants (Ravensgate) on behalf of Coalworks; this was publically reported on 17th February 2012. The estimate is purported to have been undertaken in accordance with the JORC Code. The associated explanatory memorandum by the Competent Person, Mr. Stephen Hyland, was provided to MMC for review on 22nd February. No additional supporting data was provided.

A summary of the reported Ferndale Inferred Resources is presented in **Table 23.5**.

Table 23.5 – Ferndale Coal Resources – February 2012

Seam	Resources	Average Thickness	Average Ash
	Mt	metres	% adb
Open Cut Resources			
Great Northern	9.48	1.94	26.1
Fassifern	19.62	1.66	32.0
Upper Pilot	17.04	1.23	33.2
Hartley Hill 1	39.74	0.92	40.2
Hartley Hill 2	52.15	1.30	31.9
Subtotal to Hartley Hill Seams	**138.03**		
Montrose 1, 2	69.80	0.84, 0.72	47.1, 46.7
Wave Hill 1, 2, 3, 4	179.02	0.87, 1.32, 1.10, 0.86	47.3, 38.6, 45.5, 48.8
Nobby"s	45.36	1.12	47.5
Borehole	11.24	0.33	44.2
Subtotal below Hartley Hill Seams	**305.42**		
Subtotal Open Cut Resources	**443.45**		
Underground Resources			
Whybrow	24.22	1.50	44.0
Redbank Creek	57.68	3.10	42.8
Whynot	41.31	2.20	33.7
Blakefield	34.93	3.40	44.3
Bowfield	25.09	1.50	38.0
Warkworth	42.00	2.80	32.3
Broonie	45.46	1.80	28.4
Bayswater	28.88	5.50	24.4
Subtotal Underground Resources	**299.57**		
Total Resources	**743.02**		

MMC has reviewed the Resource estimate and the accompanying memorandum, using the data that was previously provided in the Boardwalk dataroom. Insufficient data has been provided to undertake an audit or full assessment of the Resource estimate; however MMC make the following observations:

- In general terms the modeling and estimation methodology as described by Ravensgate appear reasonable and in conformance with industry standards.
- The Resource assumptions appear to be reasonable, with the exception of the following:
  - The minimum thickness cutoff of 1.0 metre for the underground Resources;
  - The lack of a maximum practical depth limit for the underground Resources;

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  - The high maximum ash cut-off of 50% adopted for the open cut areas; and
  - The probability that the open cut waste ratio limit takes no account of the adverse impact on economics of the very low washplant yields that would be expected from the high ash (>40% adb) coal seams.
- The Resource estimate does not address the possible impact of intrusions or structure on the coal seam tonnage.
- The Resource estimate is based on a geology block model which has not been provided to MMC, and which incorporates some borehole data that is not represented in the Vulcan geology model in the Boardwalk dataroom. MMC have compared a selection of the structural statistics reported in the explanatory memorandum with data in the Vulcan model; a number of differences have been identified. In the absence of any interrogation of the Ravensgate model the reasons for these differences remain uncertain. The Vulcan geology model could therefore not be used to check the veracity of the Ravensgate Resource estimate.
- The seam structure and the distribution of the Points of Observation and Resource polygons illustrated in the memorandum appear to be generally consistent with the data in the Vulcan model.

Although MMC are not able to confirm the correctness of the Resource estimate, it is acknowledged that a Resource has been declared for Ferndale, and that the Resource estimate has been endorsed by the Competent Person as having been undertaken in conformance with the JORC Code. Furthermore, the reported Resources appear reasonable when compared with the Exploration Target estimates reported by Palaris for the corresponding seams.

However, it is MMC"s opinion that the Resources should be discounted for valuation purposes to allow for the following items:

- It is considered by MMC that the inclusion in the open cut Resources of the seams which underlie the Hartley Hill Seams is not justified. These lower seams represent almost 70 percent of the reported open cut Resource tonnage, but they contain very high in situ ash, are relatively deep and thin and are unlikely to provide saleable coal yields sufficient to make them economic for extraction.
- The adoption of a 1 metre minimum seam thickness and the lack of a maximum depth limit are considered to be optimistic assumptions for defining underground Resources. The impact of increasing the minimum seam thickness has not been quantified by MMC. However, it is MMC"s opinion that the deeper (depth greater than 500 metres) Bayswater and Broonie Seams, totalling 74 Mt, carry greater mining risk.

23.8 Environment

The site is adjacent to the Wollemi National Park with drainage across the property to the Goulburn River. Water resource protection, drainage management, water supply, and water discharge capability are among the main environmental constraints to future development at the site with an expected exclusion zone limiting open cut and underground mining activity in at least the northeast of EL7430 due to regulatory requirements to protect major watercourses and accompanying alluvial floodplains.

Accordingly, if a conservative assumption of 150 m open cut and underground mining setback from the Goulburn River alluvial floodplain and 100 m from any other significant watercourse (of at least 3rd order) and alluvial floodplain in the northern section of the EL is applied then it may impose a moderate but material environmental constraint to extraction of a small proportion of northernmost coal target. A low permeability curtain may also be necessary to enhance hydrological isolation of the alluvial materials from the open cut.

Matters that MMC consider will influence the awarding of a lease and development timing for the project are:

- Full land ownership by the mine developer of all private lands within the affected valleys in EL7430 as well as ownership of adjacent private lands within a buffer zone (zone of amenity affectation) particularly around the north of the EL;
- Effective drainage paths and diversions of the water courses from the Wollemi National Park; and
- Water supply will need to be secured from the relevant local water sources associated with the Goulburn River (a very tightly held water trading market) but which may also be possible from the Hunter River water source.

Although the site is within the lower Goulburn River system, water discharge from the mine site may be potentially negotiable to be permitted under the Hunter Salinity Trading Scheme which applies to the Hunter River system located several kilometres from the site. If possible, this could provide significant benefit and operational flexibility to a future operation that would not normally apply in the Goulburn River catchment.

The continued provision throughout the life of a future mining operation of satisfactory and stable drainage systems in the space-constrained elongated valleys, including watercourse realignments and the mitigation of flooding risk, will also be a key focus in environmental management.

There are a number of constraints that collectively may impact on the development timing of the project. The current requirements for baseline work require two years of data and this may impact on the progress of the environmental

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assessment and ultimately delay the timing of project development beyond the planned start date of 2014. The constraints will need investigation and management during ongoing project planning and development to enable the risk levels to be reduced.

23.9 Infrastructure

The Ferndale project is well located with respect to supply, rail and port access through the Port of Newcastle, which has ongoing expansion plans in place to increase capacity over the next five years to accommodate planned production increases from the Hunter Valley and Gunnedah coalfields. MMC consider that no obvious constraints to infrastructure threaten the project.

MMC considers that Boardwalk"s proposed timing of development of the project is probably optimistic, given the level of exploration and the approvals processes.

23.10 Mining

23.10.1 *Open Cut*

An area within the northern part of EL7430 has been identified for an open cut study. The coal seams within the NCM are relatively shallow at less than 120 m to the Wave Hill Seam and offer a reasonable strip ratio. Palaris has outlined a conceptual area for a number of small production open cut pits where the upper seams have not been eroded. No economic assessment was undertaken, rather a general pit area with physical volumes estimated. The current and planned exploration expenditure is to finalise a resource area for the open cut to allow a pre-feasibility study to be undertaken. Coal yield and a product specification need to be determined for outlining an economic pit shell and hence production rates to be estimated.

MMC considers that the open cut exploration is at a stage where sufficient information will exist to define a resource estimate when the pending analytical data has been evaluated.

23.10.2 *Underground*

The full stratigraphic sequence of the WCM is present although many of the seams exhibit thinning and ply separation across the area. A number of seams appear sufficiently thick and continuous to warrant conceptual underground studies to proceed. Further infill drilling is warranted which is planned in the forward exploration programme to verify the targets and define a suitable resource. The upper seams within the WCM are at depths similar to underground mines within the Hunter Valley and should be amenable to typical extraction conditions. The deeper seams that approach 600 m are beyond depths ever mined within the Hunter Valley and would be deeper than any mine within Australia. MMC considers the mining of these deeper seams unlikely.

In designing an underground mine the unusually shaped boundary of EL7430 will require an irregular array of panels. This is not unusual but adds to design complexity.

MMC considers that the underground project is at a lower level of geological certainty than the open cut.

24. SIENNA

24.1 Key Outcomes

- Sienna is well located with respect to infrastructure and access to a number of port options.
- The tenements have prospectivity for low volatile coal of a type that is well known in adjacent producing mines: however insufficient exploration has been undertaken to be certain of structure or to estimate a Resource tonnage.
- Sienna has potential for open cut mining in the Rangal Coal Measures in the south of the tenement to produce a PCI coal. The coal quality and tonnage are influenced by the effect of igneous intrusions in the seams and that may affect a total resource estimate for the area.
- Open cut mining will be characterized by steep dips and selective mining by conventional truck-excavator fleet.
- The location of the open cut mine will be highly visible and is likely to be limited by the environmental constraints associated with the proximity to Middlemount.
- There is a possibility that underground intersections of metallurgical coal seams in the German Creek Coal Measures may be discovered at mineable depths across the whole tenement: this is speculative and will depend on down dip seam continuity from the west and the effects of local thrust faulting.
- The target exploration tonnage adopted by MMC is 14 Mt to 565 Mt of open cut and underground coal.

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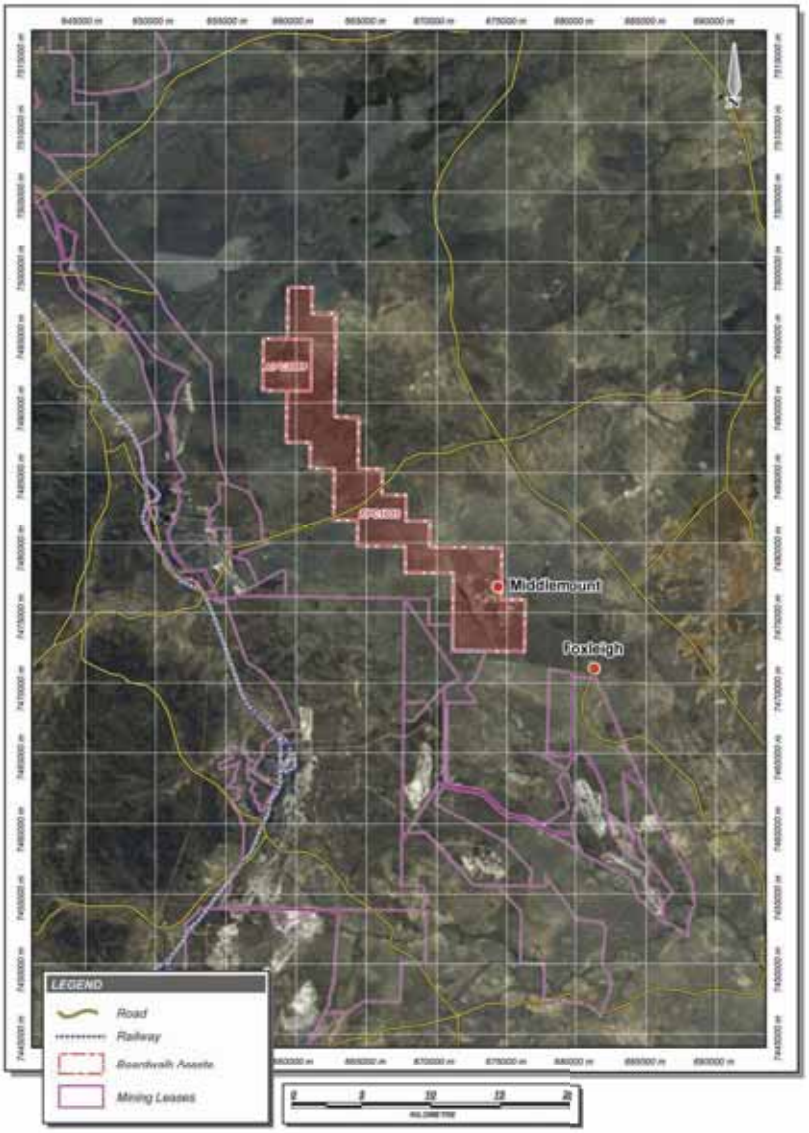
24.2 Location and Description

The Sienna project is at Middlemount in the Bowen Basin in Central Queensland (refer **Figure 24.1**). The project area includes two coal exploration permits; EPC 1033 consisting of 32 sub blocks located adjacent to and extending northwesterly from Middlemount, and EPC 2089 a smaller area of 4 sub blocks.

The project area is near the Foxleigh, Norwich Park and Middlemount mines and approximately 200 km southwest of Mackay. The region is well serviced by rail and mine service industries.

The exploration area is split into two project areas; the Sienna Project Area is in the south east of the tenement where shallow Rangal Coal Measure (RCM) strata are present allowing potential open cut mining, and the Electra Project Area over the remainder of the permits where deeper German Creek Coal Measures (GCCM) strata are present. The Sienna area is adjacent to the township of Middlemount.

Figure 24.1 – Location of Sienna Tenements



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24.3 Regional Operations

The Sienna tenements are located in a well-established mining area with operating mines exploiting the Rangal and German Creek Coal Measures in close proximity.

The RCM, the open cut target for the Sienna Project area, are mined for metallurgical and thermal coals by open cut methods in the nearby Foxleigh and Middlemount mines.

Foxleigh is a truck-shovel operation producing +2.5 Mtpa of washed coking and PCI coals from the Middlemount Seam with the product transported via the adjacent German Creek mine to the Dalrymple Bay coal terminal at Mackay. The mine uses a terrace mining method similar to that suggested for Sienna due to the comparatively steep and faulted seam conditions. Middlemount is a recently developed operation which will produce +3.5 Mtpa of washed coking and PCI coals from the Middlemount and Pisces seams. The Middlemount mine lies in an area less structurally disturbed than nearby areas and uses conventional truck-excavator strip mining.

The GCCM, the underground target for the Electra Project area, are expected to be a continuation down dip from those mined for metallurgical coal at Norwich Park, immediately to the west. Norwich Park produces 4 Mtpa of low volatile coking coal by dragline strip mining methods from the shallow-dipping Dysart Seams. The anticipated depth of the seam sequence in the Electra Project area is expected to exceed 500 m, so it is targeted as an underground mining area.

24.4 Exploration History

The EPC"s were part of former larger exploration areas that have been explored by a number of companies. More recently Norton Gold Pty Ltd held the respective EPC"s from 2006 and undertook a number of exploration campaigns concentrating on the shallower Rangal Coal Measures in the Sienna Project area within the southern part where open cut potential has been identified. The target area has been defined by 50 boreholes, five of which were cored for quality assessment.

The deep northern borehole (MM052) is the only hole to explore the Electra Project area at depth which was sunk to test the presence of deeper GCCM coal with its presence extrapolated from the mines further to the west. The stratigraphic interpretation has been assisted by limited seismic work undertaken by Anglo and BHP Billiton and although the hole has intersected the GCCM and penetrated to a depth of 702 m, no specific target seam has yet been identified. The presence of these coking coal seams across the area can only be inferred at this stage of exploration with uncertain depths depending on fault displacement.

Boardwalk who acquired the tenement in 2011 intend to continue exploration with two more programmes of work (Stages 3 and 4) consisting of 145 open holes and 37 core holes in the Sienna Project open cut target area, and 5 boreholes in the underground Electra Project area.

24.5 Geology

The Sienna project is situated in the western part of the Bowen Basin and contains the Rangal, Fort Cooper and Moranbah Coal Measures (German Creek Coal Measures). The sediments dip to the east. The Rangal Coal Measures subcrop in the south-east of the lease area where the Phillips, Leichhardt and Vermont Seams have been identified as potential targets.

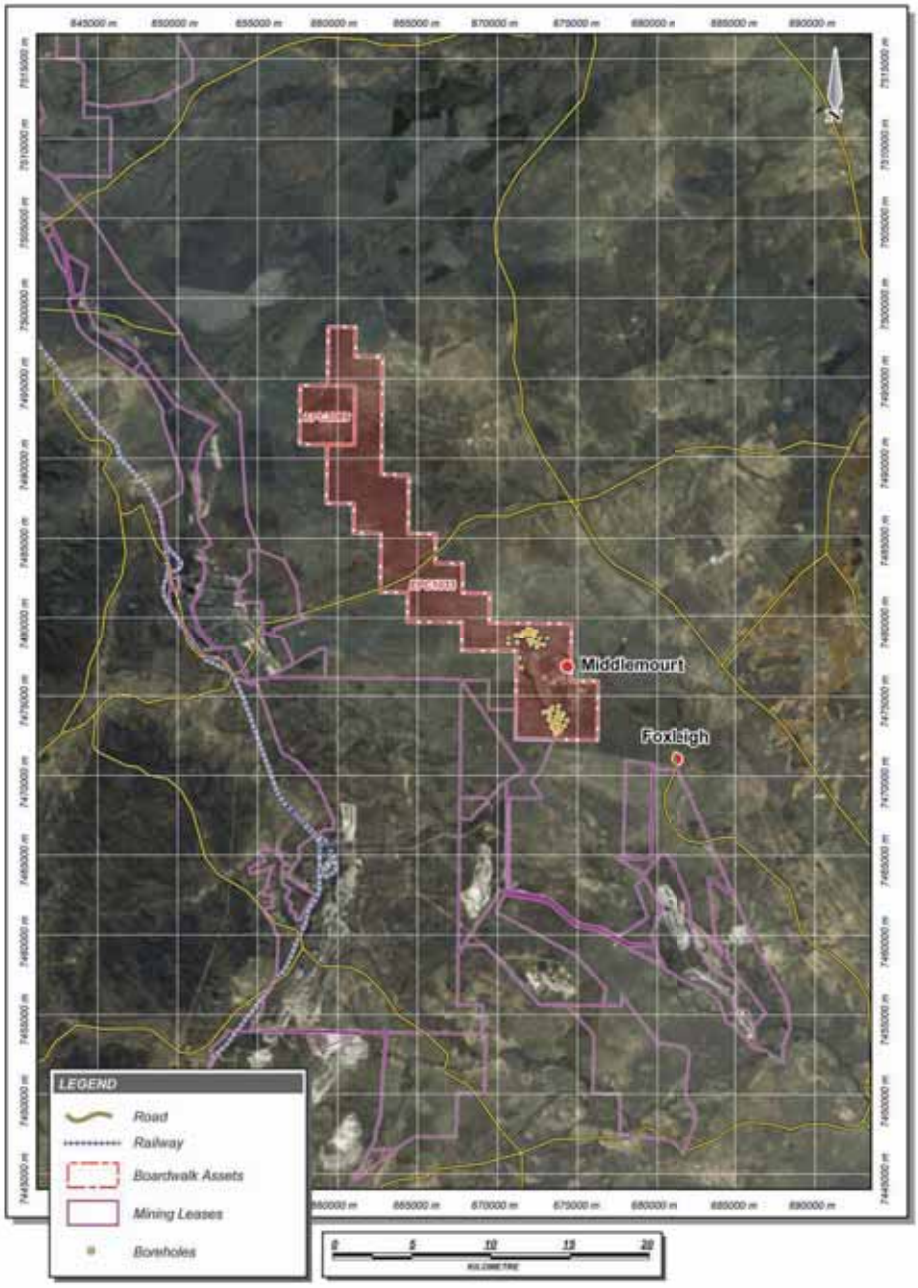
The Sienna Project area is faulted and intruded and a major structure the Middlemount Intrusion separates the area into two exploration targets, Sienna North and South projects. This intrusion outcrops in the area immediately west of the town of Middlemount. Two sills have been identified; an upper sill ranging up to 100 m thick located 20-50 m above the Phillips Seam in Sienna South, and a lower sill 9-15 m thick located 0-5 m below the Vermont Seam in Sienna North. The geometry of the sills and associated dykes are not well understood and additional exploration is required to fully define these. From available data it appears that the Leichhardt Seam is relatively unaffected by intrusions, however the underlying Vermont Seam is heat affected in several holes. The borehole locations are shown in **Figure 24.2**.

The northern Electra project has few boreholes but is thought to contain the German Creek Formation at depths greater than 600 m.

In general the area in which the Sienna tenements are situated is recognised as being structurally disturbed and intruded to varying extent. The Middlemount mine to the south-west is bound by the Jellinbah Fault, although is locally flat-dipping. The Foxleigh mine to the south is characterised by faulting and steep dips. It is generally known that attempts to extend mining operations in the GCCM from the west have been limited by wide areas of intrusion that were intersected during exploration.

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Figure 24.2 – Sienna – Borehole Location Plan



24.6 Coal Quality

Coal quality data for the Sienna Project is limited to the open cut area. The weighted in situ quality data from the five quality holes in the open cut area is listed in **Table 24.1**.

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Table 24.1 – Sienna Coal Quality

No. of Holes	Seam	IM %(adb)	Ash %(adb)	VM %(adb)	TS %(adb)	SE MJ/kg(adb)
Sienna North						
3	Leichhardt	1.4	12.18	10.91	0.46	31.74
3	Vermont	3.5	31.72	6.10	0.33	21.25
Sienna South						
1	Phillips 2	2.5	31.12	5.69	0.69	22.73
2	Leichhardt	2.2	19.36	8.96	0.35	27.29
2	Vermont	1.8	43.46	8.91	0.36	18.82

The effect of the intrusion on the Vermont Seam is evident in the composited raw analysis in **Table 24.1**. This is more striking in the individual ply analysis, which demonstrates the uneven distribution and severe devolatilisation that occurs in the heat affected zones of the Vermont and Phillips Seams, with some volatile matter results as low as 3.6% to 7.3%, and corresponding specific energy values of 13.2 to 19.4 MJ/kg. Although phosphorous levels have not been reported, it is also recognized from other sites that some plies of the Vermont Seam exhibit high phosphorus levels.

Float-sink analysis is reported to have been undertaken, however the data has not been sighted by MMC and the Palaris report states that no detailed assessment of washability has yet been conducted. Palaris indicated high yields were achieved for a 10% ash product, but it is not known whether this was from selected plies or dilution allowances were made in arriving at this view. Boardwalk anticipate that the Leichhardt Seam has the potential to provide a washed low-volatile PCI product, with the higher-ash Phillips and Vermont Seams producing a thermal product and compare the expected PCI product to that of the Middlemount Seam at Foxleigh which mines the corresponding coal measures along strike from Sienna. This remains to be substantiated by the appropriate test work which is to be undertaken in the planned exploration.

Further borehole programs are required to better define the seam, seek to identify any heat affected zones, provide higher confidence levels for coal quality and provide the base parameters for determining coal processing requirements.

24.7 Estimation of Resources and Coal Targets

In April 2009 an open cut Resource estimate for the Sienna Project of 57 Mt of Inferred Resources was prepared by SMG Consultants for Norton Goldfields Limited. Although the Inferred category indicates a degree of uncertainty relating to the coal structure and quality, the Palaris report disagrees with this assessment based on:

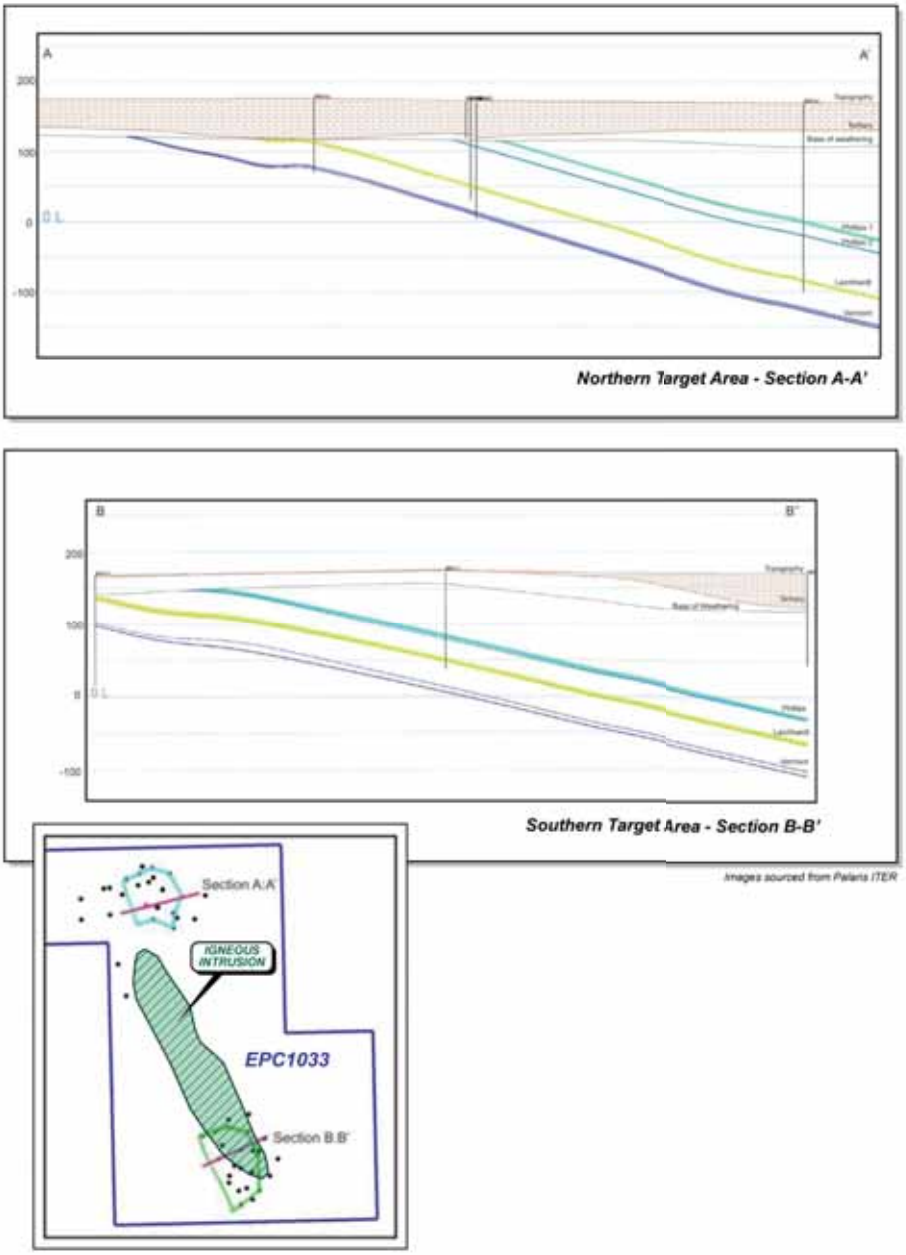
- There being very little coal quality assessment and was not modelled;
- The available quality shows that many of the samples are heat affected and no attempt was made to mask out or derate areas affected by intrusives; and
- A global default RD of 1.40 was used rather than laboratory results.

MMC agrees with the Palaris assessment.

In February 2011 a geological model of the Sienna North and South areas was created by JB Mining Services using 57 holes. A cross section of the open cut area based on this model is shown in **Figure 24.3**.

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Figure 24.3 – Sienna Geological Model Cross Sections



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The three seams were divided into twelve plies as shown in **Table 24.2.**

Table 24.2 – Seam Summary at the Sienna Deposit

Model Seam Name	Alternate Seam Name	No of Intercepts	Min Thick (m)	Max thick (m)	Avg Thick (m)	Max Depth Roof (m)
BW	Base of Weathering	35	0.00	0.00	0.00	71.00
TERT	Base of Tertiary	39	0.50	61.00	29.03	0.00
PH1		13	0.30	4.70	1.98	166.35
PH1I1	Phillips 1 Upper	5	0.25	1.94	1.50	143.80
PH1I2	Phillips 1 Lower	5	0.44	2.07	1.24	145.70
PH2		12	0.40	3.15	1.59	187.01
PH2I1	Phillips 2 Upper	4	0.90	1.60	1.24	148.10
PH2I2	Phillips 2 Lower	4	0.55	1.85	1.06	150.10
LH		13	2.80	4.36	3.69	250.00
LHL	Leichhardt Lower	7	0.40	1.20	0.70	126.05
LHU13	Leichhardt Upper Plies 1-3	7	2.84	3.60	3.15	121.79
LHU4	Leichhardt Upper Ply 4	7	0.35	1.34	0.81	125.40
VER1	Vermont 1	13	0.50	2.64	1.55	199.04
VER2	Vermont 2	7	0.38	1.42	0.81	203.15

Source: Sienna Project Geological Overview, JB Mining Services Pty Ltd, February 2011

MMC has reviewed the model and it is MMC"s opinion that it has been created competently from the data available and is suitable for the future generation of an exploration target as further data becomes available.

Palaris has used the data from the JB Mining model and has estimated exploration targets for four separate domains. The following methodology was adopted:

- Polygons were developed for the open cut areas surrounding the boreholes in Sienna North and Sienna South, including the Phillips, Leichhardt and Vermont Seams, limited to 200 m depth. Seams were limited to the subcrop to the west and were restricted to the outermost borehole that encountered at least one of the target seams. Furthermore the total tonnage was reduced by 30% to account for uncertainty regarding intruded and heat affected coal. The estimated tonnage forms the lower limit to the exploration target range for the open cut areas.
- A Polygon covering the remainder of the exploration permit area for the Phillips, Leichhardt and Vermont Seams, limited to 200 m depth and includes the area along strike between the Sienna North and Sienna South deposits and to the north and south of the lease boundary. The seams were limited to the subcrop in the west and the town of Middlemount. The estimated tonnage forms the upper limit of the exploration target range for the open cut areas.
- The potential underground exploration target has been defined for the Leichhardt Seam using the following criteria:
  - The domain is restricted to the west by the 200 m depth of cover over the Phillips Seam;
  - The domain is restricted to the east by the 500 m depth of cover over the Leichhardt Seam; and
  - The town of Middlemount has not been excluded due to the underground mining method.
- For the Electra area, the target has been bounded by the interpreted 350 m to 500 m depth limits. Allowance was made for interpreted thrust faults which raise the target seams to within the target depths.

Open cut exploration targets have been generated using average seam thickness data and default densities of 1.45 g/cc for the Leichhardt Seam, and 1.50 g/cc for the Phillips and Vermont Seams. The potential underground Exploration Target has been generated using a default thickness of 3 m and a density of 1.45 g/cc for the Leichhardt Seam.

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The Palaris estimates of target tonnage are shown in **Table 24.3**.

Table 24.3 - Exploration Target for Sienna Deposit

Domain	Formation	Exploration Target Range (Mt)	Surface Area (Ha)	Cumulative Coal Thickness (m)	Method of Estimation
Sienna North	RCM	6 – 36	366	8.8	Borehole data and
Sienna South	RCM	8 – 51	446	10	extrapolation
Sienna UG	RCM	0 – 38	877	3	Extrapolation
Electra UG	GCCM	0 – 440	5,240	5.8	General estimate
Total OC		**14 – 87**	**812**		
Total UG		**0 - 478**	**6,117**		

Source: Boardwalk Resources Independent Technical Experts Report, 25th September 2011, Palaris

MMC have reviewed the methodology and ranges used by Palaris and consider that they are generally suitable for the Sienna deposit at its current level of geological uncertainty. The lack of drilling in the central area between the Sienna North and South deposits represents a risk to the upper limits for the Sienna open cut target tonnages, especially due to the presence of the known intrusion. The continuity of the Leichhardt Seam at depth is also a risk to the target estimates within the potential underground domain. Further drilling is required to assess these risks and provide additional certainty to the exploration targets.

MMC consider that there is insufficient drill hole information to estimate a Resource to JORC standard within any part of the tenement. More exploration is needed to understand the nature of the deposit, particularly the igneous intrusions and coal quality to reduce the geological uncertainty. It is uncertain whether further exploration will result in the determination of a Mineral Resource.

The Palaris estimate of target coal tonnage has been accepted for the purpose of the valuation.

24.8 Environment

24.8.1 *General*

The Sienna properties lie within the Isaac River catchment. EPC 2089 in the northwest of the property is bisected by the ephemeral, east-flowing Bore Creek but based on the limited environmental information available to date it does not indicate any significant confirmed environmental constraints. EPC 1033 also features east-flowing ephemeral watercourses (Rolf Creek and its tributary Back Creek) and the southeast-flowing Cockatoo Creek through Middlemount. However, the larger EPC 1033 tenement includes scattered endangered regional ecosystems (EREs) throughout which are a Category B Environmentally Sensitive Area (ESA) that nominally provide for 500 m exclusion zones unless otherwise authorised.

24.8.2 *Urban Areas*

The key environmental constraints for the Sienna asset occur in the southern area of EPC 1033 surrounding the town of Middlemount. While the town is listed as being subject to the application of RA384"s 2 km urban buffer zone from any future mining activity, according to DEEDI"s latest information sheet on RA384 dated 12 January 2012, the fact that the EPC 1033 has been previously granted EPC 1033 and/or applied for its renewal prior to 12 January 2012 would appear to avoid buffer zone restrictions being imposed in EPC 1033 based on RA384.

Other major constraints to mining development in the southern Sienna remain including potential amenity impacts (noise, basting, dust, visual, etc) from mining operations in proximity to residential areas and the presence of EREs.These constraints will be evaluated under existing planning legislative frameworks. While these environmental constraints are greatest for open cut mining, a moderate level of constraint would also apply in the case of underground mining in close proximity to Middlemount township. The potential for mining in the vicinity to Middlemount would now appear likely to be determined on a normal merit-based environmental assessment process rather than a blanket planning restriction under a State planning policy such as RA384.

24.8.3 *Strategic Cropping Land*

Strategic cropping trigger areas lie outside the area and no adverse conditions appear to be present.

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24.9 Infrastructure

Due to the generally high ash of the coal seams, the Sienna project will require a CPP to produce an export product: this will include a train loadout facility and rail loop. Use of the facilities at the German Creek mine on a commercial basis may be a possibility.

The Sienna project is located in the heart of one of Australia"s major coal producing areas, the Bowen Basin. As such there is significant rail infrastructure in place with the rail line to Dalrymple Bay located 18 km due west. The project has two options: extending an existing mine"s rail spur to its site facilities (approximately 4 to 5 km) or constructing its own rail spur and loop 18 km off the Norwich Park/ German Creek line. The major advantage of the second option is a greater control and flexibility over rail schedules. Depending on mine output and port stockpile capacity this may justify the additional capital cost of this option.

The port options are:

- Wiggins Island Coal Terminal (WICET) Stage 3 (scheduled for mid 2016) approximately 395 km;
- Abbot Point Terminal (ABT) T4-7 (expansion scheduled to commence from 2015) at 225 km; and
- Dalrymple Bay Coal Terminal (DBCT) Dudgeon Point expansion (scheduled for 2017) at 225 km.

Boardwalk has commenced planning and discussions around these transport options, but the final outcome will depend on finalizing the rail load out location, Queensland Rail (QR) pricing on rail construction options or with private providers. Preliminary discussions with providers on rail and port options are underway.

24.10 Mining

In September 2011 Palaris developed a conceptual mine plan based on the JB Mining geology model. This provided an estimate of potential open cut tonnage in the Sienna Project area, based on a simple strip ratio cut-off, resulting in a ROM estimate of 35.5 Mt at an average 17.1 bcm/t. The model does not address the economics of open cut mining and does not represent a formal Reserve. MMC considers the design to be optimistic and unlikely to be realised. However it does define a conceptual pit shell for the open cuts and allow an estimate to be made of the likely practical impacts.

The concept demonstrates that open cut mining at Sienna will be characterised by steep conditions of 12 to 17 degrees and will require selective mining to avoid intruded coal. A terrace mining method will be required, similar to that used at Foxleigh. As such, large out-of-pit waste dumps will be necessary. Subject to marketability of the coal and project economics, it is likely that mining with conventional excavators and trucks will be feasible, provided that sufficient exploration and quality drilling is undertaken to delineate the intruded areas.

The Sienna open cut mine and associated waste dumps lie within close proximity to the Middlemount township and will be highly visible. It will lie within the notional 2 km limit of the RA384 buffer and it is likely that the approvals for the operation will depend on the outcome of negotiations with the legislator to protect the amenity of the township. This is likely to place additional costs on the mining operation and may limit the size of the reserves.

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25. DINGO

25.1 Key Outcomes

- The Dingo tenements have prospectivity for coking, PCI and thermal coals and are in close proximity to the existing Baralaba mine, operated by Cockatoo Coal a joint venture partner to the Dingo project.
- The tenements are well located with respect to rail infrastructure and access to port.
- Dingo will experience open cut mining conditions which are similar to the Baralaba mine, where the strata are heavily folded and faulted.
- While the general structure is well understood, insufficient drilling and coal sampling has been completed to allow a Resource tonnage to be estimated. Geological certainty requires a greater degree of exploration to be undertaken than that required for less complex coal deposits.
- Open cut mining will be limited by the geology to small isolated pits.
- The exploration target adopted for Dingo is 82 Mt to 462 Mt.

25.2 Location and Description

The Dingo project is located approximately 125 km west of Rockhampton in the Bowen Basin of Central Queensland. The project area is approximately 225 km from the port of Gladstone.

The Dingo exploration area includes EPC"s 862, 863 and 1063 that extend for approximately 36 km in a NNW direction along the strike of the Rangal Coal Measures from the Cockatoo Coal Baralaba North and Wonbindi areas that are associated with the Baralaba open cut mine. The northern tenement EPC 1063 extends across the Blackwater coal haulage railway between Duaringa and Dingo.

The site location and borehole locations are shown in **Figure 25.1**.

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Figure 25.1 – Dingo Tenement and Borehole Location Plan



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Three prospective areas have been identified along the strike of the Rangal Coal Measures subcrops for detailed exploration drilling and coal quality testing:

- Giles Creek in the north approximately 10 km south of the Blackwater line;
- Pearl Creek in the central area: this is deemed the most attractive area of the deposit; and
- Carinya in the south which has had the least exploration.

There are numerous steeply dipping coal seams present and the area has a complex structure with numerous faulting similar to that at the nearby Baralaba mine.

25.3 Regional Operations

Cockatoo Coal"s Baralaba open cut mine and associated projects are located immediately to the southeast of EPC 863 and EPC 862. These target the subcropping coal seams within the Rangal Coal Measures. The occurrence of coal Resources within the Baralaba area is bounded within complex structural fault zones. The Baralabe mine is a small, complex operation producing ROM product with a nominal production capacity of 0.5 to 0.7 Mtpa. Baralaba North remains a development project. A summary of the Baralaba complex is presented in **Table 25.1.**

Table 25.1 – Baralaba Mine Summary

Location	Total Resources (Mt)	Reserves (Mt)	Target Seams	Production (Mtpa)	Coal Type
Baralaba Mine	33.7	1.2		0.60	PCI, Thermal
Baralaba North	45.9	6.4		3.5	PCI, Thermal
Baralaba South	63.7	25.8	Doubtful, Dawson, Dunstan, Wright, Double, Coolum, Dirty , Sub-dirty	NA	NA
Wonbindi	64.1			NA	

The Bandanna Energy Limited EPC881 exploration tenement (Dingo West Project) lies approximately 25 km west of the Dingo area and is planning to target the Rangal Coal Measures for a reported open cut coal mine targeting up to 1.0 Mtpa. Resources are 91.1 Inferred and the area is known for structural complexity.

25.4 Exploration History

Six hundred and forty geophysically logged open holes have been drilled within the project whereas only one cored (200 mm) hole has been drilled within the Pearl Creek area. Exploration has been concentrated in two areas; Pearl Creek and Giles Creek. At Pearl Creek the hole spacing is 50 m x 200 m and at Giles Creek the spacing is 100 m x 250 m. Holes in the remainder of the lease are more widely spaced. The borehole locations are shown in **Figure 25.1**.

