Post Hearing Information Pack of

Yancoal Australia Ltd

ACN 111 859 119

兗煤澳大利亞有限公司*

(Incorporated in Victoria, Australia with limited liability)

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No offer or invitation will be made to the public in Hong Kong until after a prospectus of the Company has been registered with the Registrar of Companies in Hong Kong in accordance with the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong). If an offer or an invitation is made to the public in Hong Kong in due course, prospective investors are reminded to make their investment decisions solely based on a prospectus of the Company registered with the Registrar of Companies in Hong Kong, copies of which will be distributed to the public during the offer period.

* *For identification purposes only*

IMPORTANT

If you are in any doubt about any of the contents of this prospectus, you should obtain independent professional advice.

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GLOBAL OFFERING

Number of Offer Shares under the Global Offering	**:**	**[REDACTED] Shares (subject to the Over-allotment Option)**
Number of Hong Kong Offer Shares	**:**	**[REDACTED] Shares (subject to reallocation)**
Number of International Offer Shares	**:**	**[REDACTED] Shares (subject to reallocation and the Over-allotment Option)**
Maximum Offer Price	**:**	**HK$[REDACTED] per Offer Share plus brokerage of 1.0%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005% (payable in full on application in Hong Kong dollars and subject to refund)**
Stock Code	**:**	**[REDACTED]**

Joint Sponsors

Morgan Stanley

[REDACTED]

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

A copy of this prospectus, having attached thereto the documents specified in "*Appendix VIII – Documents Delivered to the Registrar of Companies and Available for Inspection*", has been registered by the Registrar of Companies in Hong Kong as required by Section 342C of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong). The Securities and Futures Commission and the Registrar of Companies in Hong Kong take no responsibility as to the contents of this prospectus or any other documents referred to above.

The Offer Price is expected to be determined by agreement between the Joint Global Coordinators (on behalf of the Underwriters) and the Company on the Price Determination Date, which is expected to be on or about [**REDACTED**] and, in any event, not later than [**REDACTED**]. The Offer Price will not be more than HK$[**REDACTED**] per Offer Share and is expected to be not less than HK$[**REDACTED**] per Offer Share, unless otherwise announced.

The Offer Shares have not been and will not be registered under the U.S. Securities Act or any state securities law in the United States and may not be offered, sold, pledged or transferred within the United States, except that Offer Shares may be offered, sold or delivered (a) in the United States solely to QIBs in reliance on Rule 144A or another exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act or (b) outside the United States in offshore transactions in reliance on Regulation S.

Prior to making an investment decision, prospective investors should consider carefully all of the information set out in this prospectus, including the risk factors set out in "*Risk Factors*". The obligations of the Hong Kong Underwriters under the Hong Kong Underwriting Agreement are subject to termination by the Joint Global Coordinators (on behalf of the Underwriters) if certain grounds arise prior to 8:00 a.m. on the Listing Date. Such grounds are set out in "*Underwriting*".

* *For identification purposes only*

IMPORTANT

[**REDACTED**]

[**REDACTED**]

EXPECTED TIMETABLE[(1)]

[**REDACTED**]

EXPECTED TIMETABLE[(1)]

[**REDACTED**]

CONTENTS

IMPORTANT NOTICE TO INVESTORS

You should rely only on the information contained in this prospectus and the Application Forms to make your investment decision. The Hong Kong Public Offering is made solely on the basis of the information contained and the representations made in this prospectus. Neither the Company nor any of the Relevant Persons has authorised anyone to provide you with any information or to make any representation that is different from what is contained in this prospectus. Any information or representation not made in this prospectus must not be relied on by you as having been authorised by the Company or any of the Relevant Persons.

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SUMMARY

This summary is intended to provide you with an overview of the information contained in this prospectus. As it is a summary, it does not contain all the information that may be important to you. You should read the whole prospectus before you decide whether to invest in the Offer Shares. Some of the particular risks of investing in the Offer Shares are set out in "Risk Factors" and you should read that section carefully before you decide to invest in the Offer Shares.

As used in this prospectus, except as otherwise indicated:

- "***The Group***", "***we***" *and* "***our***" *means the Company, its consolidated subsidiaries and the Company's interests in its associates, joint ventures and joint operations.*
- "***Our mines***" *or* "***mines we have ownership interests in and operate***" *means HVO, MTW, Moolarben, Stratford Duralie and Yarrabee, each as defined below.*
- "***100% basis***" *means the aggregate of the resources, reserves, production or sales data, or other amount or measure, without taking into account our effective ownership interest therein.*
- "***Attributable basis***" *means our effective ownership interest in the resources, reserves, production or sales data, or other amount or measure, whether established contractually or otherwise.*

OVERVIEW

Introduction

We are Australia's largest pure-play coal producer based on aggregate Coal Reserves and marketable coal production, and have been listed on the ASX since 2012. Of all Australian coal producers, we rank third on both these aforementioned metrics, behind only Glencore and BHP. Our principal business activity is the production of thermal and metallurgical coal for use in the power generation and steel industries in Asian markets. In contrast to coal companies that are currently listed on the Stock Exchange, all of the coal we produce is sold for export to customers located overseas, whether directly, through overseas traders or through other Australian coal companies. We believe that the export-oriented nature of our business is a key differentiator as it allows us to obtain global and market-determined indexed pricing for most of our coal sales.

We have ownership interests in, and operate, five coal mine complexes across New South Wales and Queensland, and manage five others across New South Wales, Queensland and Western Australia. Our mining interests in New South Wales include the Hunter Valley Operations, which is now operated as an unincorporated joint venture with Glencore ("**HVO**"), the integrated operations of the Mount Thorley and Warkworth open cut mines which are located adjacent to each other ("**MTW**"), the open cut and underground mines comprising the Moolarben coal complex ("**Moolarben**"), and the integrated operations of the Stratford and Duralie mines which are located in proximity to each other ("**Stratford Duralie**"). Our mining interests in Queensland are located in the Bowen basin and include the Yarrabee mine ("**Yarrabee**"), and a near-50% share in the Middlemount mine through an incorporated joint venture with Peabody Energy

("**Middlemount**"). Our mining interests also include the Ashton, Austar and Donaldson mines (the "**Watagan Mines**") in New South Wales, which we manage on behalf of Watagan Mining Company Pty Ltd ("**Watagan**"), our unconsolidated, wholly-owned subsidiary. Additionally, we manage the Cameby Downs and Premier coal mines in Queensland and Western Australia, respectively, on behalf of our Shanghai and Hong Kong listed controlling shareholder, Yanzhou Coal Mining Company Limited ("**Yanzhou**"). We also have shareholding interests in three major Australian coal export terminals.

As at 30 June 2018, the mines we have ownership interests in and operate ("**our mines**"), Middlemount and the Watagan Mines had, in the aggregate, Coal Reserves of 1,710 Mt, Marketable Coal Reserves of 1,218 Mt, and Measured and Indicated Coal Resources of 5,414 Mt (all on a 100% basis). On an attributable basis, we had Coal Reserves of 1,178 Mt, Marketable Coal Reserves of 837 Mt and Measured and Indicated Coal Resources of 3,964 Mt as at that date. In 2017 and the six months ended 30 June 2018, we sold 19.3 Mt and 16.2 Mt of coal products, respectively, and reported revenue from continuing operations of A$2,601 million and A$2,347 million, respectively.

Our mines and operations employ approximately 4,000 people in addition to the contractors and service providers who support our business, and we seek to continue contributing to the economic growth of the regional Australian areas in which we operate.

History and Material Transactions

We have become the largest Australian pure-play coal producer through both organic growth and a series of corporate acquisitions since our incorporation in November 2004.

We acquired the Southland mine (renamed Austar) in December 2004 and Felix Resources (assets of which included interests in the Moolarben, Yarrabee and Ashton mines) in December 2009. We acquired further interests in the Ashton mine in 2011. We listed on the ASX in June 2012, following our merger with Gloucester Coal, assets of which included interests in the Middlemount, Stratford Duralie and Donaldson mines and the Monash exploration project. Since our listing on the ASX, we have acquired the remaining interests in the Ashton mine and further interests in the Moolarben mine.

In 2014, during the global coal market downturn, we made a major strategic commitment to expand mining operations at Moolarben. Development approval for the Moolarben Stage Two expansion project was received in early 2015 and provided for an increase in Run of Mine ("**ROM**") production capacity at the low cost Moolarben complex from 8 Mtpa of open cut production to 21 Mtpa across both open cut (13 Mtpa) and underground operations (8 Mtpa). With efficient project management and careful cost control, we were able to execute the Moolarben expansion ahead of schedule and within budget. With construction now complete at both the open cut and underground operations, Moolarben is one of the ten largest producers of thermal coal in Australia based on 2017 saleable production. We have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben.

In March 2016, we transferred our interests in the Ashton, Austar and Donaldson mines to Watagan as part of a structured financing transaction, further details of which are set forth in "*Business – Our Mining Operations – Watagan Mines – Watagan Agreements*" and "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*".

On 1 September 2017, we completed the acquisition of 100% of the equity interest in C&A from Rio Tinto (the "**C&A Acquisition**"). The consideration for the C&A Acquisition was US$2.69 billion, comprising US$2.45 billion cash payable on completion and US$240 million in future non-contingent royalty payments over five years following completion, and a coal price-linked contingent royalty. On completion, we acquired:

(i) interests in two of Australia's leading tier-one large-scale, long-life and low-cost coal mines located in the Hunter Valley region of New South Wales, including:

(a) a 67.6% interest in HVO; and

(b) an 80.0% interest in the Mount Thorley mine and a 55.6% interest in the Warkworth mine, which are located adjacent to each other and are operationally integrated as MTW; and

(ii) a 36.5% interest in Port Waratah Coal Services ("**PWCS**"), which provides the export infrastructure for the acquired mines.

The C&A Acquisition contributed to a substantial increase in our total assets from A$7,660 million as at 31 December 2016 to A$11,914 million as at 30 June 2018. In addition, we began consolidating the profit and loss accounts of C&A from 1 September 2017, the date of completion of the C&A Acquisition, and our results of operations for 2017 and the six months ended 30 June 2018 reflect the consolidation of C&A's results from 1 September 2017 to 30 June 2018. This contributed to the increase in our total revenue from A$1,238 million in 2016 to A$2,601 million in 2017, and our profit after income tax of A$246 million in 2017 compared to a loss after income tax of A$227 million in 2016. A significant contributor to our profitability in 2017 was other income, consisting of a gain on acquisition of A$177 million in connection with mine assets acquired from C&A and a reversal of impairment of mining tenements of A$100 million for the Moolarben mine, both of which are non-recurring items. Our total revenue increased from A$832 million in the six months ended 30 June 2017 to A$2,347 million in the six months ended 30 June 2018, and we had a loss after income tax of A$14 million and a profit after income tax of A$361 million in the same periods, respectively.

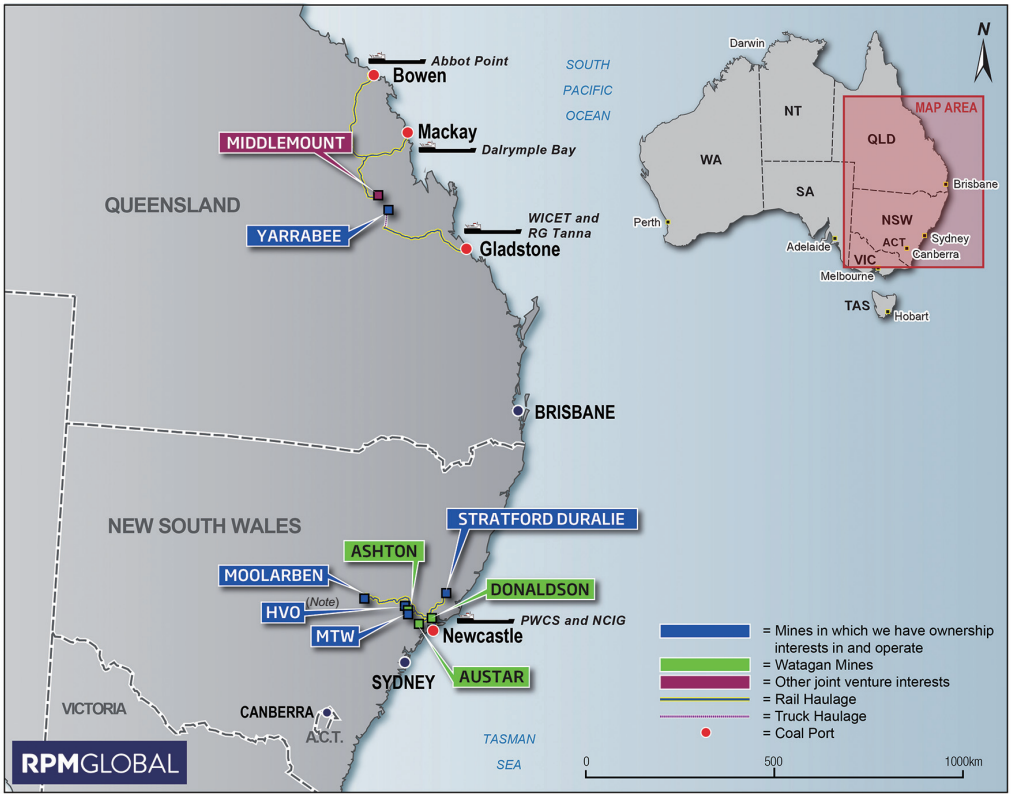
On 7 March 2018, we completed a transaction to acquire an additional 28.9% interest in the unincorporated Warkworth joint venture from MDP for consideration of US$230 million, subject to final post-closing working capital adjustments (the "**Warkworth Transaction**"), which increased our ownership of the Warkworth joint venture from 55.6% to 84.5%.

On 4 May 2018, we completed the sale of a 16.6% interest in the HVO mine to Glencore, reducing our interest in the HVO unincorporated joint venture from 67.6% to 51%, resulting in a 51%:49% unincorporated joint venture between us and Glencore (the "**Glencore Transaction**"). Glencore acquired its 49% interest for consideration of US$1,139 million, of which (i) US$710 million was paid to HVO Resources Pty Ltd ("**HVOR**") for its 32.4% interest in HVO and (ii) US$429 million (with further post-closing adjustments) was paid to us for a 16.6% interest in HVO. As part of this transaction, our effective ownership interest in PWCS was reduced to 30%.

We have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019 (the "**Moolarben Acquisition**"), and adjusted for the economic benefit of the 4% interest from 15 April 2018 that will flow to us. We intend to finance the Moolarben Acquisition with a portion of the expected proceeds from the Global Offering. See "*Future Plans and Use of Proceeds*" for further details. The Moolarben Acquisition will raise our interest in the unincorporated Moolarben JV to 85%.

Locations

The following map shows the location of the coal mines we have ownership interests in and operate, the Middlemount joint venture, the Watagan Mines, and the ports and railway network serving these areas:



Note:

HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through a joint venture management committee ("**JVMC**") and is operated by a manager, HV Operations Pty Ltd ("**HV Ops**"), which is appointed by us and Glencore and reports to the JVMC. See "*Business – Joint Venture Agreements – HVO*" for further details of the joint venture agreement with Glencore.

OUR BUSINESS OPERATIONS

Our principal coal products are thermal coal and metallurgical coal. Thermal coal is primarily used as an energy source in the generation of electricity, as well as in cement manufacturing and other major energy intensive industries which use heat and/or steam in their production processes. As a result, thermal coal demand is strongly driven by electricity generation and is generally sold at prices which reflect demand and quality. Metallurgical coal is also known as coking coal. Hard coking coal ("**HCC**") is essential for the production of a strong coke which is used primarily in the steel making process. Semi-hard coking coal ("**SHCC**") and semi-soft coking coal ("**SSCC**") are lower grades of coking coal that are often blended with HCC to reduce the overall cost of coal for steel production. SSCC can also be used as a substitute for thermal coal. Pulverised coal injection ("**PCI**") coal is generally a high calorific value coal, which is injected directly into a blast furnace to provide the carbon and heat in the iron-making process and can be used as a cost effective replacement for coking coal to some extent. The table below sets forth average coal characteristics of the coal sold by the mines we have ownership interests in and operate, and Middlemount:

Coal type	Region	Calorific value	Ash	Total moisture	Fixed carbon	Sulphur	Phosphorous	Volatile matter (%)	HGI	Free swelling index	Fluidity
		(Kcal/kg)	*(%)*	*(%)*	*(%)*	*(%)*	*(%)*	*(%)*			*(ddpm)*
Low Ash Thermal	Hunter Valley	6,322	⩽15%	10	53	0.55	0.008	31	50	NA	NA
High Ash Thermal	Hunter Valley	<6,322	>15%	10	53	0.55	0.008	31	50	NA	NA
SSCC	Hunter Valley	6,784	9.5	10	52	0.65	0.023	36	50	7	800
PCI	Queensland	6,767	11.5	9	77.8	0.68	0.096	9.2	72	NA	NA
Coking Coal	Queensland	NA	10	10	69.5	0.43	0.039	19	85	6	20

All of the coal we produce is sold for export to customers located in various key markets across the Asia Pacific region, whether directly, through overseas traders or through other Australian coal companies.