A 2D seismic survey across the project area was carried out by Velseis in 2005 that showed the structure to be complex with north-west striking reverse faults and synclines and anticlines not dissimilar to the Baralaba area. The study divided the area into a number of domains based on the structure.

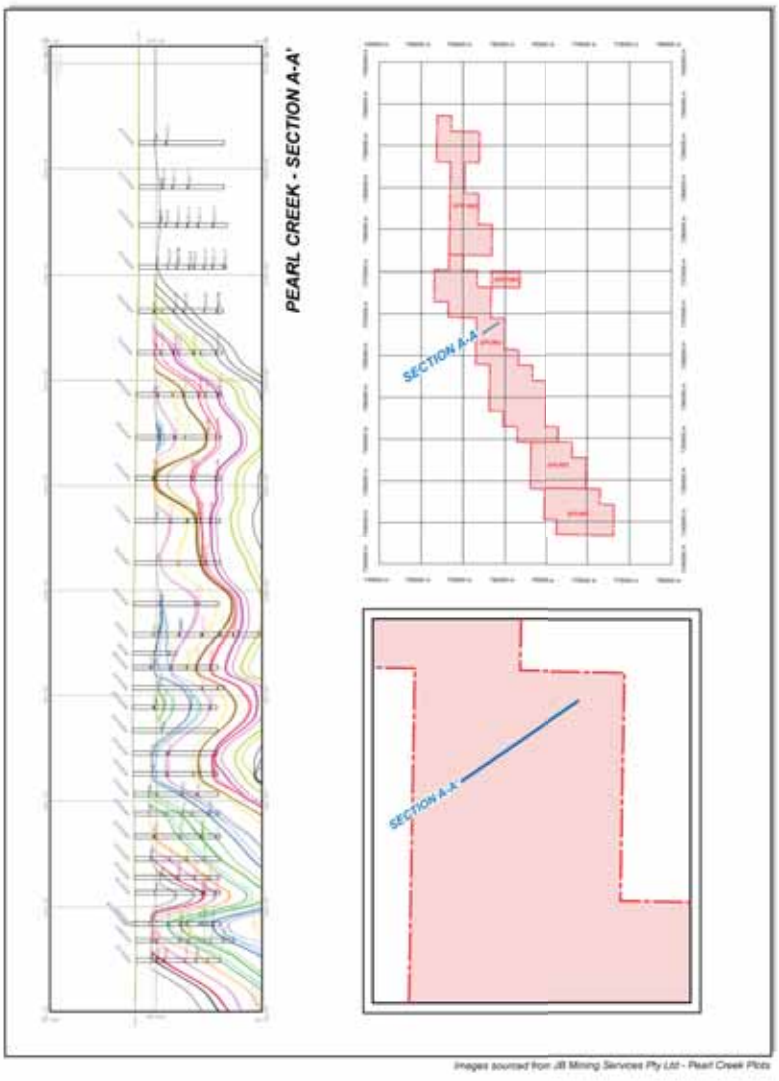
25.5 Geology

The Dingo Project is situated in the eastern flank of the north to northwest striking Mimosa Syncline, in the south-eastern part of the Bowen Basin. Tight folding and thrust folding has led to the formation of steeply dipping coal seams. This is illustrated in the geological cross section shown in **Figure 25.2**.

The regional dip is to the south-west. The coal seams are contained within the Upper Permian Baralaba Coal Measures, which are laterally equivalent to the Rangal Coal Measures. Underlying the coal measures is the coal bearing Burngrove Formation which is laterally equivalent to the Fort Cooper Coal Measures.

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Figure 25.2 – Dingo Geology Cross Section



There are up to 12 seams within the possible mine section but not all may have economic potential. Analysis to date for has been carried out on five of the seams: Dunstan, Wright, Doubtful, Coolum and Dirty. The economic potential of the seams within the Burngrove Formation is unknown although these seams typically consist of alternating thin coal and stone bands.

25.6 Coal Quality

The product from this deposit is forecast to be a mix of coking, PCI and thermal coal which is consistent with similar operations in the area such as Baralaba and Callide. The one cored hole (DG0029CH) within the Pearl Creek area has results listed in **Table 25.2**.

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Table 25.2 – Dingo Coal Quality Analysis

Seam	Thickness (m)	Ash (%ad)	IM (%ad)	VM (%ad)	TS (%ad)	Phos (%ad)	SE (MJ/kg ad)	CSN	CF1.55Y	CF1.55 Ash
Dunstan	3.05	8.9	1.6	14.6	0.58	0.118	32.26	5	88.6	5.2
Wright	3.65	17.5	1.5	14.9	0.44	0.126	28.57	4	76.2	7.4
Doubtful	0.55	28.1	1.7	12.6	0.43	0.220	24.92	3.5	52.8	11.0
Coolum	4.77	13.9	1.4	16.4	0.45	0.103	29.78	1	80.7	4.8
Dirty	0.83	52.6	2.2	10.4	0.30	0.021	15.19	0	12.6	7.5

The high level of phosphorus (0.10 %) is on the upper limit of market acceptability before blending would be considered and the relatively higher HGI number indicating a softer coal that will impact on product size and hence total moisture: this latter point however is not considered a significant demerit.

The Floats 1.55 results, reported in the Palaris report and by AB Mylec (September 2011) indicate the potential for reasonably high yields (76.2% to 88.6 % range) for the Dunstan, Wright and Coolum Seams. The Coolum Seam results may be compromised by reported significant core loss. Given that the seams are steeply dipping, dilution may be greater than normally expected. The Dunstan Seam with a raw ash of 8.9% may well have potential as a by-pass coal The Doubtful Seam is relatively thin at 0.55 m and raw ash of 28.9% and may well be economic and worthy of investigation.

The Preliminary Coal Quality Statement for Dingo Reserve – August 15 2011 by A&B Mylec, also based on the analysis of DG0029CH, has also been reviewed. Although there are some variances in the raw ash between this statement and that of the Palaris report, it should be noted that A&B Mylec specifically reports recoveries as "dilution free". A&B Mylec undertook limited coal washability analysis to which they applied a preliminary plant simulation using dense medium cyclones, spirals and froth flotation separation. The SG 1.50 results are shown in **Table 25.3**.

Table 25.3 – Dingo Preliminary Coal Quality Statement – A&B Mylec

Seam	Raw Ash %	% -0.250mm Material in ROM	SG 1.50 Ash (% ad)	SG 1.50 Yield (ad)
Dunstan	8.4	21.8	5.7	83.3
Wright	17.9	14.9	7.9	71.0
Coolum	11.6	27.1	5.5	75.4
Doubtful	30.1	21.5	11.9	48.6
Dirty	54.9	17.4	14.7	14.3

The product from all seams, with the exception of the Coolum Seam, reported good CSN results (3-4). A&B Mylec conclude that the Dunstan and Wright Seams have good metallurgical coal potential and the Coolum and Doubtful Seams have a lower metallurgical potential. They assess the Dirty Seam as being uneconomic. The Dingo coal is categorised as a low volatile bituminous coal with some metallurgical coal potential and comment is made on the good to high calorific value of the coal. MMC"s believes that based on the data, these conclusions are reasonable.

A&B Mylec further report that the fluorine levels are relatively high for an export coal and the sodium and potassium levels are considered high for a coking coal. Also for The Coolum Seam the iron and calcium levels may impact on the Ash Fusion Temperature, when it is assessed as a thermal coal. Because the raw data has not been sighted by MMC, comment will not be made on the veracity of these items but they are raised for future consideration.

At this time MMC considers the coal information to be inadequate to form a clear view on the quality characteristics of the deposit or to be confident of potential products and coal processing requirements; this is a view supported by A&B Mylec.

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However, the recently completed exploration program should assist in better understanding the potential products from the seams.

25.7 Estimation of Resources and Coal Targets

At present there is insufficient drill hole information to estimate a resource within the exploration tenements and further drilling is required to understand the nature of the deposit, particularly structure and quality, and reduce the geological uncertainty. It is uncertain whether further exploration will result in the determination of a Mineral Resource.

The geological model for the deposit was developed by JB Mining Services. Palaris has reviewed the data used in the model and identified no material errors. However, the model does not contain known faults, which are known to be very significant in the interpretation of the structure and therefore the economics of mining the deposit. JBMS also stated in their report that seam correlation also appeared to be incomplete.

Palaris has estimated coal target tonnages for the Pearl Creek and Giles Creek areas from the geological model using a default RD of 1.44, and restricted the depth to an overburden ratio of 15:1 bcm/tonne. The resulting values were taken as the maximum tonnage. For the Baralaba Coal Measures these values were derated by 20% to provide a minimum value, whilst for the Burngrove Formation the minimum target tonnage was assigned as zero.

Exploration target tonnages for the remainder of the areas have been estimated by domain. Each domain polygon was created by assigning a strike length and an estimated width. An average cumulative coal thickness was applied to the polygon based on the average value from Pearl Creek. A default RD of 1.44 was used and the tonnage restricted to an overburden ratio of 15:1 bcm/tonne. The resultant value was taken as the maximum tonnage and the minimum target tonnage was assigned as zero.

The coal targets estimated by Palaris within the Dingo coal permits are presented in **Table 25.4 -**

Table 25.4 - Dingo Coal Targets

EPC	Location	Coal Area (ha)	Coal Target	
			Minimum (Mt)	Maximum (Mt)
862	Pearl Creek	476	50	140
862	Giles Creek	21	1	7
862	Carinya	450	20	130
862, 863	Remainder	630	0	185
Total			**82**	**462**

MMC have reviewed the methodology used for the estimate and given the complexity of the deposit and difficulty of interpretation the approach adopted by Palaris is considered appropriate and the results are reasonable. MMC has adopted the Palaris estimate for the purpose of the valuation.

25.8 Environment

25.8.1 *General*

The project area features very low rolling hills to flat terrain with ephemeral east-flowing tributaries (King, Pearl, Charley and Sharpers Creeks) of the Dawson River further east.

EPC 862 ("Dingo South") comprises two discrete areas which are relatively unconstrained in environmental terms. EPC 1063 also has two discrete areas which are constrained by Dawson Range State forest (Category C ERA) at the southernmost extents of these areas. EPC 863 is mostly constrained by State forest as well as endangered regional ecosystems located in the north of this tenement.

25.8.2 *Urban Areas*

There are no substantive settlement areas in the Dingo tenements to result in exclusion zones under the RA384 policy.

25.8.3 *Strategic Cropping Land*

Trigger mapping indicates that the likely Strategic Cropping Lands occur in the floodplains of the Dawson River and associated tributary confluence areas well to the east but are not expected within the Dingo tenements.

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25.9 Infrastructure

Boardwalk suggests in a public presentation that the target mining rate for Dingo will be 4.8 Mt of product per year. In order to achieve this output the project will require a washplant to produce a consistent export coal at the high production rates. Part of this infrastructure will also include a train loadout facility and rail loop.

The Dingo project is located in the heart of the Bowen Basin, and there is significant rail infrastructure in place with the project exploration leases straddling the main Blackwater/Gladstone line. This is a significant advantage as only a rail loop will need to be constructed. Wiggins Island Coal Export Terminal (WICET) is approximately 225 km distance from the lease.

The project transport logistics has three options:

- WICET Stage 3 (scheduled for mid 2016) at 225 km;
- Abbot Point Coal TerminaL (ABT) T4-7 at scheduled to commence from 2015) at approximately 460 km; and
- Dalrymple Bay Coal Terminal (DBCT) Dudgeon Point (scheduled for 2017 expansion) at 309 km.

The most logical option is WICET Stage 3. WICET Stage 2 is fully subscribed and unless arrangements can be entered into with Stage 2 participants to access their allocated tonnage it is not a viable alternative. The proposed Fitzroy Port south of Rockhampton could also be considered, however should it proceed, it is currently seeking funding and the reported start date is 2015.

Boardwalk has commenced planning and discussions around these transport options, however the final outcome will depend on finalizing the rail load out location, QR pricing on rail construction options or with private providers, pricing for rail off take from rail load out to port with QR or private providers, and then port off take agreements.

25.10 Mining

Boardwalk recognises that the Dingo mining operation will be modelled on the nearby Baralaba mine and specifically refers to this project in public presentations (Boardwalk Company Presentation – October 2011). The Baralaba mine is a bench mining operation where the steeply-dipping seams are extracted in lifts along strike by excavator as they are exposed. It is a highly selective operation and the production rate is limited by the need to use smaller machinery sizes for selectivity work on the thin dipping seams to produce a run-of-mine product. As a result it is a higher cost operation than other Bowen Basin coal mines in the same market.

The adjacent Baralaba mine and nearby Dingo West Project are targeting production rates significantly less than the 4.8 Mt for the Dingo area. The opportunity to produce higher production rates at Dingo is likely to rely on the availability of multiple pit areas and the use of a washplant to allow higher levels of contamination to be taken during mining. MMC consider that the main challenge to implementing the stated production rate will be the development of a sufficient number of practical pit areas and maintenance of close supervision of the ROM quality.

With respect to the difficulty to define a mineable coal reserve, the current Baralaba operation is known by MMC to require very close drill spacing to define the seams sufficiently in advance for reliable production scheduling, and therefore reconciliation and grade control will be challenging. However, the mining method is well proven in other Australian mines.

26. MONTO

26.1 Key Outcomes

- The Monto tenement has prospectivity for thermal coals and is close to the existing tenements of Peabody Energy which are at feasibility study stage for up to 10 Mtpa of production (Stage 1 and 2).
- The tenement is located comparatively close to the port of Gladstone, but would require considerable expense to develop a rail link to the Moura line to the north.
- There is no exploration data available on the Monto tenement, but the prospectivity of the tenement is based on regional geological interpretation by Boardwalk and the evidence of coal intersections from a number of historic water bores.
- Open cut mining conditions in the tenement area are not known from available data.
- The exploration target adopted for Monto is 0 to 1,832 Mt, but the upper value should be heavily discounted for geological uncertainty.

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26.2 Location and Description

The Monto exploration permit EPC 1220 covers approximately 29,600 ha within the Mulgildie Basin approximately 120 km southwest of Gladstone. The Monto rail line traverses the tenement with a distance of approximately 95 km to the port of Gladstone. The area is an inverted U shape that surrounds the township of Monto and associated tenures of Peabody Energy"s Monto Coal Project. **Figure 26.1** shows the project location.

26.3 Regional Operations

There are no operating coal mines in the Monto area. However, the Boardwalk tenement surrounds the exploration and mining tenements of the Monto Coal Project (MCP), now managed by Peabody Energy Corporation (through acquisition of Macarthur Coal Pty Ltd). Peabody also has ML80175 (Mulgildie Extended), and the only other coal tenement in the area is EPC1175 belonging to Carabella Resources, which is 10 km south of Monto.

The MCP is at feasibility status and a Stage 1 mining area was granted a mining lease in 2005. An associated MDL was applied for in 2010. Public information on the MCP reveals that:

- Stage 1, a small scale open cut mine of 1.5 Mtpa was subject to a feasibility study in 2008, which identified rail transport as being the largest cost element;
- The coal will require washing; and
- Stage 2 is a larger mine area up to 10Mtpa and is currently undergoing pre-feasibility study and environment assessment.

The status of the MCP is provided in **Table 26.1.**

Table 26.1 - Peabody Energy Monto Project

Mine	Owners/ Manager	Coal Type	Commence Production	Target Production (Mtpa)	Marketable Reserves (Mt)	Resources (Mt)	Tenements
Monto Stage 1	Peabody Energy	Thermal	Est 2012	1.5	NA	328	EPC613 (24 sub-blocks), EPC683 (53 sub-blocks), ML80101, MDL445
Monto Stage 2	Peabody Energy	Thermal	Est 2014	10	NA		

26.4 Exploration History

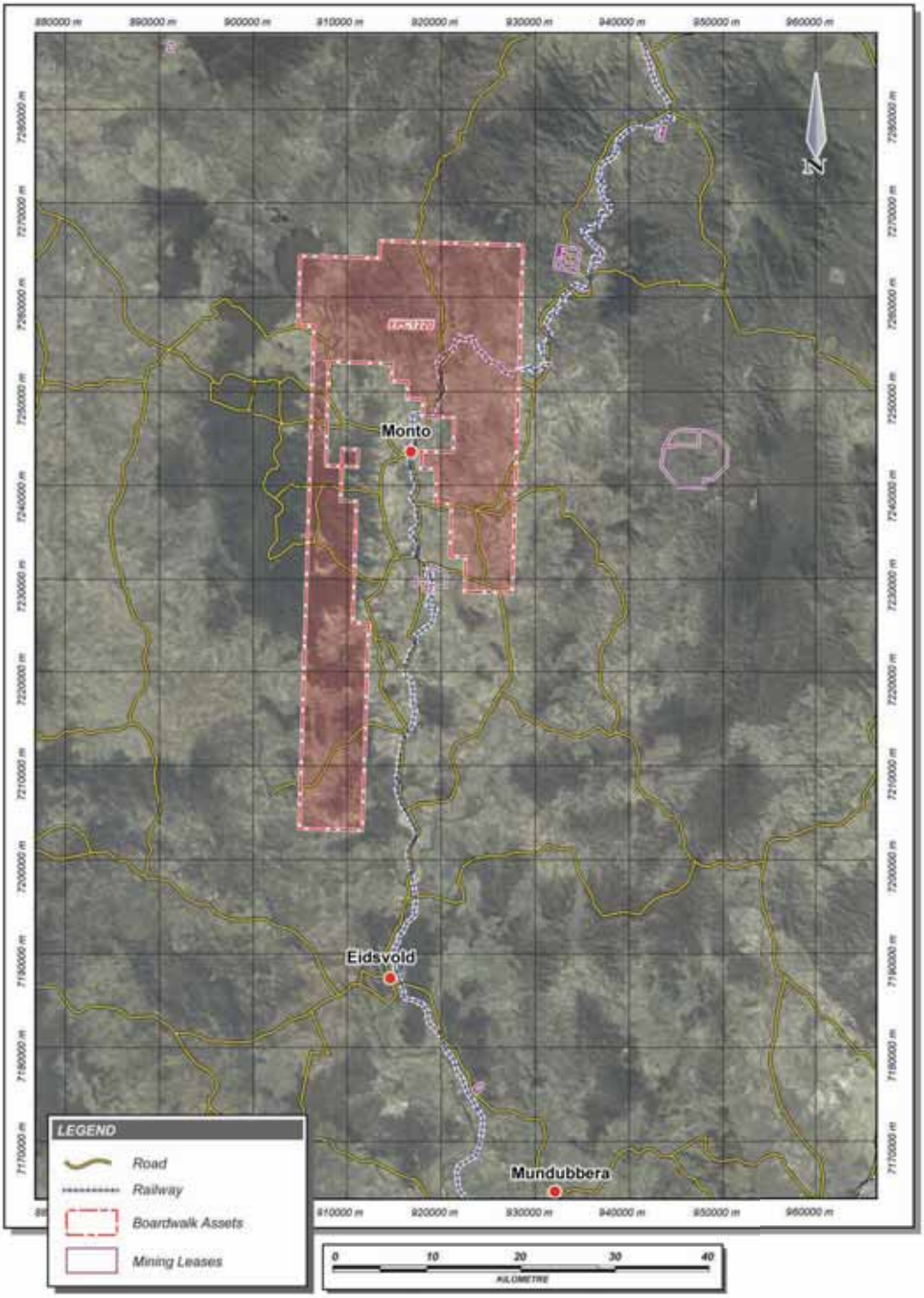
The Monto area was explored in the 1970"s and 1980"s, however there is no drilling for coal within the current EPC1220. A large number of water bores have been drilled in the area, most of which were too shallow to have intersected coal with only nine holes having coal intercepts.

Boardwalk has planned an exploration program over four target zones based on regional geological data and the known coal intersections in the water bores. Drilling in the target areas is planned to commence in the first quarter of 2012.

Target Domain 1 has the highest potential for coal based on the four water boreholes drilled that have intersected coal seams in the vicinity. Based on exploration leases to the west up to five seams have been identified however only two of these are economically prospective ranging from 2.93 m thick at a depth of 90 m on AP70C and 1.5 m thick at a depth of 35 m on AP303C. The Palaris report indicates a maximum coal thickness of 6 m based on five seams within the Target Domain 1 area. This should be discounted to a maximum of 4.43 m, based on the evidence provided on AP70C and AP303C.

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Figure 26.1 – Monto Tenement Location Plan



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26.5 Geology

The western portion of the Monto project lies within the coal-bearing Mulgildie Basin and the eastern portion within the barren Yarrol Gasin. The two basins are separated by the north-westerly trending Mulgildie fault.

The Mulgildie Basin contains Jurassic rocks, the uppermost unit of which is the Mulgildie Coal Measures. The coal measures contain five seams, named A to E. All seams are prone to splitting.

No information is available on structural or igneous features.

26.6 Coal Quality

No coal quality has been assessed within the exploration tenement. Data from the adjacent Peabody Monto Coal Project indicates a washed export thermal coal product would be expected.

An internal Boardwalk presentation provides coal quality data for the Monto Coal Project as shown in **Table 26.2**. MMC are not able to confirm this data but for a comparison MMC has researched previous studies, (1982 Brigalow Mines Pty. Ltd.), that demonstrate a thermal coal suitable for export can be expected from this deposit. Based on comparable operations the product would be a high volatile coal with a lower calorific value when compared with other Australian exports coals. The historical data has reported yields of 58% and 70% for a 13.5 % ash.

Substantially more quality information is required to better assess the economic value of this property

Table 26.2 - Regional Comparative Product Quality

Location	Coal Type	IM (%adb)	Ash (%adb)	VM (%adb)	FC (%adb)	Sul. (%adb)	Phos. (%adb)	HGI	Cal. Val. (kcal/kg gad)	CSN
Peabody MCP	Thermal	4.5	10.0	41.0	44.5	0.50		45	6,700	1
Brigalow	Thermal (Raw)	6.8	24.1	36.2		0.47		35	5,350	
Brigalow	Thermal (Washed)	5.0	13.5	41.8		0.50		35	6,520	

26.7 Estimation of Resources and Coal Targets

It is noted that the published Resource for the Monto Coal Project was down-graded in November 2009 from 519 Mt (estimated February 2002) to the current 328 Mt as a result of the introduction of the latest JORC reporting guidelines. Of this tonnage, ML80101 contains 150 Mt, the remainder (178 Mt) being associated with the Peabody EPCs (77 sub-blocks) or an average of 8 kt per hectare.

Palaris has estimated exploration target ranges for four target areas. The minimum tonnage for the range is zero demonstrating the lack of meaningful exploratory data that is available to enable any modelling. The maximum value for the range has been calculated as the product of the area of the target zone multiplied by a coal thickness derived from exploration reports on areas outside the Monto tenement. This gives a target value of 1,832 Mt, or 66 kt per hectare. MMC considers that for the purpose of valuation the maximum for the range is misleading due to the very high level of structural uncertainty, and as such should be discounted for geology.

26.8 Environment

26.8.1 *General*

The site is partly constrained by a combination of Category C and Category B Environmentally Sensitive Areas (ESA) and potential Strategic Cropping Land.

The Coominglah State Forest is a Category C (low constraint) ESA and covers up to 20% of the EPC while scattered endangered regional ecosystems (EREs) cover approximately 2% of the EPC, mainly in the western arm of EPC1220. However, these EREs have not been confirmed by detailed site ecological survey as baseline environmental studies have not commenced. Potential exploration and mining activities in these ESAs (and within the 500 m ERE exclusion zones) will require approval from the relevant authority and specific approval conditions in the Environmental Authority. Cania Gorge National Park (a high constraint Category A ESA) provides a small encroachment into the extreme northwest area of the EPC (1% sterile land).

Other mineral (non-coal) tenements overlap EPC 1220, namely EPM 18499, EPM 18708, EPM 18596 and EPM 19801 which together comprise an estimated 30% of the EPC.

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26.8.2 ***Urban Areas***

According to a fact sheet listing urban restricted areas (DEEDI, December 2011), the North Burnett Regional Council has successfully excluded the town of Monto (the largest settlement in the vicinity of EPC 1220, population 1,166) from the application of the urban buffer zone policy (RA384) which avoids the potential imposition of any development exclusion zone around the town. However, given DEEDI"s advice of 13 January 2012 on RA384, and on the basis that EPC 1220 has already been granted (although awaiting renewal), it is expected that there will be no impact by RA384 on this EPC.

26.8.3 ***Strategic Cropping Land***

Relevant trigger mapping indicates that potential Strategic Cropping Land (SCL) in EPC 1220 occurs locally along the Three Moon, Monal, Splinter and Flood Creeks and other tributaries in the Burnett River catchment. While this potential SCL land represents a relatively minor proportion of EPC 1220 (approximately 10%), it needs to be subject to further investigation to determine if SCL applies as a severe constraint because its location includes the important Target 1 area in the vicinity of mapped Mulgildie Coal Measures.

A total of 677 mainly shallow water bores are located within EPC1220, indicating a high demand for stock and domestic water supply as well as for agricultural purposes. This may place a moderate environmental planning constraint due to potential land use conflict.

26.9 Infrastructure

The most logical port option for Monto is WICET Stage 3. WICET Stage 2 is fully subscribed and unless arrangements can be entered into with Stage 2 participants to access their allocated tonnage it is not an alternative leaving Stage 3 as the main alternative. The proposed Fitzroy Port south of Rockhampton should also be considered however that might may not be a reasonable proposition with the possible timeframe for a mine.

The mine to port infrastructure for this resource is a significant component in establishing the economic viability of this project. The rail system to Monto from the coast is thought to be decommissioned. Adjacent projects have proposed using the Moura rail system (approximately 125 km away), and planned for the significant capital to implement this option of new track and upgrading of the Moura system to handle typical export coal trains. Given Peabody"s potential local coal project development these costs may well be shared by the proponent of this project.

Until the potential for such an agreement is realised, lower rail productivity and higher cost options such as using trucks and small tonnage rakes may well serve to get the project commenced. This does however leave the project exposed to a major risk if no shared rail agreements can be reached.

Boardwalk has commenced planning and discussions around these transport options which assist in finalising the rail load out location, QR pricing on rail construction options or with private providers, pricing for rail off take from rail load out to port with QR or private providers and then port off take agreements. These studies and negotiations will need to be undertaken to a confidence level to allow the definitive feasibility study and full economic value of the mine to be established.

Water and power are two other infrastructure requirements for Monto that require detailed study. Other local projects considered that the initial water requirements may well be met from local aquifers, however provision of water for further project development will need to be determined with treatment dams from CSG developments the most likely. This will need to be considered in project capital estimates.

26.10 Mining Issues

The proposed mine plan for the Peabody Monto Coal Project is not available for public scrutiny. However, it is likely that the mine will be a traditional truck-excavator operation designed to cope with structural complexity. In the complete absence of definitive geology data for the tenements, MMC can make no comment made regarding any future mining options for the Monto project.

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27. BOARDWALK VALUATION METHODOLOGY

27.1 Valuation Methods

In determining the appropriate valuation method(s) to be used for the Boardwalk exploration assets MMC has taken into consideration the classification of these assets as defined in the Valmin Code and the different methodologies that are generally accepted as industry practice for each classification.

The Valmin Code (Clause 32) states, inter alia, that the specialist must make use of valuation methods suitable for the Mineral assets under consideration and the method will depend on factors such as:

- The nature of the valuation;
- The development status of the mineral asset and
- The extent and reliability of available information.

Generally there are three broad methods of valuation that are used for valuing mineral assets (**Table 27.1**). These are the cost approach, income approach and market approach and each is more suitable for the relevant status of the exploration or mining project from grass roots exploration through to operating mine.

Table 27.1 – Typical Valuation Methods of Exploration Tenements

Classification	General Description	Valuation Methods
Early Stage Exploration Areas	Properties where coal occurrences may or may not have been identified, but a Resource has not been identified	Rule of Thumb, Geoscience Factor, Comparable Transaction
Advanced Exploration Areas	Properties where considerable exploration has been undertaken and specific targets identified. A resource estimation may or may not have been made. Good understanding of coal seam presence.	Geoscience Factor Method, Appraised Value Method, Comparable Transaction
Pre-development Project	Properties where Resources have been identified but decision to proceed with development not made. Includes properties held on retention titles.	The above methods and DCF/NPV valuation, however it has been found that using comparable transaction or appraised value methods tend to undervalue more advanced projects.

The valuation approach that is generally adopted for early stage exploration areas is generally defined as inferential methods that rely on comparative or subjective inputs such as a rule of thumb or appraised value method. These include the estimated coal target range and a value applied to the unit tonne of coal based on comparative transactions. The value would be discounted by any specific site factors as well as the status of resource classification. This method does rely on the selection of suitably comparable areas for determining a transaction unit rate. The appraised value approach uses actual specific sunk costs for exploration relevant to the property being considered.

A discussion of typical valuation methods used for coal assets follows.

Income Approach

This method of determining value of mineral assets is by considering the future income streams that can be obtained from the mineral with the investment of capital. The method relies on the valuer"s estimate of the income earned from the sale of the mineral, cost of mining and distribution, capital expenditure taxes and royalties resulting in the free cash flow. The most common method is the use of the Net Present Value that predicts the future cash flows of an asset over its life. The method recognises the time value of money and provides flexibility for periods of positive and negative cash flow periods. Issues associated with this method are:

- Selection of a suitable discount rate commensurate with risk and an estimated return on capital (weighted average cost of capital);
- Estimating cash flows and in particular future commodity prices and exchange rates (if necessary) that can have a significant impact on the valuation.

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The NPV method is universally adopted for advanced exploration projects where a resource has been determined and some basic economic assessment is able to be carried out to define a reserve. As such this valuation method is commonly unacceptable when only Inferred Resources are estimated and should not be used where only coal targets have been determined which by definition are conceptual in nature.

MMC therefore considers the relevant assets are not at sufficient stage of understanding for this method to be used.

Cost Approach

This method is based on the principle of a contribution paid to replace depleted assets. The most common method in the category is the *Appraised Value Method* whereby past and planned exploration expenditures are used for a valuation of the property. It has as its fundamental premise that future expenditure is warranted recognising the potential to enhance the property to define Resources. In using this method it is important that:

- Only past expenditure that has been productive in identifying a target is considered;
- Recent historical expenditure is used and the last three years is usually adopted as a cut-off;
- This method is best applied to properties that are actively being explored; and
- Future budgeted expenditure of one year beyond the current exploration year is added on the assumption that this is a warranted expenditure based on the attractiveness of the outcome of previous exploration campaigns.

The appraised value is generally adjusted depending on current market conditions at the time of valuation by applying a premium or discount. Historical expenditure has been escalated for inflation using the average CPI.

The planned budget expenditure on exploration is included for the next twelve months only as subject to results there is no guarantee that further expenditure may be committed to the project. MMC has adopted a prospectivity factor matrix for modifying the appraised value cost based on the potential of the property to proceed to identifying Resources, a mine plan and economic recovery. MMC has further considered any extraneous matters such as coal type; location; proximity to known Resources and mines; availability of services; environmental risk. This is a variation to the Kilburn method and is deemed more appropriate for coal tenements.

Issues and limitations of this method include:

- The technique should be applied to properties that are actively being explored;
- Experienced judgement must be applied to separate past expenditures considered productive from those that have not contributed to the value of the property; and
- Properties with difficult geological structure may have incurred higher costs in exploration that may not necessarily be transferred to meaningful advancement of the property.

This method requires judgement and has some subjective elements but is a recognised methodology for valuing exploration properties and is transparent in its application.

Market Approach

This is generally referred to as a comparative transaction method where similar properties should have similar value. It assumes that arms length transactions have been undertaken on a reasonable basis between a willing seller and willing buyer. Many such transactions are not completed at the particular time but involve a farm-in arrangement of future exploration expenditure that must be taken into consideration.

A dollar value per resource tonne is used as a basis for the valuation. For appropriate comparison the asset transaction must be at a similar stage of exploration as that of the property being valued. MMC has reviewed transactions over recent years and has found that:

- Advanced exploration properties where Resources have been determined and are at pre-feasibility stage have values varying from $0.26/t to $1.68/t.
- Exploration tenements where Resources have been estimated have values ranging from $0.01/t to $2.91/t.
- Preliminary exploration tenements where only targets have been estimated vary from <$0.01/t to $0.15/t.

For early stage exploration properties there is generally a small payment followed by farm in exploration expenditure to obtain an increased joint venture participation.

Many transactions are influenced by strategic factors and may not be appropriate comparatives. In general, no two coal properties are alike and it is necessary to take into consideration the following:

- The coal type that is present (coking, thermal, PCI);
- Likely general qualities of the coal compared to market benchmarks;
- Proximity to infrastructure such as rail, port and general services;
- Depth of the coal and potential mining methods;

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- Potential size of the resource; and
- Potential land access and environmental issues.

Historical transaction costs require to be adjusted to reflect the present market environment.

27.2 MMC's Valuation Approach

For the valuation of the coal properties MMC has used a combination of two methods due to the uncertainties attached to these assets progressing to projects. The valuation methods applied include Appraised Value based on past and forecast exploration expenditure with an appropriate multiplier applied to these expenditures, and Comparable Transactions with appropriate discount or premium based on underlying factors associated with the property.

Fair market value is usually the technical value plus a premium or discount to account for market, strategic considerations and special purposes. MMC has therefore assessed a range of values based on the methodologies used, which is a technical value.

MMC has used the Appraised Value method as the primary assessment of value with the comparative market approach as a sensitivity check.

27.2.1 *Appraised Value*

The recent historical exploration expenditure for each of the relevant properties over the period 2009 to 2011 adjusted for inflation and that budgeted for 2012 and 2013 is shown in **Table 27.2**.

Table 27.2 – Recent and Planned Exploration Expenditure

Property	FY Exploration Expenditure ($000)					Expenditure Value ($000)
	Historical			Forecast	Budget	
	2009	2010	2011	2012	2013	
Ferndale		103	2,458	12,325	2,255	17,141
Sienna	730	399	45	3,302	5,723	10,201
Dingo	225	5,953	344	2,652	6,589	15,763
Monto			185	327	3,820	4,332

In appraising the prospectivity and a multiplying factor to be applied to the expenditure values. MMC has taken into consideration the effect of location, land issues and an assessment of the geological data for advancing towards estimating Resources and defining an economic reserve base. The multiplying factors for different stages of exploration and understanding of the structure and advancement to estimating a resource is shown in **Table 27.3**.

Table 27.3 – Multiplying Factors

0	No further exploration is justified
0 – 0.5	Recent exploration has significantly down graded the tenement"s prospectivity. Further exploration cannot be justified and disposal is best option
0.5 – 1.0	Recent exploration has maintained rather than enhanced the prospectivity of the tenement. Further exploration delayed until reassessment of an appropriate strategy.
1.0 – 1.5	Further exploration justified and recent exploration has enhanced the prospectivity with a geological model showing targets.
1.5 – 2.0	Recent exploration has enhanced the prospect increasing coal targets and identifying potential areas for mining.
2.0 – 2.5	A small resource is able to be identified with good prospects of increasing the resource and economics through infill drilling with excellent potential along strike. Conceptual mine studies undertaken.
2.5 – 3.0	Sufficient drilling to identify possible mine areas with conceptual mine layouts with further infill drilling planned.
3.0 – 5.0	Resource defined and progressing to feasibility study.

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27.2.2 ***Comparative Transaction Value***

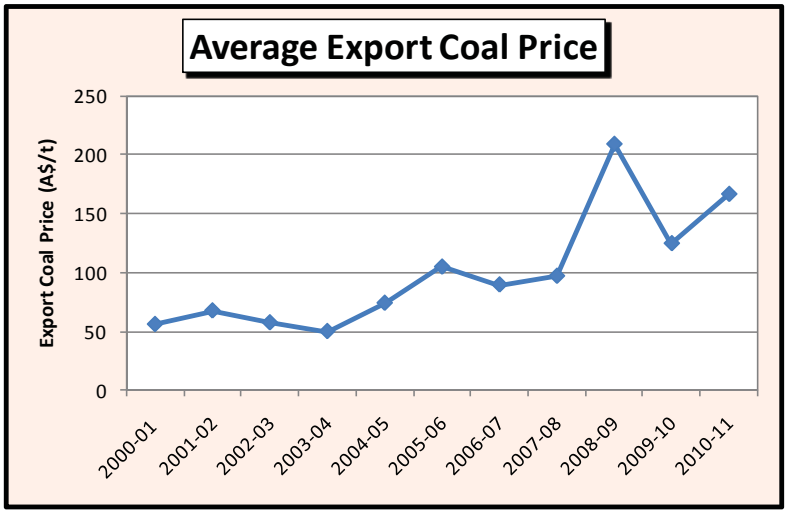
The Ferndale deposit has reported Inferred Resources and an analysis of comparative transactions has been presented in **Appendix A**.

For the remaining Boardwalk assets without associated Resources, MMC has reviewed a number of publicly available coal asset transactions which are at early exploration stage where coal targets have been identified but no Resources estimated. These are included in **Table 27.4**. Where there may be underlying environmental, legal or political sensitivities that could seriously delay or reduce access to areas for development of the property, a reduction in the estimated value is applied.

To derive the transaction cost for each property to present day market conditions, MMC has adjusted the historical costs including farm in expenditures by comparing the average export coal price published by ABARES to that for the 2011 coal prices. Any unspent farm in expenditure is discounted at a rate of 10% to reflect risk and uncertainty on whether these will be eventually committed.

The average export coal price has varied significantly over recent years and as considered to have a material impact on prices offered for joint venture participation. The trend is shown in **Figure 27.1** with the year 2011 being estimated by MMC from published coal prices.

Figure 27.1 – Average Export Coal Prices



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Table 27.4 – Summary of Recent Transactions of Exploration Target Areas

Tenement	Location	Date	Adjusted Pro-Rata Consideration[1] ($m)	Target Coal (Mt)		Estimated Value range ($/t)		
				Low	High	Low	High	Average
Hughenden EL"s	Galilee Basin	Sep 2011	33.33	580	5,720	0.006	0.057	0.032
EPC 1260 (Pentland)	Galilee Basin	Apr 2011	15.38	0	745	0.0218	-	0.022
Dellworth, Savoy Hill EL 6812, EL 6594	Hunter Valley	April and Sep 2011	3.48	Not defined but based on general geology 100 – 300 Mt.		0.012	0.038	0.023
Ferndale EL7430,	Hunter Valley	Dec 2010	45.3	350	530	0.129	0.085	0.107
Ferndale EL7430	Hunter Valley	Jan 2010	3.56	60	85	0.042	0.059	0.051
Columboola, EPC 1165	Surat Basin	Apr 2010	48.15	830	1,165	0.041	0.058	0.050
EPC 1261, EPC 1276	Bowen and Surat Basins	May 2009	3.50		400	0.009	-	0.009
EPC 956, EPC 957	Maryborough	April 2008	13.17	10	20	0.659	1.317	0.988
EPC 862,EPC 863	Dingo	Feb 2005 and Aug 2007	14.26	0	300	0.048	-	0.048
High								**0.878**
Low								**0.009**
Median								**0.048**
Average								**0.147**

Note: 1. Transaction prices adjusted for historical coal price variations and future risks.

The value range is large as would be expected for these tenements due to the conceptual estimates attached to target coal and the nature of the transaction. To derive a meaningful base value per tonne for assessing the relevant properties, MMC has determined an average value per tenement from the target coal range and due to the large variations has selected the median value for its Base Value. The median value for exploration tenements with no Resources has been estimated at $0.048/t of target coal.