Mines we have ownership interests in and operate

Our flagship mines are Moolarben, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW, which are respectively the second, third and fifth largest majority Australian-owned thermal coal mines (meaning mines for which thermal coal comprises at least 50% of saleable production) in terms of aggregate thermal and metallurgical coal production on a 100% basis in the first half of 2018. All of these mines are located in New South Wales, and in the aggregate accounted for approximately 91.6% of total attributable coal we sold from our mines in the six months ended 30 June 2018 on a pro forma basis (as if the C&A Acquisition, the Warkworth Transaction, the Glencore Transaction and the Moolarben Acquisition had been completed on 1 January 2017). All three mining operations are large, with long mine life, and produce coal at relatively low cost that is in the first and second quartiles of the FOB cash cost curve and the first quartile of the FOB cash margin curve. Our other mines in which we have ownership interests and operate include Stratford Duralie located in New South Wales and Yarrabee located in Queensland. See "*Business – Our Mining Operations*" for further details.

Middlemount joint venture

Middlemount is an open cut mine operated by Middlemount JV, an incorporated joint venture in which we have a near 50% interest. We acquired our interest in the joint venture as a result of our merger with Gloucester Coal Ltd in June 2012.

Watagan Mines

Our interests in the Ashton, Austar and Donaldson mines are held under Watagan, which is one of our wholly-owned subsidiaries. On account of certain financing transactions, however, from 31 March 2016 we were determined to have lost accounting control of Watagan and its subsidiaries and ceased to consolidate it, further details of which are set forth in "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*".

Mining ceased at Donaldson's Abel underground mine in June 2016. Donaldson's coal operation was moved to a "care and maintenance" phase and feasibility studies have been commenced to explore potential future mining options including the introduction of a longwall mining method. As at the Latest Practicable Date, Donaldson had not recommenced operations. Moreover, during the Track Record Period, Austar experienced geotechnical issues, safety issues and suspension of longwall production as a result of coal burst incidents, which resulted in investigations and discussions with the Resources Regulator and certain prohibition notices being issued against Austar. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. Further details of geotechnical issues at Austar are set out in "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown", "Appendix III – JORC Coal Reserves – Reserves Comments"* and in *"Business – Health, Safety and Environmental Matters – Safety Incidents*". Furthermore, the open cut project of the Ashton operation (the "**South East Open Cut**") requires that we come to a commercial arrangement with a privately owned property which forms part of the proposed mining area. We have until April 2020 (or April 2022 if extended) to secure such an arrangement. No such arrangement has been agreed to date. We may seek to extend the deadline beyond 2022 to reach agreement with the owner of such property. Given that the South East Open Cut is not included in the Ashton mine's current five-year plan forecasts and Ashton otherwise remains fully operational, we do not expect any material near-term impact on our operations.

The following table sets forth certain information relating to each of the coal mines in which we have ownership interests and operate, the Middlemount joint venture and the Watagan Mines:

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Background data										
Location	NSW	NSW	NSW	NSW	QLD	QLD	NSW	NSW	NSW	–
Date of initial operation	1949	1981	2010	1995	1982	2011	2005	1916	2006	–
Interest at the Latest Practicable Date (%)	51.0	Mount Thorley: 80 Warkworth: 84.5 Share of coal production: 82.9	81	100	100	49.9997	100	100	100	–
Designed annual production capacity (Mt)[4]	20.0	18.5	21.0	4.6	3.5	5.4	5.5	5.0	5.1	88.6
Permitted annual production capacity (Mt)[4]	38.0	28.0	21.0	5.6	4.0	5.7	8.6	3.6	6.1	120.6
Tenement expiry dates[5]	14 Apr 2019 – 19 Apr 2038	23 Feb 2020 – 17 Mar 2038	12 Feb 2020 – 31 Aug 2036	5 Apr 2019 – 8 Apr 2037	13 Nov 2018 – 31 May 2044	30 Apr 2020 – 30 Sep 2031	21 May 2020 – 16 May 2035	7 Dec 2018 – 3 Feb 2039	21 Jul 2019 – 30 Jun 2038	–
Remaining mine life (years)	43	23	20	35	38	20	13	17	11	–
Coal Resources (as at 30 June 2018)[4][12]										
Measured (Mt) (100% basis)	704	MT:27 W:197	OC:438 UG: 287	OC:11 UG: –	94	73	OC:25 UG: 52	70	OC: 10 UG: 178	2,165
Indicated (Mt) (100% basis)	1,430	MT:75 W:713	OC:105 UG: 131	OC:196 UG: 1	80	47	OC:49 UG: 18	80	OC: – UG: 326	3,249
Measured and Indicated (Mt) (100% basis)	2,134	MT:102 W:910	OC: 543 UG: 418	OC:207 UG: 1	174	120	OC:74 UG: 70	150	OC: 10 UG: 503	5,414
Inferred (Mt) (100% basis)	1,654	MT: 153 W: 527	OC: 69 UG: 129	OC:76 UG: 35	20	1	OC:70 UG: 15	69	OC: – UG: 95	2,913
Total (100% basis)	3,788	MT:255 W: 1,437	OC:612 UG: 547	OC:283 UG: 36	194	121	OC:144 UG: 85	219	OC: 10 UG: 598	8,327
Attributable to the Group[7]										5,916

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Coal Reserves (proved and probable, as at 30 June 2018)[6][12]										
Coal Reserves (Mt)										
100% basis	796	MT:8 W:314	OC:189 UG: 67	44	55	87	OC:14 UG: 33	41	62	1,710
Attributable to the Group[7]										1,178
Marketable Coal Reserves (Mt)										
100% basis	554	MT:5 W:220	OC:148 UG: 67	26	42	67	OC:7.8 UG: 18	31	32	1,218
Attributable to the Group[7]										837
Product type	Met/ Thermal	Met/ Thermal	Thermal	Met/ Thermal	Met/ Thermal	Met/ Thermal	Met	Met/ Thermal	Thermal	–

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total
ROM coal production (Mt)[8]										
2015	–	–	9.0	1.9	3.4	5.5	3.0	0.8	1.8	25.4
2016	–	–	12.2	1.2	3.6	5.3	2.4	1.2	0.3	26.2
2017	19.5	17.7	14.7	0.9	3.4	5.3	2.8	2.0	–	66.3
1H2018	9.1	8.5	9.8	0.3	1.3	2.5	1.0	0.4	–	32.9
Marketable coal production (Mt)[8]										
2015	–	–	6.9	1.4	2.8	4.4	1.4	0.7	1.3	18.9
2016	–	–	9.3	0.9	3.1	4.1	1.1	1.1	0.2	19.8
2017	14.8	11.8	12.4	0.7	2.9	3.9	1.2	1.9	–	49.4
1H2018	6.4	6.0	8.8	0.2	1.1	2.1	0.4	0.4	–	25.4
Coal sales volume (Mt)[9]										
2015	–	–	5.6	1.5	3.0	–	1.3	0.6	1.4	13.4
2016	–	–	7.4	0.9	3.2	–	0.4	0.1	0.1	12.1
2017	3.1	2.5	10.2	0.7	2.8	–	–	–	–	19.3
1H2018	3.8	4.5	6.5	0.3	1.1	–	–	–	–	16.2

Notes:

(1) UG refers to underground mining operations and OC refers to open cut mining operations.

(2) HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See "*Business – Joint Venture Agreements – HVO*" for further details of the joint venture agreement with Glencore.

(3) Owned but not controlled by us under the applicable accounting standards. See "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation", "Business – Our Mining Operations – Watagan Mines – Watagan Agreements*" and "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes including permanent shutdown*" for further details.

(4) As defined in the JORC Code and as at 30 June 2018.

(5) See "*Business – Mining and Exploration Licences – Approvals, Permits and Licences to be Obtained*" and "*Appendix III – Competent Person's Report – Appendix F. Tenements*" for further details of the expiry dates of the tenements for each mine site.

(6) As defined in the JORC Code and as at 30 June 2018.

(7) Attributable data is based on our effective ownership interest as at the Latest Practicable Date and is provided on an aggregate, not per mine, basis.

(8) Reported on a 100% basis and subject to the limitations and qualifications set forth in *"Appendix III – Competent Person's Report"*.

(9) Represents ex-mine sales volume reported on an attributable basis and does not include the sales of Middlemount, which is an incorporated joint venture, and Watagan following its deconsolidation from the Group in March 2016.

(10) HVO and MTW were not part of the Group in 2015 and 2016.

(11) Data is subject to rounding, which may result in minor tabulation differences.

(12) The coal resources and reserves stated above must be read in conjunction with the Competent Person's Report in Appendix III to this prospectus which includes disclosures required as per the JORC Code.

Managed Mines

We manage the Cameby Downs and Premier Coal mines, located in Queensland and Western Australia, respectively, on behalf of Yanzhou, our majority shareholder. The management services provided by us include corporate support (comprising human resources, treasury, payroll, insurance, financial accounting, reporting, compliance, management support, technical support, marketing and logistics, corporate communications, government and industry relations, business development, IT services and corporate procurement services), operations management (comprising carrying out exploration programs, preparing business plans, using all reasonable endeavors to meet business KPIs, preparing plans of operations as may be required by laws, and other operational services) and other general services. For the provision of these services, we charge a fee on cost plus 5% margin basis, except for any third party charges attributable to the provision of the management services which will be charged (proportionately) at cost. We will also purchase coal produced by the managed mines for back-to-back on-sale to end customers, with the purchase price being determined with reference to industry index prices and coal quality characteristics.

Production Process and Blending

We utilise large scale open cut mining methods in our open cut mining operations, which include the removal and storage of topsoil material via truck and front-end-loader ("**FEL**") methods, drilling of a blast pattern, blasting of fragment rock, excavation of waste material with truck and shovel or excavator in the upper benches and by draglines in lower benches, and digging, loading and hauling of coal via truck and excavator or FEL methods. Our open cut mines include HVO, MTW, Stratford Duralie, Middlemount and Yarrabee, as well as portions of Moolarben and Ashton.

We utilise longwall mining in our underground mining operations. Longwall mining roadways are cut by continuous miners around the perimeter of a rectangular block or panel of coal to form ventilation and access passageways. Our underground mines include Austar and portions of Moolarben and Ashton.

The products produced by our operations are a mix of premium thermal coal (<15% Ash), semi-soft coking and PCI coals together with mid – high ash thermal coals (15% – 30% Ash). Our premium grade products are typically sold to premium markets where the value of the coal can be reflected by the quality of the product. However, in some circumstances and some markets coal may be blended to satisfy customer requirements. We focus on ensuring that blends satisfy the customers' requirements, but we also pursue blending strategies to optimise our revenue return that would otherwise have been received by selling the products independently. Due to the number of pits, product types and required product specification of our customers, we have the ability to blend ROM coal and washed coal to optimise products and add value.

Infrastructure, Transport and Logistics

Product coal at each of our mines is transferred from loading points within the mines to coal carts (save for Yarrabee in Queensland which is road hauled to the Boonal load out facility on the Blackwater railway system) for transport by rail to PWCS or the Newcastle Coal Infrastructure Group ("**NCIG**") coal terminals in the Port of Newcastle (for HVO, MTW, Moolarben, Ashton, Austar and Donaldson in NSW) or Abbot Point Coal Terminal at the Port of Abbot Point or the Dalrymple Bay Coal Terminal at the Port of Hay Point (for Middlemount in Queensland) or RG Tanna or Wiggins Island Coal Terminals at the Port of Gladstone (for Yarrabee in Queensland). The table below sets forth the allocated capacity and utilisation of our port and rail allocations in 2017:

Infrastructure[(Note)]	Service provider	Capacity allocated to	Contracted capacity in 2017 (Mt)	Utilisation percentage	Excess (Mt)
New South Wales					
Port	PWCS, NGIC	Austar, Ashton, Donaldson, Hunter Valley Operations, Moolarben, Mt Thorley Warkworth, Stratford.	54.56	77%	12.63
Above Rail	Pacific National, Aurizon		42.40	96%	1.50
Below Rail	ARTC		46.13	95%	2.44
Queensland					
Port	RGTanna, WICET, APCT		6.20	92%	0.47
Above Rail	Aurizon, Pacific National	Yarrabee, Middlemount	6.20	94%	0.37
Below Rail	Aurizon Network		6.20	94%	0.37

Note:

The above rail infrastructure consists of locomotives and wagons and the below rail infrastructure consists of train tracks.

Our contracts for port and rail infrastructure are generally under long-term take-or-pay agreements with the relevant operators. See "*Business – Infrastructure, Transportation and Logistics*" for further details.

OUR CUSTOMERS AND SUPPLIERS

Our customers are located throughout the Asia-Pacific region, with South Korea, the PRC, Singapore and Japan comprising our largest jurisdictions by revenue during the Track Record Period. We have established long term relationships with major power utilities and steel mills in these and other countries. During the Track Record Period, we also supplied coal to power and steel mills in India, South America and Europe on an ad hoc basis. See "*Financial Information of the Group – Description of Major Line Items in Our Consolidated Statements of Profit or Loss and Other Comprehensive Income – Revenue*" for a breakdown of our revenue by geographic region. We also sell coal to customers in the commodities trading business, who purchase our coal for trading purposes or to on-sell the coal to their end customers. However, we are reducing our focus on trading customers in favour of end customers such as power utilities and steel mills. For the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, revenue from our five largest customers in aggregate amounted to A$630 million, A$480 million, A$839 million and A$788 million, respectively, representing approximately 47.8%, 38.8%, 32.3% and 33.8% of our revenue, respectively, and revenue from our largest customer in those periods amounted to A$247 million, A$162 million, A$216 million and A$225 million, respectively, representing approximately 19%, 13%, 8% and 9.7% of our revenue, respectively.

Our main supply contracts include those for infrastructure, fuel and electricity, explosives for blasting and critical spare parts from original equipment manufacturer suppliers. We have entered into master supply agreements at the Group level with fuel suppliers for the supply of diesel and lubricants to our mining operations. We contract with blasting services experts for the provision of explosives and related explosive application and blasting services. We also have master supply agreements for the supply of spare parts which support our heavy mining equipment. For the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, our purchases from our five largest suppliers in aggregate amounted to A$333 million, A$353 million, A$508 million and A$326 million, respectively, representing 20.8%, 24.8%, 21.5% and 23.4% of our total purchases for the relevant period, and our purchases from our largest supplier amounted to A$89 million, A$94 million, A$133 million and A$89 million, respectively, representing 5.6%, 6.6%, 5.6% and 6.4% of our total purchases for the relevant period.

MINING AND EXPLORATION LICENCES

Our mining operations in New South Wales are conducted in accordance with the conditions of Mining Leases and Coal Leases granted under the NSW Mining Act, 1992, while exploration activities are undertaken in accordance with Exploration Licences, Authorisations and Assessment Leases, each as issued by the NSW Department of Resources and Energy.

Our mining operations in Queensland are conducted in accordance with the conditions of Mining Leases granted under the *Mineral Resources Act 1989 (QLD)*, while our exploration activities are undertaken in accordance with Exploration Permits for Coal and Mineral Development Licences issued under the *Mineral Resources Act 1989 (QLD)*.

See "*Appendix III – Competent Person's Report – Appendix F. Tenements*" for details on our licences with respect to each mine.

OUR COMPETITIVE STRENGTHS

We believe that the following key strengths provide us with a competitive advantage and position us well to pursue current and future growth opportunities.

- We are Australia's largest pure-play coal producer with a seaborne business focused on major Asian export markets including the PRC.
- We have a diversified portfolio of world class assets that produce high value coal products for our major export markets.
- We have a sustainable platform for future growth.
- Our experienced management team is well positioned to pursue growth opportunities and create further shareholder value.
- We have valuable and strategic operational and trade relationships as well as strong support from our key shareholders.

See "*Business – Our Competitive Strengths*" for further details.

OUR BUSINESS STRATEGIES

We are committed to continuing our strategic growth and to maximising new opportunities to build our business as a leading low cost coal producer in the global seaborne market with a focus on creating long term value for our shareholders. Our management team remains focused on investing in the Australian resources sector, implementing operational efficiencies, reducing costs, exploring new market opportunities and providing our customers with the certainty of product quality and delivery. Key elements of our strategy include the following:

- Evaluate and execute portfolio expansion through value accretive organic and inorganic opportunities.
- Continued focus on operational efficiencies to increase mine productivity and reduce operating costs.
- Grow our business in existing markets and new markets, aided by a dynamic product mix strategy.
- Sustain financial discipline and strengthen our balance sheet to support future growth.
- Maintain high standards of safety and responsible working practices.

See "*Business – Our Business Strategies*" for further details.