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To recognise the effect of location, proximity to rail and services, environment and socio-political risk, coal type and coal occurrence (geology and coal seam depth), modifying factors particular to each property have been applied to the Base Value.

27.2.3 *Ferndale Property Valuation*

Exploration activity has been advanced to a stage where Inferred Resources have been estimated. From the data the seams within the Newcastle Coal Measures are at depths amenable to surface mining; however the upper seams are not continuous across the area due to erosion. An open cut area at the north part of the tenement has been delineated from a conceptual assessment of potential mineable coal seams to a depth of 100 m to 150 m depending on the seams present and cumulative strip ratio. Deeper coal seams within the Newcastle Coal Measures, although having potentially favourable strip ratios, have high ash and would appear to be potentially prohibitive with respect to product coal strip ratio. Further exploration is required to confirm the oxidation limits and coal washability testing for undertaking economic evaluation.

In general, the coal seams contain stone bands and the total seam sections are relatively high in ash. MMC would expect a thermal coal product higher in ash than typical Hunter Valley export coals in order to achieve reasonable yields.

The estimated value for the Ferndale tenement is provided in **Table 27.5**.

Table 27.5 – Ferndale Value Estimate - Appraised Value

Exploration Expenditure (A$000)					Base Value ((A$000)	Adjustment Factor		Value (A$000)	
2009	2010	2011	2012	2013		Lower	Upper	Lower	Upper
	103	2,458	12,325	2,255	17,141	3.0	4.0	51,423	68,564

Value Estimate – Comparative Transaction

For a value estimate using a comparative transaction with appropriate modifiers, MMC has split the prospect into four categories. In assigning a base transaction value range, the upper and lower limits for an Inferred Resource depicted in Appendix A is used. MMC has determined a value range for Inferred Resource transactions between a willing buyer and willing seller in an arms-length transaction acting knowledgeably, is $0.10/t to $0.27/t. For the valuation estimate the Ferndale resource has been split into the following four sections:

- A potential open cut area targeting the upper Newcastle Coal Measures as identified in **Table 23.5**. MMC considers these coal seams to be at suitable depths and of quality to advance to a higher status of Resource and Reserve estimate;
- A potential open cut that includes the deeper, higher ash seams within the Newcastle Coal Measures. As discussed in **Section 23.7** MMC has significantly downgraded the potential for these Resources and attaches a low value;
- An underground targeting the upper seams of the Wittingham Coal Measures, and
- An underground targeting the deeper coal seams of the Wittingham Coal Measures.

MMC has taken into consideration the following issues in its valuation of the Ferndale property using comparative transaction values:

- The site is adjacent to rail and general services and within a mining area with close proximity to Newcastle port;
- The seam structure is relatively benign with no significant faulting nor intrusions identified. Seams are shallow dipping;
- The shallow coal seams are variable in occurrence and in their thickness across the tenement;
- Available coal quality suggests variable seam quality and potential low yields unless a higher ash product is targeted;
- The open cut area could support multiple small pits but their extent is unable to be defined until limits of oxidation are known;
- The deeper higher strip ratio coal included in the open cut Resources has mostly ash values in excess of 45%;
- Underground seams are variable in thickness and further exploration and analysis is required. The Resource estimation has used a 1 m lower thickness limit considerably limiting the ability to advance some of the Resource areas to potential Reserve status. MMC has discounted the potential value for underground coal areas due to the inclusion of thin coal areas.

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- Seam depths extend to below 600 m for one target underground seam, a depth which is un-tested with respect to Australian mining; and
- The underground Resource areas include higher ash seam sections exceeding 40% that MMC considers may not be reasonable prospects for eventual economic extraction.

The comparative sale estimate is shown in **Table 27.6**.

Table 27.6 – Ferndale Comparative Sale Value Estimate

Base Value Range ($/t)		Inferred Resources (Mt)	Factor Adjustment						Value Range (A$mil)
Low	High		Geology/ Thickness	Location	Coal Depth	Environment Risk	Coal Type	Modifying Factor	
0.10	0.27	138.03 (OC)	+80%	+100%	+20%	-20%	-10%	2.70	37.3 – 100.6
0.10	0.27	305.42	+20%	+100%	-75%	-20%	-100%	0.25	7.6 – 20.6
0.10	0.27	225.23 (UG)	-50%	+100%	-50%	-20%	+10%	0.90	20.3 – 54.7
0..10	0.27	74.34 (UG)	-50%	+100%	-100%	-20%	+10%	0.40	3.0 – 8.0
							Total Value Estimate		**68.2 – 184.0**

The prime value method provides a value range between $51.4 million and $68.6 million and the estimated comparative transaction range using derived values per tonne of coal estimates provides an upper estimate to the appraised value range. A range of $51.4 million to $184.0 million is deemed appropriate reflecting the limits sued for defining the Resources and uncertainty of eventual extraction of a number of the higher ash seams.

27.2.4 *Sienna Property Valuation*

Exploration activity has concentrated within the southern part of EL 1033 where the shallow Rangal coal occurrences have been identified through historical and recent drilling up until 2009. Little exploration has occurred over the last two years due to lack of access due to wet weather.

Deeper coal occurrence of the German Creek coking coal seams has been inferred from down dip projections from mines up to 7 km to the west, although no successful drilling has been completed to confirm depth or possible structure. Major regional faulting suggests possible uplift of this deeper coal but as yet not intersected by any drilling.

In assessing a valuation for this property MMC has taken into consideration the following:

- Open cut target areas in the south with reasonable stripping ratios;
- Intrusions that have displaced the coal within the area;
- Uncertainty is attached to the extent of known igneous intrusions within the surrounding strata, demonstrated by a number of coal quality results indicating zones of heat affected coal;
- A forward work programme is planned to improve the identified areas of geological uncertainty sufficient to define an open cut measured resource in the Sienna area;
- A draft policy and proposed legislation by the Queensland DEEDI (RA384) that places a 2 km buffer around urban areas with population >1,000. If this applies to EPC1033 in relation to Middlemount it would potentially exclude approximately 30% of the southern (open cut) part of the EPC from mining if the policy is approved. The proposed Sienna North (Pit 2) target area has a low to moderate constraint but the constraint level for Sienna South (Pit 1) based on current information remains high irrespective of RA384 due to the potential for significant amenity impacts on the town;
- The Electra target area in the north of the asset area is regarded as a low to moderate environmental constraint area depending on the presence of endangered regional ecosystems (EREs, a Category B ESA). The main

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concentration of EREs in EPC 1033 occurs as a band or moderate constraint area across the central part of the tenement; and

- The deeper underground target coal is structurally undefined and is considered a blue sky prospect.

The estimated value for the Sienna tenement is provided in **Table 27.7**.

Table 27.7 – Sienna Value Estimate - Appraised Value

Exploration Expenditure (A$000)					Base Value (A$000)	Adjustment Factor		Value (A$000)	
2009	2010	2011	2012	2013		Lower	Upper	Lower	Upper
730	399	45	3,302	5,723	10,201	2.0	3.0	20,402	30,603

The comparative sale estimate is shown in **Table 27.8**.

Table 27.8 – Sienna Value Estimate – Comparative Transaction

Base Value ($/t)	Target Coal (Mt)	Factor Adjustment						Value Range (A$mil)
		Geology	Location	Coal Depth	Environment Risk	Coal Type	Modifying Factor	
0.048	14 – 87 (OC)	-20%	+50%	+20%	-30%	+20%	1.4	0.9 – 5.8
0.048	0 – 38 (UG-Rangals)	-50%	+50%	-50%	-10%	+50%	0.9	0 – 1.6
0.048	0 – 440 UG (GCCM)	-80%	+50%	-70%	0%	+100%	1.0	0 – 21.1
Estimated Value Range								**0.9 – 28.5**

The value range based on comparative sales and site specific adjustments demonstrates the uncertainty attached to prospectivity and possible restrictive access. The upper value based on exploration expenditure is similar to the upper comparative transaction range.

27.2.5 ***Dingo Property Valuation***

Exploration activity has been extensive with approximately 641 holes being drilled for structure definition and one LD core hole for coal sampling and testing having been completed. The coal area is along strike from the existing Baralaba open cut mine and the geology structure and seam occurrence is well understood. In assessing a valuation for the property MMC has taken into consideration the following:

- Complex seam structure with faulting and steeply dipping coal potentially resulting in isolated small mining areas. Three areas have been identified for possible open cut pits;
- The coal has similar properties, including low volatile PCI, thermal and coking coal to the nearby Baralaba mine and the associated resource areas at Baralaba North and Wonbindi;
- Further coal sampling and washability tests are in progress to advance to a resource status;
- The area is crossed by the Blackwater rail line in the north providing an direct access to port;
- There is a low level of environmental constraint within EPC 862 and specifically in the Pearl Creek and Giles Creek target areas; and
- EPC 863 is more environmentally constrained and requires study of ecological systems to determine the implications of the relevant potential ERE constraint and a suitable response strategy implemented. The southernmost quarter of EPC 1063 is subject to a low constraint of State forest land use.

The estimated value for the Dingo tenement is provided in **Table 27.9**. The comparative sale estimate is shown in **Table 27.10.**

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Table 27.9 – Dingo Value Estimate - Appraised Value

Exploration Expenditure (A$000)					Base Value (A$000)	Adjustment Factor		Value (A$000)	
2009	2010	2011	2012	2013		Lower	Upper	Lower	Upper
211	5,953	344	2,652	6,589	15,763	2.5	3.5	39,408	55,171

Table 27.10 – Dingo Value Estimate – Comparative Transaction

Base Value ($/t)	Target Coal (Mt)	Factor Adjustment						Value Range (A$mil)
		Geology	Location	Coal Depth	Environment Risk	Coal Type	Modifying Factor	
0.048	82 - 462	-30%	+100%	+20%	0%	+50%	2.4	**9.4 – 53.2**

27.2.6 ***Monto Property Valuation***

Exploration has not proceeded in recent years to reliably apply an Appraised Value methodology. To derive a minimum value for the asset MMC has used the sunk exploration costs of $185k reported at October 2011.

The inference of a large coal target range demonstrates at this early stage the uncertainty on the occurrence of suitable coal areas to advance to a resource status. MMC has therefore used a comparative sale method to estimate a value range for this property.

Factors influencing the value are:

- Regional structure fault zones potentially split areas of coal but at this early stage of exploration the possible extent of mineable regions is unknown;
- The relinquishment of sub blocks will require sufficient exploration to identify non prospective zones;
- The estimated target coal range up to 1,832 Mt is excessive at 66 kt/ha and reflects the high degree of uncertainty in defining reasonable resource areas. The estimated resource at the adjacent MCP of 328 Mt at 8 kt/ha indicates a substantial downgrading is expected;
- The area is crossed by the light agricultural railway to Gladstone. This would require upgrading for coal traffic;
- There is potential leverage from the nearby Peabody Resources Monto project for infrastructure;
- The coal quality, based on coal sections from surrounding tenements, indicates a thermal coal with typical benchmark properties although possibly high in volatiles;
- Environment uncertainties and risk of impact from potential SCL and EREs (especially for Target 1 area), in combination with the current uncertainty in the Government"s application of SCL and other policy and regulation; and
- The lack of environmental studies to date which both limits the ability to evaluate the detailed impact of such constraints.

The comparative sale estimate is shown in **Table 27.11**.

Table 27.11 – Monto Value Estimate – Comparative Transaction

Base Value ($/t)	Target Coal (Mt)	Factor Adjustment						Value Range (A$mil)
		Geology	Location	Coal Depth	Environment Risk	Coal Type	Modifying Factor	
0.048	0 – 1,832	-80%	+50%	+10%	-20%	+0%	0.6	**0.2 – 52.7**

The value range based on target coal estimates is large, reflecting the uncertainty attached to defining a location for a resource within the current tenement area of 296 square kilometres.

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27.2.7 ***Total Value Estimate***

The estimated total value for the relevant assets in an unrestricted market between a willing buyer and willing seller in an "arms length" transaction with each party acting knowingly, prudently and without compulsion is presented in **Table 27.12**.

Table 27.12 – Boardwalk Relevant Assets – Value

Asset	Attributable Interest (%)	Coal Resource (Mt)	Coal Target (Mt)		Value (100% basis) A$M	
			Low	High	Low	High
Ferndale	18.4	743	-	-	51.4	184.0
Sienna	100.0	-	14	565	20.4	30.6
Dingo	51.0	-	82	462	39.5	53.2
Monto	100.0	-	0	1,832	0.2	52.7
Total		**743**	**96**	**2,859**	**111.4**	**320.6**
Attributable					**50.2**	**144.4**

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TECHNICAL SPECIALIST REPORT

ON THE

ASTON, BOARDWALK AND WHITEHAVEN ASSETS

APPENDIX A – VALUATION REFERENCE TRANSACTIONS

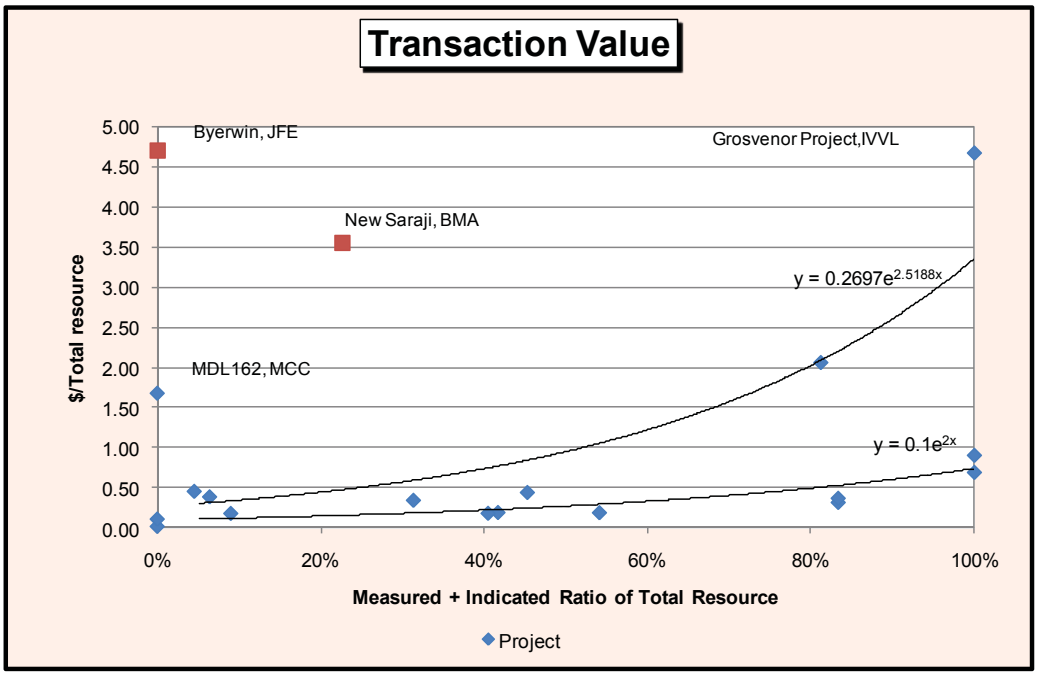
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Valuation Reference Transactions

Project	Acquirer	Date	EV/JORC Resource ($/t)	Ratio (Meas+Ind)/ Total resource	JORC Reserves Estimated
Woori	Mitsui	Jul 2010	0.90	100%	No
Columboola	DADI	Sep 2011	0.18	9%	No
Alpha, Kevins Corner	GVK	Sep 2011	0.19	42%	Yes
Lenton	Mai-Liao	May 2011	2.06	81%	No
Monash	Gloucester Coal	May 2011	0.45	5%	No
Grosvenor Project	ICVL	Mar 2011	4.67	100%	Yes
Northern Energy	New Hope	Feb 2011	0.44	45%	Yes
MDL162	MCC	Sep 2010	1.68	0%	No
Galilee	Adani	Aug 2010	0.38	6%	No
Collingwood, Ownaview, Taroom	Cockatoo Coal	Jul 2010	0.34	31%	No
Belvedere	Vale	Jun 2010	0.18	40%	No
Vickery South	Itochu	Mar 2010	0.19	54%	Yes
Broughton	Resource Portfolio	Mar 2010	0.31	83%	No
Byerwen	JFE	Mar 2010	4.70	0%	No
China First (South Alpha)	China Metallurgical Group	Mar 2010	0.69	100%	Yes
South Alpha	Mineralogy	Dec 2009	0.02	0%	No
Broughton	Rio Tinto	Dec 2009	0.37	83%	No
New Saraji	BMA	Dec 2008	3.55	23%	Yes
Wonbindi	Cockatoo Coal	Nov 2008	0.11	0%	No
		Maximum	4.70	Avge $/t with Reserves	1.62
		Minimum	0.02	Avge $/t w/o Reserves	0.90
		Median	0.38	Reserves Uplift Multiple	180%
		Mean	1.13		

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Transaction Value versus Measured+Indicated Resource Ratio



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APPENDIX B – COMPARATIVE EXPLORATION TENEMENT TRANSACTIONS

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Tenement	Location	Date	Transaction	Adjusted Pro-Rata Consideration ($m)	Target Coal (Mt)	Potential Mining	Coal Type	$/t (range)	Average ($/t)
Hughenden EL"s	Galilee Basin	Sep 2011	Guildford Coal acquired outstanding 20% of subsidiary FTB (Qld) held by Carpentaria Exploration Limited for $4 million cash equivalent. FTB has approximately 60% interest of the Hughenden Coal Project. Carpentaria retains 50c/t coal royalty with a potential value of $100 million.	33.33	580 – 5,720	OC	Thermal	0.006 - 0.057	0.032
EPC 1260 (Pentland)	Galilee Basin	Apr 2011	Guildford Coal acquires 51% of EPC1260 from Tiaro coal for $3.3 million + commitment of $5 million for exploration and development.	15.38	0 - 745	OC	Thermal	0.0218	0.022
Dellworth, Savoy Hill EL 6812, EL 6594	Hunter Valley	April and Sep 2011	Upfront payment of $1.42 million from Nucoal for 49% and $1.1475 million for remaining 51%. $1 million on verification of coal targets	3.48	Not defined but based on general geology 100 – 300 Mt.	OC	Thermal, SSCC	0.012 -0.038	0.023
Ferndale EL7430,	Hunter Valley	Dec 2010	Boardwalk to earn a 50% JV interest in Coalworks 90% owned Ferndale project with payment of up to $25 million for bankable feasibility for open cut and pre-feasibility for underground	45.30	350 - 530	OC and UG	Thermal, coking	0.085 -0.129	0.107
Ferndale EL7430	Hunter Valley	Jan 2010	Coalworks acquires all of Yarrawa Coal holder of 90% of the Ferndale project for $2.4 million	3.56	60 - 85	OC and UG	Thermal coking	0.042-0.059	0.051
Columboola , EPC 1165	Surat Basin	Apr 2010	Metro Coal JV agreement with China Coal Import and Export for expenditure of $30 million for 51% interest. $4 million to be spent in first two years.	48.15	830– 1,165	UG	Thermal	0.041 -0.058	0.050

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Tenement	Location	Date	Transaction	Adjusted Pro-Rata Consideration ($m)	Target Coal (Mt)	Potential Mining	Coal Type	$/t (range)	Average ($/t)
EPC 1261, EPC 1276	Bowen and Surat Basins	May 2009	Bundaberg Coal proposes to divests 50% of its tenements to Tiaro Coal for $2.2 million.	3.50	400	OC and UG	Thermal, coking	0.009	0.009
EPC 956, EPC 957	Maryborough	April 2008	Farm in arrangement where Dynasty Metals spends $5 million to acquire 51% in JV for a target of 10 – 20 Mt of coal within 30 month period. Initial $750k and then further $750k for 15% interest. Further expenditure of $1 million for 30% interest within 18 months and after a further 12 months $2.5 million for 51% interest.	13.17	10 - 20	OC		0.659 – 1.317	0.988
EPC 862,EPC 863	Dingo	Feb 2005 and Aug 2007	Cockatoo Coal (through a wholly owned subsidiary) earn up to 80% of the project with $1 million payment and a farm in of $4 million for 23.3% and a further expenditure of $6.3 million to 60% and final 20% interest with $12 million by 1 January 2009. Subsequent purchase of 100% of tenements plus EPC 1063 for $2 million after part of exploration funding completed.	14.26	0 - 300	OC	LV PCI, thermal	0.048	0.048
A 406, CL 316	Vickery Project Gunndah	Feb 2010	Whitehaven Coal acquires 100% of Vickery from Coal and Allied for consideration of $31.5 million. Includes parcel of land and water licences.	42.5					

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APPENDIX C - COMPETENT PERSONS AND SUBJECT SPECIALISTS

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Greg Maiden – Executive Consultant – Runge Limited

BE (Mining), B Comm, BA (Arch), MAusIMM CP (Min)

Greg is a professional mining engineer with 39 years of experience in the Australian mining industry. He has a strong technical background in mine planning and operations covering coal, base metals and gold in both open-cut and underground operations. Greg"s key strength is in the analysis of open cut mining projects to identify the key technical and economic drivers and in developing practical and economic mine plans that maximise the projects" value. Greg is a "Competent Person" as defined in the JORC Code.

Greg worked at technical management level in open-cut coal operations in Queensland and gold operations in Western Australia. He developed his career in mine planning and feasibility work and has also gained experience in tenure management, minesite property development and minesite environmental management. He has led feasibility studies, technical reviews and due diligence studies for coal, base metals and gold operations both nationally and internationally. He has also provided mine planning expert opinion, operational mine design and planning, and participated in tenure negotiation with government and land-holders in Queensland.

Greg coordinated the preparation of the report and provided the mining engineering and Reserves advice relating to the Whitehaven open cut assets and the Boardwalk assets.

Phil Mitchell – Executive Consultant – Minarco-MineConsult

BE (Mining), B.Sci, Grad Dip (Applied Finance), MAusIMM

Phil has over 35 years mine industry experience, including over 10 years in senior management positions. Phil is an expert on mining due diligence evaluations for investment or acquisition, reports for ASX listed companies, reserve reporting, technical reviews, reserve estimations, feasibility studies and mine planning.

Phil has extensive operational experience in underground coal operations including longwall, continuous miner, ventilation planning and feasibility studies.

Phil has been involved in the management and training of mine staff and has specific capabilities in project valuations, IPO independent technical reports and evaluations. Phil is a „Competent Person" as defined by the JORC and Valmin Codes.

Phil provided the advice relating to the Narrabri underground mine and prepared the valuation for the Boardwalk assets and the Whitehaven and Maules Creek Residual Resources.

David Quemard – Mineral Processing Consultant – Contract

ASMB (Met), MBA,DBA, FAusIMM

David has over thirty years of experience in the mining industry and port operations. He has strong capacity in coal mining operations in both underground and open cut, plant commissioning and infrastructure delivery.

David"s strengths are in coal quality assessment, operations management, coal preparation and project delivery. More recently he has been undertaking independent expert assessments for a range of Australian and international companies on new projects and existing mine operations.

David provided the advice relating to product coal quality and coal processing for all of the assets, and for the port and rail opportunities for the Queensland Boardwalk assets.

Cam Davidson – Executive Consultant – Runge Limited

BE (Mining, Hons), Master (Bus Admin), FAusIMM, Adjunct Professor Departments of Mechanical and Mining Engineering University of Qld.

Cam is a professional mining engineer with over thirty five years" experience in the mining industry. He has a strong technical capability in operations and mine planning and all aspects of mining technology in open cut coal and underground operations in base metals and gold. Cam"s strength is in planning and economic evaluation of open cut coal mining projects with the ability to identify the key operational aspects necessary for the implementation of plans. Cam is a Competent Person in terms of the JORC Code.

Cam has a wide variety of experience in all aspects of planning and operations for open cut coal mines in Queensland including management of mineral processing, maintenance, infrastructure, and statutory systems implementation and management. Cam"s experience includes mine design, and resource and reserve evaluation projects in China, India and Indonesia.

Cam provided the mining engineering and Reserves advice relating to the Maules Creek project.

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Kerry Heywood – Consulting Mining Engineer – Minarco-MineConsult

BE (Mining), Master (Bus Admin)

Kerry has over 30 years mining industry experience in a variety of technical, operational and management roles. His background includes operating and feasibility studies, project start-ups and business restructuring at operations within Australia and overseas. He has also participated in numerous due diligence assignments, capital rasings and strategic business reviews. One of Kerry"s key strengths is in the analysis of mining projects (both operating mines and new developments), and his skill lies in identifying key technical and economic drivers and the appropriate business strategy to maximise project value.

He has experience in both underground and open-cut mining with a particular emphasis on coal, iron-ore, uranium, copper and gold.

Kerry provided the advice relating to the Gunnedah Region transport infrastructure and the port and rail opportunities for Boardwalk"s Ferndale project.

Merryl Peterson – Principal Geologist – Runge Limited

B.Sc. Hons, M.Sc.Env.Stud., Member of Australasian Institute of Mining and Metallurgy, Member of Geological Society of Australia,

Merryl has over 30 years experience in geological modelling and resource estimation. Merryl has undertaken a range of assignments from greenfields exploration through to final feasibility. After working for a number of mining companies, Merryl spent 15 years with a major software house where she was involved with both consulting and design of their geological database and modelling system. Since joining Runge, she has conducted numerous technical reviews, audits and due diligence studies. Merryl is a Competent Person in terms of the JORC Code.

Merryl provided oversight for the geology review, geology modelling and Resources review of the Whitehaven and Maules Creek assets.

Peter R Smith– Manager – Environment, Minarco-MineConsult

BA, MEnvStud, MEnvLaw. Member, Environment Institute of Australia & New Zealand, Fellow, Australian Institute of Energy, Member, Clean Air Society of Australia and New Zealand, Board member, Centre for Mined Land Rehabilitation, SMI, University of Qld.

Peter has approximately thirty years" experience in Australia and overseas in environmental planning and management for mining operations, as well as for industrial, residential, and infrastructure developments. Peter"s key strengths are in the provision of strategic advice to minerals industry clients on sustainable environmental and community management, analysis and assessment of the compliance and performance of proposed and existing minerals industry operations and assisting in the development planning and approvals for new minerals industry operations. Peter has extensive experience at senior levels in mining corporate sector, industry association (mining, exploration & extractive industries), consultancies and government for investigation, analysis, preparation of environmental reports and audits, and project management of mineral resource development studies.

Peter provided the advice relating to the environmental and tenure aspects of the Whiteheven, Maules Creek and Boardwalk assets

Gordon Naidoo – Senior Consultant Geologist – Runge Limited

B.Sc (Geo, Econ Geo, Geography), B.Sc Hons (Geo)

Gordon has over ten years" experience as a senior geologist in both open-pit and underground operations in Southern Africa. Throughout his career his focus has been on coal geology. He is a competent user of Minex software and also has a working knowledge of Minescape StratModel. Gordon"s strengths are in the areas of geological modelling, resource estimation, and mine planning/design. Gordon is registered with the South African Council for Natural Scientific Professions and is a competent person according to SAMREC requirements. He is proficient in the creation and auditing of geological models, auditing the geological processes used in mining, exploration and resource generation and has experience working on a number of due diligence and feasibility studies across South Africa and Africa.

Gordon provided oversight for the review of the geology, geology modelling and exploration targets of the Boardwalk assets, and contributed to the valuation of the Boardwalk assets.

Simon Bruzzone – Senior Consultant Geologist – Runge Limited

B.Sc Hons (Geo), MAusIMM

Simon has over five years of experience in the mining industry in Australia, working in gold/copper and coal open-cut mining and exploration. He is an advanced user of Vulcan, and has good working knowledge of GBIS and XPAC software packages. Simon"s strengths are in the areas of geological modelling, technical reviews, reconciliation, and exploration planning/execution.

Simon provided the advice relating to the geology modeling of the Boardwalk assets, Maules Creek and Vickery projects.

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Christine Robertson – Coal Geologist – Runge Limited

B.Sc (Geo)

Christine has three years practical experience as a coal mine geologist in geologically challenging open-pit operations in Australia. She also has experience in geological exploration on drilling programs in NSW.

Christine"s strengths are in the areas of geological modelling, resource estimation, and mine planning/design. She is proficient in the creation and auditing of geological models, auditing the geological processes used in mining, exploration and resource generation.

Christine provided the advice relating to the geology modeling of the Whitehaven assets, excluding the Vickery project.

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APPENDIX D - GLOSSARY OF TERMS AND DEFINITIONS

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Glossary of Terms

In this Report:

- **ARTC** means Australian Rail Track Corporation,
- **ash** means the residue remaining after a pulverised sample of the coal is incinerated under standard laboratory conditions,
- **assets** means coalmines, port and projects,
- **bcm** means bank cubic metres being the volume of the in situ material,
- **CHPP** means coal handling and preparation plant where raw mined coal is stockpiled, crushed and beneficiated to a final product,
- **CPP** means a coal preparation plant – the actual beneficiation process,
- **coal mine** means an operating mine producing coal,
- **coking coal** means coal used in steel production,
- **CSN** means crucible swelling number,
- **CY** means calendar year, 12 months commencing 1st January,
- **daf** means dry ash free,
- **DFS** means Definitive Feasibility Study,
- **DP&I** means Department of Planning and Infrastructure,
- **EL** means exploration licence (NSW),
- **EMP** means Environment Management Plan,
- **EPA** means Environmental Protection Authority,
- **EPC** means exploration permit – coal (Qld),
- **FC** means fixed carbon,
- **FOR** means free on rail,
- **FY** means financial year, 12 months commencing 1st July,
- **GAD** means gross air dried with respect to coal energy that includes inherent moisture,
- **Geological Resources** means Coal Resources,
- **IM** means Inherent Moisture,
- **ITR** means Independent Technical Review,
- **JORC Code** means the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee,
- **kt** means thousand tonnes,
- **large diameter (LD)** means dill core holes of 200 mm diameter for coal washing tests,
- **lcm** means loose cubic metres allowing for swell of the blasted rock or other material,
- **LOM(P)** means life of mine (plan),
- **m** means metre,
- **Marketable Reserves** means saleable reserves as defined under the JORC Code,
- **Mbcm** means million bank cubic metres,
- **Mining Reserves** means Coal Reserves,
- **metallurgical coal** means coking coal and pulverised coal used in making steel,
- **MIA** means mine infrastructure area,
- **mine production** means mine production equal to the total production from the particular mine**,**
- **MINESCAPE** is a proprietary geological modelling software package marketed by Mincom Pty. Ltd.
- **Mlcm** means million loose cubic metres,
- **MOP** means Mine Operation Plan,
- **Mt** means million tonnes,
- **Mtpa** means million tonnes per annum,
- **OOP dump** means out of pit waste dump,
- **PCI** means Pulverised Coal Injection,

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- **project** means a coal deposit which is in the pre-operating phase of development and, subject to capital investment, feasibility investigations, statutory and management approvals and business considerations, may be commissioned as a coalmine,
- **RD** means relative density to that of water,
- **Recoverable Reserves** means an estimate of run of mine reserves which is the sum of Proved and Probable Reserves under the JORC Code,
- **reject** means the material extracted from the ROM coal feed during cleaning, for re-treatment or discard,
- **ROM** means run-of-mine being coal as mined, including mining losses and dilution before beneficiation,
- **ROMt** means run-of-mine tonnes,
- **SCL** means Strategic Cropping Land,
- **SE** means Specific Energy (also Calorific Value),
- **SIS** means Surface to In Seam, in reference to gas drainage techniques for underground mines**,**
- **SSCC** means semi-soft coking coal which is a coal unable to make a strong coke in its own right but is suitable as a component blend in coke ovens,
- **subcrop** means just below the surface,
- **thermal coal** means coal used in generating steam for electricity production,
- **TM** means Total Moisture content of coal as sampled,
- **tpa** means tonnes per annum or tonnes per year,
- **TS** means Total Sulphur,
- **TSS**means total suspended solids,
- **UIS** means Underground In Seam, in reference to gas drainage techniques for underground mines,
- **VM** means volatile matter, the loss in mass of a coal sample when it is heated under laboratory conditions.
- **VULCAN** is a proprietary geological modelling software package marketed by Maptek Pty. Ltd.

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10 INDEPENDENT INDUSTRY EXPERT'S REPORT

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20 January 2012

The Board of Directors
Aston Resources Limited
GPO Box 145
Brisbane QLD 4001
AUSTRALIA

Dear Aston Resources Limited Directors,

RE: Coal Market Report

AME Consulting Pty Limited ("AME") has been engaged to prepare a report on the coal market (the "Report"). We understand the Report is to be used for inclusion, whole or in part, within an Independent Expert Report developed by PricewaterhouseCoopers Securities Limited ("PwCS") in relation to the proposed merger between Aston Resources Limited ("Aston") and Whitehaven Coal Limited ("Whitehaven").

Cost and Production Analysis

Available data varies greatly between operations and projects. Much information is not reliable due to language difficulties, the confidential nature of the information, the inability to estimate the reliability of AME's sources and general lack of data. Consequently, much information has to be estimated and the quality, accuracy and completeness of the resulting cost comparisons will reflect this. Furthermore, forecast costs embody a number of significant assumptions with respect to exchange rates and other technical variables. Because of these factors, direct comparability between individual projects may be limited, and as such our supply and cost estimates must be treated with caution and cannot be relied upon.

Supply/Demand Analysis

In addition, AME has supplied tables of historical data and estimated future supply, demand and market trends by compiling, interpreting and analysing engineering, supply, economic, statistical and technical information from many third-party sources. Such company and country statistics usually contain inconsistencies and utilises sampling data techniques and thus should not be relied upon.

Data Accuracy

AME has prepared this Report using information from its in-house database and its expertise, as well as a wide range of public domain and industry data sources for which assessment cannot be made in regard to accuracy. This is because AME does not have access to confidential company information to verify our data quality. Therefore, reliance can only be provided where we have data that is of sufficient quality that is acceptable to an International Commercial Court.

AME Consulting Pty Limited
AME House, 342 Kent Street
Sydney NSW 2000, AUSTRALIA

www.ame.com.au
T: +61 2 9262 2264
F: +61 2 9262 2587

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Forward-looking statements

Statements in this document that contain forward-looking information are identified by words such as "estimates", "intends", "expects", "believes", "may", "will" and included, without limitation, statements regarding the AME's plan of business operations, supply levels and costs, potential contractual arrangements and the delivery of equipment, receipt of working capital, anticipated revenues, mineral reserve and mineral resource estimates, and projected expenditures. There can be no assurance that such statements will prove to be accurate; actual results and future events could differ materially from such statements. Factors that could cause actual results to differ materially include, among others, changes to metal prices, risks inherent in the mining industry, changes in the economic environment, financing risks, labour risks, uncertainty of mineral reserve and resource estimates, equipment and supply risks, regulatory risks and environmental concerns. Caution is needed and no reliance on forward-looking information can be made. Except as otherwise required by applicable securities statutes or regulation, AME expressly disclaims any intent or obligation to update publicly forward-looking information, whether as a result of new information, future events or otherwise.

Yours faithfully,

AME Consulting Pty Limited

AME Consulting Pty Limited
AME House, 342 Kent Street
Sydney NSW 2000, AUSTRALIA

www.ame.com.au
T: +61 2 9262 2264
F: +61 2 9262 2587

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Executive Summary

This Report has been prepared by AME to provide a report on the coking and thermal coal markets for inclusion in an Independent Expert Report in relation to the proposed merger between Aston Resources Limited ("Aston") and Whitehaven Coal Limited ("Whitehaven").

The Report provides analysis on the global coking and thermal coal markets and discussion on forecast coal production from Aston, Whitehaven and Boardwalk Resources Pty Ltd ("Boardwalk"). Specifically, it details coking coal and thermal coal market dynamics, production and forecasts as well as the marketability of Aston and Whitehaven products.

AME expects that Aston and Whitehaven's semi-soft coking coals ("SSCC") and high volatile pulverised coal injection ("HVPCI") products may be marketed as blending coals. AME anticipates that blending is possible between the two companies' products as Aston's Maules Creek could potentially be blended with Whitehaven's coal products.

In terms of thermal coal products, AME believes that blending synergies may also arise between the Maules Creek thermal coal product and Whitehaven's products at, for example, Rocglen and Werris Creek. AME anticipates such blending opportunities would in turn lower penalties on coal pricing. In addition, further blending potential may be possible with Boardwalk's Ferndale and Sienna brands.

In AME's analysis of Aston and Whitehaven's coking and thermal coal products as standalone products, AME believes that Aston's SSCC/HVPCI products are comparable with the qualities of comparable regions, countries and competing mines. Specifically, Aston's SSCC/HVPCI products have relatively low ash and sulphur, a competitive volatile matter with Indonesia and low phosphorus, although possessing a higher moisture compared with New South Wales ("NSW") and Queensland ("Qld") counterparts and other seaborne exporters. Its crucible swelling number ("CSN") range is also typical of SSCC/HVPCI products from NSW. Whitehaven's SSCC/HVPCI products possess a comparable ash content with similar products produced in NSW and may garner a premium. Further, it has a comparable volatile matter range comparable to NSW counter parts and Chinese and South African producers. Low phosphorus levels and sulphur content are also present in Tarrawonga and Vickery products. However, the high moisture levels in these products could attract a pricing penalty. Furthermore, Tarrawonga, Vickery and Werris Creek all possess low CSN ranges, which could also attract a pricing penalty on the seaborne market.

In respect to thermal coal products of the companies, Aston's thermal products possess relatively low ash and sulphur content, which would be beneficial and improve marketability of the products. The high calorific value of Maules Creek may also be advantageous in terms of marketability and price negotiation. For Whitehaven products, the ash content generally falls within the range typically accepted by Japanese power utilities. Further, its low sulphur content would be positive for marketability purposes. The high calorific values of Whitehaven's thermal coal products are also comparable with NSW and USA counterparts, while the moisture levels are generally higher than the Australian average. Despite this, it is competitive against Indonesia and Colombia.

For Boardwalk thermal coal products, based on available information, its low energy content could be accepted by Indian and Chinese utility companies whom accept lower calorific valued coals. Further, moisture content of Boardwalk products are comparable with other NSW counterparts and are considered comparatively low compared to other Qld thermal coals. Furthermore, with its lower levels of moisture, Boardwalk's thermal products may be an attractive on the thermal coal seaborne market.

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Coal Material Analysis

Coal is a common and widely distributed carbon-based energy natural resource, mined by both open-cut and underground mining methods. Typically, there are two main types of coal produced based on the end-use of the coal, namely coking coal and thermal coal. Generally, traded coals fall into the broad categories of bituminous and sub-bituminous coals. The markets for coking coal and thermal coal operate largely independently of each other. However, a degree of substitution can occur between specific thermal coals and lower ranked coking coals.

- *Thermal coal*, also referred to as steaming coal, is primarily used as an energy source in the generation of electricity. Other applications include direct heating, space and water heating, process heating and cement manufacturing. Thermal coal covers all black coals other than those which are specifically designated as coking coal. In broad terms, all coal can be used as thermal coal, however, not all coals can be used for coking purposes.
- *Coking coal*, also commonly referred to as metallurgical coal, is used to produce metallurgical coke, which is used as a reductant in the manufacturing of iron and steel. Coke is an essential raw material with unique physical and chemical properties which supports a variety of basic industrial activities - most importantly the production of pig iron in blast furnaces. To a lesser extent, coke is also used in the casting and smelting of base metals. Market participants typically refer to six types of coking coals based on specific characteristics of the coal – including the ash content, volatile material content, coke strength and fluidity.