KEY RISK FACTORS

Our business is subject to numerous risks and there are uncertainties relating to an investment in the Shares. These risks and uncertainties can be categorised as (i) risks relating to our business and industry and (ii) risks relating to the Global Offering. The following are some of the key risks that affect our business:

- The trading price of our Shares has been volatile and the Minimum Offer Price is higher than the recent trading price of the Shares, which may result in substantial losses for investors subscribing for or purchasing our Shares pursuant to the Global Offering.
- Coal prices are cyclical and subject to fluctuations, and any significant decline in the prices we receive for our coal products would materially and adversely affect our business, financial condition and results of operations.
- Our coal production is subject to conditions and events beyond our control that could result in high expenses and decreased supply.
- Coal markets are highly competitive and are affected by factors beyond our control.
- Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown.
- We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations.
- We derive a significant portion of our revenue from a limited number of customers, and the loss of, or a reduction in, sales to any of these customers could materially and adversely affect our business, financial condition and results of operations.
- Our existing and future indebtedness could restrict our financial and operational flexibility and adversely affect our financial condition.
- We may not be able to meet our capital expenditure requirements or secure additional financing on favourable terms, whether from external sources or our major shareholders, in the future.
- We have had negative reserves and accumulated losses during the Track Record Period, and did not declare or pay any dividends for 2015, 2016 or 2017.
- We operate through a number of joint venture and similar structures, and our operational and financial results will be affected by how these arrangements are managed.
- Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders.
- We are exposed to fluctuations on exchange rates and interest rates.

See "*Risk Factors*" for further details.

OUR CONTROLLING SHAREHOLDERS

As at the Latest Practicable Date, Yankuang Group Company Limited ("**Yankuang**"), our ultimate controlling shareholder, was, directly and indirectly, interested in approximately 51.81% of the shares in Yanzhou, our controlling shareholder, and Yanzhou was interested in approximately 65.45% of the Shares in the Company. Yankuang is principally engaged in the production and sale of coal, coal chemicals and aluminium, power generation, machinery manufacturing and financial investments. Yanzhou is principally engaged in the production of coal and coal chemicals, manufacturing of mechanical and electrical equipment and power and heat generation. Yanzhou has been listed on the Shanghai Stock Exchange and the Hong Kong Stock Exchange since 1998.

Immediately following the completion of the Global Offering, (i) Yanzhou will be interested in approximately [**REDACTED**]% of the Shares in issue (assuming the Over-allotment Option is not exercised), (ii) the Company will remain as a non-wholly owned subsidiary of Yankuang and Yanzhou and (iii) Yankuang and Yanzhou will be the controlling shareholders of the Company.

RECENT DEVELOPMENTS OF OUR BUSINESS SUBSEQUENT TO THE TRACK RECORD PERIOD

Since 30 June 2018,

(i) we have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, for the Moolarben Acquisition. We intend to finance the Moolarben Acquisition with a portion of the expected proceeds from the Global Offering. See "*Future Plans and Use of Proceeds*" for further details; and

(ii) on 20 August 2018, we obtained a US$300 million term debt facility from certain banks which are party to our A$1,000 million bank guarantee facility from a syndicate of seven domestic and international banks. On 23 August 2018, we fully drew down the US$300 million under this facility. We used this amount to repay a portion of the Syndicated Facility, resulting in an outstanding balance on the Syndicated Facility of US$1,650 million. On 17 September 2018 and 17 October 2018, respectively, we further repaid US$150 million of our debt (US$75 million on the Syndicated Facility and US$75 million on our unsecured loans from related parties) and US$100 million of our debt (US$50 million on the Syndicated Facility and US$50 million on our unsecured loans from related parties) using excess cash flows generated from operations.

As far as the Directors are aware, other than as disclosed above, there have not been any material changes in our operations, nor in the general economic and market conditions in the regions or the industries in which we operate that materially and adversely affected our business operations or financial condition since 30 June 2018 and up to the date of this prospectus, and no material changes have occurred since the effective date of the Competent Person's Report.

SUMMARY FINANCIAL AND OPERATING INFORMATION

Summary Consolidated Statements of Profit or Loss and Other Comprehensive Income

	Year ended 31 December						Six months ended 30 June			
	2015		2016		2017		2017		2018	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*
							(unaudited)			
Revenue	1,319	100.0	1,238	100.0	2,601	100.0	832	100.0	2,347	100.0
Costs and expenses[1]	(1,672)	(126.8)	(1,553)	(125.4)	(2,630)	(101.1)	(885)	(106.4)	(1,980)	(84.3)
Others[2]	(1)	(0.1)	3	0.2	364	14.0	35	4.2	172	7.3
Income tax (expense)/benefit	63	4.8	85	6.9	(89)	(3.4)	4	0.5	(178)	(7.6)
Profit/(loss) after income tax	(291)	(22.1)	(227)	(18.3)	246	9.5	(14)	(1.7)	361	15.4
Other comprehensive (expense)/income for the year	(319)		63		404		274		(141)	
Total comprehensive (expense)/income for the year	(610)		(164)		650		260		220	

We incurred loss after tax of A$291 million in 2015 and A$227 million in 2016, due in significant part to the adverse coal price environment in those years. Our average selling price was A$80 per tonne in those years, compared to A$114 per tonne that we were able to obtain in 2017. As a consequence, our operating cash flows were negatively affected which, combined with increased finance costs, resulted in losses in those years.

Notes:

(1) Includes raw materials and consumables used, employee benefits expenses, depreciation and amortisation, transportation, contractual services and plant hire, government royalties expense, changes in deferred mining costs, coal purchases, other operating expenses and finance costs.

(2) Includes other income, changes in inventories of finished goods and work in progress and share of profit/(loss) of equity-accounted investees, net of tax. In 2017, our other income included a non-recurring gain on acquisition of A$177 million in connection with the acquisition of C&A and a reversal of impairment of mining tenements of A$100 million for the Moolarben mine, both of which were a significant contributor to our profitability in that year.

Price and Sales Volume of Coal

The table below sets forth, for the years indicated, a breakdown of our ex-mine[(1)] sales volume and average selling price between thermal and metallurgical coal[(2)], presented on an attributable basis:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
Thermal coal					
Average selling price (A$ per tonne)	68	71	102	90	117
Sales volume (Mt)	8.1	8.8	15.5	4.9	13.8
Total ex-mine thermal coal revenue (A$ million)	548	617	1,585	447	1,607
Average Newcastle 6,000 NAR spot price (A$ per tonne)[(3)]	76	90	115	107	135
Metallurgical coal					
Average selling price (A$ per tonne)	100	106	165	174	191
Sales volume (Mt)	5.3	3.3	3.8	1.3	2.4
Total ex-mine metallurgical coal revenue (A$ million)	526	350	619	224	468
Average premium hard-coking coal FOB spot price (A$ per tonne)[(3)]	118	195	246	240	273
Total coal					
Average selling price (A$ per tonne)	80	80	114	108	128
Sales volume (Mt)	13.4	12.1	19.3	6.2	16.2
Total ex-mine coal revenue (A$ million)	1,074	967	2,204	670	2,075
Coal purchases[(4)] (A$ million)	214	232	355	165	156
Other[(5)] (A$ million)	–	–	64	–	19
Total coal revenue from customers (A$ million)	1,288	1,199	2,623	835	2,250

Notes:

(1) Ex-mine coal represents coal directly produced at our mines, and excludes coal purchased from other parties.

(2) Includes our attributable interest in production from (a) in 2015, the Moolarben, Yarrabee, Stratford Duralie and Watagan mines, (b) in 2016, the Moolarben, Yarrabee, Stratford Duralie and Watagan mines (until 31 March 2016), (c) in 2017, the Moolarben, Yarrabee, Stratford Duralie, and C&A mines (HVO (67.6%) and MTW (64.1%), from 1 September 2017) and (d) in 2018, the Moolarben, Yarrabee, Stratford Duralie, and C&A mines (HVO (67.6% until 30 April 2018 and 51% thereafter) and MTW (64.1% until 28 February and 82.9% thereafter). Does not include the results of Middlemount, which is an incorporated joint venture in which we hold a 49.9997% interest. For accounting purposes, we equity account for our share of the profit or loss after tax of Middlemount as a single line item.

(3) According to the Industry Report. The A$ per tonne is calculated at an US$:A$ foreign exchange rate of 1.33, 1.35, 1.30, 1.33 and 1.33 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The average premium HCC price represents the most readily-available index price for metallurgical coal.

(4) Represents sales made as part of our coal blending strategy attributable to coal purchased from related parties and third parties and any increase or decrease in ex-mine revenue recognised on coal purchased from our mines. See "*Financial Information of the Group – Description of Major Line Items in Our Consolidated Statements of Profit or Loss and Other Comprehensive Income – Coal Purchases*" for further details.

(5) Other coal revenue mainly represented acquisition accounting fair value adjustments with respect to the below market customer contract with BLCP Power Limited ("**BLCP**"), which we took on as part of the C&A Acquisition and which obligates us to deliver coal to BLCP at a price that we deem to be below market relative to our long-term coal price forecast.

Operating and Production Costs

The tables below set forth, for the years indicated, a breakdown of our overall and per sales tonne costs:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Cash operating costs					
Workforce employment	227	184	299	100	253
Consumables	149	138	248	76	227
Fuel, electricity, water and other utilities services	64	49	101	33	109
Contractual services and plant hire	195	110	213	62	181
On and off site administration	17	14	22	5	12
Environmental protection and monitoring	8	5	9	4	5
Transportation of workforce	–	–	–	–	–
Product marketing and transport	261	267	312	122	274
Non-income taxes, royalties and other government charges	77	71	173	53	161
Contingency allowances	–	–	–	–	–
Total cash operating costs	998	838	1,377	455	1,222
Non-cash operating costs					
Depreciation and amortisation	200	133	256	80	244
Total production costs	1,198	971	1,633	535	1,466

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ per tonne		
Cash operating costs					
Workforce employment	17	15	15	16	16
Consumables	11	11	13	12	14
Fuel, electricity, water and other utilities services	5	4	5	5	7
Contractual services and plant hire	15	9	12	10	11
On and off site administration	1	1	1	1	1
Environmental protection and monitoring	1	1	–	1	–
Transportation of workforce	–	–	–	–	–
Product marketing and transport	19	22	16	20	17
Non-income taxes, royalties and other government charges	6	6	9	9	10
Contingency allowances	–	–	–	–	–
Total cash operating costs	75	69	71	74	76
Non-cash operating costs					
Depreciation and amortisation	15	11	14	12	15
Total production costs	90	80	85	86	91

Our total production cost per sales tonne was A$90, A$80, A$85, A$86 and A$91 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan underground mines and reduced operations at Stratford Duralie, together with ongoing cost saving initiatives across all sites. The increase in 2017 and 2018 was primarily due to the additional depreciation and amortisation of property, plant and equipment and mining tenements recognised on the C&A Acquisition and an increase in raw materials and consumables used.

Our cash operating cost per sales tonne before non-income taxes, royalties and other government charges and contingency allowances, was A$69, A$63, A$62, A$65 and A$66 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan underground mines and reduced operations at Stratford Duralie, together with ongoing cost saving initiatives across all sites. Between 2016 and 2017, there was a slight decrease from A$63 to A$62 per sales tonne, and between the six months ended 30 June 2017 and the six months ended 30 June 2018 there was a slight increase from A$65 to A$66 per sales tonne. Cash operating costs between these periods remained relatively unchanged despite an increase in market-driven costs of consumables such as diesel and electricity and despite the fact that in each of the former periods Moolarben (which is a low cost mine that is in the first quartile of the cash cost curve) had a materially high weighting in our overall portfolio. While HVO and MTW are higher operating cost mines than Moolarben, they still fall within the second quartile of the cash cost curve (and rank higher than Moolarben on the cash margin curve) and as such are considered low cost mines. See "*Industry Overview – Competitive Landscape – Cost Competitiveness Analysis*" and "*Financial Information of the Group – Significant Factors Affecting Our Results of Operations and Financial Condition – Operating and Production Costs*" for further details.

Summary Consolidated Statements of Financial Position

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Current assets	2,124	738	1,689	1,370
Current liabilities	(638)	(499)	(1,013)	(906)
Net current assets	1,486	239	676	464
Non-current assets	5,746	6,922	10,624	10,544
Non-current liabilities	(5,544)	(5,809)	(6,257)	(5,743)
Total equity	1,688	1,352	5,043	5,265

Indebtedness

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Indebtedness repayable within:				
Less than one year	11	20	17	17
One to two years	80	12	12	415
Two to five years	1,329	2,439	3,316	2,414
Five or more years	3,312	2,479	1,378	1,454
Total indebtedness	4,732	4,950	4,723	4,300

The above table excludes an amount of A$24 million and A$16 million as at 31 December 2017 and 30 June 2018, respectively, with respect to the fair value gain on refinancing of secured bank loans recognised during those periods on the adoption of IFRS 9. See "*Financial Information of the Group – Indebtedness*" for further details on the material terms of our indebtedness, including security interests and guarantees.

Summary Consolidated Cash Flow Statement

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million	(unaudited)	
Net cash (used in)/generated from operating activities	(108)	(24)	408	282	712
Net cash (used in)/generated from investing activities	(314)	(466)	(3,449)	(133)	228
Net cash generated from/ (used in) financing activities	366	525	3,062	(14)	(698)
Net (decrease)/increase in cash and cash equivalents	(56)	35	21	135	242
Cash and cash equivalents at the beginning of the year	204	159	190	190	207
Effects of exchange rate changes on cash and cash equivalents	11	(4)	(4)	(8)	36
Transfer to assets held for sale	(5)	–	–	–	–
Cash and cash equivalents at the end of the period	154	190	207	317	485

Key Financial Ratios

	As at or for the year ended 31 December			As at or for the six months ended 30 June
	2015	2016	2017	2018
Return on assets[(1)]	(3.8)%	(2.9)%	2.5%	6.0%[(4)]
Return on equity[(2)]	(13.9)%	(14.9)%	7.7%	14.0%[(4)]
Gearing ratio[(3)]	2.80x	3.66x	0.93x	0.81x

Notes:

(1) Return on assets is calculated by dividing profit after income tax by average total assets and multiplying the resulting value by 100%. Average total assets equal total assets at the beginning of the period plus total assets as at the end of the period, divided by two.

(2) Return on equity is calculated by dividing profit after income tax by average total equity and multiplying the resulting value by 100%. Average total equity equals total equity at the beginning of the period plus total equity as at the end of the period, divided by two.

(3) Gearing ratio is calculated as gross debt divided by total equity at the end of the period. Gross debt consists of the total balance of interest-bearing liabilities as at the end of the period.

(4) On an annualised basis.

Non-IFRS Financial Measures

Operating EBITDA and operating EBIT are key metrics that our management uses to assess the performance of our individual segments and make decisions on the allocation of resources. Neither operating EBITDA nor operating EBIT is a standard measure under IFRS. As presented by our management, operating EBITDA represents profit or loss before income tax for the year as adjusted for net interest expense, depreciation and amortisation and any significant non-operating items, while operating EBIT represents profit or loss before income tax as adjusted for net interest expense and any significant non-operating items.

While operating EBITDA and operating EBIT provide additional financial measures for investors to assess our operating performance, the use of operating EBITDA and operating EBIT has certain limitations because they do not reflect all items of income and expense that affect our operations. In addition, operating EBITDA and operating EBIT do not reflect changes in working capital, capital expenditure or other investing and financing activities and therefore should not be considered a measure of our liquidity.

As a measure of our operating performance, we believe that the most directly comparable IFRS measure to operating EBITDA and operating EBIT is profit before income tax. The table below sets forth, for the periods indicated, a reconciliation of operating EBITDA and operating EBIT with profit before income tax under IFRS:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Profit before income tax	(354)	(312)	335	(18)	539
Adjustments for:					
Finance costs	162	209	294	105	152
Bank fees and other charges	116	113	109	49	62
Interest income	(50)	(125)	(114)	(57)	(58)
Stamp duty	–	12	167	3	16
Fair value losses recycled from hedge reserve	22	133	229	101	45
Gain on acquisition	(6)	–	(177)	–	–
Gain on disposal	–	–	–	–	(78)
Impairment reversal of mining tenements for Moolarben	–	–	(100)	–	–
Gain on refinance	–	–	(31)	–	–
GILTs and WIPs remeasurement and impairment[(1)]	–	–	–	–	50
Transaction costs	–	3	33	21	10
JV receipt	–	–	(5)	(5)	–
Royalty remeasurement	(2)	6	(8)	(2)	(2)
Operating EBIT	(112)	39	732	197	736
Adjustment for depreciation and amortisation	200	133	256	80	244
Operating EBITDA	88	172	988	277	980

Note:

(1) GILTs and WIPs represent our investments in long-term securities and preference securities, respectively, issued by WICET Holdings Pty Limited. See "*Risk Factors – Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders*."

In 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our operating EBIT margin (calculated as operating EBIT divided by revenue and multiplied by 100%) was (8.5)%, 3.2%, 28.1%, 23.7% and 31.4%, respectively, while our operating EBITDA margin (calculated as operating EBITDA divided by revenue and multiplied by 100%) was 6.7%, 13.9%, 38.0%, 33.3% and 41.8%, respectively.

Operating EBITDA and operating EBIT should not be considered in isolation or construed as a substitute for analysis of IFRS financial measures. In addition, because operating EBITDA and operating EBIT may not be calculated in the same manner by all companies, our operating EBITDA and operating EBIT may not be comparable to the same or similarly titled measures presented by other companies.

UNAUDITED PRO FORMA CONSOLIDATED FINANCIAL INFORMATION OF THE ENLARGED GROUP

The table below sets forth selected unaudited pro forma combined income statement data for the year ended 31 December 2017 and the six months ended 30 June 2018 as if the C&A Acquisition, the Glencore Transaction and the Warkworth Transaction (together, the "**Pro Forma Transactions**") had been completed on 1 January 2017. Such pro forma financial information has been prepared using the procedures and adjustments as described in more detail in Appendix IIB to this prospectus, and should be read in conjunction with the related notes thereto.

		Pro forma adjustments[1] for		
	The audited Group as at the six months ended 30 June 2018[2]	Acquisition of additional 28.9% interest in Warkworth	Disposal of 16.6% interest in HVO	Unaudited pro forma consolidated statement of profit or loss of the Group for the six months ended 30 June 2018
		A$ million		
Revenue	2,347	48	(89)	2,306
Other income	115	–	(78)	37
Changes in inventories of finished goods and work in progress	24	1	–	25
Raw materials and consumables used	(337)	(9)	18	(328)
Employee benefits	(254)	(5)	10	(249)
Depreciation and amortisation	(244)	(4)	–	(248)
Transportation	(274)	(3)	7	(270)
Contractual services and plant hire	(206)	(5)	11	(200)
Government royalties	(161)	(4)	7	(158)
Coal purchases	(182)	–	–	(182)
Other operating expenses	(170)	–	3	(167)
Finance costs	(152)	–	(1)	(153)
Share of profit of equity-accounted investees, net of tax	33	–	–	33
Profit before income tax	539	19	(112)	446
Income tax expenses	(178)	(6)	34	(150)
Profit for the period	361	13	(78)	296

			Pro forma adjustments[1] for			
	The audited Group for the year ended 31 December 2017	Audited C&A for the eight months ended 31 August 2017	Adjustment for acquisition accounting on C&A Acquisition, including 55.6% interest in Warkworth & 67.6% interest in HVO	Acquisition of additional 28.9% interest in Warkworth	Disposal of 16.6% interest in HVO	Unaudited pro forma consolidated statement of profit or loss of the Enlarged Group for the year ended 31 December 2017
			A$ million			
Revenue	2,601	1,424	46	261	(288)	4,044
Other income	325	26	–	–	78	429
Changes in inventories of finished goods and work in progress	7	(11)	–	3	(2)	(3)
Raw materials and consumables used	(349)	(274)	–	(50)	56	(617)
Employee benefits	(302)	(140)	–	(33)	27	(448)
Depreciation and amortisation	(256)	(78)	(97)	(27)	–	(458)
Transportation	(312)	(110)	26	(19)	20	(395)
Contractual services and plant hire	(274)	(169)	–	(26)	39	(430)
Government royalties	(173)	(111)	–	(21)	23	(282)
Coal purchases	(340)	–	–	–	–	(340)
Other operating expenses	(330)	(26)	–	(19)	7	(368)
Finance costs	(294)	(3)	(10)	–	1	(306)
Share of profit of equity-accounted investees, net of tax	32	(16)	–	–	–	16
Profit/(Loss) before income tax	335	512	(35)	69	(39)	842
Income tax (expense)/benefit	(89)	169	(320)	(20)	12	(248)
Profit/(Loss) for the year	246	681	(355)	49	(27)	594

Note:

(1) See the Unaudited Pro Forma Consolidated Financial Information of the Enlarged Group in Appendix IIB to this prospectus for further details on the adjustments for the Pro Forma Transactions.

(2) Includes the financial results of C&A for the six months ended 30 June 2018.

FUTURE PLANS AND USE OF PROCEEDS

The net proceeds from the Global Offering which the Company will receive, after deducting the underwriting commissions and the estimated expenses in relation to the Global Offering and assuming the Over-allotment Option is not exercised, will be:

- approximately HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the Minimum Offer Price);
- approximately HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the mid-point of the Offer Price Range); or
- approximately HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the Maximum Offer Price).

The Company intends to use the net proceeds of HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the mid-point of the Offer Price Range), from the Global Offering as follows:

- approximately HK$[**REDACTED**] million (or approximately [**REDACTED**]% of the net proceeds) will be used to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties. The Syndicated Facility has an interest rate of LIBOR plus 2.8% to 3.1% plus Yanzhou guarantee fees and the unsecured loans from the related parties have an interest rate of 7%. The Syndicated Facility matures in instalments and the unsecured loans from the related parties are due between 2022 and 2024. In each case, the loans have been utilised primarily to finance our capital expenditure and working capital requirements. (See "*Financial Information of the Group – Indebtedness*" for further details);

- approximately HK$[**REDACTED**] million (or approximately [**REDACTED**]% of the net proceeds) will be used to finance potential acquisitions (as at the Latest Practicable Date, the Company has not identified any targets to be acquired). In deciding whether to invest in or acquire a particular asset or business, we consider multiple key factors, including, among others (i) strategic value-accretion, (ii) the return on investment and (iii) future growth potential and the level of synergies created by the investment;

- approximately HK$[**REDACTED**] million (or approximately [**REDACTED**]% of the net proceeds) will be used to finance the acquisition of an additional 4% interest in the unincorporated Moolarben joint venture (see "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Moolarben Acquisition*" for further details); and

- approximately HK$[**REDACTED**] million (or approximately [**REDACTED**]% of the net proceeds) will be used for working capital and general corporate purposes.

In the event that the Offer Price is fixed at a higher or lower level compared to the mid-point of the Offer Price Range, the net proceeds from the Global Offering will be allocated to the above purposes on a *pro rata* basis, except that if the proceeds to be allocated to the Moolarben Acquisition exceed the purchase price, the difference will be reallocated to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties.

DIVIDENDS AND DIVIDEND POLICY

We did not declare or pay any dividends during the Track Record Period. On 15 August 2018, we declared a dividend of approximately A$130 million on our ordinary shares, which was paid on 21 September 2018. Subject in each case to applicable laws, the ongoing cash needs of the business, the statutory and common law duties of the Directors and shareholders' approval, the Directors may pay interim and/or final dividends, and in accordance with our Constitution must:

(i) subject to (ii) below, pay as interim and/or final dividends not less than 40% of net profit after tax (pre-abnormal items) in each financial year; and

(ii) if the Directors determine that it is necessary in order to prudently manage our financial position, pay as interim and/or final dividends not less than 25% of net profit after tax (pre-abnormal items) in any given financial year.

Our Australian legal advisers have advised that under Australian law, a company is able to pay dividends out of current year profits even though it has accumulated losses, and there is no restriction in our Constitution that would prevent current year profits from being paid out as dividends in this way. Accordingly, the Company's accumulated losses do not prevent it from being able to pay dividends, provided that current year profits are not used to offset prior period losses and the Company is otherwise able to satisfy the other legal requirements of paying a dividend under Australian law. As a result, the amount of any dividends to be declared or paid will depend on, among other things, our results of operations, cash flows, financial condition, operating and capital requirements and applicable laws and regulations.

GLOBAL OFFERING STATISTICS

	Based on an Offer Price of HK$[REDACTED]	**Based on an Offer Price of HK$[REDACTED]**
Market capitalisation of our Shares[(1)]	HK$[**REDACTED**] million	HK$[**REDACTED**] million
Unaudited pro forma adjusted net tangible asset value per Share[(2)]	HK$[**REDACTED**]	HK$[**REDACTED**]

Notes:

(1) The calculation of the market capitalisation is based on the assumption that [**REDACTED**] Shares will be in issue and outstanding immediately following the Global Offering (assuming the Over-allotment Option is not exercised).

(2) The unaudited pro forma adjusted net tangible asset value per Share is calculated after the adjustments referred to in the Unaudited Pro Forma Financial Information in Appendix IIA to this prospectus and on the basis of [**REDACTED**] Shares in issue immediately following the Global Offering (assuming the Over-allotment Option is not exercised).

The Company is applying for the Listing under the market capitalisation/revenue test of Rule 8.05(3) of the Listing Rules.

[**REDACTED**]

[**REDACTED**]

The Shares to be issued pursuant to any exercise of the Over-Allotment Option will be issued by the Company pursuant to its general power under the ASX Listing Rules to issue shares up to [**REDACTED**]% of its issued share capital, and will constitute up to [**REDACTED**]% of the Company's issued share capital at the date of this prospectus.

LISTING EXPENSES

Total expenses (including estimated underwriting commissions) expected to be incurred in relation to the Listing are A$[**REDACTED**] million (HK$[**REDACTED**] million), of which approximately A$[**REDACTED**] million (HK$[**REDACTED**] million) is expected to be charged to the consolidated statement of profit or loss of the Group and approximately A$[**REDACTED**] million (HK$[**REDACTED**] million) is expected to be capitalised.

[**REDACTED**]

DIRECTORS' RESPONSIBILITY FOR THE CONTENTS OF THIS PROSPECTUS

[**REDACTED**]

INFORMATION AND REPRESENTATION

The Company has issued this prospectus solely in connection with the Hong Kong Public Offering and the Hong Kong Offer Shares. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities other than the Hong Kong Offer Shares offered by this prospectus pursuant to the Hong Kong Public Offering. This prospectus may not be used for the purpose of, and does not constitute, an offer or invitation in any other jurisdiction or in any other circumstances. No action has been taken to permit a public offering of the Offer Shares in any jurisdiction other than Hong Kong and no action has been taken to permit the distribution of this prospectus in any jurisdiction other than Hong Kong. The distribution of this prospectus and the offering and sale of the Offer Shares in other jurisdictions are subject to restrictions and may not be made except as permitted under the applicable securities laws of such jurisdictions pursuant to registration with or authorisation by the relevant securities regulatory authorities or an exemption therefrom.

You should only rely on the information contained in this prospectus and the Application Forms to make your investment decision. Neither the Company nor any of the Relevant Persons has authorised anyone to provide you with any information or to make any representation that is different from what is contained in this prospectus. No representation is made that there has been no change or development reasonably likely to involve a change in the Group's affairs since the date of this prospectus or that the information contained in this prospectus is correct as at any date subsequent to its date.

FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical fact contained in this prospectus, including, without limitation:

(a) the discussions of our business strategies, objectives and expectations regarding our future operations, margins, profitability, liquidity and capital resources;

(b) any statements concerning the future development of, and trends and conditions in, the coal market and the general economy of the countries in which we operate or plan to operate;

(c) any statements concerning our ability to control costs;

(d) any statements concerning the nature of, and potential for, the future development of our business; and

(e) any statements preceded by, followed by or that include words and expressions such as "expect", "believe", "plan", "intend", "estimate", "forecast", "project", "anticipate", "seek", "may", "will", "ought to", "would", "should" and "could" or similar words or statements,

as they relate to the Group or our management, are forward-looking statements.

These statements are based on assumptions regarding our present and future business, our business strategies and the environment in which we will operate. These forward-looking statements reflect our current views as to future events and are not a guarantee of our future performance. Forward-looking statements are subject to certain known and unknown risks, uncertainties and assumptions, including the risk factors described in "*Risk Factors*". Important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements include, among other things, the following:

- our operations and business prospects, including without limitation, our production volume or capacity;
- the ownership and consolidation status of our mines, whether owned and operated by us or through joint ventures;
- our future debt levels and capital needs;
- developments in our business strategies and business plans;
- future developments, demand and price trends and other conditions in the coal and coal-related products market in the Asia-Pacific region;
- regulatory changes affecting, among other things, the coal industry, accounting standards and taxes;
- general economic conditions;
- changes in relationships with our customers;
- our relationships with contractors and suppliers and ability to negotiate favourable agreement terms;
- effectiveness of our risk management and health, safety and environmental controls;
- developments of our competitors and other competitive pressures within the coal industry; and
- developments in alternative energy sources to coal.

Subject to the requirements of applicable laws, rules and regulations, we do not have any obligation, and undertake no obligation, to update or otherwise revise the forward-looking statements in this prospectus, whether as a result of new information, future events or developments or otherwise. As a result of these and other risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus might not occur in the way we expect or at all. Accordingly, you should not place undue reliance on any forward-looking information. All forward-looking statements contained in this prospectus are qualified by reference to the cautionary statements set out in this section as well as the risks and uncertainties discussed in "*Risk Factors*".

In this prospectus, statements of or references to our intentions or that of any of the Directors are made as at the date of this prospectus. Any of these intentions may change in light of future developments.

An investment in the Shares involves a high degree of risk. Prospective investors should carefully consider the following risk factors, together with all other information contained in the prospectus, before deciding whether to invest in the Shares. If any of the following events occur or if these risks or any additional risks not currently known to us or which we now deem immaterial materialise, our business, financial condition, results of operations and our ability to meet our financial obligations could be materially and adversely affected. The market price of the Shares could fall significantly due to any of these events or risks or such additional risks, and you may lose your investment. The order in which the following risks are presented does not necessarily reflect the likelihood of their occurrence or the relative magnitude of their potential material adverse effect on our business, financial condition, results of operations and prospects.

RISKS RELATING TO OUR BUSINESS AND INDUSTRY

Coal prices are cyclical and subject to fluctuations, and any significant decline in the prices we receive for our coal products would materially and adversely affect our business, financial condition and results of operations.

Substantially all of our revenue is derived from the sale of coal products, and therefore our results of operations are highly dependent upon the prices we receive for our coal. In developing our business plan and operating budgets, we make certain assumptions regarding future coal prices and demand for coal. Coal prices are cyclical and fluctuate depending on conditions in the global and regional coal markets. These markets are sensitive to changes in coal mining capacity and output levels, the outcome of future sale contract negotiations, patterns of demand and consumption of coal, environmental, coal import and other regulations, technological developments, the price and availability of competing coal and alternative fuel supplies, changes in international freight rates or other transportation infrastructure costs, changes in foreign exchange rates, labour disruptions, economic downturns, the status of global, regional and local credit markets, and other macroeconomic conditions. As a consequence of any of these factors, the underlying coal price assumptions relied on by us may change and actual coal prices and demand may differ from those expected.

Specifically, the prices for our coal products are affected by conditions in the Asia-Pacific region, particularly in the major coal supplying countries such as Australia and Indonesia, and the major coal consumption countries such as the PRC, India, Japan and South Korea, as well as the coal consumption patterns of the electricity generation and steel industries which are the principal end consumers of our coal products. Power generation from coal remains a cost-effective form of energy, and new thermal generation capacity continues to be installed, in many of our key Asian markets. However, the increasing focus on renewable energy generation and environmental regulations, and the consequential decline in electricity generation from fossil fuels, is expected to result in the share of coal powered electricity generation reducing from 41% of global electricity generation in 2017 to 39% by 2020. A decrease in thermal electricity generation may consequently result in reduced demand for thermal coal. Demand for metallurgical coal, which is widely used in steel production, may decline if adverse conditions in the infrastructure and property sectors in our key markets result in lower demand for steel. The PRC's rapid economic growth, its investment in major infrastructure projects and its shift from being a net exporter of coal to a net importer was a major contributor to the growth in coal demand in the past decade. The pace of economic growth in the PRC has slowed, and while there is optimism regarding demand

for metallurgical coal in markets such as India in the long term, this may not be sufficient to replicate the scale of the PRC's demand over the past decade. See "*Industry Overview*". Coal demand and prices may also be affected by the recent tariffs imposed by the U.S. government on steel and other products imported from various countries. In response, certain countries have imposed tariffs on U.S. exports, and others have sought recourse to the World Trade Organisation. While we are not able to predict the outcome of these trade disputes or their effect on our business, it is possible that they will affect demand and prices in our industry.

Local factors also affect coal prices. With the PRC government, which has had significant influence on coal supply and demand, relaxing its domestic production restrictions in December 2016, premium thermal coal spot prices have moved over a broad range from US$98.5 per tonne at the end of 2016 to a low of US$71 per tonne in May 2017 to a high of US$123 per tonne in July 2018. Hard coking coal prices were affected when Cyclone Debbie struck the Queensland coast in 2017, resulting in a substantial increase in the price of premium hard coking coal to an average of US$209 per tonne for the year, an increase of approximately US$100 per tonne compared to 2016. See "*Industry Overview*" and "*Financial Information of the Group – Significant Factors affecting our Results of Operations and Financial Condition – Price and Sales Volume of Coal – Sales Price*". Strong demand and limited supply due to these and other factors have resulted in high coal prices prevailing in the market since the middle of 2017. Both thermal coal and metallurgical coal prices are expected to decline in the next few years.

In November 2018 China imposed a quota on imports of coal, following which China has halted coal imports for the remainder of the year. We believe that this development will not have a material impact on us. However, if the Chinese government were to impose stricter import quotas for 2019 or future periods, our revenues and results of operations in future periods could be adversely affected, unless we are able to find alternative destinations for the coal we designate for export to China.

Our sales contracts provide for either fixed or indexed pricing arrangements. In 2015, 2016 and 2017 and the six months ended 30 June 2018, approximately 7.0%, 12.5%, 9.5% and 9.0% of our coal sales were made pursuant to fixed price arrangements with a term of more than 12 months and approximately 93.0%, 87.5%, 90.5% and 91.0% of our coal sales were made pursuant to indexed pricing arrangements referenced to various product categories, such as the globalCOAL NEWC index, API5 and Platts. However, spot pricing has become significantly prevalent in the market, particularly for metallurgical coal, which may contribute to price fluctuations as buyers and sellers on the spot market are more sensitive to market volatility. If we are required to renegotiate or adjust prices under our coal supply agreements in a manner that results in a sustained decline in the prices we receive for our coal products, our business, financial condition and results of operations would be materially and adversely affected.