Industry Analysis – Coking Coal

Coking coal demand

Coking coal is one of the primary raw materials used in the production of steel. Almost all coking coal is used to produce coke for blast furnace ("BF"). Approximately 70% of total global steel production is dependent on coking coal and as a result, the demand for coking coal is primarily dependent on the market dynamics of the steel industry.

Each steel producer seeks an ideal mixture of hard coking coal ("HCC"), SSCC/HVPCI products and low volatile pulverised coal injection ("LVPCI") products in the BF. According to the availability of technology and the market price for coking coals, the percentage make-up of the different types of coking coal in the coke blend are known to change accordingly to achieve an ideal end-use product.

Steel production

After the initial financial downturn in 2008 and 2009, crude steel production regained momentum in 2010, growing around 15% to reach approximately 1.4Bt. This more than offsets the declines seen in 2008 and 2009 which were brought about by the global financial downturn. In part, this growth represents the underlying strength in the economies of the developing world which have recently become a much larger portion of the world gross domestic product ("GDP").

Despite this growth, the world economy has however changed significantly in recent times and the risk of financial instability is apparent. Caution is raised as a result of current global economic instability stemming from financial uncertainty and high sovereign debt levels in Europe, the United States and Japan.

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Global coking coal market

Assuming markets conditions stabilise, growth in global coking coal demand is expected to be driven by developing Asian countries such as China and India. Whilst a recovery of the major developed economies will support traditional coking coal importers, such as Japan and Europe, to return to the globally traded coking coal market. Nonetheless, demand growth in developed economies is expected to be relatively weak, particularly in Europe, as financial instability poses a potential downside risk.

China is expected to remain a significant importer of coking coal in the seaborne market. Chinese coking coal production is expected to be insufficient to meet the requirements of its domestic steel industry. Insufficiencies in Chinese coking coal production will be driven by greater consolidation in the coal mining industry; ongoing coal mine safety campaigns; government pressures to close inefficient and unsafe coal mines; and a government-led shift in steel production.

The Indian steel industry has been affected by a lack of domestic high quality hard coking coal production and the ambitious National Steel Policy. Despite expected increases in coking coal imports, the growth rate of Indian coking coal imports in the short to medium term is expected to be dependent on the rate at which India's steel production capacity expands. Issues of insufficient infrastructure, government intervention and social segregation amongst different provinces and religions may hinder the development process.

Japan showed signs of recovery in 2010 with coking coal imports increasing by over 14% year-on-year. However, Japanese demand is estimated to have declined in 2011 as a result of slow demand for steel products due to uncertain global economic conditions and to a lesser degree, flooding in Thailand in September 2011. AME does expect imports to recover in 2012 and growth will remain relatively subdued compared to China and India.

South Korean crude steel production is expected to remain relatively robust in the short to medium term, underpinned by the nation's steel oriented sectors in ship building, automotive and industrial machinery. Similar to Japanese steel producers, Korean producers are also looking at ways to increase SSCC ratios to lower raw material costs. This in turn may have a positive effect of driving SSCC demand.

Following the global economic downturn in 2008-09, steel demand started to recover from mid-2010. However, the current economic uncertainty in Europe is expected to adversely affect the speed of this recovery - a process which may take some time. The slowing growth in steel demand from the construction industry, the highest steel user in EU-27, is primarily driven by decelerating growth in Western Europe. Most of the other EU countries, including those in Central Europe, are also expecting a fall in growth in steel output.

Coking coal supply

The expected shortage in global traded coking coal supply has resulted in suppliers expediting plans for new supply through numerous brownfield and greenfield projects in Australia, Canada, the United States, Indonesia, Russia, Mongolia, Mozambique and Colombia. Despite the abundance of potential coking coal supply streams, growth in export supply is subject to the following key limiting factors including: (i) availability of rail and port infrastructure; (ii) challenges in accessing finances for new supply development; and (iii) political risk factors such as changes in the approvals process, licensing, stricter safety regulations and taxation policies (for example, the carbon tax scheme for Australia).

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Global coking coal supply

Australia is the world's largest exporter of coking coal. This is attributable to its quality and geographical location. Growth in Australian coking coal exports was relatively strong in 2010 following a fall in exports during 2009. Coking coal exports from Australia was constrained throughout 2011 due to adverse weather conditions and the residual effects of floods which have affected production recovery speeds and rail infrastructure. While production has returned to pre-flood levels, the decline in the market outlook for the steel industry limited Australia's export potential for the year. The Gunnedah Basin is an emerging producer of metallurgical coals (SSCC, HVPCI).

In 2011, coking coal production from Indonesia is estimated to have increased markedly by approximately 9%. This is driven by the presence of coking coal reserves in the Central Kalimantan region. Coking coals produced in Indonesia are mainly lower ranked coking coals such as SSCC and PCI coals. Production of high quality HCC is low. Given Indonesia's relative advantage in terms of short freight distance to key demand markets, the majority of the coal exports from Indonesia are consumed by countries in Asia, such as China, India, Japan, South Korea and Taiwan. However, growth in Indonesian coking coal supply may be limited by the need for large rail projects, lack of project funding and uncertainty created by government policies.

Mongolia is beginning to emerge as a new coking coal producer. There has recently been an increase in Mongolian development, production and export of coking coal to China. Most coking coals exported from Mongolia are generally delivered unwashed, however, given the higher premium available on washed coals, an increasing number of Mongolian mining companies are building coal handling process plants ("CHPP") to process coals further. Export capacity from Mongolia is limited as the country is land-locked. In order to reach these markets, coals will need to be railed long distances across-borders to reach ports in either China or Russia.

Mozambique's Moatize basin is a large coalfield with large coking coal reserves. The two most advanced projects, Benga (Rio Tinto and Tata Steel) and Moatize (Vale), together hold around 4.5Bt of resources. Mozambican coking coal entered the export market in 2011 following the commissioning of Vale's Moatize project. Coking coal products from Benga is expected in the March quarter of 2012. However, Mozambique coal project developments are relatively constrained by the availability of rail and port in the area. The two biggest projects in the area, the Moatize and Benga operations are expected to tie up all existing infrastructure capacities.

Coking coal pricing overview

Coking coal purchasers in Asia-Pacific have historically followed settlements in the dominant Japanese market, with contracts based on the Japanese Financial Year ("JFY"), (1 April to 31 March). For the quarter ending June 2010, many coking coal producers secured a move to a quarterly pricing regime, in line with contracts signed by iron ore companies.

Under the previous annual contract pricing regime, coking coal producers were generally required to wait at least one year before prices could be renegotiated to reflect changes in market dynamics.

Given spot prices for coking coal are generally higher than contract prices during buoyant market conditions, coal producers have a preference to negotiate prices more frequently during bullish markets.

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Industry Analysis – Thermal Coal

Thermal coal demand

Thermal coal demand as a fuel source, in the short and long term, is expected to remain relatively strong due to its relative abundance, cost advantage and supply reliability compared to alternative energy sources. The two key factors behind this expectation are the demand for power within developing economies and the pace of development/expansion of newer and more cost-effective alternative means of energy generation. In addition, considering that current market conditions stabilise, the rise of domestic demand growth (for producing countries) is likely to create greater competition for available thermal coal supply within the internationally traded market.

The high price of thermal coal is a result of the constrained demand and supply conditions. Reflective of the continued strong demand for thermal coal and limits in availability of supply due to rail and port constraints and adverse weather conditions, thermal coal prices remained relatively strong.

Global thermal coal demand

The growth in global thermal coal imports is expected to gradually ease over the long term as alternative sources of energy gain traction and are utilised more efficiently. AME's outlook for thermal coal demand is characterised by the following key factors:

- Significant focus has been placed on the energy demands of developing Asian countries such as China and India;
- Chinese thermal coal imports are estimated to have grown substantially beginning 2002, with significant increases experienced in 2006 and 2009. This was particularly the case in 2009, when the rest of the world decreased their coal import demand. The growth in China's economy has driven the demand for electricity and in turn thermal coal;
- According to figures released by the Indian Government, there is a current thermal coal shortage in India. The coal shortage may be worsened by India's Forest and Environment Ministry's refusal to lift a moratorium on Coal India Limited's ("CIL") Korba coalfields, which contribute 20% of CIL's total production. The demand for import thermal coal is also driven by the scarcity and poor quality of domestically supplied coal. This has been identified as a key concern for the industry and efforts are also underway to increase total coal production from captive mining operations;
- Despite a relatively small increase in absolute tonnage, Vietnam is expected to ramp up its demand for export thermal coal. In the long term, it is anticipated that Vietnam may increasingly rely on imports and its developing economy is likely to drive thermal coal demand;
- The recovery of major developed economies should support the growth in thermal coal demand as traditional thermal coal importers, such as Japan, return to the globally traded thermal coal market as current economic volatilities stabilise. However, in the short term, Japan's nuclear utilisation rates are down to record lows following the crisis from the Fukishima disaster. Coal fired electricity generation has increased to fill the void left by reduced nuclear generation. As a result, increased thermal coal imports are expected as rebuilding efforts continue;
- Japan and South Korea are expected to continue to consume significant amounts of electricity in their industrial sectors. In comparison to China and India, thermal coal import demand growth rates in Japan and South Korea are expected to be relatively more subdued. After the shutdown of thermal coal plants as a result of the March 2011 earthquake, Japan continues to put its thermal power plants back online and coal demand in Japan is expected to be firm as rebuilding efforts continue; and

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- Europe's thermal coal import requirements are influenced by a slow decline in the high cost European coal industries, a gradual withdrawal of subsidies, the wide availability of relatively low-cost imports and government and EU electricity generation/transmission and environmental policies.

Thermal coal supply

Provided the economic uncertainty around the United States and European debt issues absolve, AME expects thermal coal import demand will grow at a more typical rate, albeit lower than the unusually rapid increases seen during the 2000-2008 period. The main factors limiting growth in export thermal coal supply over the short to medium term are likely to be attributable to port and rail infrastructure capacities, government policies, labour shortages and difficulties in securing finance.

Global thermal coal supply

If current economic conditions stabilise, the medium term outlook will remain positive as growth in supply is unlikely to be adequate to meet demand. Supply from major exporting countries, such as Indonesia and Vietnam, may be restricted as demand for domestic electricity consumption may be more pressing than demand in export markets. Further, rail and/or port infrastructure capacity may continue to be a concern in most major thermal coal export countries. Some considerations of global supply include:

- Suppliers have been quick in their attempts to take advantage of the relatively buoyant market conditions by revisiting production expansions planned back in 2007 and 2008;
- In Australia, thermal coal sources will mainly come from the northern NSW coalfields, Galilee and Surat Basins in Qld. The developments in these areas, along with other project and related rail and port developments is expected to keep Australia's position as a key thermal coal exporter on the seaborne market in the medium to long term;
- In Australia, the issue of infrastructure constraint is one of the main limiting factors on supply growth. Crucial rail and port infrastructure construction and expansion are underway, however the risk remains as to the timely commissioning of these infrastructure projects;
- Indonesia has been the world's largest exporter since 2005. In the short to medium term and with increasing greenfield and brownfield projects coming online, Indonesia's export of thermal coal is expected to experience continued stable growth, although this is likely to be offset by increasing domestic demand; and
- Mongolia, and to a lesser extent Mozambique, are also expected to begin to emerge as new thermal producers. Similarly to its coking coal supply, most or all of Mongolia's supply will not reach the seaborne market as it is expected to be absorbed by China.

Thermal coal pricing overview

In the thermal coal market, benchmark contracts remain negotiated on an annual basis. Negotiations are typically carried out on an individual basis between buyers and sellers, potentially producing a range of prices.

Trends in the Atlantic and Asia-Pacific spot markets have become increasingly important indicators of contract prices in recent years with the Newcastle prices generally used as benchmark for pricing guidance for all seaborne thermal coals. Furthermore, spot sales are taking a higher proportion of the total thermal coal traded, and the proportion of term supply contracts linked to price indices, such as the Richards Bay Index or the Newcastle Index, is increasing.

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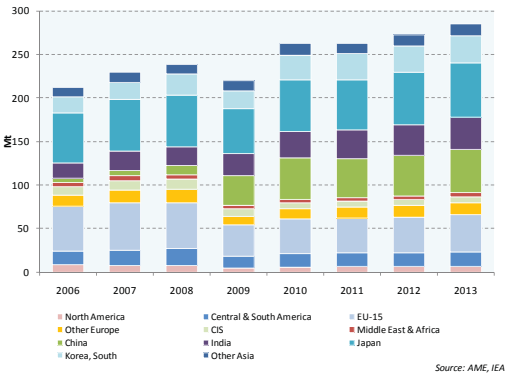
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Forecasts and Assumptions

AME's general pricing opinions are based upon our economic model which is driven by the assumptions below. Naturally, these assumptions may not necessarily reflect potential future events.

Coking coal demand outlook

Figure 1: Estimated Coking Coal Import by Key Regions and Countries, 2006-2013 (Mt)



Source: AME, IEA

AME expects global coking coal demand will remain firm in the short term despite the weakening economic outlook in the United States and Europe. Coking coal demand may be driven mainly by steel production and consumption in the developing Asian countries such as China and India.

China will remain as net coking coal importers as steel production is expected to continue to exceed domestic coal production. The Chinese Government's continued push for consolidation and improved safety and efficiency in the coal industry is expected to see an increase on the reliance on seaborne markets in the short term. Over the medium to long term, the limited availability of high quality coking coals and increases in blast furnace sizes due to consolidation and expansion programs in the steel industry will see China increasingly dependent on coking coal imports.

India's coking coal demand growth is expected to remain robust in the medium to long term underpinned by the Indian Government's increasing infrastructure developments and the National Steel Policy. Significant increases in steel production capacity are expected to ensue.

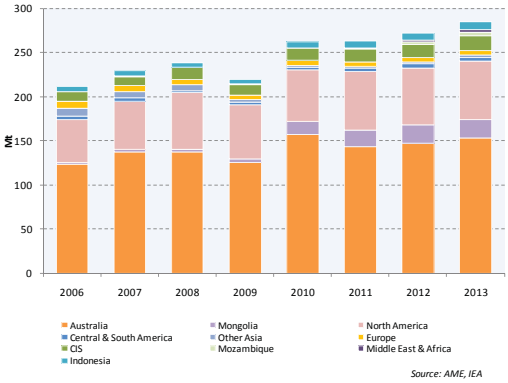
Growth in coking coal imports from traditional coking coal importers such as Japan and South Korea is expected to remain more subdued in comparison to the likes of China and India due to the maturity of the economies. Improvements in technology will also see these countries taking on greater proportion of the lower ranking coals.

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Coking coal supply outlook

Figure 2: Estimated Coking Coal Exports by Key Regions and Countries 2006-2013 (Mt)



Source: AME, IEA

In the short term, pending the stabilisation of current economic volatilities, despite the increasing supplies from both traditional and emerging producers, the demand supply dynamics of seaborne coking coal will remain tight as a result of sustained demand from developing Asia. The shortage of globally traded coking coal supply has continued to spur suppliers to expedite plans for new supply in both brownfield and greenfield projects in Australia, Canada, the United States, Indonesia, Russia, Mongolia and Mozambique.

AME expects Australia to maintain its role as the world's largest exporter of coking coal. Australia's exports are expected to dominate the global export market, with a share above 50%. This is attributable to the relative proximity of Asian steel mills and Australia's ability to readily export significant volumes of high-quality HCC. Canadian exports of coking coal are expected to increase in the immediate term driven by the substitution effect of the supply constraints of Australian coking coal due to remnant effect of severe adverse weather conditions experienced in late 2010 and early 2011. Nonetheless, growth in the medium term will be more subdued with ramp up in Australian production and the introduction of Mongolian and Mozambican coking coals onto the market.

Although Russia will maintain its importance to steel mills in Europe and the Commonwealth of Independent States ("CIS"), increasing focus will be shifted to exports to the Asian market. This is a result of the recent decline in steel production and turn demand for coking coal from Europe. With the development of projects in eastern Russia, and with much needed rail infrastructure connecting to the new Vanino Port, future eastern Russian coking coal operations may have easier access to China and to the rest of Asia.

Coking coal price forecasts and assumptions

AME believes prices of all coking coal types will remain firm in the short term given the tight demand and supply dynamics. In spite of this, with the ramp up in coking coal operations in Australia's Bowen Basin and sluggish global market dynamics, coking coal prices have declined in the current market conditions from the highs witnessed earlier in 2011.

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Table 1: Estimated Benchmark Coking Coal Prices (JFY, US$/t FOB), 2006-2013

Coal Type	2006	2007	2008	2009	2010	2011	2012	2013
Premium Hard Coking	114	96	300	129	215	291	235	238
Semi-Soft Coking	92	72	265	115	195	264	213	216
High Volatile PCI	60	66	215	80	166	202	170	169

NOTES:
- Prices prior to 2011 are on Nominal basis; prices post 2011 are provided on a real 2011 basis
- Premium Hard Coking coal prices are for Peak Down and Saraji brands
- Semi-soft coking coal prices are for typical NSW Hunter Valley brands (7,200kcal/kg GAD)
Source: AME

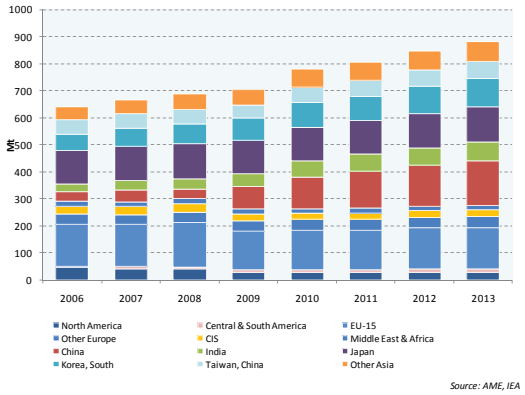
In the short to medium term, AME forecasts that prices for low quality coking coals such as SSCC and PCI coals may return to the level witnessed in 2010. In the short to medium term, the price of lower grade coking coals is expected to remain firm as a result of:

- Scarcity of high quality coking coal and greater acceptance of lower coking blends in blast furnaces may increase demand for lower quality coking coals;
- Increased steel production targets supporting relatively strong demand growth in developing nations such as China and India; and
- Supply growth limited by port and rail infrastructure constraints and challenges in accessing capital funding given the changed financial climate.

In the long term, similar trends will be apparent. Prices increases are likely to slow as the tight market balance eases with the continued commissioning of new supply and the alleviation of port and rail infrastructure constraints. The new supply relates to the emergence of production in Mongolia and Mozambique as major long term players. Likewise, critical rail and port infrastructure expansions may be implemented to alleviate potential bottlenecks for overland and seaborne trade if prices remain buoyant.

Thermal coal demand outlook

Figure 3: Estimated Thermal Coal Imports by Key Regions and Countries, 2006-2013 (Mt)



Source: AME, IEA

AME forecasts global thermal import coal demand to grow moderately in the short term. Demand for thermal coal in the short term is expected to be driven by relatively strong industrial growth expected within developing countries such as China and India. AME expects that in 2012, Chinese and Indian industrial production ("IP") growth will be robust as the countries continue to industrialise. In comparison, thermal coal demand from other parts of the world is expected to be relatively subdued.

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Japanese thermal coal demand in 2012 is likely to increase in due to the continued recovery efforts following the Japanese earthquake and tsunami in March 2011. Demand for seaborne thermal coal in Europe is expected to remain much more subdued thereafter due to slower regional GDP and IP resulting from uncertainties within the recent financial markets.

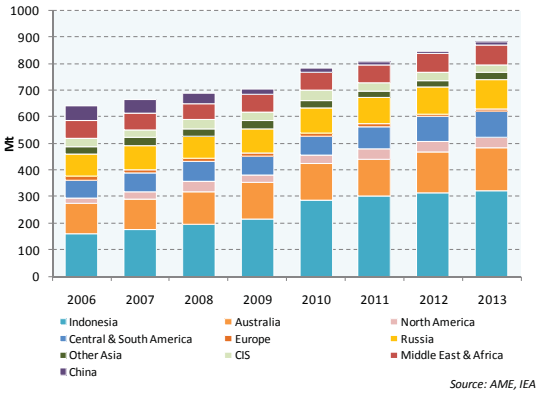
In the medium term, global thermal coal demand is expected to remain robust driven by continued import demand from developing Asian countries. Seaborne thermal coal demand from China is expected to remain relatively strong as the Chinese experiences continued urbanisation. Thermal coal demand from India is also expected to be strong, fuelled by the Indian Government's plans to build nine "Ultra Mega Power Plants" in the medium term.

For the developed Asian countries, demand for thermal coal is expected to be more subdued due to the maturities of the economies and heavier reliance on other power generating methods. Coal is expected to remain an integral part of the fuel mix as coal remains the most cost-effective and reliable power generating method. European imports of thermal coal are expected to be relatively depressed over the same period.

In the long term, coal is to provide a substantial amount of the world's electricity and is expected to remain the one of the main fuels for electricity generation. AME believes that long term electricity consumption may broadly track IP growth, albeit at a lower rate given the rise of alternative sources of electricity generation.

Thermal coal supply outlook

Figure 4: Estimated Thermal Coal Exports by Key Regions and Countries, 2006-2013 (Mt)



Source: AME, IEA

In the short term, the growth in export thermal coal supply is expected to remain robust. Thermal coal supply will be supported by greenfield and brownfield projects currently under construction and pushes for developments in correlated rail and port infrastructures. However, the recent financial market volatility, infrastructure limitations and scarcity in skilled labour may delay commissioning of some projects.

In the medium term, the outlook remains positive as growth in supply is unlikely to be adequate to meet demand. This is despite a significant amount of greenfield and brownfield thermal coal projects expected to come online in the medium term, in line with the planned expansion of rail and port capacities from major exporting countries.

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In the long term, thermal coal export growth rates are expected to ease as more countries reach the peak of their industrial production growth and alternative methods (namely gas) of electricity generation take up a greater proportion of total electricity production.

For Australia, large-scale projects in the Surat and Galilee Basins are expected to have matured and reached economies of scale. In Indonesia, the period of rapid export growth is expected to slow, with the most favourable deposits already in production. South African thermal coal exports are estimated to grow at a slower rate. As such, the slowdown in European thermal coal demand may see more exports going to India as well as servicing the nations' own growing electricity needs.

Thermal coal price forecasts and assumptions

Table 2: Estimated Benchmark Thermal Coal Contract Price (JFY, US$/t FOB), 2006-2013

Coal Type	2006	2007	2008	2009	2010	2011	2012	2013
Thermal Coal	53	56	125	70	98	130	114	115

NOTES:
- Prices prior to 2011 are on Nominal basis; prices post 2011 are provided on a real 2011 basis
- Prices represent Hunter Valley settlements, basis 6,700kcal/kg GAD (or 6,322 kcal/kg GAR)
Source: AME

In the short term, AME maintains that the 2012 thermal contract price to be around US$114/t as a result of tight supply and continued need for electricity in spite of the ongoing economic uncertainty. The tightness in the market will be compounded by increased tension between supplying the export market and supplying domestic customers for thermal coal producers in key areas such as Indonesia, Vietnam and China.

In the medium term, AME expects contract thermal prices to remain relatively attractive, however the increase is expected to be subdued compared to previous periods. Price growth is likely to slow as the tight demand and supply market conditions are eased with the commissioning of new supply streams and alleviation of port and rail infrastructure constraints.

AME does not anticipate a decline in benchmark thermal coal prices until the end of 2013, when sufficient new export supply capacity is likely to be available to the market. AME expects a relative increase in supply starting around 2014/2015, with the developments in northern NSW coalfields and projects in the Galilee and Surat Basin in Qld. The implementation of new rail and port infrastructure capacity will also facilitate supply increases, particularly port expansions at Newcastle boosting supply from the Hunter Valley and the development of rail and port capacity in Qld to support production from the emerging Surat and Galilee Basins.

Aston and Whitehaven coal analysis

Marketability of Aston and Whitehaven products

It is expected that SSCC/HVPCI products from Aston and Whitehaven will be marketable to steel producers in developed and developing nations, particularly in the Asian region such as Japan, Malaysia, Taiwan, China, South Korea and India.

Traditional steel producing countries such as Japan and South Korea have historically sourced coking coal from Australia. These countries may seek relatively greater amounts of SSCC and PCI coals in the medium term, making them an ideal market for the sale of SSCC/HVPCI coals. This outlook on demand is attributable to the development of new steel making technologies. Steel producers have over time

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adopted blast furnace technologies which increased the consumption of lower grade coking coals such as semi-soft coking and PCI coal to replace high quality coking coals.

The drive for technological development has been driven by the increasing cost of raw materials (coking coal and iron ore) for steel producers. This has placed substantial pressure on steel producer margins. In order to minimise costs, steel producers have sought to vertically integrate their steel operations, increasing the level of self sufficiency for coking coals and introduce new measures of steel production.

Despite upgrades for some steel producers in China to increase the intake of lower ranking coking coals, on average, Chinese steel facilities typically use a smaller proportion of lower grade coking coal in their coke blends. Notwithstanding, considering the size of the Chinese steel industry and the large volumes of steel production, China is a significant consumer of SSCC/HVPCI coal. Similarly, considering the standard of steel making technologies and Indian steel producers being more accepting of a variety of coal grades – when compared to Japan and South Korean producers – India may be a potential market for coals from the Gunnedah Basin.

Over time, similar technological advances made in Japan will increasingly be incorporated by steel operations in developing nations such as China and India. Such transitions may in turn support an increase in the demand for SSCC/HVPCI in the export market. Japanese steel mills tend to lead the way in respect to the use of SSCC in the coke blend. This is attributable to the technology used in coke ovens. With respect to PCI coals, Chinese, Indian and Japanese steel industries are considered to have relatively high rates of PCI usage.

PCI coals are generally injected directly into the blast furnace and thus reduce the relative volume of coke required. Demand for HVPCI products is considered to be typically low compared to other coking coals in the market. Compared to HVPCI, ultra-low volatile ("ULV") PCI coals are generally priced higher in the market as it displays higher replacement ratios (the quantity of coke displaced in the blast furnace per tonne of coal). PCI coals are typically used to provide carbon for iron ore reduction. Given that only a certain level of carbon reductant is required for a blast furnace to operate efficiently, this limits the amount of PCI consumption potential.

The market for PCI coals are generally considered to be more volatile than that of higher grade coking coals. This is attributed to the greater availability of PCI coal supply compared to hard coking coal. Further, in times of relatively lower coking coal prices, it is more efficient and easier to downgrade the use of PCI coals and increase coke volumes.

PCI brands from the Gunnedah Basin have been found to share similar coal qualities such as low ash, low sulphur and phosphorus. Preliminary assessment of similar coals in the region has shown qualities indicative of comparatively high PCI/Replacement Ratios. This means the rate at which coke may be replaced by injection coals which is expected to be a result of low phosphorus and sulphur. Studies on PCI products from the surrounding area have also found favourable ash chemistry. This, in turn, may potentially lower the flux requirement in the blast furnace and provide advantages in reducing CO_2 from the blast furnace. PCI from the region has been found to be marketed as potential multi-use coal, for both metallurgy and energy generation purposes.

SSCC brands in the same proximity also contain relatively low ash, sulphur and phosphorus content. SSCC brands from the area have been found to have been marketed as potential multi-use coal with emphasis on the previously mentioned qualities. Low phosphorus content is desired in the steelmaking process as high phosphorus can cause brittleness and lowers the toughness of the end product.

Given the quality of Whitehaven/Aston coal products and the geological location of NSW, it is expected that the Whitehaven/Aston SSCC/HVPCI products may be marketable to steel producers in developed and developing nations, particularly in the Asian region such as Japan, Malaysia, Taiwan, China, South Korea and India.

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Boardwalk's projects remain in the early stages of development such that the availability of its coking coal qualities is limited. Preliminaries studies from Sienna have however shown relatively low volatility, which provides higher replacement ratios in the blast furnace and are preferred by steel producers.

It is expected that the thermal coal products from the Aston, Whitehaven and Boardwalk will be predominantly consumed by major power producers in Japan, China, South Korea, India and other Asian countries such as Taiwan, Malaysia, Thailand, Vietnam and Philippines.

Coals from the Gunnedah region tend to be characterised by its relatively high energy content, low ash and low sulphur. Whilst most Asian power companies are more relaxed on the amount of ash in the thermal coal, growing numbers of utility companies are becoming more stringent. The Japanese utilities especially tend to prefer ash levels of 11-13% and are subject to sulphur content below 1% due to environmental constraint.

All thermal coals brands from the companies are generally below the sulphur content limitation, however, thermal coal products from Maules Creek and Narrabri are better positioned for the Japanese market due to their relatively low ash content and high net energy values. As a result these coals may be subject to potential quality pricing premiums.

Potential blending opportunities

Steel producers generally use a blend of HCC, SSCC/HVPCI and LVPCI in the coke mix. Aside from blending qualities, lower grade coking coal is generally included to reduce the cost of raw materials. SSCC exhibits lower coking properties and is generally blended with hard and semi-hard coking coals ("SHCC") to produce coke. Steel producers tend to use a larger proportion of lower cost SSCC in the coke blend and extend coking times when demand for steel is slow and/or during times where cost of raw materials are high. PCI coals on the other hand are directly fed into the blast furnace. The use of PCI is known to lower the consumption requirements for coking coals, in turn reducing the overall cost of the steel making process. Nonetheless, a balanced usage of HCC, SSCC and PCI is crucial as high PCI usage can lead to increase in furnace gas which reduces furnace permeability.

Based on information provided by Aston and Whitehaven regarding coal qualities, it is anticipated that the SSCC/HVPCI brands may be marketed as a blending coals. Further synergies may be possible between the companies to blend its products as Maules Creek has low ash, sulphur, relatively low phosphorus content and a reasonable CSN. There may be potential benefits with Whitehaven's SSCC/HVPCI products such as Werris Creek to lower the sulphur and phosphorus content and blend down Werris Creek's moisture and ash content and increase CSN, which may in turn increase the caking ability in the coke oven.

For the thermal coal products, blending synergies may be available between Aston's Maules Creek product and Whitehaven's products such as Rocglen, Werris Creek and Sunnyside to decrease the ash content and in turn lower penalties on pricing. Further blending opportunities may also arise with Boardwalk's Ferndale and Sienna brands which display high levels of ash content and lower calorific value. However, the quantity of the Maules Creek thermal coal product available for blending is expected to be limited given the current offtake agreement with Noble Group for 1.2Mtpa of thermal coal for 10 years.

Aston and Whitehaven coking coals comparison

This preliminary assessment of the Whitehaven and Aston coal products considers its suitability for sale within the global coking coal market. As part of the assessment, existing and potential Whitehaven and Aston SSCC/HVPCI coals were compared to known coal qualities in comparable regions, countries and against coal qualities of competing mines. A select number of coal properties have been considered for

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this assessment. The coal quality averages for any specific geographical location are an average range of a sample set of coal brands representative of each country considered. Variances may exist due to differences in coal classifications between countries and different levels of disclosure by coal producers.

Table 3: Coal Quality Comparison - Aston & Whitehaven SSCC/HVPCI products; Estimated regional & country average ranges

Property	Basis	Maules Creek	Tarrawonga	Werris Creek	Vickery
		Aston	Whitehaven	Whitehaven	Whitehaven
Inherent Moisture	% ad	3.5	3.5	5.0	3.5
Ash	% ad	7.0	6.0	8.0	8.0
Volatile Matter	% ad	37.7	35.0	30.0	36
Fixed Carbon	% ad	-	-	-	-
Total Sulphur	% ad	0.50	0.38	0.33	0.45
Phosphorous	% ad	0.005	0.005	0.003	0.005
Calorific Value (GAD)	kcal/kg	7300	7400	6960	7250
Crucible Swelling Number	#	3.0 - 6.0	1.0 - 4.0	0.5	2.5 - 4.0

Property	Basis	Australia (NSW)	Australia (Qld)	Indonesia	China	South Africa	Canada
		Average	Average	Average	Average	Average	Average
Inherent Moisture	% ad	2.0 - 3.0	1.7 - 2.7	3.0 - 4.0	1.5 - 2.5	2.3 - 3.3	0.6 - 1.7
Ash	% ad	7.5 - 9.5	8.2 - 10.2	5.0 - 7.0	8.0 - 10.0	6.8 - 9.8	10.7 - 12.7
Volatile Matter	% ad	31.0 -37.0	20.0 - 26.0	37.0 - 43.0	31.0 - 37.0	30.5 - 36.5	20.5 - 26.5
Fixed Carbon	% ad	50.0 - 60.0	61.0 - 71.0	45.0 - 55.0	50.0 - 60.0	51.0 - 61.0	58.5 - 68.5
Total Sulphur	% ad	0.55 - 0.65	0.40 - 0.50	0.95 - 1.05	0.55 - 0.65	0.60 - 0.70	0.40 - 0.50
Phosphorous	% ad	0.02 - 0.03	0.06 - 0.07	0.005 - 0.02	-	0.06 - 0.08	0.04 - 0.05
Calorific Value (GAD)	kcal/kg	7245 - 7445	7375 - 7575	7300 - 7500	7035 - 7235	7150 - 7350	7335 - 7535
Crucible Swelling Number	#	4 - 5.5	2 - 3.5	3 - 4	-	2.5 - 3.5	4 - 5

Note: (i) Maules Creek coal qualities are based on information provided by Aston (ii) Whitehaven coal qualities are based on information provided by Whitehaven (iii) Regional and country average ranges are estimates based on a sample of operating and proposed coal projects sourced from limited published data.
Source: AME; Aston Reources; Whitehaven; Company reports

Ash

- The ash content in coal represents the non-combustible inorganic residue remaining after the coal is burned. Lower ash content will assist in lowering any production of alkalis, minimise heat and energy loss and help the oxidising process. Premiums and discounts may be possible for ash content below or above a standard of approximately 7.0-10.5% (air dried, "a.d.").
- The average range for ash of export quality SSCC/HVPCI from NSW is estimated to be between 7.5-9.5% (a.d.) while Qld coals tend to exhibit relatively higher ash content at around 8.2-10.2% (a.d.). On the seaborne market, Indonesian SSCC/HVPCI coals are considered to have lower levels of ash content averaging at around 5.0-6.0% (a.d.), whilst other SSCC/HVPCI producing countries such as, China and South Africa, are comparable to coal products from Qld.
- Aston's average SSCC/HVPCI coal has ash content at 7.0% (a.d.). This is relatively low in comparison to other competing producers and export SSCC/HVPCI supply from other parts of Australia and other producers in China and Canada.
- However, Whitehaven's SSCC/HVPCI products display a wide range in its ash content. The Vickery and Werris Creek products have ash content comparable to similar products produced in NSW, Australia. The SSCC/HVPCI product from Tarrawonga, Werris Creek and Vickery operations' ash content at between 6.0-8.0% (a.d.) remains on par with the NSW average.

Volatile Matter

- Volatile matter is the percentage of components in the coal primarily representing organic compounds and mineral impurities, excluding inherent (dry) moisture, that are liberated at an elevated temperature (900°C) in an air-free atmosphere.

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- In the global seaborne coking coal market, SSCC/HVPCI coals from Australia's Qld region and Canada tend to exhibit comparatively low levels of volatile matter, averaging a range between 20.0-26.5% (a.d.). Volatile matter content in other regions such as NSW, China and South Africa are slightly higher, ranging between 30.5-37.0% (a.d.). Indonesian SSCC/HVPCI coal tends to have relatively higher volatile matter content at an average range between 45.0-55.0% (a.d.).
- SSCC/HVPCI product from Aston's Maules Creek has an average volatile matter of 37.7% (a.d.), which is slightly above the average found in NSW, China and South Africa. Nevertheless, it remains competitive in comparison to SSCC/HVPCI coals from Indonesia.
- Whitehaven's SSCC/HVPCI products range between 30.0-36.9% (a.d.), which is comparable to other SSCC/HVPCI products from NSW and other producers such as China and South Africa.

Sulphur

- Typical coking coals ideally have a sulphur content of no more than 0.8% (a.d.). Sulphur has a negative effect in steel manufacturing, as it can increase coke and energy requirements.
- Sulphur content of Aston's SSCC/HVPCI coal product at 0.50% (a.d.) is considered to be relatively low compared to other SSCC/HVPCI products from NSW, Indonesia and South Africa. Its low sulphur content is comparable to the average SSCC/HVPCI products from Qld and Canada.
- Whitehaven's SSCC/HVPCI products also display low sulphur content, with Werris Creek products at 0.33% (a.d.). The Vickery and Tarrawonga products have slightly higher sulphur content at 0.45% (a.d.) and 0.38% (a.d.) respectively.
- At a general standard between 0.3%-1% (a.d.) sulphur content, a premium or discount may be possible for every 0.1% above or below the standard. As a result, it is expected that both Whitehaven and Aston are likely to benefit from the low sulphur content.

Phosphorus

- High phosphorus has a detrimental effect on iron and steel quality. Whilst controlled quantities of phosphorus increase the yield and strength of steel, in excess, it can reduce the toughness and ductility in steel products. In general, the typical upper limit for phosphorus is a 0.05% (a.d.) in coking coal. From the coal quality details provided by Aston and Whitehaven, both companies are expected to be rewarded from the low levels of phosphorus found in the products.
- Phosphorus content in Aston's Maules Creek is relatively low at 0.005% (a.d) and is low in comparison to competitors on the seaborne market. Whitehaven's products also display relatively low levels of phosphorus content in its products, ranging from 0.003% (a.d.) for Werris Creek to 0.005% (a.d.) for both Tarrawonga and Vickery. For the other coking products, the phosphorus level is not known from the preliminary studies.

Inherent Moisture

- High moisture content translates to low carbon content and therefore low energy content. As a result, it is important for coke producers to lower the moisture content of coking coals used in the coke oven. In turn, this may assist in gaining a more uniform carbonisation of the oven chamber and produce coke of homogenous structure and strength.
- Within the NSW and Qld region, export quality SSCC/HVPCI coals tend to exhibit relatively low average inherent moisture levels of between 1.7-3.0% (a.d.). Canada also displays relatively low moisture content, whilst Indonesian SSCC/HVPCI is higher at between 3.0-4.0% (a.d.).
- Aston's Maules Creek with moisture content at around 3.5% (a.d) is slightly higher compared to the average range of SSCC/HVPCIs from regions – including NSW, Qld, China, South Africa and Canada.

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- Whitehaven's coals also tend to display relatively high moisture content. Its Tarrawonga and Vickery SSCC/HVPCI is expected to average at around 3.5% (a.d.) and the Werris Creek product is around 5.0% (a.d.) - above the average in NSW and comparable to higher moisture coal from Indonesia.
- The high moisture content for both Aston and Whitehaven may attract a pricing penalty on the seaborne market. On an "as received" (a.r.) basis, premiums or penalties may be available for coals above/below the estimated standard of between 8% - 11% total moisture.

Caking Properties

- Caking properties refers to the ability of a coal to soften, swell and fuse when heated, and then to bind into a hard porous mass (i.e. coke) upon cooling. Higher index values (CSN ranging from 6 - 9) equate to superior caking and/or swelling properties of the coal – required for coke making. Notwithstanding, lower grade coking coals with CSN between 1 – 6 are increasingly utilised in coke blends to minimise overall costs for raw materials for steel producers.
- At the preliminary stage, Maules Creek SSCC/HVPCI coals exhibit CSN readings in a range of 3-6. This is on par with the CSN for typical SSCC/HVPCI products from NSW. Whitehaven's Tarrawonga and the Vickery project can produce products with CSN ranging between 1-4 and 2.5-4 respectively. Whilst its Werris Creek displays very low CSN at 0.5 CSN. Low CSN would generally attract a pricing penalty on the seaborne market in comparison to potential competitors from the surrounding NSW operations.

Aston and Whitehaven thermal coals comparison

The table below compares key properties of thermal coal produced by Aston, Whitehaven and Boardwalk compared to thermal coal from comparable mines in Australia, Russia, Indonesia, South Africa, Colombia and USA. Mines considered in the sample set for this analysis are regarded as representative proxies of each country/region considered.

Table 4: Coal Quality Comparison - Aston & Whitehaven thermal coal products; Estimated regional & country average ranges

Property	Basis	Maules Creek	Sunnyside	Werris Creek	Narrabri	Rocglen	Ferndale	Sienna North	Sienna South
		Aston	Whitehaven	Whitehaven	Whitehaven	Whitehaven	Boardwalk	Boardwalk	Boardwalk
Inherent Moisture	% ad	3.5	4.5	5.0	4.5	3.5	3.5	2.5	2.2
Ash	% ad	9.0	14.0	13.0	10.0	13.0	22.4	22.0	31.3
Volatile Matter	% ad	36.4	30.0	30.0	29.5	32.0	29.0	8.5	7.9
Fixed Carbon	% ad	-	-	-	-	-	-	67.1	58.6
Total Sulphur	% ad	0.5	0.40	0.33	0.45	0.45	0.40	0.40	0.47
Calorific Value (GAD)	kcal/kg	7150	6520	6560	6840	6825	-	6204	5480
Hargrove Grindability Index	#	48	47	48	48	48	-	-	-

Property	Basis	Australia (NSW)	Australia (Qld)	Indonesia	South Africa	Colombia	Russia	USA
		Average	Average	Average	Average	Average	Average	Average
Inherent Moisture	% ad	2.0 - 3.0	3.1 - 4.1	7.0 - 8.0	2.5 - 3.5	5.5 - 6.5	0.7 - 1.7	1.5 - 2.5
Ash	% ad	12.0 - 16.0	10.7 - 14.7	5.7 - 9.7	11.4 - 15.4	4.5 - 8.5	9.6 - 13.6	8.0 - 12.0
Volatile Matter	% ad	27.5 - 33.5	23.0 - 29.0	35.5 - 41.5	23.5 - 29.5	32.5 - 38.5	32.0 - 38.0	30.0 - 36.0
Fixed Carbon	% ad	48.0 - 58.0	53.5 - 63.5	43.0 - 53.0	52.0 - 62.0	47.0 - 57.0	47.5 - 57.5	49.5 - 59.5
Total Sulphur	% ad	0.50 - 0.60	0.50 - 0.60	0.80 - 0.90	0.65 - 0.75	0.65 - 0.75	0.30 - 0.40	0.85 - 0.95
Calorific Value (GAD)	kcal/kg	6605 - 6805	6775 - 6975	6540 - 6740	6525 - 6725	6450 - 6650	6880 - 7080	6705 - 6905
Hargrove Grindability Index	#	47 - 60	61 - 74	45 - 58	46 - 59	42 - 55	60 - 73	49 - 62

Note: (i) Maules Creek coal qualities are based on information provided by Aston (ii) Whitehaven coal qualities are based on information provided by Whitehaven, (iii) Boardwalk coal qualities are provided by Boardwalk, (iv) Regional and country average ranges are estimates based on a sample of operating and proposed coal projects sourced from limited published data.
Source: AME; Aston Reources; Whitehaven; Boardwalk; Company reports

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Ash

- Ash is a non-combustible material which lowers the heating value and leads to problems of disposal (after burning). It can also cause corrosion and abrasion of boilers.
- Typical traded coal ash values range between about 5-15% for bituminous thermal coal and 1-5% for Indonesian sub-bituminous coal (a.d.). Ash levels of less than 13% are preferred by the Japanese power utilities, however they also take coals with ash levels of up to 14%. Other Asian power utilities from South Korea, Taiwan and China are more accepting of the higher ash products. Premiums are typically paid for coals with lower ash content, as lower ash coals are highly desired by power utilities in complementing higher-ash coals in a thermal blend.
- A typical range for Australian bituminous thermal coal exports is around 11-16% (a.d.). Thermal coal products from Indonesia and Colombia tend to display lower levels of ash content, whilst other producers from South Africa, Russia and the USA are comparable to thermal coal from Australia.
- Aston's Maules Creek has a relatively low ash at around 9.0%. It is below the average found in NSW and Qld and comparable to thermal coal products from Indonesia and Colombia. As a result, premium for Maules Creek's thermal coal product may be likely.
- Whitehaven's thermal coal products display a wide range of ash content. Its Werris Creek, Narrabri, Sunnyside and Rocglen products with ash content ranging between 10.0-14.0% (a.d.) is comparable to thermal coals from NSW. It also predominately falls within the range generally preferred by Japanese power utilities.
- Thermal coal products from Boardwalk's Ferndale and Sienna North brands display high ash content from the preliminary studies. Boardwalk's Sienna South is likely to have ash content of up to 31.3% (a.d.). These coal brands are more likely be demanded by in other Asian utilities in countries such as South Korea and China.
- Blending opportunities may also arise to blend down the high ash products from Whitehaven and Boardwalk and appeal to a greater variety of utility companies.

Sulphur

- Generally, high-sulphur coal will be less competitive than low-sulphur coal in power generation as it will be excluded from markets where no flue gas desulphurisation ("FGD") units are installed but environmental restrictions on sulphur oxide ("SO_2") emissions are stringent.
- Coals with sulphur levels above 1% are generally disadvantaged in international markets and attract penalties. A maximum sulphur content of 1% is the generally accepted level for power plants, but this can vary depending on blending options for individual plants.
- In the European and the US power plants, the level of sulphur content is highly sensitive, whilst power producers from Asian developing nations tend to be more willing to accept higher sulphur products. Generally, sulphur content greater than 1% (a.d.) may incur penalties which are estimated to be around US$2-3/t.
- Thermal coal products from Aston, Whitehaven and Boardwalk coals have relatively lower sulphur content between 0.33-0.50% (a.d.). The relatively low sulphur content may be beneficial and improve the marketability of the products.

Specific Energy

- The specific energy in export coal is tending to decline – particularly in relation to the increased use of lower energy sub-bituminous coals. High volatile thermal coal brands exported from Australia and South Africa are in the preferred category in international markets.

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- Certain markets, such as Japan, are reluctant to accept low ranked coals. Low-ranked coals consumed in Japan are generally treated further to convert it into high-grade coal with higher heating value and less propensity of spontaneous combustion.
- Maules Creek's thermal coal product is expected to have calorific value of 7150kcal/kg gross air dried ("GAD"). This is comparatively higher than the average thermal coal found on the seaborne market. The high energy content is likely to be beneficial for Maules Creek's thermal coal in terms of marketability and pricing negotiation.
- Whitehaven's thermal coal products display a range of high calorific from 6250kcal/kg GAD (Sunnyside) to 6840kcal/kg GAD (Narrabri). With exception of Sunnyside, the products are akin to the average thermal coal energy content from NSW and the USA.
- Boardwalk's Sienna North and Sienna South, at 6204kcal/kg GAD and 5480kcal/kg GAD respectively, display lower energy content than the averages found on the international market. Nevertheless, with acceptance of relatively lower quality thermal coals by India and China, the lower calorific valued coals may be desired by utility companies from those countries.
- The energy level of thermal coals is a key factor in determining coal pricing. Benchmark contract prices are generally adjusted pro-rata from a base price set for an energy level of 6700kcal/kg GAD (Hunter Valley benchmark). As a result, coal from Maules Creek, Werris Creek, Narrabri and Rocglen may be priced slightly higher than competing international thermal coals.

Moisture

- Water is contained in pores within the coal. It diminishes the heating value and can make it more difficult to ignite. In the processing stage it can affect the handling and crushing properties. Low moisture content is desirable, but is not critical.
- The moisture content of Indonesian and Colombian thermal coals tends to be higher at between 7.0-8.0% (a.d.) and 5.5-6.5% (a.d.) respectively. Thermal coals from Australia and South Africa, however tend to range between 2.0-3.5% (a.d.).
- Maules Creek at 3.5% (a.d.) displays slightly higher moisture content in comparison to other thermal coal products from NSW, but is similar to thermal coals from Qld and South Africa. However, it is lower than products from Indonesia and Colombia.
- Whitehaven's thermal coal brands range between 3.5% (a.d.) to 5.0% (a.d.). They are relatively higher than the average thermal coals from Australia. However, it is competitive against coals from Indonesia and Colombia.
- Boardwalk's thermal products at between 2.2-3.5% also display moisture content comparable to the average from NSW and are comparatively lower compared to thermal coals from Qld. On the international market, it is similar to thermal coal products from South Africa but somewhat higher than products from the USA and Russia.
- Lower levels of moisture are likely to be advantageous to the pricing of Whitehaven's Sunnyside and Boardwalk's coal products on the international seaborne thermal coal market, whilst the higher moisture content for Maules Creek and Whitehaven may not be favourable.

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Boardwalk Resources

Boardwalk Resources is currently a privately owned Australian coal mining investment company which will be subsumed into the merger between Aston and Whitehaven. The company's portfolio of assets includes the following:

Sienna

The project is located 18 km from the Dysart line in the Goonyella System. The project is currently undergoing a drilling program to delineate a JORC resource. According to Boardwalk, Sienna's coal products are likely to be predominately PCI, with some potential SHCC and thermal coal. The coal quality is expected to be similar to Peabody's Middlemount and Anglo American's Foxleigh coal products. Potential port options for the Sienna project include the Dudgeon Point Coal Terminal ("DPCT") and Abbot Point Coal Terminal ("APCT").

Dingo

Located in the southern section of the Bowen Basin, the project is currently undergoing a drilling program, in preparation for a pre-feasibility study to commence in the December 2012 quarter. Boardwalk has indicated that potential coal products include HCC, PCI and export quality thermal coal. The coal quality is expected to be similar to Cockatoo's neighbouring Baralaba mine. Potential markets include Japan, India and China. The project is intersected by the Blackwater railway line to the Port of Gladstone, which is around 225km away.

Monto

The project is located on the Mulgildie Coal measures and is currently subject to a detailed drilling program. Thermal coal is being targeted at the project. Coal specifications from Peabody's neighbouring Monto project indicate a higher calorific value and lower ash when compared to Galilee coals. The largest importers of thermal coal include Japan, South Korea, Taiwan and China. The tenement is approximately 8km from the railway line to Gladstone around 160 km away.

Ferndale

The Ferndale project is at Yarrawa, approximately 8 km south-west of Denman within the Hunter Valley. Exploration is currently taking place with a target of 350-530 Mt, and a JORC resource by May 2012. Potential coal products include thermal and SSCC. The expected calorific value is considered to be within the acceptable range for exporting. Similar to Maules Creek, Japan, Korea and developing Asian countries are likely target markets for its coking coal. Ferndale is immediately adjacent to the Ulan Branch of the Hunter Valley system. The railway line is 125km to the Port of Newcastle. Coal could be exported from the PWCS T4 expansion.

Coalworks (19.9% interest in Coalworks Ltd)

Coalworks' Vickery South project is a coking and export thermal coal project near Gunnedah. Coalworks has completed measured drilling and has identified approximately 59 Mt JORC compliant bituminous coal resources. Coalworks envisages 3 million tonnes per annum ("Mtpa") of run of mine coal with an estimated 16 year mine life. Coal yields are estimated to in the order of 83% with SSCC reported to be around over 80% of production and thermal coal the remainder.

Coalworks' Oaklands project in southern NSW covers around 54 square kilometres and has a measured, inferred and indicated thermal coal JORC resource of 822 Mt. Located about 6km north of the town of Oaklands, the project contains a group of kaolin mines. The Oaklands project has potential as an export oriented operation. There are plans for the rail line which connects to the main Sydney-to-Melbourne rail line to be upgraded, providing the necessary link for the transport of coal or coal products to port.

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11 INVESTIGATING ACCOUNTANT'S REPORT

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11. INVESTIGATING ACCOUNTANT'S REPORT

Ernst & Young Centre
680 George Street
Sydney NSW 2000 Australia
GPO Box 2646 Sydney NSW 2001
Tel: +61 2 9248 5555
Fax: +61 2 9248 5959
www.ey.com/au

9 March 2012

The Board of Directors
Aston Resources Limited
AMP Place, 10 Eagle Street
Brisbane, Queensland 4000

Dear Directors

Investigating Accountant's Report on Historical Financial Information and Pro Forma Financial Information

1. Introduction

We have prepared this Investigating Accountant's Report (the "Report") on the historical and pro forma financial information of Aston Resources Limited ("Aston"), Whitehaven Coal Limited ("Whitehaven") and Boardwalk Resources Limited ("Boardwalk") for inclusion in the Scheme Booklet to be dated on or about 9 March 2012, and to be issued by Aston, in respect of Whitehaven's proposed acquisition of all the issued shares in Aston by means of a members' scheme of arrangement under Part 5.1 of the Corporations Act 2001 ("Proposed Transaction").

Expressions defined in the Scheme Booklet have the same meaning in this Report.

2. Scope

Ernst & Young has been requested to prepare this Report to cover the following financial information:

Historical Financial Information

The historical financial information, as set out in Section 6.7 of the Scheme Booklet comprises the reviewed Statements of Financial Position's of Aston, Whitehaven and Boardwalk as at 31 December 2011.

(Hereafter the 'Historical Financial Information')

The Historical Financial Information has been extracted from the reviewed financial statements of Aston, Whitehaven and Boardwalk, each of which were reviewed by Ernst & Young and on which unqualified review opinions were issued. The unqualified review opinion for Boardwalk included an emphasis of matter regarding the inherent uncertainty of Boardwalk to continue as a going concern.

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Pro Forma Financial Information

The pro forma financial information as set out in section 6.7 of the Scheme Booklet comprises:

- the pro forma Statement of Financial Position incorporating pro forma adjustments representing the combined Aston, Whitehaven and Boardwalk entities as at 31 December 2011; and
- the pro forma Statement of Financial Position incorporating pro forma adjustments representing the combined Aston and Whitehaven entities as at 31 December 2011.

(Hereafter the 'Pro Forma Financial Information')

(Collectively, the 'Financial Information').

The Pro Forma Financial Information assumes completion of the proposed transactions outlined in Section 6.7 of the Scheme Booklet.

The Financial Information is presented in an abbreviated form insofar as it does not include all of the presentation and disclosures required by Australian Accounting Standards applicable to general purpose financial reports.

3. Directors' Responsibility for the Financial Information

The Directors of Aston have prepared and are responsible for the preparation and presentation of the Financial Information. The Directors are also responsible for the determination of the pro forma adjustments as set out in Section 6.7 of the Scheme Booklet.

4. Our Responsibility for the Financial Information

Our responsibility is to express a conclusion on the Financial Information based on our review. We have conducted an independent review of the Financial Information in order to state whether on the basis of the procedures described, anything has come to our attention that would cause us to believe that:

a. The Historical Financial Information does not present fairly the reviewed Statement of Financial Positions of Aston, Whitehaven and Boardwalk as at 31 December 2011 in accordance with the measurement and recognition requirements (but not all of the presentation and disclosure requirements) of Australian Accounting Standards;

b. The Pro Forma adjustments do not provide a reasonable basis for the Pro Forma Financial Information;

c. The Pro Forma Financial Information has not been prepared on the basis of the adjustments set out in Section 6.7 of the Scheme Booklet;

d. The Pro Forma Financial Information does not present fairly:

   - the pro forma Statement of Financial Position incorporating pro forma adjustments representing the combined Aston, Whitehaven and Boardwalk entities as at 31 December 2011; and

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- the pro forma Statement of Financial Position incorporating pro forma adjustments representing the combined Aston and Whitehaven entities as at 31 December 2011.

in accordance with the measurement and recognition requirements (but not all of the presentation and disclosure requirements) of Australian Accounting Standards as if the pro forma transactions set out in Section 6.7 of the Scheme Booklet had occurred at 31 December 2011.

Our independent review of the Financial Information has been conducted in accordance with Australian Auditing and Assurance Standards applicable to review engagements. Our procedures consist of reading of relevant Board minutes, reading of relevant contracts and other legal documents, inquiries of management personnel and the Directors of Aston, Whitehaven and Boardwalk, and analytical and other procedures applied to the Aston, Whitehaven and Boardwalk's accounting records. These procedures do not provide all the evidence that would be required in an audit, thus the level of assurance provided is less than that given in an audit. We have not performed an audit and, accordingly, we do not express an audit opinion on the Financial Information.

5. Review conclusion on the Financial Information

Based on our independent review, which is not an audit, nothing has come to our attention which causes us to believe that:

a. The Historical Financial Information does not present fairly the reviewed Statement of Financial Positions of Aston, Whitehaven and Boardwalk as at 31 December 2011 in accordance with the measurement and recognition requirements (but not all of the presentation and disclosure requirements) of Australian Accounting Standards'

b. The Pro Forma adjustments do not provide a reasonable basis for the Pro Forma Financial Information;

c. The Pro Forma Financial Information has not been prepared on the basis of the adjustments set out in Section 6.7 of the Scheme Booklet;

d. The Pro Forma Financial Information does not present fairly:

   - the pro forma Statement of Financial Position incorporating pro forma adjustments representing the combined Aston, Whitehaven and Boardwalk entities as at 31 December 2011; and
   - the pro forma Statement of Financial Position incorporating pro forma adjustments representing the combined Aston and Whitehaven entities as at 31 December 2011.

   in accordance with the measurement and recognition requirements (but not all of the presentation and disclosure requirements) of Australian Accounting Standards as if the pro-forma transactions set out in Section 6.7 of the Scheme Booklet had occurred at 31 December 2011.

We disclaim any assumption of responsibility for any reliance on this Report or on the Financial Information to which this Report relates for any purposes other than the purpose for which it was prepared. This Report should be read in conjunction with the Scheme Booklet.

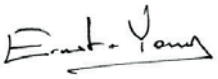
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6. Independence or Disclosure of Interest

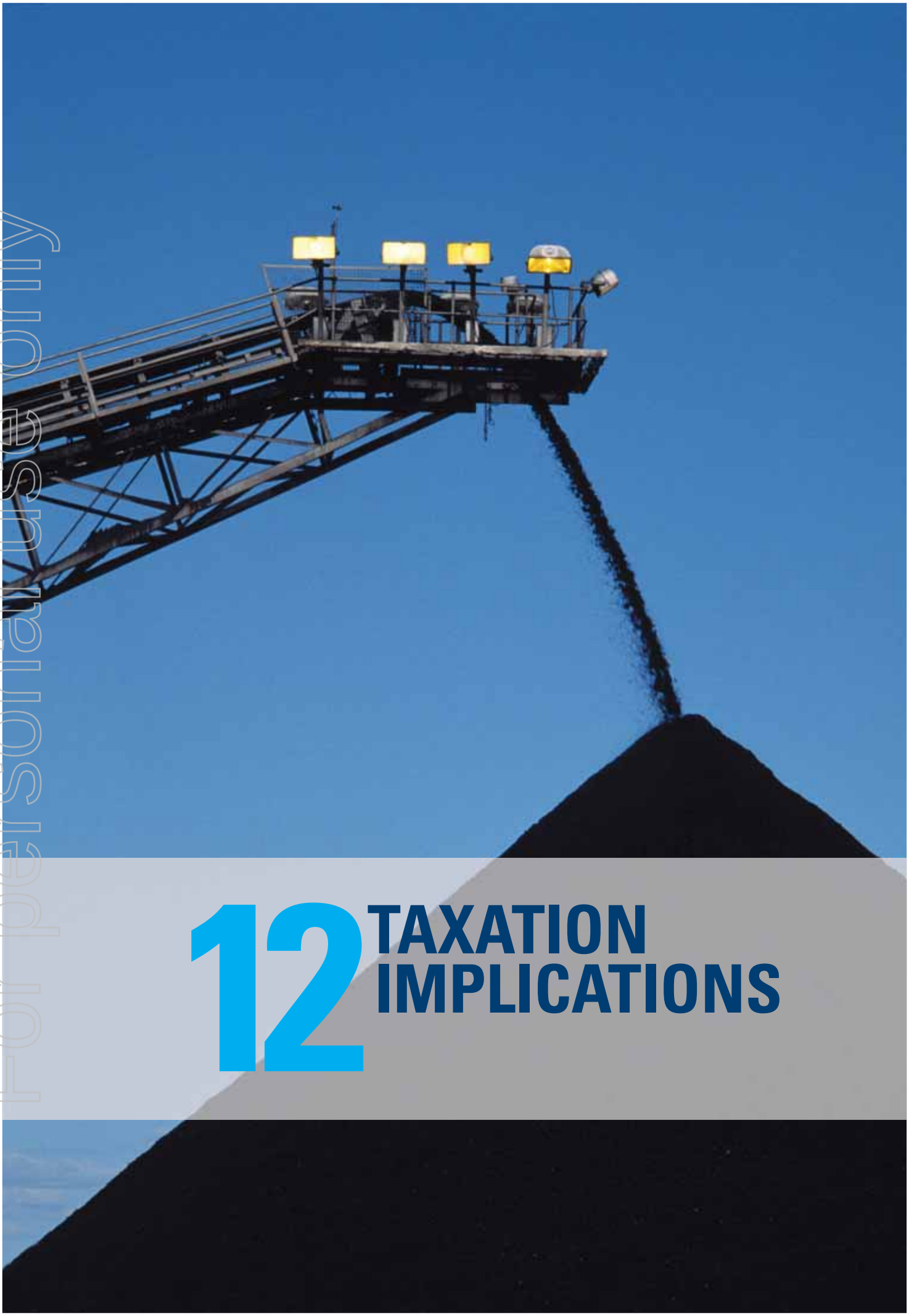
Ernst & Young does not have any pecuniary interests that could reasonably be regarded as being capable of affecting its ability to give an unbiased conclusion in this matter. Ernst & Young provides audit and other advisory services to Aston, Whitehaven and Boardwalk and will receive a professional fee for the preparation of this Report.

Yours faithfully



Ernst & Young

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12 TAXATION IMPLICATIONS

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Greenwoods & Freehills

The Directors
Aston Resources Limited
Level 10, AMP Place
10 Eagle Street
Brisbane QLD 4000

2 February 2012

Dear Directors

Australian tax implications of the Scheme

1 Introduction

We have been instructed to provide a summary of the Australian income tax and goods and services tax ("**GST**") consequences for Scheme Participants as a result of the implementation of the Scheme. We have provided our consent for the inclusion of this letter in the Scheme Booklet.

This letter only comments on the Australian tax consequences for Scheme Participants who hold their Aston Shares on capital account. This letter does not consider the Australian tax consequences for Scheme Participants who:

- are in the business of dealing or trading in securities or who otherwise hold their Aston Shares on revenue account for tax purposes; or
- hold Aston Shares or options through an employee share scheme.

Although this letter focuses on the Australian tax consequences for Scheme Participants who are residents of Australia for tax purposes, we have also provided some broad comments in respect of Scheme Participants who are non-residents.

The following summary is based on the Australian tax laws and the administrative practice of the Australian Taxation Office as at the date of this letter. It is necessarily general in nature and is not definitive. The precise Australian tax consequences of the Scheme will depend on each Scheme Participant's specific circumstances. Accordingly, Scheme Participants should seek their own independent tax advice; for non-resident Scheme Participants, this should include advice as to the foreign tax consequences of the Scheme.

Capitalised terms that are not otherwise defined in this letter have the meaning given to them in the Scheme Booklet.

2 Australian tax resident Scheme Participants

2.1 Disposal of Aston Shares

(a) **CGT event A1**

If the Scheme is implemented, each Scheme Participant will receive 1.89 New Whitehaven Shares for every Aston Share in respect of which the Scheme Participant is registered as the owner on the Scheme Record Date.

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The transfer of Aston Shares on the Implementation Date will result in CGT event A1 happening for Scheme Participants. Scheme Participants that are Australian tax residents will:

- make a capital gain if the capital proceeds for their Aston Shares are greater than the cost base of their Aston Shares (subject to the availability of CGT roll-over relief, as discussed below); or
- make a capital loss if the capital proceeds for their Aston Shares are less than the reduced cost base of their Aston Shares.

The capital proceeds for the transfer of Aston Shares will be the market value of the New Whitehaven Shares received as consideration (determined as at the Implementation Date).

A Scheme Participant's cost base for their Aston Shares would generally be the purchase price of the shares (or the deemed cost of acquisition) plus certain incidental costs of acquisition and disposal of the Aston Shares. The reduced cost base for their Aston Shares would be determined in a similar manner, although the related costs which can be included may be different.

(b) **CGT scrip for scrip roll-over relief**

Scheme Participants should generally be eligible to choose CGT scrip for scrip roll-over relief ("**CGT roll-over relief**") to the extent they would otherwise make a capital gain. CGT roll-over relief cannot apply where a Scheme Participant makes a capital loss.

(c) **Effect of CGT roll-over relief applying**

Where CGT roll-over relief applies in respect of the exchange of Aston Shares for New Whitehaven Shares, any capital gain in respect of the disposal of the Aston Shares is disregarded. Taxation of that capital gain is effectively deferred until the disposal of the New Whitehaven Shares received in exchange for the Aston Shares. That is, choosing CGT roll-over relief will affect the cost base of the New Whitehaven Shares acquired, which will in turn affect the tax consequences of a future disposal of those New Whitehaven Shares. This is discussed in section 2.2 below.

The relative benefit of choosing to obtain CGT roll-over relief is dependent on each Scheme Participant's particular circumstances. Scheme Participants should obtain their own independent tax advice as to the most appropriate course of action.

(d) **How to choose CGT roll-over relief**

No formal election is required to be lodged in order to choose CGT roll-over relief. The choice would be evidenced by a Scheme Participant preparing and lodging their income tax return for the income year in which the exchange occurs in a manner consistent with having chosen CGT roll-over relief.

(e) **Where CGT roll-over relief does not apply**

Where CGT roll-over relief does not apply in respect of the disposal of a Scheme Participant's Aston Shares (for instance, because they do not choose for it to apply), the Scheme Participant may make a capital gain or capital loss on the disposal.

Capital gains of a taxpayer in an income year are aggregated and then first reduced by capital losses made during the income year and further reduced by unused net capital losses of earlier years (subject to satisfying certain loss recoupment conditions) to determine whether the taxpayer has a net capital gain for the year. Any net capital gain is included in assessable income and is subject to income tax at the taxpayer's marginal tax rate. If a taxpayer's capital losses for an income year exceed its capital gains, the excess will be a net capital loss. A net capital loss cannot be deducted against other income for income tax purposes, but may be carried forward to offset against capital gains derived in future income years (subject, in the case of companies and trusts, to certain loss carry forward rules).

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Individuals, complying superannuation entities or trustees that have held Aston Shares for at least 12 months should be entitled to discount the amount of any capital gain that they realise (after the application of capital losses, if any). The amount of this discount is 50% in the case of individuals and trustees and 33⅓% for complying superannuation entities. The CGT discount is not available to companies.

Where a Scheme Participant is a trustee, the CGT discount may flow through to the beneficiaries in that trust, other than company beneficiaries. Scheme Participants that are trustees should seek specific advice regarding the tax consequences of distributions to beneficiaries attributable to discounted capital gains.

The following example demonstrates the CGT implications of the transfer of Aston Shares where CGT roll-over relief does not apply. The example assumes, for illustrative purposes only, that:

- the Scheme Participant has a cost base of $9.00 for each Aston Share; and
- on the Implementation Date the market value of each New Whitehaven Share they receive is $5.40.

Example 1 – no CGT roll-over relief

A Scheme Participant, who is an Australian resident individual, owns 1,000 Aston Shares with a cost base of $9.00 for each share (total cost base of $9,000).

On the Implementation Date, the Scheme Participant receives 1,890 New Whitehaven Shares (i.e. 1.89 New Whitehaven Shares for each Aston Share). The market value of each New Whitehaven Share on the Implementation Date is $5.40.

CGT roll-over relief does not apply in respect of the transfer of the Scheme Participant's Aston Shares.

Capital proceeds	= $10,206 (1,890 x $5.40)
Cost base of Aston Shares	= $9,000
Capital gain	= Capital proceeds – Cost base of Aston Shares
	= $10,206 - $9,000
	= $1,206

If the Scheme Participant held the Aston Shares for more than 12 months, the CGT discount may apply to reduce the capital gain by 50%, i.e. to $603 (assuming the Scheme Participant has no capital losses).

2.2 Holding and disposing of New Whitehaven Shares

For Australian tax resident Scheme Participants, the tax consequences of holding New Whitehaven Shares will generally be comparable to the tax consequences of holding their existing Aston Shares. That is, Scheme Participants holding New Whitehaven Shares will generally be taxable on:

- any dividends received from Whitehaven (although a tax offset for any franking credits attached to those dividends may be available); and
- any capital gain arising from a future disposal of New Whitehaven Shares.

The tax consequences for a Scheme Participant on a future disposal of New Whitehaven Shares in a normal on-market transaction should generally be similar to the consequences of the disposal of Aston Shares without choosing CGT roll-over relief, as described in section 2.1(e) above.

To work out any capital gain (or capital loss) on a disposal of New Whitehaven Shares it will be necessary to have regard to the cost base (or reduced cost base) of the New Whitehaven Shares and their acquisition date. A Scheme Participant's cost base, reduced cost base and acquisition date for their New Whitehaven Shares will depend on

whether they choose to obtain CGT roll-over relief in respect of the transfer of their Aston Shares under the Scheme.

(a) **Where CGT roll-over relief applies**

Where CGT roll-over relief applies in respect of the transfer of Aston Shares, in general terms a Scheme Participant's existing cost base for their Aston Shares is apportioned across their New Whitehaven Shares.

The following example demonstrates how the cost base and reduced cost base of New Whitehaven Shares is determined where CGT roll-over relief applies. This example is based on the same assumptions as in Example 1 in section 2.1(e) above.

Example 2A – cost base of New Whitehaven Shares where CGT roll-over relief applies

Cost base of Aston Shares = $9,000

Cost base of each New Whitehaven Share = Cost base of Aston Shares / Number of New Whitehaven Shares

= $9,000 / 1,890

= $4.761

Each New Whitehaven Share will be deemed to have been acquired by the relevant Scheme Participant on the same date that they acquired the Aston Share which gave rise to the entitlement to acquire the New Whitehaven Share. This deemed acquisition date will be relevant for CGT discount purposes (where applicable).

(b) **Where CGT roll-over relief does not apply**

Where CGT roll-over relief does not apply, the cost base and reduced cost base of the New Whitehaven Shares should be equal to the market value of the Aston Shares (determined on the Implementation Date) that are exchanged in return for the New Whitehaven Shares. In this case, the New Whitehaven Shares will be taken to have been acquired on the Implementation Date.

The following example demonstrates how the cost base and reduced cost base of New Whitehaven Shares is determined where CGT roll-over relief does not apply. The example is based on the same assumptions as in Example 1 in section 2.1(e) above and, in addition, the assumption that the market value of the Aston Shares exchanged equals the consideration received (i.e. the total market value of the New Whitehaven Shares received, being $10,206).

Example 2B – cost base of New Whitehaven Shares where CGT roll-over relief does not apply

Market value of Aston Shares = $10,206

Cost base of each New Whitehaven Share = Market value of Aston Shares / Number of New Whitehaven Shares

= $10,206 / 1,890

= $5.40

3 Non-resident Scheme Participants

The information in this section dealing with Scheme Participants that are non-residents of Australia for tax purposes does not apply to non-residents who hold their Aston Shares:

- on revenue account for tax purposes;

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- through a permanent establishment in Australia; or
- via an interposed Australian entity or entities.

These Scheme Participants should seek their own independent tax advice.

Aston Shares held by non-resident Scheme Participants should only be subject to Australian CGT if the shares qualify as "taxable Australian property". Very broadly, a share in Aston should not be "taxable Australian property" for a non-resident Scheme Participant unless:

- that Scheme Participant, together with its associates, held 10% or more of the shares in Aston at the time of disposal or for any continuous 12 month period within the 24 month period preceding the disposal; and
- more than 50% of Aston's value is due to direct or indirect interests in Australian real property, which is defined to include mining and exploration leases and licences.

There are special rules for determining whether a non-resident can qualify for CGT roll-over relief in respect of the disposal of shares that are "taxable Australian property". Any non-resident Scheme Participant that has held at least 10% of the shares in Aston at any time during the 24 month period prior to the Implementation Date should seek their own independent tax advice as to the Australian tax implications of the Scheme, including whether any protection from Australian tax would be available under an applicable double tax treaty.

4 Goods and Services Tax

No GST should be payable in respect of the disposal of Aston Shares or the acquisition of New Whitehaven Shares pursuant to the Scheme. However, the ability of Scheme Participants to claim input tax credits on related acquisitions (if any) may be restricted. Scheme Participants that are registered for GST should seek their own independent tax advice in this regard.

5 Tax File Number

Australian resident Scheme Participants may notify Whitehaven of their Australian Tax File Number (or Australian Business Number if the Whitehaven Shares are held in the course of carrying on an enterprise). If the required notifications are not provided, tax will be deducted from the unfranked component of dividends paid by Whitehaven at the top marginal tax rate plus the Medicare levy (currently totalling 46.5%). However, shareholders will be entitled to claim an income tax credit/refund (as applicable) in respect of the tax withheld in their income tax returns.

* * *

Yours sincerely

Greenwoods & Freehills Pty Ltd



13 IMPLEMENTATION OF THE SCHEME

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13. IMPLEMENTATION OF THE SCHEME

13.1. Scheme Implementation Agreement

On 11 December 2011, Aston and Whitehaven entered into a Scheme Implementation Agreement in relation to the Scheme under which Aston agreed to propose the Scheme.

The Scheme Implementation Agreement sets out Aston's and Whitehaven's obligations in connection with the implementation of the Scheme. A summary of the key elements of the Scheme Implementation Agreement is set out in Sections 13.2 to 13.6 below and a full copy is available on Aston's website www.astonresources.com.

13.2. Conditions Precedent

Implementation of the Scheme is subject to Conditions Precedent which must be satisfied or waived by 8:00am (Sydney time) on the Second Court Date, before the Scheme can be implemented. The Conditions Precedent are as follows:

Foreign investment approval

The Treasurer of the Commonwealth of Australia or his agent either advises Whitehaven to the effect that there are no objections to the acquisition of up to all the Aston Shares by Whitehaven (by any means permitted by the Corporations Act) in terms of the Commonwealth Government's foreign investment policy or becomes precluded from making an order prohibiting the acquisition under the *Foreign Acquisitions and Takeovers Act 1975* (Cth).

NSW Ministerial approval

The Minister administering the *Mining Act 1992* (NSW) gives his consent to the acquisition by Whitehaven of all the Aston Shares, to the extent required under or in connection with Authorisation No. 346.

Other Regulatory Approvals

All Regulatory Approvals (other than FIRB and NSW Ministerial approval referred to above) that are necessary to lawfully implement the acquisition by Whitehaven of all the Aston Shares are obtained or received by the parties and none of those Regulatory Approvals have been withdrawn, cancelled or revoked.

No regulatory actions

Between the date of the Scheme Implementation Agreement and 8:00am (Sydney time) on the Second Court Date (each inclusive):

- there is not in effect any preliminary or final decision, order or decree issued by a Governmental Agency;
- no action or investigation is announced, commenced or threatened by any Governmental Agency; and
- no application is made to any Governmental Agency,

in consequence of or in connection with the acquisition by Whitehaven of all the Aston Shares which restrains, prohibits or impedes, or threatens to restrain, prohibit or impede, the implementation of the acquisition by Whitehaven of all the Aston Shares or any part of it or the acquisition of Aston Shares under the Scheme, or seeks to require the divestiture by Whitehaven of any Aston Shares.

Court orders

No temporary restraining order, preliminary or permanent injunction or other order issued by any court of competent jurisdiction or other legal restraint or prohibition being in effect at 8:00am (Sydney time) on the Second Court Date which prevents the consummation of any aspect of the acquisition by Whitehaven of all the Aston Shares.

No Aston Material Transactions

No Aston Material Transaction occurs between the date of the Scheme Implementation Agreement and 8:00am (Sydney time) on the Second Court Date.

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No Whitehaven Material Transactions

No Whitehaven Material Transaction occurs between the date of the Scheme Implementation Agreement and 8:00am (Sydney time) on the Second Court Date.

No Aston Material Adverse Change

No Aston Material Adverse Change occurs or becomes apparent between the date of the Scheme Implementation Agreement and 8.00am (Sydney time) on the Second Court Date.

No Whitehaven Material Adverse Change

No Whitehaven Material Adverse Change occurs or becomes apparent between the date of the Scheme Implementation Agreement and 8:00am (Sydney time) on the Second Court Date.

No Aston dividends

Between the date of the Scheme Implementation Agreement and 8:00am (Sydney time) on the Second Court Date (each inclusive), neither Aston nor any of its Related Bodies Corporate makes or declares any distribution (whether by way of dividend, capital reduction or otherwise and whether in cash or in specie).

No Whitehaven dividends other than the Special Dividend

Between the date of the Scheme Booklet and 8:00am (Brisbane time) on the Second Court Date (each inclusive), neither Whitehaven nor any of its Related Bodies Corporate makes or declares any distribution (whether by way of dividend, capital reduction or otherwise and whether in cash or in specie) other than the Special Dividend.

Independent Expert's Report

The Independent Expert issues its report which concludes that the Scheme is in the best interests of Scheme Participants before the date on which this Scheme Booklet is registered by ASIC under the Corporations Act and the Independent Expert does not change its conclusions or withdraw its report prior to 8:00am (Sydney time) on the Second Court Date.

Aston Shareholder approval

Aston Shareholders (excluding any holder of Excluded Shares) approve the Scheme by the necessary majorities at the Scheme Meeting (or any adjournment or postponement thereof).

Court approval of Scheme

The Court approves the Scheme under section 411(4)(b) of the Corporations Act and an office copy of the Scheme Order is lodged with ASIC as contemplated by section 411(10) of the Corporations Act.

13.3. No-talk and no-shop obligations

Aston and Whitehaven have agreed to enter into exclusivity arrangements which apply from the date of the Scheme Implementation Agreement until the earlier of the termination of the Scheme Implementation Agreement and the Effective Date (**Exclusivity Period**).

During the Exclusivity Period, Aston must not, and must use all reasonable endeavours to ensure that each of its Representatives does not:

- except with the prior written consent of Whitehaven, directly or indirectly solicit, invite, encourage or initiate any Competing Proposal or any enquiries, negotiations or discussions with any Third Party in relation to, or which may reasonably be expected to lead to, a Competing Proposal, or communicate any intention to do any of those things;

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- except with the prior written consent of Whitehaven, enter into, facilitate, continue or participate in negotiations or discussions with, or enter into any agreement, arrangement or understanding with, any Third Party in relation to, or which may reasonably be expected to lead to a Competing Proposal, even if:
  - the Competing Proposal was not directly or indirectly solicited, invited, facilitated, encouraged or initiated by Aston or any of its Representatives; or
  - the Competing Proposal has been publicly announced; or
- make non-public information available to Third Parties in connection with a Third Party formulating or otherwise developing a Competing Proposal.