Our coal production is subject to conditions and events beyond our control that could result in high expenses and decreased supply.

Our financial performance is dependent on our ability to sustain or increase coal production and maintain or decrease operating costs on a per tonne basis. Our coal production and production costs are subject to conditions and events beyond our control

which could disrupt our operations and have a significant impact on our financial results. Adverse operating conditions and events that we have experienced in the past or may experience in the future include:

- changes or variations in coal quality or geologic, hydrologic or other conditions, such as deterioration of seam quality, variations in the thickness of the coal seams, excessive groundwater or inability to safely or economically manage gas risks;

- critical mining, processing and loading equipment failures and unexpected maintenance problems, such as unforeseen delays or complexities in installing and operating longwall mining systems;

- difficulties associated with mining under or around surface obstacles;

- adverse weather and natural disasters, such as heavy rains and flooding, lightning strikes, hurricanes or earthquakes;

- accidental mine water discharges, coal slurry releases and failures of an impoundment or refuse area;

- ground or slope failures;

- excessive drought leading to a lack of efficiencies in the operation of site water;

- mine safety accidents, including fires and explosions from methane and other sources (see also "– *Our operations may be affected by uncertain mining conditions and we may suffer losses resulting from mining safety incidents, which may not be covered by our insurance*.");

- a shortage of skilled and unskilled labour;

- strikes and other labour-related interruptions;

- security breaches or terrorist acts;

- fatalities, personal injuries or property damage arising from unexpected hazards or incidents; and

- competition or conflicts with other natural resource extraction activities and production within our operating areas.

These conditions and events could also adversely affect the value of our coal inventories, which we state at the lower of cost, which is assigned on a weighted average basis and includes direct materials, direct labour and certain overheads, and net realisable value, which is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. We write down coal stocks from cost to net realisable value when we determine that such write down is appropriate in the course of assessing our stocks for obsolescence. Coal stock write downs amounted to A$12 million, A$1 million, A$1 million and A$1 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively.

Our coal supply agreements typically require the delivery of a fixed or minimum quantity of coal at a location, at a time and over a period stipulated in the agreement. To the extent that any contracted volumes cannot be delivered as agreed, we may be liable to pay compensation for the resulting losses, costs and charges (including demurrage) incurred by the buyer. Further, there may be changes in the costs of our mining and processing operations as well as capital costs, including due to unforeseen events such as international and local economic and political events, movements in exchange rates or unexpected geological or mining conditions. Any disruption of our operations or increase in costs due to any of the events or conditions described above or otherwise could have a material adverse effect on our business, financial condition and results of operations.

In addition, our mining operations are concentrated in a limited number of mines. Our three flagship mines, HVO (which is operated as an unincorporated joint venture with Glencore), MTW and Moolarben, together accounted for approximately 91.6% of the total coal sales (on an attributable basis) from our mines in the six months ended 30 June 2018 on a pro forma basis (as if the Moolarben Acquisition, the C&A Acquisition, the Warkworth Transaction and the Glencore Transaction had been completed on 1 January 2017), as well as 93.3% of the Coal Reserves and 93.6% of the Marketable Coal Reserves in mines we have ownership interests in and operate as at 30 June 2018 (on a 100% basis). As a result, the effects of any of these conditions or events may be exacerbated and may have a disproportionate impact on our business, financial condition and results of operations.

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

We face competition in all aspects of our business, including sales and marketing, pricing of coal, production capacity, coal quality and specifications, transportation capacity, cost structure and brand recognition. Our coal business competes in the domestic and international markets with other large domestic and international coal producers. In addition, ongoing consolidation in the Australian coal industry has increased the level of competition we face. Our competitors in Australia include Peabody Energy, Whitehaven, Centennial Coal and New Hope among the pure-play coal producers, and Glencore, BHP and Anglo American among the diversified mining companies. Our principal competitors in the Asian seaborne market include major Indonesian coal companies such as PT Bumi Resources Tbk and PT Adaro Energy Tbk. We also face competition in our end markets such as the PRC and India, as well as from other coal exporting nations such as the United States, Canada, South Africa, Colombia and Russia.

Production costs are a key competitive differentiator in the coal mining business. Factors that directly influence coal producers' production costs include the geological characteristics of their coal deposits such as the depth of underground reserves (for underground mines) and the strip ratio of open cut reserves (for open cut mines), transportation costs, and labour availability and cost. Furthermore, our competitors may have higher production capacities, stronger brand names and better financial, marketing, distribution and other resources than we do. We may not be able to maintain our competitiveness if changes or developments in the market weaken our existing competitive advantages. Efforts by our competitors to improve the quality of their coal may render obsolete or irrelevant any competitive advantage we have over them. Over the past two decades, a growing world coal market and increased demand for coal worldwide have attracted new investors to the coal industry, encouraged the development of new mines and the expansion of existing mines in various countries,

including Australia and the PRC, and resulted in added production capacity throughout the industry. Subsequent overcapacity in the industry has contributed, and may in the future contribute, to lower coal prices. Our inability to maintain our competitive position as a result of these or other factors could have a material adverse effect on our business, financial condition and results of operations.

Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown.

In 2017, the Austar mine, which is owned by Watagan and managed by us, produced approximately 1.7 Mt of semi-hard coking product coal and as at 30 June 2018 had JORC ROM Coal Reserves totalling 41 Mt and Marketable Coal Reserves totalling 31 Mt. Multiple incidents have occurred at the mine due to coal bursts and other occurrences. A major incident in the maingate A9 development panel in the Stage 3 area of the Austar mine on 15 April 2014 led to the death of two workers. The Resources Regulator, which is now part of the Department of Planning and Environment of the New South Wales government, regarded the incident as serious and a possible contravention of health and safety laws, and conducted an investigation into the matter including the mine's safety managements systems and the level of compliance with health and safety laws by officers. The investigation identified that the incident was a result of a pressure burst of such magnitude and volume as to render the installed rib support ineffective. Following the investigation, the Resources Regulator notified Yancoal Australia Ltd and Austar Coal Mine Pty Ltd in April 2016 that it had decided not to institute prosecution proceedings.

On 19 August 2016, a coal burst occurred in longwall panel B2 in the Bellbird South working area of the Austar mine. A prohibition notice was issued by the Resources Regulator in relation to the incident. A prohibition notice is a direction to prohibit an activity issued when a mine inspector reasonably believes that there is a serious risk emanating from an immediate or imminent exposure to a hazard. The prohibition notice in relation to the Austar mine was cancelled on 14 September 2016. Additional safety controls were implemented at the mine, including the introduction of coal burst protection conveyor mats supported from the flippers of the longwall shields, the deployment of restricted face zones on the longwall face and the use of shield flippers to provide protection to workers, and these controls have been subsequently improved over time. No proceedings were commenced by the Resources Regulator in relation to this incident and the option of the Resources Regulator to commence such proceedings expired on 19 August 2018.

On 2 February 2018, an initial coal burst occurred in longwall panel B4 of the Bellbird South area of the Austar mine which resulted in minor injuries to a worker. A prohibition notice was issued as a result of that incident. This notice was varied by a replacement prohibition notice on 8 February 2018 which ceased to have effect on 21 February 2018. Subsequently, a series of coal bursts occurred in longwall panel B4 in the Bellbird South area of the Austar mine on 21 February 2018, 23 February 2018, 13 March 2018 and 15 March 2018, none of which resulted in any injuries to workers although the 23 February 2018 event caused damage to the longwall shearer. Another coal burst occurred on 16 March 2018, and while no injuries were caused a prohibition notice was issued by the Resources Regulator. This prohibition notice was subsequently replaced with a fresh prohibition notice on 9 April 2018, which was in turn replaced by another notice on 12 May 2018 that allowed limited mining activities. An additional coal

burst occurred on 17 May 2018 which did not result in any injuries, but caused damage to the longwall shearer and resulted in another prohibition notice being issued on 18 May 2018.

Between 19 February 2018 and 24 May 2018, we made a series of submissions to the Resources Regulator seeking to have the prohibition notices dated 12 May 2018 and 18 May 2018 cancelled. On 1 June 2018, we were notified by the Resources Regulator that its investigation unit had commenced an investigation into all coal bursts that have occurred at the Austar mine since 15 April 2014. As part of this investigation, four notices to obtain documents, information and evidence were issued, which were complied with on 22 June 2018, 27 June 2018, 31 July 2018 and 15 August 2018 respectively, as required. Inspectors from the investigation unit commenced interviews with longwall deputies in the last week of July 2018 and their investigation is ongoing and the results are pending. Four further notices to obtain documents, information and evidence were issued by a separate section of the Resources Regulator, which were complied with on 26 June 2018, 10 July 2018, 20 August 2018 and 24 August 2018 respectively, as required.

Following agreement as to the provision of limited information to the Resources Regulator, the two prohibition notices dated 12 May 2018 and 18 May 2018 were cancelled on 30 July 2018 and 3 August 2018, respectively. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. On 30 August 2018 operations were halted on account of technical issues related to de-stressing activity in certain areas of the long wall, and on 5 September 2018 a prohibition notice was received relating to this activity which was cancelled on 28 September 2018. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. The nature of the geological and technical challenges faced at the Austar mine exposes us to the risk of future prohibition notices and production delays at the mine.

For further details, see "*Business – Health, Safety and Environmental Matters – Safety Incidents*."

These incidents have resulted in production shutdowns, increased expenses and consequent loss of revenue from the Austar mine. Ongoing work is being undertaken by Watagan in respect of the very challenging geological and geotechnical conditions at the mine, including both the Bellbird South and Stage 3 areas. If similar incidents occur in the future or if it is determined by Watagan that normal operations cannot be recommenced or continued at Austar, or production needs to be stopped indefinitely or permanently, it is likely that the fair value of the mine will be reduced materially, which would adversely affect our financial condition and results of operations.

We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations.

Effective on and from 31 March 2016, the Company entered into certain financing arrangements with Watagan (a newly established subsidiary of the Company at the time), Industrial Bank Co., Ltd ("**IBC**"), BOCI Financial Products Limited ("**BOCIF**") and United NSW Energy Limited ("**UNE**" and together, the "**Bondholders**"). These

arrangements involved the issue of US$775 million nine-year secured bonds by Watagan to IBC, BOCIF and UNE (the "**Watagan Bonds**"), a loan facility agreement between Watagan and the Company, and certain other agreements or deeds ancillary to the issue of the bonds (together, the "**Watagan Agreements**").

In accordance with the terms of the Watagan Agreements, our interests in the Ashton, Austar and Donaldson mines were transferred to Watagan for consideration of A$1,363 million (equal to the book value of the three mines at the time). Watagan fully funded the purchase with an A$1,363 million loan from us bearing interest at the bank bill swap bid rate on the first day of each interest period plus 7.06% with a maturity date of 1 April 2025. The outstanding interest and principal of this loan is guaranteed by Yankuang, our ultimate controlling shareholder. Watagan can make prepayments of the outstanding loan balance at any time, and (subject to there being no default continuing and other customary conditions) any amounts prepaid may be redrawn by Watagan in the future for specified permitted purposes. As at 30 June 2018 the loan receivable from Watagan was A$730 million (re-drawable to A$1,363 million).

While we wholly-own Watagan, upon the issuance of the Watagan Bonds, the Bondholders were given the power to nominate two of its three directors, which together with other terms included in the Watagan Agreements resulted in the determination that we had lost accounting control of Watagan. The loss of accounting control resulted in us deconsolidating the financial results of Watagan as a subsidiary from our consolidated financial statements with effect from 31 March 2016. From that time, we began to account for our equity interest in Watagan as an associate rather than a subsidiary. We also designated the value of the Ashton, Austar and Donaldson mines as assets classified as held for sale as at 31 December 2015, pending completion of their transfer to Watagan in early 2016. While Watagan is deconsolidated from our consolidated financial statements for accounting purposes, Watagan remains within our tax consolidated group as a result of our ongoing 100% equity ownership of Watagan.

The determination of loss of accounting control of Watagan is a matter of accounting judgement, which could be subject to review and change. The International Financial Reporting Standards ("**IFRS**") under which we prepare our financial statements requires us to make certain judgements and estimates when preparing our financial statements, and are issued by the International Accounting Standards Board ("**IASB**"), along with other authoritative pronouncements and interpretations. The IASB or other agencies and authorities may not agree with the judgements or estimates applied by us. Moreover, the IASB may amend IFRS and the related pronouncements and interpretations or replace them with new standards, and such amendment or replacement is beyond our control. Any changes to IFRS or to the interpretation of those standards, such as a change which would require us to reconsolidate Watagan's results and financial position ahead of the scheduled date in 2025, may have an adverse effect on our reported financial performance or financial position.

Watagan is required to redeem all of the outstanding Watagan Bonds on the maturity date of 8 January 2025 (if the put option is exercised on or after 1 January 2025, the maturity date would be deferred to 1 April 2025), and may elect to redeem any or all of them commencing from 31 March 2019. Additionally, the Bondholders have a put option that allows them to transfer the issued Watagan Bonds at face value to Yankuang during specified put option exercise windows during the first week of January in each of 2019, 2021, 2023 and 2025. The Bondholders may also exercise the put option after 1 January 2019 while an event of default under the bond terms is subsisting in relation to Watagan or Yankuang. The put option must be exercised by a Bondholder in respect of all (but not some) of its respectively held bonds. If the put option is exercised (i) by UNE,

as the instructing Bondholder of the investor syndicate, or (ii) with respect to at least 50.1% of the face value of the Watagan Bonds, the put option will be deemed to have been exercised as to all of the bonds.

In accordance with the Watagan Agreements, if Yankuang becomes the sole bondholder of the Watagan Bonds following the purchase of the bonds by Yankuang consequent to the exercise of the put option, certain bondholder rights, including the right to nominate a majority of the board of directors, would terminate, and these rights would revert to the Company as the sole shareholder of Watagan. Watagan would thereafter owe an amount payable to Yankuang for the face value of the put bonds, minus any capitalised interest. Watagan would separately pay to the exercising Bondholders the accrued interest and any capitalised interest on the put bonds.

If (i) Bondholders holding a sufficient proportion of the principal amount of the Watagan Bonds exercise their put option to Yankuang, such that Yankuang acquires all of the bonds (ii) Watagan redeems all of the Watagan Bonds or (iii) certain other events occur (such as a change to the terms and conditions of the Watagan Bonds that gives us the power to nominate the majority of the board of Watagan) that would result in us regaining control of Watagan, we will be required to reconsolidate Watagan as a subsidiary into our consolidated financial statements from the time that control is determined to be regained. We do not currently have any plan or intention to effect the early redemption of the Watagan Bonds.

Upon reconsolidation, we will (i) cease to recognise interest income on the Watagan loan, which in the year ended 31 December 2017 and the six months ended 30 June 2018 was A$67 million and A$32 million, respectively, forego the margin recognised under the various service agreements, and de-recognise the Watagan loan receivable, which as at 30 June 2018 was drawn to A$730 million, as these amounts will become intercompany balances and will be eliminated on consolidation; (ii) recognise an interest expense on the Watagan Bonds (or the Yankuang loan if the put option has been fully exercised), which during the year ended 31 December 2017 and the six months ended 30 June 2018 was A$102 million and A$35 million, respectively, and recognise the fair value of the Watagan Bonds at that time, which as at 30 June 2018 had a book value of A$1,049 million; and (iii) recognise the operating results of Watagan, including the three Watagan Mines, in our statement of profit and loss and recognise the fair value of the assets and liabilities of Watagan (including the Watagan Bonds) on our balance sheet at that time. In 2016 and 2017 and the six months ended 30 June 2017 and 2018, Watagan had loss after tax of A$162 million, A$58 million, A$7 million and A$90 million, respectively. See note 23(a) to the Accountants' Report of the Group in Appendix IA to this prospectus for further stand-alone financial information of Watagan during the Track Record Period.

The loss after tax of A$162 million in 2016 was due in significant part to the Austar mine only commencing longwall mining activities in the Bellbird South area half way through the year following a fatal incident in the Stage 3 area in 2014. The improvement in performance to a loss after tax of A$58 million in 2017 was primarily due to an improvement in coal prices between the periods and a full year of production at Austar, partially offset by an increase in finance costs primarily due to an additional A$30 million of interest owing to the bondholders due to Watagan achieving an EBITDA related threshold. The loss of A$90 million in the six months ended 30 June 2018 was primarily due to a significant reduction in production at the Austar mine due to the occurrence of multiple coal bursts resulting in repeated shutdowns during the period. See "*Risk Factors – We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of*

operations" and "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*".