Aston may undertake any act that would otherwise be prohibited under paragraphs (b) and (c) above if the Aston Board, acting in good faith and in order to satisfy what the Aston Board reasonably considers to be its fiduciary or statutory duties, determines that, where there is a Competing Proposal, the Competing Proposal is or may reasonably be expected to lead to a Superior Proposal but only if that Competing Proposal was not directly or indirectly solicited, invited, facilitated, encouraged or initiated by Aston or any of its Representatives in a manner that would breach its obligations under the relevant clauses in the Scheme Implementation Agreement.

In addition, where Aston proposes to make information available to a Third Party, it must ensure that the Third Party enters into a confidentiality agreement in favour of Aston. Aston must also provide any information it provides to the Third Party, to Whitehaven.

During the Exclusivity Period, Aston must promptly notify Whitehaven:

- of any approach made or attempt to negotiate with Aston with respect to a Competing Proposal;
- if any Aston Director proposes to publicly change or withdraw their:
  - statement that they consider the Transaction to be in the best interests of Aston Shareholders; or
  - recommendation that Aston Shareholders vote in favour of all resolution(s) to be proposed at the Scheme Meeting to approve the Scheme; or
- Aston proposes to enter into any arrangement or understanding with respect to either a Superior Proposal or Competing Proposal.

If Aston notifies Whitehaven of a Superior Proposal, Whitehaven has the right to make a counter proposal, which, if the Aston Board determines would give rise to a superior outcome than the applicable Competing Proposal, Whitehaven must announce and take all reasonable steps to implement.

13.4. Payment of Break Fee

Aston has agreed to pay a Break Fee of A$20.6 million (exclusive of GST) if:

- any of the following occurs during the Exclusivity Period:
  - any Aston Director fails to state (in the terms and subject to the qualifications envisaged in the Scheme Implementation Agreement) that they recommend to Aston Shareholders that the Scheme is in the best interests of Aston and Aston Shareholders and that Aston Shareholders vote in favour of all resolution(s) to be proposed at the Scheme Meeting to approve the Scheme, or publicly changes (including by attaching qualifications not envisaged in the Scheme Implementation Agreement) or withdraws that statement of support or recommendation, other than where that Aston Director does any of these things as a result of the Independent Expert concluding in the Independent Expert's Report that the Scheme is not in the best interests of Aston Shareholders (except in circumstances where the reason for the Independent Expert reaching that conclusion is the existence of a Competing Proposal which is publicly recommended, promoted or otherwise endorsed by a majority of the Aston Directors); or
  - a Competing Proposal is announced or made and is publicly recommended, promoted or otherwise endorsed by any Aston Director;
- a Competing Proposal is announced or made before the expiry of the Exclusivity Period, and is completed at any time prior to the first anniversary of the date of the Scheme Implementation Agreement and, as a result, a Third Party acquires a Relevant Interest and/or economic interest in at least 50% of the Aston Shares; or
- Whitehaven terminates the Scheme Implementation Agreement as a consequence of a material breach of that agreement by Aston.

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The Break Fee is only payable once and will not be payable to Whitehaven if Aston is entitled to terminate the Scheme Implementation Agreement as a consequence of a material breach of that agreement by Whitehaven.

13.5. Termination

Either Aston or Whitehaven may terminate the Scheme Implementation Agreement with immediate effect by giving notice to the other parties:

- if the resolution to approve the Scheme submitted to the Scheme Meeting is not approved by the requisite majorities of Aston Shareholders;
- if the Effective Date for the Scheme has not occurred on or before the End Date;
- the Independent Expert concludes that the Scheme is not in the best interests of Aston Shareholders;
- if the other party is in material breach of any clause of the Scheme Implementation Agreement, which breach is material in the context of the transaction, subject to complying with certain notice of remedy period obligations set out in the Scheme Implementation Agreement;
- if the Court refuses to make an order approving the Scheme;
- if any court, the Takeovers Panel or Governmental Agency has issued any order, decree or ruling or taken any other action permanently enjoining, restraining or otherwise prohibiting the Scheme, or has refused to do anything necessary to permit the Scheme, and the parties fail to agree on conducting on appeal within five Business Days;
- if any of the Conditions Precedent are not satisfied or waived by 8:00am (Sydney time) on the Second Court Hearing Date; or
- if an Insolvency Event has occurred in relation to Aston or any member of the Aston Group (in which case Whitehaven may terminate) or Whitehaven or any material member of Whitehaven Group (in which case Aston may terminate).

Whitehaven may also terminate the Scheme Implementation Agreement at any time before the End Date by notice in writing to Aston if at any time during the Exclusivity Period any of the following occur:

- any Aston Director withdraws or publicly changes their recommendation as set out in this Scheme Booklet that Aston Shareholders vote in favour of the Scheme; or
- a Competing Proposal is announced or made and is publicly recommended, promoted or otherwise endorsed by a majority of the Aston Directors.

Aston may also terminate the Scheme Implementation Agreement at any time before the End Date by notice in writing to Whitehaven if at any time during the Exclusivity Period the majority of the Aston Board:

- publicly changes its recommendation of the Scheme (including by attaching qualifications not envisaged by the Scheme Implementation Agreement); or
- withdraws its statement that it considers that the Scheme is in the best interests of Aston and Aston Shareholders or its recommendation that Aston Shareholders vote in favour of all resolution(s) to be proposed at the Scheme Meeting to approve the Scheme; or
- publicly recommends, promotes or otherwise endorses a Superior Proposal,

and, if Aston is required to do so, Aston has paid Whitehaven the Break Fee.

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13.6. Other

Each of Aston and Whitehaven has given representations and warranties to the other which are considered to be normal for an agreement of this kind.

Aston does not expect that any stamp duty will be payable on the transfer of the Scheme Shares to Whitehaven. However, if stamp duty is payable in connection with the Scheme, Whitehaven has an obligation under the Scheme Implementation Agreement to pay the stamp duty.

Aston and Whitehaven have committed to implement the Scheme by the End Date being 1 June 2012. If the Scheme is not Effective by the End Date, Aston and Whitehaven must consult in good faith to determine whether the transaction can proceed by way of alternative means or methods or whether the End Date should be extended. If Aston and Whitehaven are unable to reach agreement to extend the End Date, either party may terminate the Scheme Implementation Agreement, and if either does, the Scheme will not proceed.

13.7. Deed Poll

On Friday, 9 March 2012, Whitehaven executed the Deed Poll, pursuant to which Whitehaven agreed, subject to the Scheme becoming Effective, to issue the number of New Whitehaven Shares equal to the Scheme Consideration due to all Scheme Shareholders.

A copy of the Deed Poll is set out in Annexure B.

13.8. Scheme Meeting

On or about the date of this Scheme Booklet, the Court ordered that the Scheme Meeting be convened in accordance with the Notice of Scheme Meeting and appointed The Hon. Mark Vaile to chair the Scheme Meeting. The Notice of Scheme Meeting is set out as Annexure C to this Scheme Booklet.

Each Aston Shareholder who is registered on the Register at 10:00am (Brisbane time) on Saturday, 14 April 2012 is entitled to attend and vote at the Scheme Meeting, either in person or by direct vote, proxy or attorney or, in the case of a body corporate, by its corporate representative appointed in accordance with section 250D of the Corporations Act. Voting at the Scheme Meeting will be by poll.

Instructions on how to attend and vote at the Scheme Meeting (in person or by direct vote or proxy), are set out on page 7 "Action required by Aston Shareholders" and in the notes for the Notice of Scheme Meeting in Annexure C to this Scheme Booklet.

13.9. Court approval of the Scheme

In the event that:

- the Scheme is agreed to by the requisite majorities of Aston Shareholders at the Scheme Meeting; and
- all Conditions Precedent have been satisfied or waived (if they are capable of being waived) (see Section 13.2),

Aston will apply to the Court for orders approving the Scheme.

Each Aston Shareholder has the right to appear at the Second Court Hearing.

13.10. Effective Date

The Scheme will become Effective on the Effective Date, being the date an office copy of the Court order from the Second Court Hearing approving the Scheme is lodged with ASIC. Aston will, on the Scheme becoming Effective, give notice of that event to ASX.

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

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13.11. Scheme Record Date

Those Aston Shareholders on the Register on the Scheme Record Date (i.e. at 7:00pm on the fifth Business Day after the Effective Date) will become entitled to the Scheme Consideration in respect of the Aston Shares they hold at that time (in this Scheme Booklet, those Aston Shareholders and the Aston Shares that they hold are referred to as Scheme Shareholders and Scheme Shares respectively).

13.12. Determination of persons entitled to Scheme Consideration

Dealings on or prior to the Scheme Record Date

For the purposes of calculating entitlements under the Scheme, any dealing in Aston Shares will only be recognised if:

- in the case of dealings of the type to be effected by CHESS, the transferee is registered in the Register as the holder of the relevant Aston Shares on or before the Scheme Record Date; and
- in all other cases, registrable transmission applications or transfers in respect of those dealings are received on or before the Scheme Record Date at the Aston Registry.

Subject to the Corporations Act, ASX Listing Rules and the Aston Constitution, Aston must register registrable transmission applications or transfers which it receives by the Scheme Record Date. Aston will not accept for registration or recognise for any purpose any transmission application or transfer in respect of Aston Shares received after the Scheme Record Date.

Dealings after the Scheme Record Date

For the purposes of determining the entitlement to Scheme Consideration, Aston will, until the Scheme Consideration has been provided, maintain the Register, subject to the comments in Section 13.2, in its form as at the Scheme Record Date. The Register in this form will solely determine entitlements to Scheme Consideration.

From the Scheme Record Date:

- all statements of holding in respect of Aston Shares cease to have effect as documents of title in respect of such Shares; and
- each entry on the Register will cease to be of any effect except as evidence of entitlement to Scheme Consideration in respect of the Aston Shares relating to that entry.

13.13. Implementation Date

The Implementation Date is the third Business Day after the Scheme Record Date or such other date as Aston and Whitehaven agree in writing.

Once the Scheme Consideration has been paid, the Scheme Shares will be transferred to Whitehaven without need for further acts by Scheme Shareholders.

In the case of Scheme Shares held in joint names, the Scheme Consideration will be made payable to the joint holders and sent to the holder whose name appears first in the Register as at the Scheme Record Date.

13.14. Delisting Aston

On a date after the Implementation Date to be determined by Whitehaven, Aston will apply:

- for termination of the official quotation of Aston Shares on ASX; and
- to have itself removed from the official list of ASX.

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14 ADDITIONAL INFORMATION

14. ADDITIONAL INFORMATION

14.1. Shares held by Aston Directors

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

Aston Director	Number of Aston Shares (direct and indirect interests)
Nathan Tinkler	• 64,845,799 ordinary shares held indirectly – 64,645,799 shares held by Aston Resources Investments Pty Limited (held as trustee for Aston Resources Trust, a Tinkler family trust) – 200,000 shares held by Tinkler Investments Pty Ltd as trustee for the Tinkler Family Trust
Mark Vaile	• 1,460,988 ordinary shares held indirectly by Wendmar Pty Ltd
Philip Christensen	• 17,750 ordinary shares, held indirectly – 3,000 shares held by Neban Pty Ltd – 9,270 shares held by Begini Pty Ltd – 2,505 shares held by Georgia Christensen – 2,975 shares held by Thomas Christensen
David Ryan	Nil
Rick Gazzard	Nil

No director of Aston has acquired or disposed of a Relevant Interest in any Aston Shares in the four month period ending on the date immediately before the date of this Scheme Booklet.

14.2. Options held by Aston Directors

As at the date of this Scheme Booklet, the Aston Directors held the following options in Aston:

Aston Director	Number of Aston options (direct and indirect interests)
Nathan Tinkler	Nil
Mark Vaile	• 100,000 options in respect of fully paid ordinary shares (held directly)
Philip Christensen	• 100,000 options in respect of fully paid ordinary shares • 100,000 performance rights each held directly
David Ryan	Nil
Rick Gazzard	Nil

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14.3. Interests and dealings in Whitehaven Shares

Interests of Aston Directors

As at the date immediately before the date of this Scheme Booklet, no director of Aston had a Relevant Interest in any Whitehaven Shares.

No director of Aston acquired or disposed of a Relevant Interest in any Whitehaven Shares in the four month period ending on the date immediately before the date of this Scheme Booklet.

Nathan Tinkler and Philip Christensen (through Associates) own shares in Boardwalk and will therefore be issued and have an interest in New Whitehaven Shares upon completion of the Boardwalk Transaction. Information about the Boardwalk Transaction is disclosed in Section 5.8 of this Scheme Booklet. The following table outlines these interests:

Aston Director	Beneficial holder of Boardwalk shares	Number of Boardwalk shares held as at the date of this Scheme Booklet	Number of New Whitehaven shares held upon completion of the Boardwalk Transaction
Nathan Tinkler	BRI	96,387,500	67,352,409[85] (ordinary shares) 26,678,979 (Milestone Shares)
Philip Christensen	Neban Pty Ltd as trustee for P.J. Christensen Family Trust	5,000,000	1,925,983 (ordinary shares) 762,902 (Milestone Shares)

85 Nathan Tinkler's shares held upon completion of the Boardwalk Transaction include the effect of the partial conversion of Boardwalk debt into equity and the A$150 million equity contribution.

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Interests of Whitehaven Directors

As at the date immediately before the date of this Scheme Booklet, the current Whitehaven Directors held the following interests in Whitehaven Shares and options issued by Whitehaven:

Whitehaven Director	Holder	Whitehaven Shares	Whitehaven options
Hans Mende Total 70,019,833 held directly and indirectly	Hans Mende (Direct)	300,000	Nil
	Hans Mende as trustee for the 2005 Kirmar Irrevocable Trust (Indirect)	340,000	Nil
	Citicorp Nominees Pty Ltd as holder for UBS Financial Services, Inc. as nominee for Hans Mende as trustee of the Mende Family Trust (Indirect)	21,428,333	Nil
	ANZ Nominees Limited as nominee for AMCI WH L.L.C. (Indirect)	47,951,500	Nil
John Conde	Bond Street Custodians Limited as nominee for Trelawney Waters Pty Ltd as trustee for the Trelawney Superannuation Fund (Indirect)	378,605	Nil
Allan Davies Total 2,000,000 held indirectly	Dalara Investments Pty Ltd as trustee of the AJ and LM Davies Family Trust (Indirect)	125,000	5,000,000 (3 tranches)
	Invia Custodian Pty Limited as nominee for Dalara Investments Pty Ltd as trustee of the AJ and LM Davies Family Trust (Indirect)	1,875,000	Nil
Neil Chatfield	Neil Chatfield (Direct)	206,805	Nil
Anthony Haggarty Total 33,479,897 held directly and indirectly	Anthony Haggarty (Direct)	41,918	Nil
	HFTT as trustee for the Haggarty Family Trust (Indirect)	33,437,979	Nil
Andrew Plummer	Ranamok Pty Ltd as trustee for the Plummer Family Trust (Indirect)	33,514,254	Nil
Alex Krueger[86]	Nil	Nil	Nil

86 Alex Krueger is a nominee of FRC Whitehaven Holdings BV which owns 72,650,000 Whitehaven Shares. Mr Krueger neither has a Relevant Interest in those shares nor is he an Associate of FRC Whitehaven Holdings BV.

14.4. Summary of Whitehaven Constitution

Rights and liabilities attaching to Whitehaven Shares

Whitehaven Shares

The Whitehaven Constitution allows shares in the capital of Whitehaven to be issued with preferred, deferred or other special rights, obligations or restrictions in relation to dividends, voting, return of share capital, payment of calls or other matters, as determined by the Whitehaven Board from time to time. All unissued Whitehaven Shares are under the control of the Whitehaven Board, which may grant options on Whitehaven Shares, issue option certificates, allot or dispose of Whitehaven Shares on the terms and conditions and for consideration it thinks fit. This power is subject to contract or any contrary rules in the Whitehaven Constitution.

The Whitehaven Constitution permits the issue of preference shares on terms determined by the Whitehaven Board.

Alteration of rights

The rights and restrictions attaching to any class of Whitehaven Shares (unless provided by the terms of issue of the shares of that class), can only be varied with the consent in writing of members with at least three-quarters of the votes in that class, or with the sanction of a special resolution passed at a separate meeting of the holders of Whitehaven Shares of that class.

Calls

The Whitehaven Board may from time to time call upon Whitehaven Shareholders for unpaid monies on their Whitehaven Shares. If such a call is made, Whitehaven Shareholders are liable to pay the amount of each call in the manner and at the time and place specified by the Whitehaven Board. Such calls may be payable by instalments. When a resolution of the Whitehaven Board authorising the call is passed, the call will be deemed to have been made. It may be revoked or postponed at the discretion of the Whitehaven Board.

Forfeiture and lien

Whitehaven is empowered to forfeit Whitehaven Shares in relation to any part of allotment monies, calls, instalments, interest and expenses which remains unpaid following any notice sent to a Whitehaven Shareholder. Such forfeiture must occur in accordance with the Whitehaven Constitution, the Corporations Act, the ASX Listing Rules and the ASX Settlement Operating Rules.

Whitehaven has a first lien or charge for unpaid calls, instalments and related interest and any amount it is legally required to pay in relation to Whitehaven Shares. The lien or charge extends to all dividends declared in respect of the Whitehaven Shares provided that, if Whitehaven registers a transfer of any Whitehaven Shares subject to this lien or charge without giving the transferee notice of the claim it may have at that time, the shares are freed and discharged from Whitehaven's lien or charge in respect to that claim.

Share transfers

Whitehaven Shares may be transferred in any manner required or permitted by the ASX Listing Rules or the ASX Settlement Operating Rules and by any instrument in writing in any usual or common form or in any other form that the Whitehaven Board approves. The Whitehaven Board may only refuse to register a transfer of Whitehaven Shares as permitted by the ASX Listing Rules or the ASX Settlement Operating Rules.

Directors need not issue share certificates

Subject to the requirements of the ASX Listing Rules and the Corporations Act, Whitehaven need not issue share certificates.

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Meeting procedure

ASX and each Whitehaven Shareholder and Whitehaven Director is entitled to receive notice of and attend any general meeting of Whitehaven. Any notice served on a Whitehaven Shareholder by electronic means is deemed to have been served when the electronic message is sent. Two Whitehaven Shareholders must be present to constitute a quorum for a general meeting and no business may be transacted at any meeting except the election of a Chairman and an adjournment, unless the quorum required is present at the start of the meeting. Whitehaven is obliged to convene and hold an annual general meeting.

Voting rights

Each Whitehaven Shareholder has the right to receive notices of, and to attend, general meetings of Whitehaven.

Subject to restrictions on voting from time to time affecting any class of Whitehaven Shares, and any restrictions imposed by the Corporations Act, Whitehaven Shares carry the right to cast one vote on a show of hands and, on a poll, one vote for each fully paid Whitehaven Share held, and for each partly paid share held, a vote having the same proportionate value as the proportion to which the shares have been paid up. Voting may be in person or by proxy, attorney or representative.

Remuneration of Whitehaven Directors

Whitehaven Directors are to be paid out of Whitehaven funds as remuneration for their services, such sum as accrues on a daily basis as Whitehaven in general meeting determines to be divided among them as agreed, or failing agreement, equally.

Whitehaven Directors' remuneration for their services as Whitehaven Directors is by a fixed sum and not a commission on a percentage of profits or operating revenue. The pool of funds from which Whitehaven Directors' remuneration is paid may not be increased except at a general meeting in which particulars of the proposed increase have been provided in the notice convening the meeting to Whitehaven Shareholders. There is provision for Whitehaven Directors who devote special attention to the business of Whitehaven or who perform services which are regarded as being outside the scope of their ordinary duties as Whitehaven Directors, or who at the request of the Whitehaven Board engage in any journey on company business, to be paid extra remuneration determined by the Whitehaven Board. Whitehaven Directors are also entitled to their reasonable travel, accommodation and other expenses incurred in attending Whitehaven general meetings, Whitehaven Board meetings, or meetings of any committee engaged in Whitehaven's business.

Any Whitehaven Director may be paid a retirement benefit as determined by the Whitehaven Board, consistent with the Corporations Act and the ASX Listing Rules.

A Whitehaven Director is disallowed from voting on any contract or arrangement in which he or she has directly or indirectly any material interest, if it will be contrary to the Corporations Act. If such a Whitehaven Director does vote, his or her vote will not be counted, nor will his or her attendance be counted in the quorum present at the meeting. Either or both of these prohibitions may be relaxed or suspended to any extent by ordinary resolution passed at a general meeting if permitted by the Corporations Act.

Election of directors

There must be a minimum of three Whitehaven Directors and a maximum number of 10 Whitehaven Directors (not including alternate directors), which the Whitehaven Board may from time to time determine provided it may not reduce the number below the number of Whitehaven Directors in office at the time of the reduction.

At every annual general meeting, subject to the Whitehaven Constitution, one third of the Whitehaven Directors (other than the Chief Executive Officer) must retire from office, and may offer themselves for re-election. If their number is not a multiple of three, then the number nearest to, but not less than one third will retire. A Whitehaven Director, other than the Chief Executive Officer, must retire from office at the conclusion of the third annual general meeting after which he or she was elected or re-elected.

With respect to the retirement of Whitehaven Directors, the Whitehaven Director or directors longest in office since last being elected must retire. If a number of Whitehaven Directors were elected on the same day, the Whitehaven Directors to retire shall, in default of agreement between them, be determined by ballot.

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Dividend

If the Whitehaven Board determines that a dividend is payable, it will be paid on all Whitehaven Shares proportionate to the total amount for the time being paid on each share. Such dividend payment is subject to the rights and restrictions on the holders of Whitehaven Shares created or raised under any special dividend arrangements.

The Whitehaven Board may establish and maintain one or more dividend plans, to which Whitehaven Shareholders may elect to take up with some or all of their Whitehaven Shares subject to the rules of the plan.

Subject to the ASX Listing Rules, the Whitehaven Board has the power to capitalise and distribute the whole or part of the undivided profits of Whitehaven or standing to the credit of any reserve or other account and which is available for distribution. Such capitalisation and distribution must be in the same proportions which Whitehaven Shareholders would be entitled to receive if distributed by way of dividend or in accordance with the terms of issue of any Whitehaven Shares or terms of any plan for the issue of securities for the benefit of officers or employees.

The Whitehaven Board has the power to decide whether to pay Whitehaven Shareholders an interim dividend on account of the next forthcoming dividend. Any distribution may be paid otherwise than in cash as specified in the Whitehaven Constitution.

No dividend is payable except out of Whitehaven profits and no dividend or other monies paid in relation to a Whitehaven Share will carry interest as against Whitehaven.

Partial takeover bids

Whitehaven may prohibit registration of transfers purporting to accept partial takeover bids unless and until a resolution of Whitehaven has been passed approving the offers in accordance with the provisions of the Whitehaven Constitution.

Indemnity

Whitehaven must indemnify current and past Whitehaven Directors, secretaries and executive officers against any liability incurred by them by virtue of their holding office as, and acting in the capacity of, Whitehaven Director, secretary or executive officer, other than a liability owed to Whitehaven or a Related Body Corporate of Whitehaven or a pecuniary penalty order or compensation order or where the liability does not arise out of conduct in good faith. Indemnities also apply to employees in circumstances designated under the Whitehaven Constitution.

Insurance

Whitehaven may also pay insurance premiums for officers and employees in certain designated circumstances but not where the liability arises out of wilful breach of duty to Whitehaven or an improper use of position or inside information, as prohibited by the Corporations Act.

14.5. Benefits and agreements

Benefits in connection with retirement from office

There is no payment or other benefit that is proposed to be made or given to any director, secretary or executive officer of Aston (or its Related Bodies Corporate) as compensation for the loss of or consideration for or in connection with his or her retirement from office in Aston or any of its Related Bodies Corporate in connection with the Scheme, subject to usual redundancy entitlements.

Agreements connected with or conditional on the Scheme

Other than is outlined in Section 14.3, there are no agreements made between any director of Aston and any other person in connection with, or conditional on, the outcome of the Scheme other than in their capacity as a holder of Aston Shares or options (as outlined in Section 14.2) other than the Call Option Agreement described below.

Call Option Agreement

Aston Resources Investments Pty Limited as trustee for the Aston Resources Trust, a Tinkler family trust (**Aston Resources Investments**), and Whitehaven, entered into the Call Option Agreement on 11 December 2011. Pursuant to the terms of the Call Option Agreement, Aston Resources Investments has granted Whitehaven an option to acquire 40,913,305 Aston Shares (the **Call Option Shares**) on certain terms (the **Call Option**). The Call Option Shares represent 19.99% of the Aston Shares on issue as at the date of this Scheme Booklet.

The Call Option is granted in consideration of the payment of a nominal fee of A$1 by Whitehaven to Aston Resources Investments, which was payable on the date of the Call Option Agreement. The exercise price under the Call Option Agreement is 1.978 Whitehaven Shares per Call Option Share.

In respect of a tranche of 10,233,443 of the Call Option Shares, the Call Option does not come into effect and is not binding until:

- the Treasurer of the Commonwealth of Australia (or his delegate) gives written advice with or without conditions that there are no objections under Australia's foreign investment policy to the proposed acquisition by Whitehaven of this tranche of Call Option Shares; or
- after notice of the proposed acquisition of this tranche of Call Option Shares has been given by Whitehaven to the Treasurer of the Commonwealth of Australia under the FATA, the Treasurer ceases to be empowered to make any order under Part II of that Act because of lapse of time.

Whitehaven may exercise the Call Option if an Option Trigger Event occurs. An Option Trigger Event means any of the following:

- a Third Party has publicly announced a takeover bid under Chapter 6 of the Corporations Act for shares in Aston under which the bidder may acquire at least 50.1% of the ordinary share capital of Aston (**Takeover Bid**) and that Takeover Bid has been recommended by a majority of the Aston Board and that recommendation has been announced publicly by Aston; or
- Aston has publicly announced a scheme of arrangement pursuant to Part 5.1 of the Corporations Act proposed by Aston to Aston Shareholders which if approved and implemented would result in a Third Party acquiring a Relevant Interest in, or becoming the holder of, 50.1% or more of Aston Shares; or
- a Third Party has publicly announced a Takeover Bid which is not unanimously recommended by the Aston Board and that Takeover Bid is either unconditional when announced, or has become unconditional, and that Third Party has received acceptances under the Takeover Bid in respect of at least 50.1% of Aston Shares.

In the case of an event referred to in paragraph (a) or (b), Whitehaven may exercise the Call Option at any time during the period starting on the day the Option Trigger Event in paragraph (a) and (b) occurs and ending 40 days after the occurrence of the Option Trigger Event.

In the case of an event referred to in paragraph (c), Whitehaven may exercise the Call Option at any time during the period starting on the day the Option Trigger Event in paragraph (c) occurs and ending on the date the Scheme Meeting is held.

The Call Option Agreement terminates if:

- The Call Option lapses (in the following circumstances):
  - if no Option Trigger Event has occurred, the Call Option is not validly exercised by 1 June 2012; or
  - if an Option Trigger Event has occurred, the Call Option is not validly exercised by the end of the time periods referred to above (in relation to the occurrence of Option Trigger Events); or
  - in circumstances where the exercise of the Call Option would result in a breach of ASX Listing Rules or section 606 of the Corporations Act, and Whitehaven fails to obtain approval under the Listing Rules or section 611 (item 7) by 1 June 2012, then the Call Option will lapse to the extent it applies to such number of Call Option Shares as would cause Whitehaven to breach ASX Listing Rules and/or section 606 of the Corporations Act.
- A copy of a Court order approving the Scheme is lodged with ASIC before 1 June 2012.

A copy of the Call Option Agreement was released to ASX on 12 December 2011.

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Benefits under the Scheme

Other than is outlined in Section 14.3, none of the directors of Aston has agreed to receive, or is entitled to receive, any benefit from Whitehaven which is conditional on, or is related to, the Scheme, other than in their capacity as a holder of Aston Shares or as set out in Sections 14.1 and 14.2.

Interests of Aston Directors in contracts with Whitehaven

None of the directors of Aston has any interest in any contract entered into by Whitehaven.

Payments to non-executive Whitehaven Directors

The Whitehaven Constitution provides that non-executive Whitehaven Directors may be paid, as remuneration for their services as Whitehaven Directors, a sum determined from time to time by Whitehaven Shareholders in general meeting, with that sum to be divided amongst the non-executive Whitehaven Directors in such manner and proportion as they agree.

As at the date of this Scheme Booklet, the aggregate maximum remuneration for non-executive Whitehaven Directors is A$1 million per annum.

Subject to implementation of the Merger, the Whitehaven Board proposes that the aggregate maximum remuneration for non-executive Whitehaven Directors (i.e. directors of the Merged Group) will be increased to A$2.5 million per annum. A resolution to approve this proposed increase will be put to a general meeting of Whitehaven Shareholders proposed to be held on or about the date of the Scheme Meeting.

14.6. Status of regulatory conditions

The regulatory approvals that are conditions to the Scheme are discussed in Section 13.2 of this Scheme Booklet. As at the date of this Scheme Booklet:

- Whitehaven has been advised that Foreign Acquisitions and Review Board has no objections to the acquisition by Whitehaven of all Aston Shares; and
- Aston has received the consent of the Minister administering the *Mining Act 1992* (NSW), in connection with Authorisation No. 346, to the effective change in control of Aston as a result of the acquisition by Whitehaven of all Aston Shares.

Aston will make a statement regarding the status of these conditions at the commencement of the Scheme Meeting.

14.7. ASIC and ASX relief

Aston has been granted a waiver from ASX Listing Rules 6.23.2 and 10.11, to permit the cancellation of Aston options for consideration under the Scheme without the requirement for Aston Shareholder approval. The waiver application was made on the basis that Aston Shareholders are provided with information about the proposed treatment of options in this Scheme Booklet and are therefore able to consider this information when determining whether to vote in favour of the Scheme.

14.8. Formal disclosures and consents

Consents

This Scheme Booklet contains statements made by, or statements said to be based on statements made by:

- Whitehaven;
- Boardwalk;
- Ernst & Young;
- PricewaterhouseCoopers Securities Limited.

Each of those persons named above has consented to the inclusion of each statement it has made in the form and context in which the statements appear and has not withdrawn that consent at the date of this Scheme Booklet.

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

- AME Group;
- Computershare Investor Services Pty Limited as the Aston Registry;
- Credit Suisse (Australia) Limited as financial adviser to Aston;
- Ernst & Young;
- Freehills as legal adviser to Aston;
- Greenwoods & Freehills Pty Ltd as tax adviser to Aston;
- Minarco Mine-Consult;
- PricewaterhouseCoopers Securities Limited; and
- UBS AG, Australia Branch as financial adviser to Aston.

Disclosures and responsibility

Further, each person named in Section 14.8:

- has not authorised or caused the issue of this Scheme Booklet;
- does not make, or purport to make, any statement in this Scheme Booklet or any statement on which a statement in this Scheme Booklet is based, other than:
  - AME Group, in relation to its Independent Industry Expert's Report;
  - Boardwalk, in respect of the Boardwalk Information;
  - Ernst & Young, in relation to the Investigating Accountant's Report;
  - Greenwoods & Freehills Pty Ltd, in relation to the summary of tax implications in Section 12 of this Scheme Booklet;
  - Minarco Mine-Consult, in relation to its Independent Technical Expert's Report;
  - PricewaterhouseCoopers Securities Limited, in relation to its Independent Expert's Report; and
  - Whitehaven, in respect of the Whitehaven Information.
- to the maximum extent permitted by law, expressly disclaims all liability in respect of, makes no representation regarding, and takes no responsibility for, any part of this Scheme Booklet other than a reference to its name and the statement (if any) included in this Scheme Booklet with the consent of that party as specified in this Section 14.8.

14.9. Other information material to the making of a decision in relation to the Scheme

Except as set out in this Scheme Booklet, there is no other information material to the making of a decision in relation to the Scheme, being information that is within the knowledge of any Aston Director, at the time of lodging this Scheme Booklet with ASIC for registration, which has not previously been disclosed to Aston Shareholders.

If, between the date of lodgement of this Scheme Booklet for registration by ASIC and the Effective Date, Aston becomes aware that:

- a material statement in this Scheme Booklet is false or misleading;
- there is a material omission from this Scheme Booklet;
- a significant change affecting a matter in this Scheme Booklet has occurred; or
- a significant new matter has arisen which 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,

Aston will prepare a supplementary document to this Scheme Booklet. The form which the supplementary document may take, and whether a copy will be sent to each shareholder, will depend on the nature and timing of the new or changed circumstances.

In all cases, the supplementary document will be available from Aston's website at www.astonresources.com and from ASX website at www.asx.com.au.

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15 GLOSSARY, DEFINITIONS AND INTERPRETATION

15. GLOSSARY, DEFINITIONS AND INTERPRETATION

15.1. Glossary

The meanings of the terms used in this Scheme Booklet are set out below.

TERM	MEANING
AASB	Australian Accounting Standards Board
AMCI	AMCI WH L.L.C.
ARTC	Australian Rail Track Corporation Ltd
ASIC	Australian Securities and Investments Commission
Associate or **Associated**	has the meaning given in sections 12 and 16 of the Corporations Act
Aston	Aston Resources Limited ABN 91 129 361 208
Aston Board	the board of directors of Aston
Aston Constitution	the constitution of Aston
Aston Director	each member of the Aston Board
Aston Disclosure Material	see Section 15.2
Aston Group	Aston and each of its Related Bodies Corporate
Aston Information	the information contained in this Scheme Booklet other than the Whitehaven Information and the Boardwalk Information
Aston Information Line	1300 554 725 from within Australia and +61 3 9415 4350 from outside Australia
Aston Material Adverse Change	see Section 15.2
Aston Material Transaction	see Section 15.2
Aston Registry	Computershare Investor Services Pty Ltd ACN 000 937 879
Aston Share	a fully paid ordinary share of Aston
Aston Shareholders	each person who is registered as the holder of Aston Shares
ASX	ASX Limited ABN 98 008 624 691 and the financial market that it operates as the context requires
ASX Listing Rules	the Listing Rules of ASX
ASX Settlement Operating Rules	the ASX Settlement Operating Rules, being the operating rules of the Settlement Facility (as defined in those rules) for the purposes of the Corporations Act
ATO	Australian Taxation Office
Boardwalk	Boardwalk Resources Limited ABN 89 130 433 617
Boardwalk Information	means the information about Boardwalk and the Boardwalk Transaction set out in Section 5.8 of this Scheme Booklet, excluding Section 5.8.2 which is the sole responsibility of Whitehaven
Boardwalk Projects	the Dingo, Ferndale, Sienna and Monto Projects
Boardwalk Securityholders	the holders of the issued securities of Boardwalk

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TERM	MEANING
Boardwalk Transaction	the proposed acquisition of Boardwalk by Whitehaven in consideration for the issue of 119,905,183 Whitehaven Shares (including 34,020,000 Milestone Shares) to Boardwalk Securityholders in accordance with the terms of the Boardwalk Transaction Documents
Boardwalk Transaction Documents	the agreements for the sale of all of the issued capital and warrants of Boardwalk to Whitehaven in consideration for the issue of Whitehaven Shares
Boggabri CHPP	Whitehaven's coal handling and preparation plant and train load-out facility located in Boggabri
Break Fee	A$20.6 million (exclusive of GST)
BRI	Boardwalk Resources Investments Pty Ltd ACN 146 263 685 as trustee for the Boardwalk Resources Trust
Brisbane time	the local time in Brisbane, Queensland
Business Day	a day that is not a Saturday, Sunday, public holiday or bank holiday in Sydney, NSW
Call Option Agreement	the document titled "Call option agreement" dated 11 December 2011 between Whitehaven and Aston Resources Investments Pty Limited as trustee for the Aston Resources Trust in relation to certain Aston Shares
Capacity Framework Arrangements	industry agreement authorised by the Australian Competition and Consumer Commission (ACCC) governing the allocation of export capacity at the Port of Newcastle
CGT	capital gains tax
CHESS	the clearing house electronic sub-register system of share transfers operated by ASX Settlement and Transfer Corporation Pty Ltd ACN 008 504 532
CHPP	Coal handling and preparation plant
Coalworks	Coalworks Limited ABN 51 114 702 831
Cockatoo Coal	Cockatoo Coal Limited ACN 112 682 158
Competing Proposal	see Section 15.2
Conditions Precedent	the conditions precedent to the Scheme. A summary is set out in Section 13.2 of this Scheme Booklet and are fully set out in clause 3.1 of the Scheme Implementation Agreement
Corporations Act	the *Corporations Act 2001* (Cth)
Court	the Federal Court of Australia or such other Court of competent jurisdiction under the Corporations Act agreed in writing by Aston and Whitehaven
Deed Poll	the deed poll executed by Whitehaven on Friday, 9 March 2012 pursuant to which Whitehaven acknowledges and confirms its obligations under the Scheme. A copy of the executed Deed Poll is contained in Annexure B to this Scheme Booklet
DFS	definitive feasibility study
Dingo Project	coal exploration project located in the Bowen Basin, Queensland, Australia jointly held by Boardwalk and Cockatoo Coal

TERM	MEANING
Effective	when used in relation to the Scheme, means the coming into effect, pursuant to section 411(10) of the Corporations Act, of the order of the Court made under section 411(4)(b) in relation to the Scheme, but in any event at no time before an office copy of the order of the Court is lodged with ASIC
Effective Date	the date on which the Scheme becomes Effective
EL	exploration licence
End Date	1 June 2012
EPC	exploration permit for coal
Excluded Share	an Aston Share held by Whitehaven or any of its Associates or by any person on behalf of, or for the benefit of, Whitehaven or any of its Associates
Excluded Shareholder	any Aston Shareholder who holds an Excluded Share
Exclusivity Period	the period from and including the date of the Scheme Implementation Agreement (12 December 2011) to the earlier of: • the termination of the Scheme Implementation Agreement; and • the Effective Date
Exploration Target	a target area where there is insufficient data from historical and current exploration activities to identify a resource in compliance with the JORC Code, and is purely conceptual in nature
Farallon Funds	funds advised and managed by Farallon Capital Management, L.L.C.
FIRB	Foreign Investment Review Board
Foreign Shareholder	an Aston Shareholder whose address shown in the Aston Registry is a place outside Australia and its external territories and New Zealand
FRC	FRC Whitehaven Holdings BV
Governmental Agency	any government or representative of a government or any governmental, semi-governmental, administrative, fiscal, regulatory or judicial body, department, commission, authority, tribunal, agency, competition authority or entity and includes any minister (including, for the avoidance of doubt, the Commonwealth Treasurer), ASIC, ATO, ASX, FIRB and any regulatory organisation established under statute or any stock exchange
Gunnedah CHPP	Whitehaven's coal handling and preparation plant and train load-out facility located in Gunnedah
Hunter Ports	Hunter Ports Pty Ltd ABN 35 143 166 170
Implementation Date	the third Business Day after the Scheme Record Date or such other day as ordered by the Court or agreed between Aston and Whitehaven
Independent Directors	Aston directors not Associated with Boardwalk, being The Hon. Mark Vaile, Mr Rick Gazzard and Mr David Ryan AO
Independent Expert	PricewaterhouseCoopers Securities Limited
Independent Expert's Report	the report prepared by the Independent Expert dated Tuesday, 6 March 2012 set out in Section 8