Since Watagan has thus far been loss-making and has incurred ordinary course depreciation and amortisation, the book value of Watagan's net assets has declined since inception and at 30 June 2018 was negative A$311 million as noted in Appendix IA to this prospectus. The book value decline is not necessarily an indicator of Watagan's fair value. If the fair value of Watagan's net assets is negative (meaning that the value of its assets is lower than the value of its liabilities, including any outstanding loan balances) at the time of reconsolidation, goodwill will be recognised by the Company. This goodwill will be subject to impairment testing based on the cash generating units to which it is allocated. To the extent that any goodwill recognised cannot be supported by an impairment model, it will be written off by the Company as a loss on acquisition. Similarly, if, prior to reconsolidation and while we recognise a loan receivable from Watagan, there is a determination of a decline in the fair value of Watagan, an impairment assessment of the carrying value of the outstanding loan balance will be required. As at 30 June 2018, the total assets of the Company were A$11,914 million and the total liabilities of the Company were A$6,649 million, and the total assets of Watagan were A$1,783 million and the total liabilities of Watagan were A$2,094 million. The impact of reconsolidating Watagan as at 30 June 2018, without reflecting any fair value adjustments that may arise on reconsolidation (including the recognition of any potential goodwill as noted above), and after intercompany balance eliminations of A$827 million for both total assets and total liability, would be material. Our gearing ratio (which is calculated as gross debt divided by total equity at the end of the relevant period) would exhibit a material increase from our gearing ratio of 0.81x as at 30 June 2018, primarily due to Watagan's interest-bearing debt and negative equity position as at that date.

During the Track Record Period, Donaldson's remaining Abel underground mine was moved to a care and maintenance phase and feasibility studies were subsequently commenced to explore potential future mining operations. In addition, multiple incidents have recently occurred in the Austar mine's Bellbird South area due to coal bursts and other occurrences. These incidents have resulted in property and site damage and consequent loss of production and shutdowns, including as a result of the regulator issuing notices to stop production for periods of time, during the Track Record Period. Ongoing work is being undertaken by Watagan in respect of the very challenging geological and geotechnical conditions at the Austar mine, including both the Bellbird South and Stage 3 areas that may have a significant adverse impact on future commercial operations. See "*– Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*" for further details.

The future prospects of the Donaldson and Austar mines are therefore uncertain, and will depend upon the work currently being conducted by Watagan and its advisers. If it is determined, by Watagan, that either or both mines are unable to return to previously forecast levels of production, there is a need to proceed to a permanent shutdown, or there are materially negative changes to other operating assumptions, including coal prices, exchange rates, operating costs or capital expenditure, it is likely that the fair value of those mines, and therefore of Watagan, would be reduced materially. In that event, a material impairment charge may be recognised on the

Watagan loan receivable, prior to reconsolidation, or any goodwill recognised on reconsolidation. In addition, the Bondholders may be more inclined to exercise the put option which, as described above, will result in the reconsolidation of Watagan. We do not control Watagan and as such are not able to control or predict the amount of any such impairment or the extent of the resulting effect on our financial condition and results of operations, which could be material and adverse. See also "– *Our assets may be subject to impairment risks which could adversely affect their value.*"

We derive a significant portion of our revenue from a limited number of customers, and the loss of, or a reduction in, sales to any of these customers could materially and adversely affect our business, financial condition and results of operations.

We generate a substantial portion of our total coal sales from a small number of customers. In 2015, 2016 and 2017 and the six months ended 30 June 2018, our top five customers accounted for 47.8%, 38.8%, 32.3% and 33.8% of our revenue, respectively, in the aggregate, and our top three customers accounted for 39.5%, 29.1%, 21.7% and 26.5% of our revenue, respectively, in the aggregate. The Noble Group Limited and its affiliated entities (the "**Noble Group**") was one of our largest customers by revenue in 2015, 2016 and 2017. We expect revenues from the Noble Group as a percentage of our total revenues to decline as a result of the ad hoc nature of contracts, price movements and spot volumes and spot volume variations. Our current coal sales contract with the Noble Group is due to expire in December 2018.

Through Yancoal Australia Sales Pty Ltd, a subsidiary of the Company, we also commenced arbitration proceedings against the Noble Group in May 2018 seeking relief, including damages, on account of the Noble Group failing to purchase coal under an existing contract. This contract provides for de facto liquidated damages payments from Noble Group in the event that the Noble Group fails to purchase coal from us, which represents the amount claimed by us in these proceedings. As at the Latest Practicable Date, this claim is in the early stages of arbitration proceedings. In a separate matter, on 3 August 2018, the Noble Group commenced proceedings in the Supreme Court of New South Wales (an Australian State court) purporting to terminate a marketing services contract, claiming an allegedly unpaid marketing fee for 2014, damages for losses said to arise from alleged breaches of the contract in 2015 to 2017, and damages for "loss of bargain" as a result of the alleged repudiation of the contract by Gloucester Coal, a subsidiary of the Company. The Noble Group also alleges that the Company caused or procured Gloucester Coal to breach the contract. The claim derives mainly from the Noble Group's allegation that Gloucester Coal failed to notify and pay marketing fees, and to provide certain information to the Noble Group so as to allow the Noble Group to verify the marketing fees payable (if any), which allegedly had the effect of Gloucester Coal repudiating the contract. As at the Latest Practicable Date, the parties continue to exchange pleadings in respect of the proceedings. See "*Business – Legal Proceedings and Non-Compliance*" for further details.

We expect that our revenues will continue to depend on sales to a limited number of major customers for the foreseeable future and the loss of one or more of these major customers, or a significant deterioration in our relationship with them, could materially and adversely affect our business, financial condition and results of operations.

Fluctuations in transportation costs and disruptions to our railway and port linkages could disrupt our coal deliveries and adversely affect our business, financial condition and results of operations.

We rely primarily on third party operated railway networks and ports to transport and deliver coal to our customers. Transportation costs are a significant expense and

accounted for 19.8%, 21.6%, 12.0% and 11.7% of our total revenue in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively. See also "*Business – Infrastructure, Transportation and Logistics*" and "*Financial Information of the Group – Significant Factors Affecting our Results of Operations and Financial Condition – Price and Sales Volume of Coal – Sales Volume.*"

A deterioration in the reliability of services provided by our transportation service providers or disruptions to any of the transportation services we rely on due to weather-related problems, key equipment or infrastructure failures, industrial action, rail or port capacity constraints, congestions, failure to obtain consents from third parties for access to rail or land, access being removed or not granted by regulatory authorities, failure or delay in the construction of new rail or port capacity, terrorist attacks or other events could impair our ability to supply coal to our customers, resulting in decreased shipments and revenue. In December 2017, the Queensland Competition Authority issued a draft ruling that would reduce the rate of return that can be charged by Aurizon, the only major coal rail network operator in Queensland, on its network routes. In response, Aurizon decided to modify its maintenance practices, as a result of which its customers will not be able to arrange for the transportation of coal in excess of the capacity guaranteed under the terms of their contracts with Aurizon. These events have not had any significant effects on the operations of Middlemount and Yarrabee, our Queensland mines, since our current production volumes from these mines are less than the transportation capacity agreed with Aurizon. However, if the production volumes from these mines increase significantly, we may not be able to transport all of the increased volume. Further, significant increases in transport costs due to factors such as the introduction of emissions control requirements and fluctuations in the price of diesel fuel and demurrage could make our coal less competitive when compared to coal produced from other regions. Disruptions in shipment or increase in costs over longer periods of time could cause our customers to look to other sources for their coal needs, negatively affecting our business, financial condition and results of operations.

We also enter into transportation agreements with national and privately operated railway networks, rail haulage operators and ports to secure transportation capacity, generally via long-term take-or-pay arrangements. As the transportation capacity secured by these agreements is based on assumed production volume, we may have excess transportation capacity (which, in the case of take-or-pay agreements, we will have to pay for even if unused) if our actual production volume is lower than our estimated production volume. Conversely, we may not have sufficient transportation capacity if our actual production volume exceeds our estimated production volume or if we are unable to transfer the full capacity due to contractual limitations such as requirements for the coal to emanate from specified source mines or be loaded onto trains at specified load points. We currently have excess port capacity commitments across our New South Wales operations, which represents a significant cost of operations. In 2017 we reduced our take-or-pay exposure for contracted but unutilised capacity to A$65 million in excess of planned sales (including take-or-pay contracts obtained under the C&A Acquisition) from A$74 million in 2016 (on a 100% basis including Middlemount). For 2018, the take-or-pay commitments are estimated to total approximately A$43 million in excess of our expected access requirements. Our logistics team continues to implement strategic measures to reduce our take or pay exposures, including the trading of our under-utilised contracted capacity between sites and with third parties on an ad hoc basis. However, we may not be able to materially reduce our take-or-pay commitments through such means, or at all.

Our sales contracts with customers allow them to terminate the contracts upon the occurrence of certain events.

Our sales contracts generally contain provisions that allow our customers to suspend or terminate the contracts if, depending on the contract:

- we commit a material breach of the terms of the contract;
- a change in law restricts or prohibits a party from carrying out its material obligations under the contract;
- we become insolvent, pass a resolution for winding up, institute or have instituted against us any proceedings for insolvency or are subject to similar occurrences;
- any document which secures, guarantees or otherwise supports the performance of our obligations under the contract is terminated or expires, or we materially breach the terms of or disaffirm or reject any such document; or
- a material adverse change occurs in our financial standing or creditworthiness such that in the reasonable opinion of our customer (exercising good faith), our ability of to perform our obligations under the contract becomes materially impaired.

See also "*Business – Marketing and Sales Arrangements*". If our customers were to terminate our sales contracts for these reasons or otherwise, our results of operations would be adversely affected.

Our existing and future indebtedness could restrict our financial and operational flexibility and adversely affect our financial condition.

As at 30 June 2018, we had A$4,300 million of indebtedness, of which A$17 million will mature within one year and A$2,414 million will mature within two to five years. Our existing and future indebtedness could have important consequences in relation to our business. For example, it could:

- make it more difficult for us to pay or refinance our debts as they become due during adverse economic and industry conditions because any related decrease in revenues could cause us to not have sufficient cash flows from operations to make our scheduled debt payments;
- subject us to operating restrictions that limit our flexibility in planning for changes to our business and limiting our ability to pursue our strategic growth plans;
- force us to seek additional capital, restructure or refinance our debts, or sell assets;
- cause us to be less able to take advantage of significant business opportunities such as acquisition opportunities and to react to changes in market or industry conditions;
- cause us to use a portion of our cash flow from operations for debt service, reducing the availability of working capital and delaying or preventing investments, capital expenditure, research and development and other business activities;

- cause us to be more vulnerable to general adverse economic and industry conditions;

- expose us to the risk of increased interest rates because certain of our borrowings are at variable rates of interest;

- expose us to the risk of foreclosure on substantially all of our assets and those of most of our subsidiaries, which secure certain of our indebtedness, if we default on payment or are unable to comply with covenants or restrictions in any of the agreements; and

- limit our ability to borrow, or increase the cost of borrowing, additional monies in the future to fund working capital, capital expenditure and other general corporate purposes.

Our ability to meet our debt service obligations will depend on our future cash flow from operations and our ability to restructure or refinance our debt, which will depend on the condition of the credit and capital markets and our financial condition.

Further, we are subject to various financial covenants under the terms of our banking facilities. These covenants may, for example, require the maintenance of a minimum net worth, net tangible assets or interest cover ratio or a maximum gearing or leverage ratio. Factors such as adverse movements in interest rates and coal prices, appreciation of the A$, deterioration of our financial performance or change in accounting standards could lead to a breach in financial covenants. If there is such a breach, the relevant lenders may require their loans to be repaid immediately or cancel the further availability of their facilities. Some covenant breaches may not be an immediate default but may restrict our ability to make distributions or otherwise limit expenditure.

As a shipper in the NCIG and WICET terminals, some of our source mines are required to maintain a specified minimum level of Marketable Coal Reserves. Non-compliance with this requirement may ultimately result in the termination of the individual contracts and require the payment of our share of any outstanding senior debt in those entities and terminals.

We may not be able to meet our capital expenditure requirements or secure additional financing on favourable terms, whether from external sources or our major shareholders, in the future.

Our business is capital intensive and will require substantial expenditure for, among other things, the construction of our key projects, machinery and equipment and operational capital expenditure. We had capital expenditure of A$333 million, A$383 million, A$345 million and A$84 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, which included, for example, projects such as the Moolarben expansion.

We intend to use cash on hand, funds from operations and additional debt and equity financing to finance our current and future capital expenditure. However, we may not be able to obtain sufficient amounts of capital in a timely manner, on terms acceptable to us, or at all, which could result in a material adverse effect on our business, financial condition and results of operations.

Our debt obligations of A$4,300 million as at 30 June 2018 could have significant consequences for our operations, including reducing the availability of our cash flow to fund working capital, capital expenditure, acquisitions and other general corporate purposes as a result of our debt servicing obligations, limiting our flexibility in planning for, or reacting to, and increasing our vulnerability to, changes in our business, our industry and the general economy and potentially limiting our ability to obtain, or increasing the cost of, any additional financing. Our business operations and cash flows are highly sensitive to any fluctuation in the US$ coal price, movements in the A$:US$ exchange rate and coal production from our operations. Accordingly, in developing our business plan and operating budget, we have made certain assumptions regarding coal prices, the A$:US$ exchange rate, future production levels and other factors which determine our financial performance. The actual amount of funding required in the future will depend on a number of factors, including the performance of our business at that time, and may differ from our estimates of capital expenditure required. In addition, our business plans may change from time to time due to changing circumstances, new opportunities or unforeseen contingencies. If our capital expenditure requirements differ from our estimates or we change our business plans, we may need to obtain additional external financing to meet our capital expenditure plans, which may include bank borrowings or issuances of debt securities.

We may not be able to raise sufficient financing to fund our future capital expenditure and service our debt obligations or at all. Further, there is no guarantee that we will be able to refinance our existing committed credit facilities on favourable terms as and when the existing facilities mature. More specifically, US$1.95 billion of our debt as at 30 June 2018 would have become due for repayment in between 2020 and 2022, and we may not be able to refinance this debt. A number of investment groups and financial institutions have announced either a change in, or intention to consider a change in, investment mandates so their groups can no longer invest in or lend to companies with coal exposure. This may impact our ability to refinance our existing debt and to attract new financing.

If a funding shortfall materialises, we may be required to rely on our shareholders, including Yanzhou, to fulfil our funding requirements. Yanzhou has provided us with a A$1.4 billion loan facility (of which A$1.1 billion had been drawn as at 30 June 2018) to support the ongoing operations and the expansion of the Group and enable it to pay debts as and when they fall due. In addition, Yanzhou had provided a letter of support pursuant to which, unless revoked by giving not less than 24 months' notice, for so long as it owns at least 51% of the Shares, it will ensure that the Company continues to operate so that it remains solvent. On 28 July 2017, Yanzhou reconfirmed to the Company that this undertaking remains in place on its current terms, and that Yanzhou has the financial capacity to perform its obligations under it. However, this undertaking may be revoked by Yanzhou by giving not less than 24 months' notice (or such shorter period as the Company may agree). In addition, depending on the form and terms of any funding to be provided by Yanzhou, minority Shareholder approval and other regulatory approvals may be required before that funding can be provided, and any such approvals may not be forthcoming. Yanzhou's support undertaking does not require Yanzhou to fund the Company in a manner which is non-dilutive to other Shareholders or to provide funding on non-commercial terms, and is also dependent on Yanzhou's financial capacity to perform its obligations under the Yanzhou support as and when called upon to do so. As a result, there is no guarantee that the Company can rely on Yanzhou's commitment to remain solvent.

Failure to obtain sufficient financing could cause delays or cause us to abandon our business development plans and have a material adverse effect on our business, financial condition and results of operations.

We had net cash outflows from operating activities for certain periods during the Track Record Period.

In 2015 and 2016, we recorded net cash outflows from operating activities of A$108 million and A$24 million, respectively, primarily attributable to our accounting losses we incurred in the respective periods. See "*Financial Information of the Group – Liquidity and Capital Resources – Cash Flows*" for further details. Given the cyclical nature of our industry, we cannot assure you that we will not record net cash outflows from operating activities in the future. In general, net cash outflows from operating activities may strain our liquidity and require us to meet the shortfall with cash on hand or cash generated from other activities. Any inability to do so could adversely affect our ability to meet our payment obligations as they become due or impede our ability to implement our business strategies as planned, which in turn could have a material adverse effect on our business, financial condition and results of operations.

We have had negative reserves and accumulated losses during the Track Record Period, and did not declare or pay any dividends for 2015, 2016 or 2017.

We had, on a consolidated basis, negative reserves and accumulated losses of A$880 million and A$535 million as at 31 December 2015; A$817 million and A$935 million as at 31 December 2016; A$413 million and A$764 million as at 31 December 2017; and A$554 million and A$403 million as at 30 June 2018. We did not declare or pay any dividends for 2015, 2016 or 2017. On 15 August 2018, we declared a dividend of approximately A$130 million on our ordinary shares, which was paid on 21 September 2018. The declaration and payment of this dividend is in compliance with the requirements of Section 254T of the Australia Corporations Act. Our profitability and our ability to pay dividends will vary from period to period and may not be predictable. For example, a significant contributor to our profitability in 2017 was other income, consisting of a gain on acquisition of A$177 million in connection with mine assets acquired from C&A and a reversal of impairment of mining tenements of A$100 million for the Moolarben mine, both of which are non-recurring items. We cannot provide any assurance that the Company's future results of operations will be sufficient to generate sufficient retained earnings to pay dividends to our shareholders. See "*– We may not declare dividends on our Shares in the future*".

Our operating results have been, and may in the future be, materially affected by acquisitions, disposals and other strategic transactions that we have undertaken and may undertake in the future.