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TERM	MEANING
Ineligible Foreign Shareholder	a Scheme Participant whose Registered Address is in a jurisdiction other than Australia and its external territories, New Zealand, the USA and Singapore except where Whitehaven and Aston are reasonably satisfied that the issue of New Whitehaven Shares to the Scheme Participant in that jurisdiction is neither prohibited by law nor unduly onerous
Insolvency Event	see Section 15.2
JORC	Australasian Joint Ore Reserves Committee, which is sponsored by the Australian mining industry and its professional organisations
JORC Code	code prepared by JORC in 2004 which defines criteria for public reporting of ore and coal resources and reserves
Marketable Reserves	saleable coal from Recoverable Reserves, as defined in the JORC Code
Measured Resources	part of a coal deposit for which quality and quantity can be estimated with a high level of confidence, as defined in the JORC Code
Maules Creek Project	the Maules Creek coal development project located in the Gunnedah Basin, New South Wales, owned by the Maules Creek joint venture, the participants in which are Aston Coal 2 Pty Ltd and ICRA MC Pty Limited
Merewether	Merewether Royalties Pty Ltd ACN 148 959 675
Merged Group	the combined entity consisting of Aston, Whitehaven and, subject to the Boardwalk Transaction proceeding, Boardwalk
Merged Group's Board	the board of directors of the Merged Group, being The Hon. Mark Vaile, Mr John C Conde AO, Mr Tony Haggarty, Mr Allan Davies, Mr Paul Flynn, Mr Philip Christensen, Mr Rick Gazzard, Mr Hans Mende and a further Independent Director to be nominated
Merger	the proposed merger between Aston and Whitehaven via the Scheme
Milestone Shares	the 34.02 million Whitehaven Shares, to be issued to Boardwalk Securityholders under the Boardwalk Transaction, which will be subject to restrictions on voting and transfer, to be lifted following receipt of mining leases and environmental approvals at any two of the Boardwalk Projects and the Oaklands North Project (being 17.01 million Whitehaven Shares released from those restrictions for each approval)
ML	mining lease
Monto Project	coal exploration project located in the Mulgildie Basin, Queensland, Australia owned by Boardwalk
Mt	millions of tonnes
Mtpa	millions of tonnes per annum
NCIG	Newcastle Coal Infrastructure Group
NCIG SSA	NCIG Substitute Shipper Agreement
New Whitehaven Shares	the Whitehaven Shares to be issued as Scheme Consideration
Noble	Noble Group Limited, incorporated in Bermuda and listed on the Singapore Stock Exchange, and its subsidiaries
Norton Gold Fields	Norton Gold Fields Limited ACN 112 287 797

TERM	MEANING
Notice of Scheme Meeting	the notice of meeting relating to the Scheme Meeting which is contained in Annexure C
NSW Trade and Investment	the NSW State Department of Trade and Investment, Regional Infrastructure and Services
Oaklands North Project	coal exploration project located in the Oaklands Basin, New South Wales, Australia owned by Coalworks
Officer	in relation to any entities, any of its directors and officers
Pacific National	Pacific National Pty Ltd
PCI or **PCI coal**	pulverised coal injection
Probable Reserves	Measured and/or Indicated Resources which are not yet proven but of which detailed technical and economic studies have demonstrated that extraction can be justified at the time of determination and under specific economic conditions, as defined in the JORC Code
Proved Reserves	Measured Resources of which detailed technical and economic studies have demonstrated that extraction can be justified at the time of determination and under specific economic conditions, as defined in the JORC Code
Proxy/Voting Form	the proxy/voting form which accompanies this Scheme Booklet
PWCS	Port Waratah Coal Services Limited
Recoverable Reserves or **Reserves**	economically mineable part of a Measured or Indicated Resource of coal at the time of reporting, as defined in the JORC Code
Register	the share register of Aston
Regulatory Approvals	• any approval, consent, authorisation, registration, filing, lodgement, permit, franchise, agreement, notarisation, certificate, permission, licence, direction, declaration, authority or exemption from, by or with a Governmental Agency; or • in relation to anything that would be fully or partly prohibited or restricted by law if a Governmental Agency intervened or acted in any way within a specified period after lodgement, filing, registration or notification, the expiry of that period without intervention or action
Related Body Corporate	has the same meaning given to it in the Corporations Act
Relevant Interest	has the same meaning as given by sections 608 and 609 of the Corporations Act
Representative	in respect of Aston or Whitehaven or any of its Related Bodies Corporate, each director, officer, employee, adviser or agent of that party or Related Body Corporate
Resources	a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories, as defined in the JORC Code
ROM	run of mine
Sale Agent	means the appropriately licensed agent appointed by Whitehaven to administer the sale facility made available to Ineligible Foreign Shareholders under which New Whitehaven Shares to which those shareholders would otherwise have become entitled under the Scheme are sold, as described in Section 2.13

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TERM	MEANING
Scheme or **Scheme of Arrangement**	the proposed scheme of arrangement between Aston and the Scheme Participants under Part 5.1 of the Corporations Act in the form set out in Annexure A which if implemented will give effect to the Merger between Whitehaven and Aston, subject to any alterations or conditions made or required by the Court under section 411(6) of the Corporations Act and approved in writing by Whitehaven and Aston
Scheme Booklet	this document
Scheme Consideration	1.89 New Whitehaven Shares per Scheme Share
Scheme Implementation Agreement or **SIA**	the Scheme Implementation Agreement between Aston and Whitehaven dated 12 December 2011. A summary is set out in Section 13.1, and a full copy can be obtained from Aston's website www.astonresources.com
Scheme Meeting	the meeting of Aston Shareholders (other than Excluded Shareholders) ordered by the Court to be convened under section 411(1) of the Corporations Act
Scheme Participant	each holder of Scheme Shares as at the Scheme Record Date
Scheme Record Date	7:00pm (Brisbane time) on the fifth Business Day after the Effective Date
Scheme Resolution	the resolution to agree to the terms of the Scheme
Scheme Share	an Aston Share held by a Scheme Shareholder as at the Scheme Record Date
Scheme Shareholder	each person who is an Aston Shareholder at the Scheme Record Date
Second Court Date	the first day on which an application made to the Court for an order under section 411(4)(b) of the Corporations Act approving the Scheme is heard
Second Court Hearing	the hearing of the application made to the Court for an order pursuant to section 411(4)(b) of the Corporations Act approving the Scheme
Securities Act	*U.S. Securities Act of 1933*
Sienna Project	coal exploration project located in the Bowen Basin, Queensland, Australia owned by Boardwalk
Special Dividend	the proposed fully franked dividend of A$0.50 for each Whitehaven Share immediately prior to the Scheme Record Date
Strip Ratio	volume of overburden that must be moved for each metric tonne of ROM coal produced
Subsidiary	has the meaning given to that term in the Corporations Act
Superior Proposal	a publicly announced bona fide proposal received after the date of this Scheme Booklet which the Aston Board determines, acting in good faith and in order to satisfy what the Aston Board considers to be its fiduciary and statutory duties (after having taken advice from its legal and financial advisers): • is capable of being valued and completed, taking into account all aspects of the proposal; and • would, if completed substantially in accordance with its terms, be more favourable to Aston Shareholders than the Scheme, taking into account all terms of the proposal
Third Party	a person other than Whitehaven and its Associates

TERM	MEANING
Tinkler Group	Tinkler Group Pty Limited ACN 149 453 814 which is an Australian owned private investment company controlled by Nathan Tinkler, and its Associates
Urban Exploration Ban Policy	the policy described in the joint statement titled "Urban areas off limits to mining exploration" released by the Queensland Premier and the Queensland Minister for Employment, Skills and Mining on 15 August 2011 which, if implemented as announced, would prohibit exploration activities on urban land in Queensland or within a two kilometre buffer of urban land in Queensland
Urban Restricted Area	as defined in the Urban Exploration Ban Policy
U.S. Person	has the meaning given to that term in Rule 902(k) of the Securities Act
Whitehaven	Whitehaven Coal Limited ABN 68 124 425 396
Whitehaven Board	the board of directors of Whitehaven
Whitehaven Constitution	the constitution of Whitehaven
Whitehaven Director	each member of the Whitehaven Board
Whitehaven Disclosure Material	see Section 15.2
Whitehaven Group	Whitehaven and each of its Related Bodies Corporate and a reference to a Whitehaven Group Member or a member of the Whitehaven Group is to Whitehaven or any of its Related Bodies Corporate
Whitehaven Information	the information contained in: • the paragraph commencing "Any forward-looking statements included in the Whitehaven Information" in the subsection headed "Disclaimer as to forward-looking statements" in the Important Notices; • the letter from the Chairman of Whitehaven; • the answer to the question, "Who is Whitehaven?" in Section 1; • the third paragraph in the question, "What is the Boardwalk Transaction?" in Section 1; • the second paragraph in the question, "What happens if the Boardwalk Transaction is approved?" in Section 1; • the fourth paragraph in Section 2.4; • Section 5; • Section 6 as it pertains to Whitehaven's contribution to the Merged Group; • Section 13.14; • Section 14.4; and • the paragraph headed "Payments to non-executive Whitehaven Directors" in Section 14.5
Whitehaven Material Adverse Change	see Section 15.2
Whitehaven Material Transaction	see Section 15.2
Whitehaven Shares	fully paid ordinary shares in the capital of Whitehaven
Whitehaven Shareholders	each person who is registered as the holder of Whitehaven Shares
Wholly-Owned Subsidiary	in relation to a party, a body corporate, all of the issued shares of which are or will be directly or indirectly owned by that party

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15.2. Definitions

The definitions of following terms that have been used in this Scheme Booklet have been taken from the Scheme Implementation Agreement.

Aston Disclosure Material

All written information in connection with the acquisition by Whitehaven of all the Shares in Aston or relating to the Aston Group's past, present or future operations, affairs, business and/or strategic plans, which has been provided to Whitehaven or its Representatives:

- via Aston's electronic and physical data room on or prior to 9 December 2011;
- via the written Q&A process associated with that data room on or prior to 9 December 2011; or
- in the disclosure letter from Aston to Whitehaven dated on or about the date of the Scheme Implementation Agreement.

Aston Material Adverse Change

A matter, event or circumstance that occurs, is announced or becomes known to Aston (whether or not it becomes public) where that matter, event or circumstance has, has had, or could reasonably be expected to have, individually or when aggregated with all such matters, events or circumstances, the result that:

- there is or would be reasonably likely to be a material adverse effect on the assets, liabilities, business, results, operations, trading or financial position or material licences of the Aston Group; or
- the Aston Group is unable to carry on its business in substantially the same manner as carried on as at the date of the Scheme Implementation Agreement, or which otherwise materially and adversely affects the prospects of the Aston Group,

other than a matter, event or circumstance:

- which is expressly contemplated by the Scheme Implementation Agreement or the Scheme;
- which is, and to the extent that it is, fairly disclosed in the Aston Disclosure Material;
- which relates to interest rates, coal or other commodity prices or currency exchange rates; or
- which is, and to the extent that it is, a consequence of losses covered by insurance which Aston's insurers have agreed to pay.

Aston Material Transaction

Other than:

- as expressly contemplated by the Scheme Implementation Agreement or the Scheme;
- to the extent that it is fairly disclosed in the letter dated on or about the date of the Scheme Implementation Agreement provided by Aston to Whitehaven;
- to the extent that it is consistent with the budget provided by Aston to Whitehaven; or
- with the express consent of Whitehaven.

An Aston Material Transaction is the occurrence of any of the following:

- Aston or any of its Subsidiaries issues, or agrees to issue, or grants an option to subscribe for, debentures (as defined in section 9 of the Corporations Act), other than to a Wholly-Owned Subsidiary of Aston;
- Aston or any Subsidiary of Aston makes any change to its constitution or other constituent documents;
- Aston or any Subsidiary of Aston disposes, or agrees to dispose, of shares in a Related Body Corporate of Aston;

- the Aston Group changes in any material respect the nature of its business;
- Aston or any Subsidiary of Aston incurs any financial indebtedness or issues any indebtedness or debt securities other than pursuant to advances under any debt facility, equipment finance facility or other financial accommodation provided to Aston or any Aston Subsidiary (whether with or without others) by any bank or other lender that is fairly disclosed in the information provided by Aston to Whitehaven, together with all associated facility, priority and other agreements and securities entered into in connection with such facilities or accommodation;
- Aston or any Subsidiary of Aston makes any loans, advances or capital contributions to, or investments in, any other person, other than to or in Aston or any Wholly-Owned Subsidiary of Aston;
- Aston or any Subsidiary of Aston:
  - grants to any Officer of Aston or any Subsidiary of Aston any increase in severance or termination pay or superannuation entitlements; or
  - makes or agrees to make any material change to the terms of, or waives any claims or rights under, or waives the benefit of any provisions of, any contract of employment with any senior executive of Aston or of any Subsidiary of Aston;
- Aston or any of its material Subsidiaries ceases, or threatens to cease, to carry on business;
- Aston or any of its material Subsidiaries becomes subject to an Insolvency Event or is deregistered as a company or otherwise dissolved;
- Aston or any of its material Subsidiaries is or becomes unable to pay its debts when they fall due;
- Aston or any of its material Subsidiaries disposes, or agrees to dispose, of any asset (including an exploration licence) other than where the total amount involved in the relevant transactions in the period until the Second Court Date is less than A$20 million;
- Aston or any of its material Subsidiaries acquires, or agrees to acquire, any asset (including an exploration licence) other than where the amount involved in the relevant transactions in the period until the Second Court Date is less than A$20 million in total;
- Aston converting all or any of its shares into a larger or smaller number of shares;
- any member of the Aston Group resolving to reduce, or reducing, its share capital in any way, or reclassifying, redeeming, combining, splitting or repurchasing directly or indirectly any of its shares;
- any member of the Aston Group resolving to buy back, or buying back, any of its shares, including by:
  - entering into a buy-back agreement; or
  - resolving to approve the terms of a buy-back agreement under the Corporations Act;
- any member of the Aston Group issuing shares, or granting an option over its shares, or agreeing to make such an issue or grant such an option, other than:
  - to a Wholly-Owned Subsidiary of Aston;
  - an issue of Aston Shares following the valid exercise of any options or performance rights on issue at 9 December 2011;
- any member of the Aston Group issuing, or agreeing to issue, securities convertible into shares or debt securities (including any performance rights or options);
- any member of the Aston Group making, in aggregate, capital expenditure in excess of A$20 million;
- any member of the Aston Group:
  - acquiring, leasing or disposing of;
  - agreeing to acquire, lease or dispose of; or
  - offering, proposing or announcing a bid or tenders for,

  any material business, assets or entity with a value greater than A$20 million in total in the period until the Second Court Date, or enters into joint venture, partnership or similar arrangement;

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- any member of the Aston Group:
  - entering into any contracts or commitments either individually or collectively involving revenue or expenditure of more than A$20 million over the term of the contract or commitment;
  - entering into any contracts or commitments with or in relation to Hunter Ports;
  - terminating or amending in a material manner any contracts of the Aston Group's business which either individually or collectively involve expenditure or revenue of more than A$20 million over the term of the contract;
  - paying, discharging or satisfying any claims, liabilities or obligations under any contracts or commitments involving revenue or expenditure of more than A$20 million other than the payment, discharge or satisfaction consistent with past practice and in accordance with its terms; or
  - waiving any material claims or rights under, or waiving the benefit of any provision of, any contracts or commitments involving revenue or expenditure of more than A$20 million;
- any member of the Aston Group entering into a contract or commitment restraining it from competing with any person or conducting activities in any market;
- except as provided for in an existing employment contract in place at 9 December 2011, a copy of which has been included in the Aston Disclosure Material, any member of the Aston Group:
  - paying any bonus to, or increasing the compensation of, any Officer of any member of the Aston Group;
  - accelerating the rights of any Officer of any member of the Aston Group to compensation or benefits of any kind (including under any Aston executive or employee share plan);
  - granting to any Officer of any member of the Aston Group any increase in severance or termination pay or superannuation entitlements or by issuing any Aston Shares or securities convertible to Aston Shares to any of those persons; or
  - establishing, adopting, entering into or amending in any material respect (including by taking any action to accelerate any rights or benefits due under) any enterprise bargaining agreement, Australian workplace agreement, employee benefit plan or superannuation scheme of Aston or relating to the Officers or employees of any member of the Aston Group; or
- any member of the Aston Group making any change in its accounting methods, principles or practices which would materially affect the reported consolidated assets, liabilities or results of operations of any member of the Aston Group, other than as required to comply with any changes to generally accepted accounting principles, standards, guidelines or practices in the jurisdiction of the relevant entity's incorporation.

Competing Proposal

Means any expression of interest, proposal, offer, transaction or arrangement (other than any transaction that may be made and implemented in accordance with the Scheme Implementation Agreement) by or with any person pursuant to which a Third Party will, if the expression of interest, proposal, offer, transaction or arrangement is entered into or completed substantially in accordance with its terms:

- acquire an interest (including an economic interest by way of an equity swap or any similar transaction or arrangement) in, or a Relevant Interest in, or become the holder of, 50% or more of the shares in Aston;
- directly or indirectly acquire, obtain a right to acquire, or otherwise obtain an economic interest in, all or a substantial part of the assets or business of Aston or the Aston Group including assets with an aggregate book value representing 50% or more of the total assets of the Aston Group as set out in Aston's consolidated balance sheet as at 30 June 2011;

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- otherwise acquire control (as that term is defined in the Corporations Act) of Aston or the Aston Group; or
- otherwise directly or indirectly acquire, merge or amalgamate with, or acquire a significant shareholding or economic interest in, Aston or the Aston Group or in all or a substantial part of their respective assets or business, whether by way of takeover offer, scheme of arrangement, shareholder approved acquisition, capital reduction, share buy-back or repurchase, sale or purchase of assets, joint venture, reverse takeover, dual-listed company structure, recapitalisation, establishment of a new holding company for the Aston Group or other synthetic merger or any other transaction or arrangement,

but does not include the proposed transaction with J-Power Australia Pty Ltd, as described in this Scheme Booklet dated on or about the date of the Scheme Implementation Agreement provided by Aston to Whitehaven (or a transaction on materially the same terms with ITOCHU or a Third Party).

Insolvency Event

Any of the following:

- a person is or states that the person is unable to pay from the person's own money all the person's debts as and when they become due and payable;
- a person is taken or must be presumed to be insolvent or unable to pay the person's debts under any applicable legislation;
- an application or order is made for the winding up or dissolution or a resolution is passed or any steps are taken to pass a resolution for the winding up or dissolution of a corporation;
- an administrator, provisional liquidator, liquidator or person having a similar or analogous function under the laws of any relevant jurisdiction is appointed in respect of a corporation or any action is taken to appoint any such person and the action is not stayed, withdrawn or dismissed within seven days;
- a controller (as that term is defined in the Corporations Act) is appointed in respect of any property of a corporation;
- a corporation is deregistered under the Corporations Act or notice of its proposed deregistration is given to the corporation;
- a distress, attachment or execution is levied or becomes enforceable against any property of a person;
- a person enters into or takes any action to enter into an arrangement (including a scheme of arrangement or deed of company arrangement), composition or compromise with, or assignment for the benefit of, all or any class of the person's creditors or members or a moratorium involving any of them; or
- anything analogous to or of a similar effect to anything described above under the law of any relevant jurisdiction occurs in respect of a person.

Whitehaven Disclosure Material

All written information in connection with the acquisition by Whitehaven of all Aston Shares or relating to the Whitehaven Group's past, present or future operations, affairs, business and/or strategic plans, which has been provided to Aston or its Representatives:

- via Whitehaven's electronic and physical data room on or prior to 9 December 2011;
- via the written Q&A process associated with that data room on or prior to 9 December 2011; or
- in the disclosure letter provided by Whitehaven to Aston on or about the date of the Scheme Implementation Agreement.

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Whitehaven Material Adverse Change

A matter, event or circumstance that occurs, is announced or becomes known to Whitehaven (whether or not it becomes public) where that matter, event or circumstance has, has had, or could reasonably be expected to have, individually or when aggregated with all such matters, events or circumstances, the result that:

- there is or would be reasonably likely to be a material adverse effect on the assets, liabilities, business, results, operations, trading or financial position or material licenses of the Whitehaven Group; or
- the Whitehaven Group is unable to carry on its business in substantially the same manner as carried on as at the date of the Scheme Implementation Agreement, or which otherwise materially and adversely affects the prospects of the Whitehaven Group,

other than an event, occurrence or matter:

- which is expressly contemplated by the Scheme Implementation Agreement or the Scheme (including the payment by Whitehaven of the Special Dividend);
- which is expressly contemplated by the Boardwalk Transaction Documents;
- which is, and to the extent that it is, fairly disclosed in the Whitehaven Disclosure Material;
- which relates to interest rates, coal or other commodity prices or currency exchange rates; or
- which is, and to the extent that it is, a consequence of losses covered by insurance which Whitehaven's insurers have agreed to pay.

Whitehaven Material Transaction

Other than:

- as expressly contemplated by the Scheme Implementation Agreement or the Scheme;
- to the extent that it is fairly disclosed in the disclosure letter provided by Whitehaven to Aston on or about the date of the Scheme Implementation Agreement;
- as expressly contemplated by the Boardwalk Transaction Documents; or
- with the express consent of Aston,

A Whitehaven Material Transaction is the occurrence of any of the following:

- Whitehaven or any of its Subsidiaries issues, or agrees to issue, or grants an option to subscribe for, debentures (as defined in section 9 of the Corporations Act), other than to a Wholly-Owned Subsidiary of Whitehaven;
- Whitehaven or any Subsidiary of Whitehaven makes any change to its constitution or other constituent documents;
- Whitehaven or any Subsidiary of Whitehaven disposes, or agrees to dispose, of shares in a Related Body Corporate of Whitehaven;
- the Whitehaven Group changes in any material respect the nature of its business;
- Whitehaven or any Subsidiary of Whitehaven incurs any financial indebtedness or issues any indebtedness or debt securities other than in the ordinary course of business or pursuant to advances under Whitehaven's existing debt facilities as at 9 December 2011;
- Whitehaven or any Subsidiary of Whitehaven makes any loans, advances or capital contributions to, or investments in, any other person, other than to or in Whitehaven or any Wholly-Owned Subsidiary of Whitehaven or in the ordinary course of business;
- Whitehaven or any Subsidiary of Whitehaven:
  - grants to any Officer of Whitehaven or any Subsidiary of Whitehaven any increase in severance or termination pay or superannuation entitlements; or
  - makes or agrees to make any material change to the terms of, or waives any claims or rights under, or waives the benefit of any provisions of, any contract of employment with any senior executive of Whitehaven or of any Subsidiary of Whitehaven;

- Whitehaven or any of its material Subsidiaries ceases, or threatens to cease, to carry on business;
- Whitehaven or any of its material Subsidiaries becomes subject to an Insolvency Event or is deregistered as a company or otherwise dissolved;
- Whitehaven or any of its material Subsidiaries is or becomes unable to pay its debts when they fall due;
- Whitehaven or any of its material Subsidiaries disposes, or agrees to dispose, of any asset (including an exploration licence) other than where the total amount involved in the relevant transactions in the period until the Second Court Date is less than A$20 million;
- Whitehaven or any of its material Subsidiaries acquires, or agrees to acquire, any asset (including an exploration licence) other than:
  - in the ordinary course of business; or
  - where the amount involved in the relevant transactions in total in the period until the Second Court Date is less than A$20 million;
- Whitehaven converting all or any of its shares into a larger or smaller number of shares;
- any member of the Whitehaven Group resolving to reduce, or reducing, its share capital in any way, or reclassifying, redeeming, combining, splitting or repurchasing directly or indirectly any of its shares;
- any member of the Whitehaven Group resolving to buy back, or buying back, any of its shares, including by:
  - entering into a buy-back agreement; or
  - resolving to approve the terms of a buy-back agreement under the Corporations Act;
- any member of the Whitehaven Group issuing shares, or granting an option over its shares, or agreeing to make such an issue or grant such an option, other than:
  - to a Wholly-Owned Subsidiary of Whitehaven; or
  - an issue of Whitehaven Shares following the valid exercise of any Whitehaven options or performance rights on issue at 9 December 2011;
- any member of the Whitehaven Group issuing, or agreeing to issue, securities convertible into shares or debt securities (including any performance rights or options);
- any member of the Whitehaven Group making, in aggregate, capital expenditure in excess of A$20 million;
- any member of the Whitehaven Group:
  - acquiring, leasing or disposing of;
  - agreeing to acquire, lease or dispose of; or
  - offering, proposing or announcing a bid or tenders for,

  any material business, assets (other than trading inventories and consumables in the ordinary and usual course of business) or entity with a value greater than A$20 million, or enters into joint venture, partnership or similar arrangement;
- other than in the ordinary course of business or for the purposes of payment of the Whitehaven corporate costs, any member of the Whitehaven Group:
  - entering into any contracts or commitments either individually or collectively involving revenue or expenditure of more than A$20 million over the term of the contract or commitment;
  - terminating or amending in a material manner any contracts of the Whitehaven Group's business which either individually or collectively involve expenditure or revenue of more than A$20 million over the term of the contract;
  - paying, discharging or satisfying any claims, liabilities or obligations under any contracts or commitments involving revenue or expenditure of more than A$20 million other than the payment, discharge or satisfaction consistent with past practice and in accordance with its terms; or
  - waiving any material claims or rights under, or waiving the benefit of any provision of, any contracts or commitments involving revenue or expenditure of more than A$20 million;

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- any member of the Whitehaven Group entering into a contract or commitment restraining it from competing with any person or conducting activities in any market;
- except as provided for in an existing employment contract in place at 9 December 2011, a copy of which has been included in the Whitehaven Disclosure Material, any member of the Whitehaven Group:
  - paying any bonus to, or increasing the compensation of, any Officer of any member of the Whitehaven Group;
  - accelerating the rights of any Officer of any member of the Whitehaven Group to compensation or benefits of any kind (including under any Whitehaven executive or employee share plan);
  - granting to any Officer of any member of the Whitehaven Group any increase in severance or termination pay or superannuation entitlements or by issuing any Whitehaven Shares or securities convertible to Whitehaven Shares to any of those persons; or
  - establishing, adopting, entering into or amending in any material respect (including by taking any action to accelerate any rights or benefits due under) any enterprise bargaining agreement, Australian workplace agreement, employee benefit plan or superannuation scheme of Whitehaven or relating to the Officers or employees of any member of the Whitehaven Group; or
- any member of the Whitehaven Group making any change in its accounting methods, principles or practices which would materially affect the reported consolidated assets, liabilities or results of operations of any member of the Whitehaven Group, other than as required to comply with any changes to generally accepted accounting principles, standards, guidelines or practices in the jurisdiction of the relevant entity's incorporation.

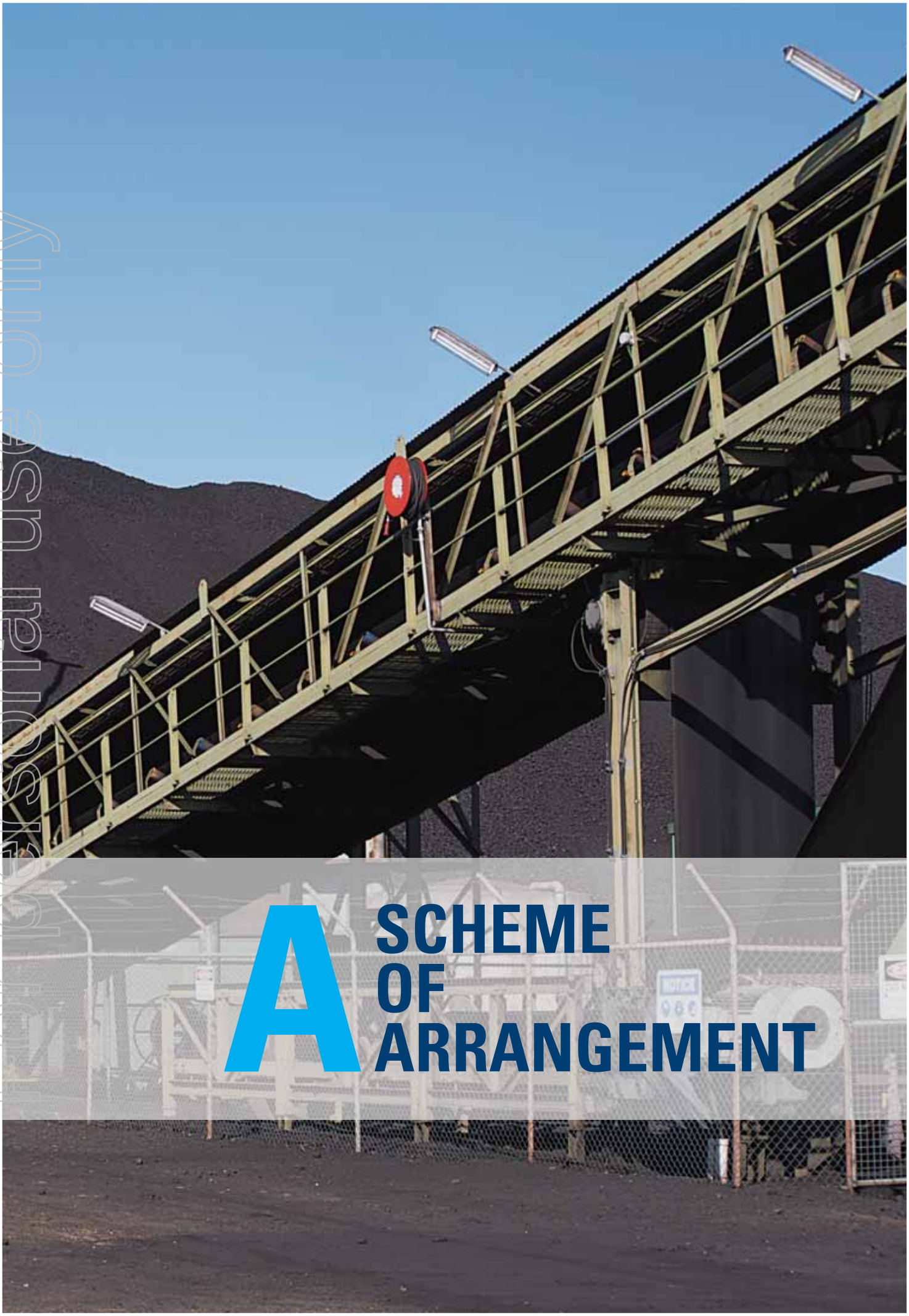
15.3. Interpretation

In this Scheme Booklet:

- other words and phrases have the same meaning (if any) given to them in the Corporations Act;
- words of any gender include all genders;
- words importing the singular include the plural and vice versa;
- an expression importing a person includes any company, partnership, joint venture, association, corporation or other body corporate and vice versa;
- a reference to a Section or Annexure, is a reference to a Section of or Annexure of, this Scheme Booklet as relevant;
- a reference to any legislation includes all delegated legislation made under it and amendments, consolidations, replacements or re-enactments of any of them;
- headings and bold type are for convenience only and do not affect the interpretation of this Scheme Booklet;
- a reference to time is a reference to Brisbane time;
- a reference to dollars, $, A$, AUD, cents, ¢ and currency is a reference to the lawful currency of the Commonwealth of Australia;
- an accounting term is a reference to that term as it is used in accounting standards under the Corporations Act, or, if not inconsistent with those standards, in accounting principles and practices generally accepted in Australia; and
- the words "include", "including", "for example" or "such as" when introducing an example, do not limit the meaning of the words to which the example relates to that example or examples of a similar kind.

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A SCHEME OF ARRANGEMENT

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Freehills

Scheme of arrangement

This scheme of arrangement is made under section 411 of the *Corporations Act 2001* (Cth)

Between the parties

Aston Resources Limited ABN 91 129 361 208 of Level 10, AMP Centre, 10 Eagle Street, Brisbane, Queensland 4000

(**Aston**)

Each person registered as a holder of fully paid ordinary shares in Aston in the Share Register as at the Scheme Record Date (other than the Excluded Shareholders)

(**Scheme Shareholders**)

1 Definitions, interpretation and scheme components

1.1 Definitions

Schedule 1 contains definitions used in this Scheme.

1.2 Interpretation

Schedule 1 contains interpretation rules for this Scheme.

1.3 Scheme components

This Scheme includes any schedule to it.

2 Preliminary matters

(a) Aston is a public company limited by shares, registered in Queensland, Australia and has been admitted to the official list of the ASX. Aston Shares are quoted for trading on the ASX.

(b) As at 8 March 2012, 204,668,861 Aston Shares were on issue.

(c) Whitehaven is a listed public company limited by shares incorporated in New South Wales, Australia. Whitehaven Acquirer is a wholly-owned subsidiary of Whitehaven, registered in New South Wales, Australia.

(d) If this Scheme becomes Effective:

(1) Whitehaven will provide, or procure the provision of, the Scheme Consideration to Scheme Shareholders in accordance with this Scheme and the Deed Poll; and

(2) all the Scheme Shares, and all the rights and entitlements attaching to them as at the Implementation Date, will be transferred to Whitehaven Acquirer and Aston will enter the name of Whitehaven Acquirer in the Share Register in respect of the Scheme Shares.

(e) Aston and Whitehaven have agreed, by executing the Implementation Agreement, to implement this Scheme.

(f) This Scheme attributes actions to Whitehaven and Whitehaven Acquirer but does not itself impose an obligation on them to perform those actions. Whitehaven and Whitehaven Acquirer have agreed, by executing the Deed Poll, to perform the actions attributed to them under this Scheme, including the providing, or procuring the provision of, the Scheme Consideration to the Scheme Shareholders.

3 Conditions

3.1 Conditions precedent

This Scheme is conditional on and will have no force or effect until, the satisfaction of each of the following conditions precedent:

(a) all the conditions in clause 3.1 of the Implementation Agreement (other than the condition in the Implementation Agreement relating to Court approval of this Scheme) having been satisfied or waived in accordance with the terms of the Implementation Agreement;

(b) neither the Implementation Agreement nor the Deed Poll having been terminated in accordance with their terms before 8.00am on the Second Court Date;

(c) approval of this Scheme by the Court under section 411(4)(b) of the Corporations Act, including with any alterations made or required by the Court under section 411(6) of the Corporations Act as are acceptable to Whitehaven and Aston;

(d) such other conditions made or required by the Court under section 411(6) of the Corporations Act in relation to the Scheme as are acceptable to Whitehaven and Aston; and

(e) the orders of the Court made under section 411(4)(b) (and, if applicable, section 411(6)) of the Corporations Act approving the Scheme coming into effect, pursuant to section 411(10) of the Corporations Act on or before the End Date (or any later date Aston and Whitehaven agree in writing).

3.2 Certificate

(a) Aston and Whitehaven will provide to the Court on the Second Court Date a certificate, or such other evidence as the Court requests, confirming (in respect of matters within their knowledge) whether or not all of the conditions precedent in clauses 3.1(a) and 3.1(b) have been satisfied or waived.

(b) The certificate referred to in clause 3.2(a) constitutes conclusive evidence that such conditions precedent are satisfied, waived or taken to be waived.

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4 Implementation of the Scheme

4.1 Lodgement of Court orders with ASIC

Aston 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 5.00pm on the first Business Day after the day on which the Court approves the Scheme.

4.2 Transfer of Scheme Shares

(a) On the Implementation Date:

(1) subject to the provision of the Scheme Consideration in the manner contemplated by clause 5, the Scheme Shares, together with all rights and entitlements attaching to the Scheme Shares as at the Implementation Date, will be transferred to Whitehaven Acquirer, without the need for any further act by any Scheme Shareholder (other than acts performed by Aston as attorney and agent for Scheme Shareholders under clause 8.5), by:

(A) Aston delivering to Whitehaven Acquirer a duly completed Scheme Transfer, executed on behalf of the Scheme Shareholders by Aston, for registration; and

(B) Whitehaven Acquirer duly executing the Scheme Transfer, attending to the stamping of the Scheme Transfer (if required) and delivering it to Aston for registration; and

(2) immediately following receipt of the Scheme Transfer in accordance with clause 4.2(a)(1)(B), Aston must enter, or procure the entry of, the name of Whitehaven Acquirer in the Share Register in respect of all the Scheme Shares transferred to Whitehaven Acquirer in accordance with this Scheme.

(b) For the purposes of rule 7 of the Aston LTIP (and the terms of any grants made under the Aston LTIP), Aston waives any restrictions on dealing or transfer in relation to any Scheme Shares, and consents to the transfer of all Scheme Shares issued upon the exercise of options or vesting of performance rights granted under the Aston LTIP, in accordance with the Scheme.

5 Scheme Consideration

5.1 Provision of Scheme Consideration

Whitehaven must, subject to clauses 5.2, 5.3 and 5.4:

(a) on or before the Implementation Date, provide the Scheme Consideration by issuing the New Whitehaven Shares to which each Scheme Shareholder is entitled under the Scheme and procure that the name and address of each Scheme Shareholder is entered in the Whitehaven Register in respect of those New Whitehaven Shares; and

(b) procure that on or before the date that is five Business Days after the Implementation Date, a share certificate or holding statement (or equivalent document) is sent to the Registered Address of each Scheme Shareholder representing the number of New Whitehaven Shares issued to the Scheme Shareholder pursuant to this Scheme.

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5.2 Joint holders

In the case of Scheme Shares held in joint names:

(a) the New Whitehaven Shares to be issued under this Scheme must be issued to, and registered in the names of, the joint holders;

(b) any cheque required to be sent under this Scheme will be made payable to the joint holders and sent to the holder whose name appears first in the Aston Share Register as at the Scheme Record Date; and

(c) any other document required to be sent under this Scheme, will be forwarded to the holder whose name appears first in the Share Register as at the Scheme Record Date.

5.3 Ineligible Foreign Shareholders

(a) Whitehaven will be under no obligation to issue any New Whitehaven Shares under this Scheme to any Ineligible Foreign Shareholder and instead:

(1) subject to clause 5.4, Whitehaven must, on or before the Implementation Date, issue the New Whitehaven Shares which would otherwise be required to be issued to the Ineligible Foreign Shareholders under this Scheme to the Sale Agent;

(2) Whitehaven must procure that as soon as reasonably practicable after the Implementation Date, the Sale Agent, in consultation with Whitehaven sells or procures the sale of all the New Whitehaven Shares issued to the Sale Agent and remits to Whitehaven the proceeds of the sale (after deduction of any applicable brokerage, stamp duty and other costs, taxes and charges) (**Proceeds**);

(3) promptly after receiving the Proceeds in respect of the sale of all of the New Whitehaven Shares referred to in clause 5.3(a)(1), Whitehaven must pay, or procure the payment, to each Ineligible Foreign Shareholder, of the amount 'A' calculated in accordance with the following formula and rounded down to the nearest cent:

$A = (B \div C) \times D$

where

B = the number of New Whitehaven Shares that would otherwise have been issued to that Ineligible Foreign Shareholder had it not been an Ineligible Foreign Shareholder and which are issued to the Sale Agent;

C = the total number of New Whitehaven Shares which would otherwise have been issued to all Ineligible Foreign Shareholders and which are issued to the Sale Agent; and

D = the Proceeds.

(b) None of Whitehaven or the Sale Agent gives any assurance as to the price that will be achieved for the sale of New Whitehaven Shares described in clause 5.3(a).

(c) Whitehaven must make payments to Ineligible Foreign Shareholders under clause 5.3(a) by either (in the absolute discretion of Whitehaven):

(1) where an Ineligible Foreign Shareholder has, before the Scheme Record Date, made a valid election in accordance with the requirements of the Aston Registry to receive dividend payments from Aston by electronic funds transfer to a bank account nominated by the Ineligible Foreign Shareholder, paying, or procuring the payment of,

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the relevant amount in Australian currency by electronic means in accordance with that election; or

(2) otherwise, whether or not the Ineligible Foreign Shareholder has made an election referred to in clause 5.3(c)(1), dispatching, or procuring the dispatch of, a cheque for the relevant amount in Australian currency to the Ineligible Foreign Shareholder by prepaid post to their Registered Address (as at the Scheme Record Date), such cheque being drawn in the name of the Ineligible Foreign Shareholder (or in the case of joint holders, in accordance with the procedures set out in clause 5.2).

(d) If Whitehaven receives professional advice that any withholding or other tax is required by law to be withheld from a payment to an Ineligible Foreign Shareholder, Whitehaven is entitled to withhold the relevant amount before making the payment to the Ineligible Foreign Shareholder (and payment of the reduced amount shall be taken to be full payment of the relevant amount for the purposes of this Scheme including clause 5.3(a)(3)). Whitehaven must pay any amount so withheld to the relevant taxation authorities within the time permitted by law, and, if requested in writing by the relevant Ineligible Foreign Shareholder, provide a receipt or other appropriate evidence of such payment (or procure the provision of such receipt or other evidence) to the relevant Ineligible Foreign Shareholder.

(e) Each Ineligible Foreign Shareholder appoints Whitehaven as its agent to receive on its behalf any financial services guide or other notices (including any updates of those documents) that the Sale Agent is required to provide to Ineligible Foreign Shareholders under the Corporations Act.

(f) Payment of the amount calculated in accordance with clause 5.3(a) to an Ineligible Foreign Shareholder in accordance with this clause 5.3 satisfies in full the Ineligible Foreign Shareholder's right to Scheme Consideration.

(g) Where the issue of New Whitehaven Shares to which a Scheme Shareholder would otherwise be entitled under this Scheme would result in a breach of law:

(1) Whitehaven will issue the maximum possible number of New Whitehaven Shares to the Scheme Shareholder without giving rise to such a breach; and

(2) any further New Whitehaven Shares to which that Scheme Shareholder is entitled, but the issue of which to the Scheme Shareholder would give rise to such a breach, will instead be issued to the Sale Agent and dealt with under the preceding provisions in this clause 5.3, as if a reference to Ineligible Foreign Shareholders also included that Scheme Shareholder and references to that person's New Whitehaven Shares in that clause were limited to the New Whitehaven Shares issued to the Sale Agent under this clause.

5.4 Fractional entitlements and splitting

(a) Where the calculation of the number of New Whitehaven Shares to be issued to a particular Scheme Shareholder would result in the issue of a fraction of a New Whitehaven Share, the fractional entitlement will be rounded up or down to the nearest whole number of New Whitehaven Shares.

(b) If Whitehaven and Aston agree that several Scheme Shareholders, each of which holds a holding of Aston Shares which results in a fractional entitlement to New Whitehaven Shares have, before the Scheme Record Date, been party to a shareholding splitting or division in an attempt to obtain an advantage by reference to the rounding provided for in the calculation of each Scheme Shareholder's entitlement to the Scheme Consideration, Whitehaven may direct Aston to give written notice to those Scheme Shareholders:

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(1) setting out the names and Registered Addresses of all of them;

(2) stating that opinion; and

(3) attributing to one of them specifically identified in the notice the Aston Shares held by all of them,

and, after the written notice has been so given, the Scheme Shareholder specifically identified in the notice shall, for the purposes of the Scheme, be taken to hold all those Aston Shares and each of the other Scheme Shareholders whose names are set out in the notice shall, for the purposes of the Scheme, be taken to hold no Aston Shares.

5.5 Unclaimed monies

(a) Whitehaven may cancel a cheque issued under this clause 5 if the cheque:

(1) is returned to Whitehaven; or

(2) has not been presented for payment within six months after the date on which the cheque was sent.

(b) During the period of one year commencing on the Implementation Date, on written request from a Scheme Shareholder, Whitehaven must reissue a cheque that was previously cancelled under this clause.

5.6 Orders of a court

If written notice is given to Aston (or the Aston Registry) of an order made by a court of competent jurisdiction that:

(a) requires payment to a third party of a sum in respect of Scheme Shares held by a particular Scheme Shareholder, which would otherwise be payable to that Scheme Shareholder by Whitehaven in accordance with this clause 5, then Aston shall be entitled to procure that Whitehaven make the payment in accordance with that order; or

(b) prevents the making a payment to any particular Scheme Shareholder in accordance with clause 5, or such payment is otherwise prohibited by applicable law, Whitehaven shall be entitled to retain an amount, in Australian dollars, equal to the amount 'A' calculated in accordance with the formula set out in clause 5.3(a)(3) until such time as payment in accordance with this clause 5 is permitted by that order or otherwise by law.

5.7 Status of New Whitehaven Shares

Subject to this Scheme becoming Effective, Whitehaven must:

(a) issue the New Whitehaven Shares required to be issued by it under this Scheme on terms such that each such New Whitehaven Share will rank equally in all respects with each existing Whitehaven Share (except that the New Whitehaven Shares will not entitle their holders to receive the Special Dividend);

(b) ensure that each such New Whitehaven Share is duly and validly issued in accordance with all applicable laws and Whitehaven's constitution, fully paid and free from any mortgage, charge, lien, encumbrance or other security interest (except for any lien arising under Whitehaven's constitution); and

(c) use all reasonable endeavours to ensure that such New Whitehaven Shares are, from the Business Day following the date the Scheme becomes Effective (or such later date as ASX requires), quoted for trading on the ASX initially on a deferred settlement basis and thereafter on an ordinary settlement basis.

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6 Dealings in Aston Shares

6.1 Determination of Scheme Shareholders

To establish the identity of the Scheme Shareholders, dealings in Aston Shares or other alterations to the Share Register 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 as the holder of the relevant Aston Shares on or before the Scheme Record Date; and

(b) in all other cases, registrable transfer or transmission applications in respect of those dealings, or valid requests in respect of other alterations, are received on or before the Scheme Record Date at the place where the Share Register is kept,

and Aston will not accept for registration, nor recognise for any purpose (except a transfer to Whitehaven pursuant to the Scheme and any subsequent transfer by Whitehaven or its successors in title), any transfer or transmission application or other request received after such times, or received prior to such times but not in registrable or actionable form, as appropriate.

6.2 Register

(a) Aston must register registrable transmission applications or transfers of the Scheme Shares in accordance with clause 6.1(b) on or before the Scheme Record Date provided that, for the avoidance of doubt, nothing in this clause 6.2(a) requires Aston to register a transfer that would result in an Aston Shareholder holding a parcel of Aston Shares that is less than a 'marketable parcel' (as defined in the Operating Rules of the ASX).

(b) If the Scheme becomes Effective, a holder of Scheme Shares (and any person claiming through that holder) must not dispose of or purport or agree to dispose of, any Scheme Shares or any interest in them after the Scheme Record Date otherwise than pursuant to this Scheme, and any attempt to do so will have no effect and Aston shall be entitled to disregard any such disposal.

(c) For the purpose of determining entitlements to the Scheme Consideration, Aston must maintain the Share Register in accordance with the provisions of this clause 6.2 until the Scheme Consideration has been paid to the Scheme Shareholders. The Share Register in this form will solely determine entitlements to the Scheme Consideration.

(d) All statements of holding for Aston Shares (other than statements of holding in favour of Whitehaven Acquirer or any Excluded Shareholders) will cease to have effect after the Scheme Record Date as documents of title in respect of those shares and, as from that date, each entry current at that date on the Share Register (other than entries on the Share Register in respect of Whitehaven Acquirer or any Excluded Shareholder) will cease to have effect except as evidence of entitlement to the Scheme Consideration in respect of the Aston Shares relating to that entry.

(e) As soon as possible on or after the Scheme Record Date, and in any event within one Business Day after the Scheme Record Date, Aston will ensure that details of the names, Registered Addresses and holdings of Aston Shares for each Scheme Shareholder as shown in the Share Register are available to Whitehaven in the form Whitehaven reasonably requires.

7 Quotation of Aston Shares

(a) Aston will apply to ASX to suspend trading on the ASX in Aston Shares with effect from the close of trading on the Effective Date.

(b) On a date after the Implementation Date to be determined by Whitehaven, Aston will apply:

(1) for termination of the official quotation of Aston Shares on the ASX; and

(2) to have itself removed from the official list of the ASX.

8 General Scheme provisions

8.1 Consent to amendments to the Scheme

If the Court proposes to approve the Scheme subject to any alterations or conditions:

(a) Aston may by its counsel consent on behalf of all persons concerned to those alterations or conditions to which Whitehaven has consented; and

(b) each Scheme Shareholder agrees to any such alterations or conditions which counsel for Aston has consented to.

8.2 Scheme Shareholders' agreements and warranties

(a) Each Scheme Shareholder:

(1) agrees to the transfer of their Aston Shares together with all rights and entitlements attaching to those Aston Shares in accordance with the Scheme;

(2) agrees to the variation, cancellation or modification of the rights attached to their Aston Shares constituted by or resulting from the Scheme;

(3) agrees to become a shareholder in Whitehaven and to be bound by the constitution of Whitehaven; and

(4) acknowledges that the Scheme binds Aston and all Scheme Shareholders (including those who do not attend the Scheme Meeting or those who do not vote, or vote against the Scheme, at the Scheme Meeting).

(b) Each Scheme Shareholder is taken to have warranted to Aston and Whitehaven Acquirer, and appointed and authorised Aston as its attorney and agent to warrant to Whitehaven Acquirer, that all their Aston Shares (including any 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 interests and interests of third parties of any kind, whether legal or otherwise, and restrictions on transfer of any kind, and that they have full power and capacity to transfer their Aston Shares to Whitehaven Acquirer together with any rights attaching to those shares. Aston undertakes that it will provide such warranty to Whitehaven Acquirer as agent and attorney of each Scheme Shareholder.

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8.3 Title to and rights in Scheme Shares

(a) To the extent permitted by law, the Scheme Shares transferred under the Scheme will be transferred free from all mortgages, charges, liens, encumbrances and interests of third parties of any kind, whether legal or otherwise.

(b) On and from the Effective Date, Whitehaven Acquirer will be beneficially entitled to the Scheme Shares to be transferred to it under the Scheme pending registration by Aston of Whitehaven Acquirer in the Share Register as the holder of the Scheme Shares.

8.4 Appointment of sole proxy

On the Implementation Date, and until Aston registers Whitehaven Acquirer as the holder of all Scheme Shares in the Share Register, each Scheme Shareholder:

(a) is deemed to have appointed Whitehaven Acquirer as attorney and agent (and directed Whitehaven Acquirer in each such capacity) to appoint any director, officer, secretary or agent nominated by Whitehaven Acquirer as its sole proxy and, where applicable or appropriate, corporate representative to attend shareholders' meetings, exercise the votes attaching to the Scheme Shares registered in their name and sign any shareholders' resolution;

(b) no Scheme Shareholder may itself attend or vote at any of those meetings or sign any resolutions, whether in person, by proxy or by corporate representative (other than pursuant to clause 8.4(a));

(c) must take all other actions in the capacity of a registered holder of Scheme Shares as Whitehaven Acquirer reasonably directs; and

(d) acknowledges and agrees that in exercising the powers referred to in clause 8.4(a), Whitehaven Acquirer and any director, officer, secretary or agent nominated by Whitehaven Acquirer under clause 8.4(a) may act in the best interests of Whitehaven Acquirer as the intended registered holder of the Scheme Shares.

8.5 Authority given to Aston

Each Scheme Shareholder, without the need for any further act:

(a) on the Effective Date, irrevocably appoints Aston and each of its directors, officers and secretaries (jointly and each of them severally) as its attorney and agent for the purpose of enforcing the Deed Poll against Whitehaven and Whitehaven Acquirer, and Aston undertakes in favour of each Scheme Shareholder that it will enforce the Deed Poll against Whitehaven and Whitehaven Acquirer on behalf of and as agent and attorney for Scheme Shareholders; and

(b) on the Implementation Date, irrevocably appoints Aston and each of its directors, officers and secretaries (jointly and each of them severally) as its attorney and agent for the purpose of executing any document or doing or taking any other act, necessary, desirable or expedient to give effect to this Scheme and the transactions contemplated by it, including (without limitation) executing the Scheme Transfer,

and Aston accepts each such appointment. Aston as attorney and agent of each Scheme Shareholder, may sub-delegate its functions, authorities or powers under this clause 8.5 to all or any of its directors, officers or employees (jointly, severally or jointly and severally).

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8.6 Instructions and elections

If not prohibited by law (and including where permitted or facilitated by relief granted by a Government Agency), all instructions, notifications or elections by a Scheme Shareholder to Aston binding or deemed binding between the Scheme Shareholder and Aston relating to Aston or Aston Shares (including any email addresses, instructions relating to communications from Aston, whether dividends are to be paid by cheque or into a specific bank account, notices of meetings or other communications from Aston) will be deemed from the Implementation Date (except to the extent determined otherwise by Whitehaven in its sole discretion), by reason of this Scheme, to be made by the Scheme Shareholder to Whitehaven and to be a binding instruction, notification or election to, and accepted by, Whitehaven in respect of the New Whitehaven Shares issued to that Scheme Shareholder until that instruction, notification or election is revoked or amended in writing addressed to Whitehaven at its registry.

8.7 Binding effect of Scheme

This Scheme binds Aston and all of the Scheme Shareholders (including those who did not attend the meeting of Aston Shareholders to vote on this Scheme, did not vote at that meeting, or voted against this Scheme at that meeting) and, to the extent of any inconsistency, overrides the constitution of Aston.

9 General

9.1 Stamp duty

Whitehaven will:

(a) pay all stamp duty and any related fines and penalties in respect of this Scheme and the Deed Poll, the performance of the Deed Poll and each transaction effected by or made under, or in connection with, this Scheme and the Deed Poll; and

(b) indemnify each Scheme Shareholder against any liability arising from failure to comply with clause 9.1(a).

9.2 Consent

Each of the Scheme Shareholders consents to Aston doing all things necessary or incidental to the implementation of this Scheme.

9.3 Notices

(a) If a notice, transfer, transmission application, direction or other communication referred to in this Scheme is sent by post to Aston, it will not be taken to be received in the ordinary course of post or on a date and time other than the date and time (if any) on which it is actually received at Aston registered office or at the office of the Aston Registry.

(b) The accidental omission to give notice of the Scheme Meeting or the non-receipt of such notice by an Aston shareholder will not, unless so ordered by the Court, invalidate the Scheme Meeting or the proceedings of the Scheme Meeting.

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9.4 Governing law

(a) The Scheme is governed by the laws in force in New South Wales, Australia.

(b) The parties irrevocably submit to the non-exclusive jurisdiction of courts exercising jurisdiction in New South Wales and courts of appeal from them in respect of any proceedings arising out of or in connection with this Scheme. The parties irrevocably waive any objection to the venue of any legal process in these courts on the basis that the process has been brought in an inconvenient forum.

9.5 Further action

Aston must do all things and execute all documents necessary to give full effect to this Scheme and the transactions contemplated by it.

9.6 No liability when acting in good faith

Neither Aston nor Whitehaven nor any director, officer or secretary of any of those companies will be liable for anything done or omitted to be done in the performance of this Scheme or the Deed Poll in good faith.

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Schedule 1

Definitions and interpretation

1 Definitions

The meanings of the terms used in this Scheme are set out below.

Term	Meaning
ASIC	the Australian Securities and Investments Commission.
Aston	Aston Resources Limited ABN 91 129 361 208.
Aston LTIP	Aston's Long Term Incentive Plan adopted by Aston on 6 August 2010.
Aston Registry	Computershare Investor Services Pty Ltd.
Aston Share	a fully paid ordinary share in the capital of Aston.
Aston Shareholder	a person who is registered in the Share Register as the holder of an Aston Share.
ASX	ASX Limited ABN 98 008 624 691 and, there the context requires, the financial market that it operates.
Business Day	a day in Sydney that is not a Saturday, Sunday, public holiday or bank holiday and on which banks and ASX are open for trading.
CHESS	the Clearing House Electronic Subregister System operated by ASX Settlement Pty Ltd and ASX Clear Pty Limited.
Corporations Act	the *Corporations Act 2001* (Cth).
Court	the Federal Court of Australia or such other court of competent jurisdiction under the Corporations Act agreed to in writing by Aston and Whitehaven.

Term	Meaning
Deed Poll	the deed poll substantially in the form of Attachment 1 under which Whitehaven and Whitehaven Acquirer each covenants in favour of the Scheme Shareholders to perform its obligations under this Scheme.
Effective	when used in relation to the Scheme, the coming into effect, under section 411(10) of the Corporations Act, of the Court order made under section 411(4)(b) of the Corporations Act in relation to this Scheme.
Effective Date	the date on which this Scheme becomes Effective.
End Date	1 June 2012 or such later date as Whitehaven and Aston agree in writing.
Excluded Shareholder	any Aston Shareholder who is a member of the Whitehaven Group or any Aston Shareholder who holds any Aston Shares on behalf of, or for the benefit of, any member of the Whitehaven Group.
Government Agency	any foreign or Australian government or governmental, semi-governmental, administrative, fiscal or judicial body, department, commission, authority, tribunal, agency or entity, or any minister of the Crown in right of the Commonwealth of Australia or any state, or any other federal, state, provincial, local or other government, whether foreign or Australian.
Implementation Agreement	the scheme implementation agreement dated 11 December 2011 between Aston and Whitehaven relating to the implementation of this Scheme.
Implementation Date	the third Business Day after the Scheme Record Date, or such other day as ordered by the Court or as Aston and Whitehaven agree.
Ineligible Foreign Shareholder	a Scheme Shareholder whose address shown in the Aston Share Register is a place outside Australia and its external territories, New Zealand, the United States of America and Singapore, except where Whitehaven and Aston are reasonably satisfied that the issue of New Whitehaven Shares to Scheme Shareholder in that jurisdiction is neither prohibited by law nor unduly onerous.
New Whitehaven Share	a fully paid ordinary share in the capital of Whitehaven to be issued to Scheme Shareholders under this Scheme.
Proceeds	has the meaning given in clause 5.3(a)(2).

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Term	Meaning
Registered Address	in relation to a Aston Shareholder, the address shown in the Share Register as at the Scheme Record Date.
Sale Agent	the appropriately licensed entity appointed by Whitehaven: a) to which New Whitehaven Shares which would otherwise be issued to Ineligible Foreign Shareholders will be issued; and b) which will sell or procure the sale of those New Whitehaven Shares, in accordance with clause 5.3(a) of this Scheme.
Scheme	this scheme of arrangement subject to any alterations or conditions made or required by the Court under section 411(6) of the Corporations Act and agreed to by Aston and Whitehaven.
Scheme Consideration	for each Aston Share held by a Scheme Shareholder as at the Scheme Record Date, an amount of 1.89 New Whitehaven Shares, subject to the terms of this Scheme.
Scheme Record Date	7.00pm on the fifth Business Day after the Effective Date.
Scheme Shares	all Aston Shares held by the Scheme Shareholders as at the Scheme Record Date.
Scheme Shareholder	a holder of Aston Shares recorded in the Share Register as at the Scheme Record Date (other than an Excluded Shareholder).
Scheme Transfer	a duly completed and executed proper instrument of transfer in respect of the Scheme Shares for the purposes of section 1071B of the Corporations Act, in favour of Whitehaven Acquirer, which may be a master transfer of all or part of the Scheme Shares.
Second Court Date	the first day on which an application made to the Court for an order under section 411(4)(b) of the Corporations Act approving the Scheme is heard.
subsidiary	has the meaning given in Division 6 of Part 1.2 of the Corporations Act.
Share Register	the register of members of Aston maintained in accordance with the Corporations Act.

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Term	Meaning
Special Dividend	the proposed dividend of $0.50 for each fully paid ordinary share in the capital of Whitehaven immediately prior to the Scheme Record Date.
Whitehaven	Whitehaven Coal Limited ABN 68 124 425 396 of Level 28, 259 George Street, Sydney, New South Wales 2000.
Whitehaven Acquirer	Whitehaven Coal Holdings Pty Ltd ACN 124 452 571 or such other wholly owned subsidiary of Whitehaven nominated by Whitehaven pursuant to clause 4.4 of the Implementation Agreement.
Whitehaven Group	Whitehaven and each of its subsidiaries and a reference to a "Whitehaven Group Member" or a "member of the Whitehaven Group" is to Whitehaven and any of its subsidiaries.
Whitehaven Register	the register of shareholders maintained by Whitehaven or its agent.

2 Interpretation

In this Scheme:

(a) headings and bold type are for convenience only and do not affect the interpretation of this Scheme;

(b) the singular includes the plural and the plural includes the singular;

(c) words of any gender include all genders;

(d) other parts of speech and grammatical forms of a word or phrase defined in this Scheme have a corresponding meaning;

(e) a reference to a person includes any company, partnership, joint venture, association, corporation or other body corporate and any Government Agency as well as an individual;

(f) a reference to a clause, party, part, schedule, attachment or exhibit is a reference to a clause or part of, and a party, schedule, attachment or exhibit to, this Scheme;

(g) a reference to any legislation includes all delegated legislation made under it and amendments, consolidations, replacements or re enactments of any of them;

(h) a reference to a document (including this Scheme) includes all amendments or supplements to, or replacements or novations of, that document;

(i) a reference to '$', 'A$' or 'dollar' is to Australian currency unless denominated otherwise;

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B DEED POLL

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Deed poll

Date

This deed poll is made

By	**Whitehaven Coal Limited** ABN 68 124 425 396 of Level 28, 259 George Street, Sydney, New South Wales 2000 **(Whitehaven)** and **Whitehaven Coal Holdings Pty Ltd** ACN 124 452 571 of Level 28, 259 George Street, Sydney, New South Wales 2000 (**Whitehaven Acquirer**)
in favour of	each person registered as a holder of fully paid ordinary shares in Aston in the Aston Share Register as at the Record Date (other than the Excluded Shareholders).
Recitals	1 Aston and Whitehaven entered into the Implementation Agreement. 2 In the Implementation Agreement, Whitehaven agreed to enter into this deed poll and to procure that Whitehaven Acquirer enter into this deed poll. 3 Whitehaven and Whitehaven Acquirer are entering into this deed poll for the purpose of covenanting in favour of the Scheme Shareholders to perform their obligations under the Implementation Agreement and the Scheme.

This deed poll provides as follows:

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1 Definitions and interpretation

1.1 Definitions

(a) The meanings of the terms used in this deed poll are set out below.

Term	Meaning
Implementation Agreement	the scheme implementation agreement entered into between Aston and Whitehaven dated 11 December 2011.
Scheme	the proposed scheme of arrangement under Part 5.1 of the Corporations Act between Aston and the Scheme Shareholders, the form of which is set out in Attachment 1.

(b) Unless the context otherwise requires, terms defined in the Scheme have the same meaning when used in this deed poll.

1.2 Interpretation

Section 2 of Schedule 1 of the Scheme applies to the interpretation of this deed poll, except that references to 'this Scheme' are to be read as references to 'this deed poll'.

1.3 Nature of deed poll

Whitehaven and Whitehaven Acquirer acknowledge that:

(a) this deed poll may be relied on and enforced by any Scheme Shareholder in accordance with its terms even though the Scheme Shareholders are not party to it; and

(b) under the Scheme, each Scheme Shareholder irrevocably appoints Aston and each of its directors and officers (jointly and severally) as its agent and attorney to enforce this deed poll against Whitehaven and Whitehaven Acquirer.

2 Conditions to obligations

2.1 Conditions

The obligations of Whitehaven and Whitehaven Acquirer under this deed poll are subject to the Scheme becoming Effective.

2.2 Termination

The obligations of Whitehaven and Whitehaven Acquirer under this deed poll to the Scheme Shareholders will automatically terminate and the terms of this deed poll will be of no force or effect if:

(a) the Implementation Agreement is terminated in accordance with its terms; or

(b) the Scheme is not Effective by the End Date.

2.3 Consequences of termination

If this deed poll is terminated under clause 2.2, in addition and without prejudice to any other rights, powers or remedies available to it:

(a) Whitehaven and Whitehaven Acquirer are released from their obligations to further perform this deed poll except those obligations under clause 5; and

(b) each Scheme Shareholder retains the rights they have against Whitehaven and Whitehaven Acquirer in respect of any breach of this deed poll which occurred before it was terminated.

3 Scheme obligations

3.1 Undertaking to issue Scheme Consideration

Subject to clause 2, each of Whitehaven and Whitehaven Acquirer undertakes in favour of each Scheme Shareholder to:

(a) provide or procure the provision of the Scheme Consideration to each Scheme Shareholder in accordance with the terms of the Scheme; and

(b) undertake all other actions attributed to it under the Scheme,

subject to, and in accordance with, the provisions of the Scheme.

3.2 Shares to rank equally

Whitehaven covenants in favour of each Scheme Shareholder that the New Whitehaven Shares which are issued to each Scheme Shareholder in accordance with the Scheme will:

(a) rank equally with all existing Whitehaven Shares (except that the New Whitehaven Shares will not entitle their holders to receive the Special Dividend); and

(b) be issued fully paid and free from any mortgage, charge, lien, encumbrance or other security interest (except for any lien arising under the constitution of Aston).

4 Warranties

Whitehaven and Whitehaven Acquirer jointly and severally represent and warrant that:

(a) each is a corporation validly existing under the laws of its place of registration;

(b) each has the corporate power to enter into and perform its obligations under this deed poll and to carry out the transactions contemplated by this deed poll;

(c) each has taken all necessary corporate action to authorise its entry into this deed poll and has taken or will take all necessary corporate action to authorise the performance of this deed poll and to carry out the transactions contemplated by this deed poll;

(d) this deed poll is valid and binding on each of them and enforceable against each in accordance with its terms; and

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(e) this deed poll does not conflict with, or result in the breach of or default under, any provision of the constitution of Whitehaven or Whitehaven Acquirer, or any writ, order or injunction, judgment, law, rule or regulation to which either is a party or subject or by which either is bound.

5 Continuing obligations

This deed poll is irrevocable and, subject to clause 2, remains in full force and effect until:

(a) Whitehaven and Whitehaven Acquirer have fully performed their obligations under this deed poll; or

(b) the earlier termination of this deed poll under clause 2.

6 Notices

6.1 Form of Notice

A notice or other communication in respect of this deed poll (**Notice**) must be:

(a) in writing and in English and signed by or on behalf of the sending party; and

(b) addressed to Whitehaven and Whitehaven Acquirer in accordance with the details set out below (or any alternative details nominated by Whitehaven or Whitehaven Acquirer by Notice).

Attention	Company Secretary
Address	Level 28, 259 George Street Sydney NSW 2000
Fax no	+61 2 8507 9701

Copy to:

Attention	Andrew Lumsden
Address	Corrs Chambers Westgarth GPO Box 9925 Sydney NSW 2001
Fax no	+61 2 9210 6611

6.2 How Notice must be given and when Notice is received

(a) A Notice must be given by one of the methods set out in the table below.

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(b) A Notice is regarded as given and received at the time set out in the table below.

However, if this means the Notice would be regarded as given and received outside the period between 9.00am and 5.00pm (addressee's time) on a Business Day (**business hours period**), then the Notice will instead be regarded as given and received at the start of the following business hours period.

Method of giving Notice	When Notice is regarded as given and received
By hand to the nominated address	When delivered to the nominated address
By pre-paid post to the nominated address	At 9.00am (addressee's time) on the second Business Day after the date of posting
By fax to the nominated fax number	At the time indicated by the sending party's transmission equipment as the time that the fax was sent in its entirety. However, if the recipient party informs the sending party within 4 hours after that time that the fax transmission was illegible or incomplete, then the Notice will not be regarded as given or received. When calculating this 4 hour period, only time within a business hours period is to be included.

6.3 Notice must not be given by email or other electronic communication

A Notice must not be given by email or other electronic means of communication (other than fax as permitted in clause 6.2).

7 General

7.1 Stamp duty

Whitehaven and Whitehaven Acquirer:

(a) will pay all stamp duty and any related fines and penalties in respect of the Scheme and this deed poll, the performance of this deed poll and each transaction effected by or made under the Scheme and this deed poll; and

(b) indemnify each Scheme Shareholder against any liability arising from failure to comply with clause 7.1(a).

7.2 Governing law and jurisdiction

(a) This deed poll is governed by the law in force in New South Wales, Australia.

(b) Whitehaven and Whitehaven Acquirer irrevocably submits to the non-exclusive jurisdiction of courts exercising jurisdiction in New South Wales and courts of appeal from them in respect of any proceedings arising out of or in connection with this deed poll. Whitehaven and Whitehaven Acquirer irrevocably waive any objection to the venue of

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any legal process in these courts on the basis that the process has been brought in an inconvenient forum.

7.3 Waiver

(a) Whitehaven and Whitehaven Acquirer 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 Whitehaven or Whitehaven Acquirer as a waiver of any right unless the waiver is in writing and signed by the Whitehaven or Whitehaven Acquirer, as appropriate.

(c) The meanings of the terms used in this clause 7.3 are set out below.

Term	Meaning
conduct	includes delay in the exercise of a right.
right	any right arising under or in connection with this deed and includes the right to rely on this clause.
waiver	includes an election between rights and remedies, and conduct which might otherwise give rise to an estoppel.

7.4 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 Aston; or

(b) if on or after the First Court Date, the variation is agreed to by Aston and the Court indicates that the variation would not of itself preclude approval of the Scheme,

in which event Whitehaven and Whitehaven Acquirer will enter into a further deed poll in favour of the Scheme Shareholders giving effect to the variation.

7.5 Cumulative rights

The rights, powers and remedies of Whitehaven, Whitehaven Acquirer 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.

7.6 Assignment

(a) The rights created by this deed poll are personal to the Whitehaven, Whitehaven Acquirer and each Scheme Shareholder and must not be dealt with at law or in equity without the prior written consent of Whitehaven.

(b) Any purported dealing in contravention of clause 7.6(a) is invalid.

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7.7 Joint and several obligations

Whitehaven and Whitehaven Acquirer are jointly and severally liable for each obligation imposed on both of them by the terms of this deed poll.

7.8 Further action

Whitehaven and Whitehaven Acquirer must, at their own expense, do all things and execute all documents necessary to give full effect to this deed poll and the transactions contemplated by it.

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C NOTICE OF SCHEME MEETING



ANNEXURE C – NOTICE OF SCHEME MEETING

Aston Resources Limited ABN 91 129 361 208

Notice of meeting

Notice is hereby given that, by an order of the Federal Court of Australia pursuant to section 411(1) of the *Corporations Act 2001* (Cth), a meeting of ordinary shareholders of Aston Resources Limited will be held at the The Hilton, Level 8, 190 Elizabeth Street, Brisbane QLD, 4000 on Monday, 16 April 2012 at 10:00am (Brisbane time).

Business of meeting

The purpose of the Scheme Meeting is to consider and, if thought fit, to agree to a Scheme of Arrangement (with or without modification) to be made between Aston and Aston Shareholders.

Resolution

The Scheme Meeting will be asked to consider, and, if thought fit, to pass the following resolution:

"That pursuant to and in accordance with section 411 of the Corporations Act, the Scheme of Arrangement (the terms of which are described in the Scheme Booklet of which the notice convening this meeting forms part) is agreed to (with or without modification as approved by the Federal Court of Australia)."

By order of the board of Aston Resources Limited

Melissa Swain
Company Secretary

Dated Friday, 9 March 2012

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Explanatory notes

Material accompanying this notice

This notice of meeting and the Scheme Resolution should be read in conjunction with the booklet of which this notice forms part (**Scheme Booklet**). Terms used in this notice, unless otherwise defined, have the same meaning as set out in the Glossary in Section 15 of this Scheme Booklet.

A copy of the Scheme of Arrangement is contained in Annexure A to this Scheme Booklet.

A Proxy/Voting Form also accompanies the Scheme Booklet.

Voting

The Aston Directors unanimously recommend that you vote in favour of the Scheme Resolution. The Independent Directors intend to vote any Aston Shares held by them in favour of the Scheme Resolution. However, Mr Nathan Tinkler and Mr Philip Christensen and their respective affiliates have decided that they will not vote any Aston Shares that they control on the Scheme at the Scheme Meeting, because of the benefits that they will receive in the Boardwalk Transaction.

Quorum

A quorum for a meeting of Aston Shareholders is two or more members present at the meeting who are entitled to vote on a resolution at the meeting as at 10:00am (Brisbane time) on Monday, 16 April 2012 (in person, by proxy or representative).

Majorities required

In accordance with section 411(4)(a) of the Corporations Act, for the Scheme of Arrangement to be Effective, the Scheme Resolution must be passed by:

- unless the Court orders otherwise, a majority in number of holders of ordinary shares present and voting (either in person or by direct vote or proxy); and
- at least 75% of the votes cast on the resolution.

Court approval

In accordance with section 411(4)(b) of the Corporations Act, to become Effective, the Scheme of Arrangement must be approved by the order of the Court. If the Scheme Resolution set out in this notice is agreed to by the required majorities set out above and the Conditions Precedent set out in the Scheme of Arrangement are satisfied or waived, Aston will apply to the Court for the necessary orders to give effect to the Scheme of Arrangement.

Determination of entitlement to attend and vote

The Court has ordered that, for the purposes of the Scheme Meeting, Aston Shares will be taken to be held by the persons who are registered as members at 10:00am (Brisbane time) on Saturday, 14 April 2012. Accordingly, registrable transmission applications to transfers registered after this time will be disregarded in determining entitlements to vote at the Scheme Meeting.

How to vote

If you are an Aston Shareholder entitled to attend and vote at the Scheme Meeting, you may vote by:

- attending the Scheme Meeting in person;
- direct vote prior to the Scheme Meeting;
- appointing an attorney to vote on your behalf;
- appointing a proxy to attend on your behalf; or
- in the case of a corporation which is an Aston Shareholder, by appointing an authorised corporate representative to attend on its behalf.

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Voting at the Scheme Meeting will occur by poll

All persons attending the Scheme Meeting are asked to arrive at least 30 minutes prior to the time the Scheme Meeting is to commence, so that either their shareholding may be checked against the Register, their power of attorney or appointment as corporate representative can be verified (as the case may be), and their attendance noted.

Jointly held securities

If the Aston Shares are jointly held, each of the joint shareholders is entitled to vote. However, if more than one shareholder votes in respect of jointly held Aston Shares, only the vote of the shareholder whose name appears first on the Register will be counted.

Voting in person

To vote in person at the Scheme Meeting, you must attend the Scheme Meeting to be held at The Hilton, Level 8, 190 Elizabeth Street, Brisbane QLD, 4000 on Monday, 16 April 2012. The meeting will commence at 10:00am (Brisbane time).

An Aston Shareholder who wishes to attend and vote at the Scheme Meeting in person will be admitted to the Scheme Meeting and given a voting card on disclosure at the point of entry to the meeting of their name and address.

Direct vote

To lodge a direct vote you must complete the enclosed Proxy/Voting Form in accordance with the instructions and return it in the reply paid envelope enclosed or by facsimile.

You may also lodge a direct vote online by visiting www.astonresources.com and following the online instructions. You will need your shareholder registration details.

Voting by proxy

An Aston Shareholder entitled to attend and vote at the meeting is also entitled to appoint a proxy to vote on their behalf. The Proxy/Voting Form is enclosed with this Scheme Booklet. You may appoint not more than two proxies to attend and act for you at the Scheme Meeting. A proxy need not be an Aston Shareholder. If two proxies are appointed, each proxy may be appointed to represent a specified number or proportion of your votes. If no such number or proportion is specified, each proxy may exercise half of your votes.

If you do not instruct your proxy on how to vote, your proxy may vote as he or she sees fit at the Scheme Meeting.

A proxy will be admitted to the Scheme Meeting and given a voting card on providing at the point of entry to the Scheme Meeting written evidence of their name and address.

The sending of a Proxy/Voting Form will not preclude an Aston Shareholder from attending in person and voting at the Scheme Meeting if the Aston Shareholder is entitled to attend and vote.

Please refer to the enclosed Proxy/Voting Form for instructions on completion and lodgement. Please note that Proxy/Voting Forms must be received by the Aston Registry by no later than 10:00am (Brisbane time) on Saturday, 14 April 2012.

You may also appoint a proxy online by visiting www.astonresources.com and following the online instructions. You will need your shareholder registration details.

Voting by attorney

Powers of attorney must be received by the Aston Registry, at the registered office of the Aston Registry, by no later than 10:00am (Brisbane time) on Saturday, 14 April 2012 (or if the meeting is adjourned, at least 48 hours before the resumption of the meeting in relation to the resumed part of the Scheme Meeting).

An attorney will be admitted to the Scheme Meeting and given a voting card on providing at the point of entry of the Scheme Meeting written evidence of their appointment, their name and address and the identity of their appointer.

The sending of a power of attorney will not preclude an Aston Shareholder from attending in person and voting at the Scheme Meeting if the Aston Shareholder is entitled to attend and vote.

Voting by corporate representative

To vote at the Scheme Meeting (other than by direct vote, proxy or by attorney), a corporation that is an Aston Shareholder must appoint a person to act as its representative. The appointment must comply with section 250D of the Corporations Act.

An authorised corporate representative will be admitted to the Scheme Meeting and given a voting card on providing at the point of entry to the Scheme Meeting written evidence of their appointment including any authority under which it is signed, their name and address and the identity of their appointer.

Lodgement of proxies and queries

Proxy/Voting Forms, powers of attorney and authorities should be:

- sent to the Aston Registry using the enclosed reply paid envelope, or if you are outside of Australia or do not use the reply paid envelope to Computershare Investor Services Pty Limited, GPO Box 242, Melbourne, Victoria 3001;
- successfully transmitted by facsimile to Computershare on 1800 783 447 (within Australia) or +61 (3) 9473 2555 (outside Australia); or
- lodged online: Shareholders/Employees: www.investorvote.com.au

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CORPORATE DIRECTORY

Board of Directors

Nathan Tinkler (Non-Executive Chairman)

Mark Vaile (Independent Non-Executive Deputy Chairman)

David Ryan AO (Independent Director)

Philip Christensen (Non-Executive Director)

Rick Gazzard (Independent Director)

Company Secretary and General Counsel

Melissa Swain

Registered Office

AMP Place
10 Eagle Street
Brisbane QLD 4000

Telephone: +61 7 3235 6600
Facsimile: +61 7 3235 6699

Postal Address

GPO Box 145
Brisbane QLD 4001

Contact Details for Scheme Enquiries

Phone: 1300 554 275 (in Australia)
Phone: +61 3 9415 4350 (if overseas)
9:00am to 5:00pm (AEST)

Web Address

www.astonresources.com

Financial Advisers

Credit Suisse (Australia) Limited
The Gateway Building
1 Macquarie Place
Sydney NSW 2000

UBS AG, Australia Branch
Chifley Tower
2 Chifley Square
Sydney NSW 2000

Legal Adviser

Freehills
MLC Centre
19-29 Martin Place
Sydney NSW 2000

Independent Expert

PricewaterhouseCoopers Securities Limited
Darling Park Tower 2
201 Sussex Street
Sydney NSW 2000

Independent Technical Expert

Minarco Mine-Consult
Australia Square
264-278 George Street
Sydney NSW 2000

Independent Industry Expert

AME Group
AME House
342 Kent Street
Sydney NSW 2000

Investigating Accountant and Auditor

Ernst & Young
Ernst & Young Centre
680 George Street
Sydney NSW 2000

Tax Adviser

Greenwoods & Freehills
MLC Centre
19-29 Martin Place
Sydney NSW 2000

Share Registry

Computershare Investor Services Pty Limited
117 Victoria Street
West End QLD 4101

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