Our historical financial results, including during the Track Record Period, have been materially influenced by our acquisitions, disposals and other strategic transactions. Specifically, on 1 September 2017, we completed the C&A Acquisition. The C&A Acquisition contributed to a substantial increase in our total assets from A$7,660 million as at 31 December 2016 to A$11,914 million as at 30 June 2018. In addition, we began consolidating the profit and loss accounts of C&A from 1 September 2017, the date of completion of the C&A Acquisition, and our results of operations for 2017 and the six months ended 30 June 2018 reflect the consolidation of C&A's results from 1 September 2017 to 30 June 2018. This contributed to the increase in our total revenue from A$1,238 million in 2016 to A$2,601 million in 2017, and our profit after income tax of A$246 million in 2017 compared to a loss after income tax of A$227 million in 2016. Similarly, our total revenue increased from A$832 million in the six months ended 30 June 2017 to A$2,347 million in the six months ended 30 June 2018, and we had a loss after income tax of A$14 million and a profit after income tax of A$361 million in the same periods. Prior to its acquisition by us, C&A itself had disposed of certain of

its mining operations in 2016, and undertook a restructuring of its interest in HVO. As a result, the financial information of C&A as disclosed in "*Financial Information of C&A*" is presented on a carve-out basis as if such interests were completed on 1 January 2015. However, the audited consolidated financial statements of C&A as disclosed in the Accountants' Report of C&A as set out in Appendix IB to this prospectus are presented without the carve-outs applied, save as indicated in note 36 therein. We also completed the Glencore Transaction and the Warkworth Transaction in 2018, both of which will influence our financial statements in 2018. See "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation.*" As a consequence, comparing our results of operations on a period-to-period basis is not meaningful.

We will incur significant expenses upon closure or discontinuance of operations at our mines, which would have an adverse impact on our financial condition and results of operations.

We may be required to close or discontinue operations at particular mines before the end of their mine life due to environmental, geological, geotechnical, commercial, health and safety or other issues. Such closure or discontinuance of operations could result in significant closure and rehabilitation expenses, employee redundancy costs and other costs or loss of revenues. If one or more of our mine sites are closed earlier than anticipated, we will be required to fund the closure costs on an expedited basis and potentially lose revenues, which would have an adverse impact on our financial condition and results of operations. In addition, there is a risk that claims may be made arising from environmental remediation upon closure of our sites. See also "– *Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown.*"

Many of these costs will also be incurred where mines are placed on care and maintenance before the end of their planned mine life. A move to care and maintenance has the potential to trigger significant employee redundancy costs and a subsequent loss of revenues since ongoing management and rehabilitation of the mine requires a minimal employee presence, which would also have an adverse impact on our financial condition and results of operations. During the Track Record Period, mining ceased at Donaldson's Abel underground mine, which is owned by Watagan and managed by us, in June 2016. As at 30 June 2018, the mine had Coal Reserves of 62 Mt and Marketable Coal Reserves of 32 Mt. The mine was moved to a care and maintenance phase which resulted in some redundancies and incurred costs, although most of the mine workers were re-allocated to other mines. We do not expect further redundancies or related costs as a result of moving to care and maintenance at the Abel mine and have subsequently commenced feasibility studies to explore potential future mining operations.

We operate through a number of joint venture and similar structures, and our operational and financial results will be affected by how these arrangements are managed.

A significant portion of our business is operated though joint venture structures and entities in which we hold equity interests. We have a joint venture partnership in respect of Middlemount Coal Pty Ltd (in which we have a 49.9997% equity interest) and hold equity interests in Newcastle Coal Infrastructure Group Pty Ltd (in which we have a 27.0% equity interest) and Port Waratah Coal Services Limited (in which we have a 36.0% legal interest and a 30.0% effective interest). We also have the following material

unincorporated joint ventures: the Moolarben JV (in which we hold a 81.0% interest and have reached an agreement in principle to increase our stake to 85.0%, subject to final approvals and documentation), the Mount Thorley joint venture (in which we hold a 80.0% interest) ("**Mount Thorley JV**") and the Warkworth joint venture (in which we hold a 84.5% interest) ("**Warkworth JV**"). See "*Business – Our Mining Operations*".

With effect from 4 May 2018, we established a 51%:49% unincorporated joint venture between us and Glencore in respect of HVO, in which we acquired a 67.6% interest from Rio Tinto as part of the C&A Acquisition. Glencore acquired its 49% interest in consideration for US$1,139 million in cash, consisting of (i) US$710 million in consideration to HVO Resources Pty Ltd, a wholly owned subsidiary of Mitsubishi Development Pty Ltd ("**MDP**"), for its 32.4% interest in HVO and (ii) US$429 million in consideration to us for a 16.6% interest in HVO, in each case subject to final post-closing adjustments, plus the acceptance of a 27.9% share of US$240 million of non-contingent royalties and 49% of HVO contingent royalties payable by the Company in respect of the C&A Acquisition. The joint venture is jointly controlled through the JVMC whose powers include the approval of budgets, life of mine and year-by-year five year plans governing the HVO JV's activities, supervision of the manager of the joint venture, and the approval of development and expansion proposals. The JVMC comprises three representatives nominated by us and three representatives nominated by Glencore. The general manager of the joint venture is nominated by Glencore while the financial controller is nominated by us. The operations and financial results of HVO, which is our largest asset with Coal Reserves of 796 Mt and Marketable Coal Reserves of 554 Mt (in each case as at 30 June 2018 on a 100% basis) and whose marketable coal production in 2017 was 14.8 Mt, will depend on how we and Glencore manage and operate our joint venture in the future.

The success of our joint ventures depends on a number of factors, including the financial resources of the other shareholders and joint venture partners, their willingness and ability to honour their commitments under the joint venture agreements, the manner in which they exercise control, veto or other governance rights in respect of the joint venture, and the extent to which they cooperate in operational and strategic decisions with respect to the relevant mine. If we become engaged in material disagreements with our joint venture partners, the operational and financial results of the underlying mines may be adversely affected.

Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders.

In 2010, Felix Resources Limited, now known as Yancoal Resources Limited ("**Yancoal Resources**"), a wholly-owned subsidiary of the Company and the shareholder of Yarrabee Coal Company Pty Limited, entered into a shareholders' agreement with WICET Holdings Pty Limited ("**WICET Holdings**"), its wholly owned subsidiary Wiggins Island Coal Export Terminal Pty Limited ("**WICET Pty Limited**") and certain other parties, in relation to the management of WICET Holdings and WICET Pty Limited. WICET Pty Limited owns and operates the Wiggins Island Coal Export Terminal ("**WICET**"). As at 31 December 2017, Yancoal Resources held a Class A ordinary share entitling it to a 9.38% voting interest in WICET Holdings, Gladstone long-term securities ("**GILTs**") issued by WICET Holdings of A$32 million and E Class Wiggins Island Preference Securities ("**WIPs**") issued by WICET Holdings of A$29 million. Further, Yarrabee Coal Company Pty Limited and the Company entered into a take-or-pay agreement with WICET Pty Limited, pursuant to which Yarrabee Coal Company Pty Limited and the Company as shippers are required to utilise certain services at WICET

or procure that a substitute shipper utilises such services. As a result, we may be liable to pay certain specified terminal handling charges for the services provided by WICET even if we are unable to utilise such services or procure their utilisation by a substitute shipper. Our terminal handling charges can also be adjusted by WICET Pty Limited if our share of its operational and finance costs increases, including because of increased operational costs or because another shipper defaults and has its capacity reduced to nil. While our liability to pay the finance cost component of such charges is under most circumstances subject to a cap, such payments may result in an increase in our expenses, which may affect our results of operations.

Under the terms of the agreements, Yancoal Resources holds one Class A share in WICET Holdings, as does each other shipper. A Class A shareholder's voting entitlement in WICET Holdings is equal to its contracted share of the total contracted WICET capacity. Each such shareholder has an indirect exposure to any bank debt owed by WICET Pty Limited ("**WICET Debt**") equal to its voting entitlement. If a Class A shareholder in WICET Holdings becomes insolvent and exits WICET Holdings, the voting entitlement of the remaining Class A shareholders increases pro-rata, which results in their indirect exposure to WICET Debt also increasing. Prior to the Latest Practicable Date, several of the original Class A shareholders of WICET Holdings had entered into administration or insolvency proceedings and subsequently exited WICET Holdings, which resulted in Yancoal Resources' voting entitlement in WICET Holdings increasing to 9.38% and a corresponding increase in our indirect exposure to the WICET Debt. On 18 October 2018, a WICET Class A shareholder, Northern Energy Corporation Limited, and its related shipper Colton Coal Pty Ltd, entered into administration but as of the Latest Practicable Date Northern Energy Corporation Limited has not exited WICET Holdings. If Northern Energy Corporation Limited exits WICET Holdings, Yancoal Resources' voting entitlement and indirect exposure to WICET Debt will increase to 10.34%. While WICET Holdings and the remaining Class A shareholders as at the Latest Practicable Date were solvent, there is no guarantee that they will not enter into insolvency or administration proceedings in the future, which may result in our indirect exposure to the WICET Debt further increasing.

In addition, the senior debt facility, which matured in September 2018, was renegotiated (involving a scheme of arrangement approved by the Supreme Court of New South Wales on 11 September 2018) and resulted in amendments to the terms of such facility, which led to us recognising A$50 million in other operating expenses in the six months ended 30 June 2018, which arose from the partial impairment of our investment in GiLTs and the full impairment of our investment in WIPs. The renegotiation of the senior debt facility has involved the 'financing costs' component of the total terminal handling charge increasing by US$3.35 per tonne and the inclusion of a new review event where there is a reduction in the aggregate contracted tonnage of the shippers below either 12.5 Mtpa or (if WICET Pty Limited is also unable to meet certain solvency and debt service cover ratio requirements) 14 Mtpa (Northern Energy Corporation Limited, and its related shipper Colton Coal Pty Ltd, ceasing to perform their shipping commitments and exiting WICET Holdings would not trigger these tonnage thresholds, as their committed tonnage is only 0.5 Mtpa of total current throughput of 16 Mtpa). These arrangements came into effect on 1 October 2018. An increase in our indirect exposure to the WICET Debt could further adversely impact the recoverability of our investments in WICET Holdings and, in the case of failure in refinancing, or a review event or event of default, could result in the senior lenders or a receiver appointed by them taking steps to recover against the shippers, whether through increased charges or otherwise.

The pro forma financial information included in this prospectus is not indicative of our future financial condition or results of operations.

The pro forma financial information set out in "*Appendix IIB – Unaudited Pro Forma Financial Information of the Enlarged Group"* has been prepared for illustrative purposes only, and shows the impact of the Pro Forma Transactions, as if these acquisitions had been completed on 1 January 2017. Such pro forma information addresses a hypothetical situation and is not necessarily representative of our results of operations and changes in liquidity and capital resources as they would have appeared in our financial statements had the relevant transaction occurred during the year ended 31 December 2017, and is not intended to be indicative of our future financial condition and results of operations. The adjustments set forth in such pro forma information are based upon available information and assumptions that our management believes to be reasonable. If the assumptions underlying the preparation of such pro forma information do not occur, our actual financial results could be materially different from those indicated in such pro forma information. Further, the rules and regulations related to the preparation of pro forma financial information in other jurisdictions may vary significantly from the basis of preparation for our pro forma combined income statement. Therefore, such pro forma information should not be relied upon as if it has been prepared in accordance with those standards and practices.

Our assets may be subject to impairment risks which could adversely affect their value.

Our balance sheet includes a number of assets that are subject to impairment risk or are required to be carried at fair value, including mining tenements, exploration and evaluation assets, intangible assets (including goodwill), the loans to Middlemount and Watagan, the royalty receivable from Middlemount, investments accounted for using the equity method and deferred tax assets. The values of these assets are generally derived from the fundamental valuation of the underlying mining operations and as such are subject to many of the risks to which our operations are exposed, including coal price and demand fluctuations, foreign exchange risks, changes in coal production and estimates of reserves and resources, and operating risks. Adverse changes in these risk factors could lead to a reduction in the valuation of our assets and result in an impairment charge or fair value loss being recognised. See also "– *We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations*."

Our ability to collect payments from our customers could be impaired if their creditworthiness and financial health deteriorate.

Our ability to receive payment for coal sold and delivered depends on the continued creditworthiness and financial health of our customers. Competition with other coal suppliers could force us to extend credit to customers and on terms that could increase our risk of payment default. In recent years, downturns in the economy and disruptions in the global financial markets have, from time to time, affected the creditworthiness of our customers and limited their liquidity and access to credit. For example, changes in the financial circumstances of the Noble Group, which had been our second largest customer for 2017 in terms of revenue, has led to the downgrading of its overall credit rating by multiple rating agencies and several instances of late payment of accounts receivable owed to us since August 2017. We have taken a number of actions in response, including changing the required payment method from telegraphic transfer to irrevocable letters of credit, imposing interest on late payments and withholding delivery of products until certain contractual requirements are met. However, while we have been

provided with irrevocable letters of credit supporting the Noble Group's payment obligations, we cannot provide any assurance that further financial problems at the Noble Group will not have an adverse effect on us. Additionally, such arrangements do not address other types of contractual default. For example, we recently commenced arbitration proceedings against the Noble Group in May 2018 seeking relief, including damages, on account of the Noble Group failing to purchase coal under an existing contract.

There is no guarantee that another customer will not commit any payment defaults in the future. Customers in certain countries may be subject to other pressures and uncertainties that may affect their ability to pay, including trade barriers, exchange controls and local economic and political conditions.

Proved and probable coal reserves are expressions of judgement based on knowledge, experience and industry practice, and any adjustments to estimated proved and probable coal reserves could adversely affect our development and mining plans.

Estimates of proved and probable coal reserves are expressions of judgement based on knowledge, experience and industry practice. In determining the feasibility of developing and operating our mines, we use estimates of coal reserves and resources that are made by competent persons appointed by us in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Numerous uncertainties inherent in estimating quantities and the value of recoverable and marketable coal reserves exist, including many factors beyond our control. As a result, estimates of reserves are, by their nature, uncertain. When calculating reserves estimates, we make assumptions about:

- geological and hydrological conditions;
- production from the mining area;
- the effects of regulations, including environmental, health and safety regulations and taxes;
- future coal prices; and
- future operating costs.

Coal resource and reserve estimates are regularly revised based on actual production experience, and determinations of coal resources or reserves that appear valid when made may change significantly when new information becomes available. Should we encounter mineralisation or formations different from those predicted by past drilling, sampling and similar examinations, coal resource and reserve estimates may have to be adjusted and mining plans, coal processing methods and infrastructure may have to be altered in a way that might adversely affect our 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 environmental, permitting, title or tax regulations, may mean that the tonnage of coal that can be feasibly extracted may be significantly lower than our coal resource and reserve estimates. As a result, estimated coal reserves and resources may require revisions. If it is determined that mining of certain coal reserves is uneconomic or not possible due to safety issues, this may lead to a reduction in our aggregate coal reserve estimates.

Further, actual facts may vary considerably from the assumptions we use in estimating our reserves. Our reserve amounts have been determined based on assumed coal prices and historical and assumed operating costs. Coal price and operating cost assumptions are by their nature uncertain, and our assumptions can vary significantly from those of other market participants, external consultants and industry experts. Some of our reserves may become unprofitable or uneconomic to develop if the long-term market price for coal decreases or our operating costs and capital expenditure requirements increase. In addition, our exploration activities may not result in the discovery of additional coal deposits that can be mined profitably or of coal products that meet the required quality specifications. For these reasons, our actual recoverable and marketable reserves and our actual production, costs, revenues and expenditures relating to reserves may vary materially from our estimates. Our estimates may not accurately reflect our actual reserves or be indicative of future production, costs, revenues or expenditures.

Adjustments to proved and probable coal reserves could also affect our development and mining plans. Our recovery rates will vary from time to time, which will increase or decrease the volumes of coal that we can sell from period to period. Any significant reduction in the volumes and grades of the coal reserves we recover from what those estimated could have a materially adverse effect on our business, financial condition and results of operations. In addition, our volume of production from our mine properties will decline as our reserves are depleted.

Exploration of mineral properties and development of resources could involve significant uncertainties.

We have two exploration projects, Monash and Oaklands, both located in NSW. Both of these projects are long term greenfield development projects which require additional exploration, scoping studies and development strategies to realise a path to commercial development. We may have additional exploration projects in other regions in the future. Any discovery of a coal deposit does not guarantee that the mining of that deposit would be commercially viable. The success of any mining exploration program depends on various factors including, among other things, whether mineral bodies can be located and whether the locations of mineral bodies are economically viable to mine. The size of the deposit, development and operating costs, coal prices and recovery rates are all key factors in determining commercial viability. In addition, the development of these resources could face significant uncertainties, may take several years and require capital expenditure from the initial exploration phase until commencement of production, during which time market fundamentals, capital costs and economic feasibility may change. As a result, actual results may differ from those anticipated by third party independent technical studies.

Furthermore, there are a number of uncertainties inherent in the development and expansion of mining operations, including: (i) the availability and timing of necessary governmental permits, licences and approvals; (ii) the timing and cost necessary to construct mining and processing facilities; (iii) the availability and cost of labour, utilities, and supplies; (iv) the accessibility of transportation and other infrastructure; and (v) the availability of funds to finance construction and production activities. As a result, we cannot assure you that any of our exploration activities will result in the discovery of valuable resources or reserves, or that reported resources can be converted into reserves in the future.

Our business may be adversely affected if we are unable to acquire additional coal resources and convert them into economically recoverable coal reserves.

Our existing coal reserves will decline as mining continues. Therefore, our growth and long-term success will depend on our ability to acquire additional coal resources within our exploration areas and to convert such coal resources into economically recoverable coal reserves. New coal resources may not be found or may not be economically recoverable. If we are unable to discover new coal resources or are unable to acquire additional coal resources and reserves, this could have a material adverse effect on our business, financial condition, results of operations and prospects.

Even if we discover additional resources or acquire additional coal resources, it could take a number of years from the initial phases of drilling until exploitation is possible, during which time the economic viability of production may change depending on the price of coal, which is subject to significant volatility, and other factors, including fuel, labour, equipment and other operating costs, government regulations and exchange rate fluctuations. If a project proves not to be economically feasible by the time we are able to exploit it, we may incur substantial write-offs. As a result of any of the foregoing factors, we may not be able to discover any viable resources, may be unable to exploit any resources discovered or may not be able to recover all or any portion of our investment in those exploration activities.

Coal mining operations in Australia have inherent title risks associated with grant and renewal of tenements, native title rights and Aboriginal land claims.

Tenements and related approvals

Exploring or mining for coal in NSW and Queensland is unlawful without a tenement granted by the relevant state government. Interests in tenements in NSW and Queensland are governed by the respective state legislation and are evidenced by the granting of licences or leases. Each licence or lease is for a specific term and carries with it reporting commitments, as well as other conditions requiring compliance. Obtaining mining tenements and carrying out certain activities under mining tenements in NSW and Queensland often involves first obtaining consents from landholders and other third parties (some of whom may in certain circumstances have a right of veto), as well as various approvals including environmental approvals. There is a risk that the requisite consents and approvals may not be able to be obtained on time or on acceptable commercial terms, or may not be able to be obtained at all. Further, all of the granted tenements in which we have or may earn an interest will be subject to applications for renewal or grant (as the case may be). We have filed advance applications for renewal of certain tenements covering the MTW and HVO mines, and these applications were pending approval by the relevant authority as at the Latest Practicable Date. The grant or renewal of each tenement or licence in NSW and Queensland is usually at the discretion of the relevant government authority which will consider various factors, which may include our compliance with any conditions placed on an existing licence, when making its decisions. There is no certainty that an application for grant or renewal of a tenement will be granted at all or on satisfactory terms or within expected timeframes.

Moreover, the conditions attached to tenements may change. The permitting rules are complex and may change over time, making our responsibility to comply with the applicable requirements more onerous, more costly or impractical, and thereby precluding or impairing continuing or future mining operations. Consequently, we may not be able to acquire title to or interest in tenements, or we may not be able to retain our interest in tenements in the long run or renew the licences or leases, if the relevant

conditions are not met or if insufficient funds are available to meet expenditure commitments. If a tenement is not renewed, we may lose the opportunity to discover and/or develop any mineral resources on that tenement.

Native title

It is also possible that, in relation to tenements which we have an interest in or will in the future acquire, there may be areas over which legitimate native title rights of Aboriginal Australians exist. Where the grant or renewal of a tenement is in respect of land in relation to which native title may exist, the provisions of the Native Title Act 1993 (Cth) need to be complied with in order for the tenement to be validly granted. Compliance with the Native Title Act 1993 (Cth) and the relevant native title process to be followed for the grant of the tenement may be prolonged or delayed, and substantial compensation may be payable as part of any agreement reached, including for the impairment of the relevant native title rights and interests.

Although there is no determination of native title which overlaps with the areas over which we have interests under tenements, there are registered native title claims overlapping some or all of the areas in which HVO, MTW, Ashton, Austar and Moolarben mines are located. While it is unlikely that these claims, should they be successful, will affect the validity of the existing mining tenements, we may be required to enter into a compensation agreement with the native title holders in areas of overlap before a new mining lease or assessment lease is granted or an existing lease renewed.

Our interests in tenements, our ability to gain access to new tenements, or our ability to progress from the exploration phase to the development and mining phases of operations, may be adversely affected by areas that are subject to native title claims.

Aboriginal land claims

Under the Aboriginal Land Rights Act 1983 (NSW), Aboriginal Land Councils can claim crown land if certain requirements are met. If a claim is successful, freehold title over the relevant land is transferred to the claimant council. Further, councils are afforded certain statutory rights which can include an effective veto over the grant of future mining tenements over any area of such land. Some of our tenements are located in areas that are subject to outstanding Aboriginal land claims, and additional Aboriginal land claims may be made in the future over other areas in which our tenements are located. Any such claims may result in our ability to explore or mine for coal in these areas being subject to the decisions of the relevant Aboriginal Land Councils, which may adversely affect our ability to develop projects and, consequently, our operational and financial performance.

Certain conditions of the approvals granted for commencement of mining operations at one of our mines have not been fulfilled, and we are unable to commence development work at that site.

Pursuant to the New South Wales Environmental Planning & Assessment Act, the required environmental approvals for the Ashton South East Open Cut Project were granted by the New South Wales Land and Environment Court on 17 April 2015. Under the terms of such approval, we are precluded from undertaking any development work on the project site until we have purchased, leased or licensed a privately owned property which forms part of the mining area for that project. As at the Latest Practicable Date, no agreement had been concluded with the owner of the relevant property. While we have until April 2020 (or April 2022 if extended) to reach agreement with the property

owner (or their successors in title), or to seek a further extension to the environmental approval beyond 2022, there is no guarantee that such agreement will be reached or an application for extension of the approval will be successful. If we are unable to reach an agreement in respect of the relevant property, we may not be able to commence development work on the project site, which could render the project unviable.

Coal mining operations in Australia are subject to certain domestic risks.

Our coal mining operations in Australia are subject to certain domestic risks, which include the following.

- *Land access*. The granting of mining tenements does not remove the need to enter into land access arrangements with third party land holders (where the land underlying the mining tenement is owned by a third party). In some cases, the underlying land may be owned by a competitor, pastoralist or other third parties. There is no guarantee that we will be able to obtain all required land access rights required for the operation of our mines from the relevant land holders.

- *Coordination agreements*. Coal mining tenements in NSW and Queensland are frequently granted over land over which other tenements and other exploration interests have been or may be granted. Where tenements overlap in Queensland, depending on the type of tenements which are overlapping, it is necessary for the holders to enter into coordination agreements or joint development plans. Where tenements overlap in New South Wales, it may be a condition of the grant or renewal of certain tenements that the tenement holder enters into, or makes every reasonable attempt (and be able to demonstrate its attempts) to enter into, cooperation agreements with the holders of any overlapping authorisation. In some cases, the interests of the overlapping tenement holders may not be aligned and accordingly, mining operations may be delayed or adversely affected. One of our mines and its associated tenements adjoin or are overlapped by petroleum tenements, exploration licences and interests, mining leases and private land leases held by third parties, and there is no guarantee that the relevant third parties will adhere to any coordination agreements or similar arrangements we enter into with them. Further, we may not be able to reach an agreement with any overlapping tenement holders on terms satisfactory to us in the future. If agreement cannot be reached with overlapping tenement holders, the matter may be referred to the relevant governmental authority or court who may make a decision which adversely impacts upon or prevents the project proposed by us.

- *Environmental conditions and action groups*. Before any mining tenure is granted in Australia, the applicant must undertake a comprehensive public environmental assessment on the impact of the proposed mining operations. Such an assessment involves a public consultation process, which often involves encountering organised environmental or community groups that seek to restrict or block contemplated mining operations. The relevant authorities frequently impose conditions on environment approvals that may materially affect mining operations. Environmental lobby groups in both Queensland and New South Wales have recently made submissions to governmental authorities in an attempt to prevent or delay new mine developments or expansion of existing mines on the basis of environmental concerns. For example, it is possible that community groups, or their

representatives, may commence legal action relating to the closure of Wallaby Scrub Road which was gazetted by the New South Wales government in connection with the planned westward expansion of the Warkworth mine. Further, community groups such as those in Bulga, situated near the MTW mines, have voiced numerous grievances against mine operations, and noise and dust emissions in particular. Increased community concern and actions taken by community and environmental groups may delay or prevent the development of new mines or the expansion of existing mines, or may result in conditions being imposed on such mines or costs being incurred that adversely affect the profitability of those mines.

We purchase services from third-party service providers to carry out certain coal mining and other work and may enter into disputes with such service providers.

We engage third-party service providers and contractors to provide certain services in our exploration, mining and other processes. The services we procure from these service providers differ depending on our needs at any given mine, but generally include secondment of workers to assist us in extracting coal at our mines, renting certain production equipment to us, providing specialist services such as blasting, and advising us on mining technology and coal production. See "*Business – Employees – Third Party Contractors*." Our aggregate expenses in relation to contractors for 2015, 2016 and 2017 and the six months ended 30 June 2018 were A$155 million, A$78 million, A$134 million and A$96 million, respectively.

Production at our coal mines could be disrupted by any significant failure by our contractors to comply with their obligations under their operating agreements (whether as a result of financial or operational difficulties or otherwise) or any termination or significant breach of an operating agreement by a contractor. We might not be able to find suitable replacement contractors within a reasonable period of time or at all, if any of our contractors were to cease to perform their services or to terminate their operating agreements.

If a dispute arises between any such service provider and us in connection with the performance of either party's obligations and the parties cannot resolve the differences in a timely manner, the operation of the relevant coal mine may be materially and adversely effected. Further, our service providers may enter into insolvency or similar proceedings, which could impact their ability to perform their contracted services as well as our ability to recover amounts owed to us. There can be no assurance that we will be successful in attempting to enforce our contractual rights or recover all or any monies owed by our counterparty (including under any claim for damages) through legal action.

Any protracted dispute with our contractors or any material labour dispute between our contractors and their employees could materially and adversely affect our operations and production, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may become involved in litigation and other legal proceedings, which may have a material adverse effect on our reputation, business, financial condition and results of operations.

Like all companies in the resources sector, we are exposed to the risk of claims, litigation and other legal proceedings involving the Company, our subsidiaries and the Directors (either as the complainant or as the defendant). Such claims or proceedings may be made or instituted by persons alleging they are owed fees or other contractual entitlements, employees, regulators, competitors or other third parties. Such claims or proceedings could divert our management's time and attention and consume financial resources in their defence or prosecution. For example, we are involved in a dispute with one of our infrastructure services providers relating to fee payments, which we do not consider to be payable to the services provider or in the amount claimed. In addition, we have commenced arbitral proceedings against the Noble Group in relation to breaches of a contract by the Noble Group and, separately, the Noble Group has commenced proceedings in the Supreme Court of New South Wales (an Australian State court) in relation to alleged breaches and repudiation of a different contract by Gloucester Coal, a subsidiary of the Company. Given the early stage nature of these matters and ongoing fact-finding, we are not able to assess whether the potential impact on us will be material.

Further, Gloucester SPV Pty Ltd ("**Gloucester SPV**"), a subsidiary of the Company, is one of several respondents to proceedings commenced in 2015 by Oceltip Pty Ltd ("**Oceltip**"), an independent third party, against Noble Resources Pte Ltd ("**Noble Resources**"), a subsidiary of the Noble Group, in the Supreme Court of Queensland. The subject of the dispute involves the transfer of Noble Resources' right to receive certain royalty payments under a royalty deed to Gloucester SPV, who since the transfer now enjoys the right to those royalty payments. The consideration for the transfer was A$168 million and as at the Latest Practicable Date we estimate the potential value of the royalty streams to be approximately A$195 million. Oceltip's claim disputes the validity of the transfer and seeks to enforce its pre-emptive rights under the royalty deed against Noble Resources. On 14 November 2018, a related claim was served on Gloucester Coal and Gloucester SPV in which Oceltip has alleged that Gloucester SPV induced or procured Noble Resources' alleged breach of the royalty deed by reason of transferring the rights to receive those payments to Gloucester SPV, and has claimed unspecified damages. As at the Latest Practicable Date, the Oceltip matters remain at a preliminary stage and may be consolidated into a single proceeding, and we are unable to assess the Group's potential exposure (if any) on account of these matters.

Save as disclosed in "*Business – Health, Safety and Environmental Matters*", during the Track Record Period and up to the Latest Practicable Date, neither we nor any of the Directors was engaged in any litigation, claim or arbitration of material importance nor, to the best of the Directors' knowledge, is any litigation, claim or arbitration of material importance pending or threatened against us or the Directors in relation to the Group. See "*Business – Legal Proceedings and Non-Compliance.*" There is no guarantee that we will not be involved in any such matters in the future, or that no additional liability will arise out of any pending proceedings that we do not consider to be of material importance. Any unfavourable decision in connection with such proceedings, individually or in the aggregate, could adversely affect our reputation, business, financial condition and results of operations.

We may experience difficulty in integrating our acquisitions, which could result in a material adverse effect on our business, financial condition and results of operations.

Historically, we have grown through acquisitions. We acquired the Southland Mine (renamed Austar) in December 2004 and Felix Resources (assets of which included interests in the Moolarben, Yarrabee and Ashton mines) in December 2009. We listed on the ASX in June 2012, following our merger with Gloucester Coal, assets of which included interests in the Middlemount, Stratford Duralie and Donaldson mines and the Monash exploration project. In September 2017 we completed the acquisition of Coal & Allied Industries Limited from Rio Tinto, as a consequence of which we acquired interests in HVO and MTW in New South Wales, which are among the largest thermal coal operations in Australia, as well as related export infrastructure. In March 2018, we acquired an additional 28.9% interest in Warkworth from MDP.

We have devoted and continue to devote significant resources to the integration of our operations in order to achieve the anticipated synergies and benefits of our acquisitions.

Acquisitions and expansion involve uncertainties and a number of risks, including:

- difficulty in integrating the assets, operations and technologies of the acquired companies or assets, including their employees, corporate cultures, managerial systems, processes and procedures and management information systems and services;

- complying with the laws, regulations and policies applicable to the acquired businesses;

- failure to achieve the objectives or benefits, or to generate sufficient revenue to recover the costs and expenses, resulting from the acquisition and integration of such companies or assets;

- managing relationships with employees, customers and business partners during the course of integrating new businesses;

- managing ongoing relationships with joint venture partners where we acquire interests in joint ventures (see also "– *We operate through a number of joint venture and similar structures, and our operational and financial results will be affected by how these arrangements are managed.*");

- integrating other acquired employee groups with our employee groups and maintaining productive employee relations;

- attracting, training and motivating members of our management and workforce;

- accessing our capital resources and internally generated funds to fund acquisitions, which may divert financial resources otherwise available for other purposes;

- enhancing our operational, financial and management controls, particularly those of our newly acquired assets and subsidiaries, to maintain the reliability of our reporting processes;

- difficulty in exercising control and supervision over the newly acquired operations, including failure to implement and communicate our safety management procedures resulting in additional safety hazards and risks; and

- potential ongoing financial obligations and unforeseen or hidden liabilities of the acquired businesses and assets.

In the event that we are unable to efficiently and effectively integrate newly acquired companies, including C&A, we may be unable to achieve the objectives or anticipated benefits of such acquisitions, which may adversely impact our business, financial condition and results of operations. In addition, we may have to write down the carrying value of the intangible assets associated with any acquired companies, which could adversely affect our results of operations.

We are exposed to fluctuations in exchange rates and interest rates.

As a company with sales across the Asia-Pacific region but operating entirely in Australia, our financial results are exposed to foreign exchange rate movements, particularly those relating to the Australian dollar and U.S. dollar rate. In particular, our sales under coal supply contracts are generally priced and payable in U.S. dollars, while our day-to-day costs are primarily denominated in our functional currency, the Australian dollar. In addition, imported plant and equipment may be priced in U.S. dollars or another foreign currency. Our debt is primarily denominated in U.S. dollars, although we also incur debt, and have debt facilities available, in Australian dollars. Some of our foreign exchange risk is hedged through natural cash flow hedges. See also *"– We do not make use of hedging instruments to hedge foreign exchange risks in respect of U.S. dollar denominated loans, and the natural cash flow hedge created by hedging a portion of these loans against our U.S. dollar denominated sales may not be sufficient to offset our foreign exchange losses*" and "*Financial Information of the Group – Significant Factors affecting our Results of Operations and Financial Condition – Foreign Exchange Rate Fluctuations*". The impact of exchange rate movements will vary depending on factors such as the nature, magnitude and duration of the movements and the extent to which currency risk is hedged under hedging arrangements.

We are exposed to cash flow interest rate risk in relation to variable-rate bank balances, term deposits, restricted cash and variable rate borrowings. Our interest rate risk primarily arises from fluctuations in the LIBOR rate in relation to our U.S. dollar-denominated borrowings. A substantial majority of our borrowings denominated in U.S. dollars are linked to floating LIBOR rates, the fluctuation of which is beyond our control. See "*Financial Information of the Group – Significant Factors affecting our Results of Operations and Financial Condition – Financing Arrangements and Interest Rate Movements*". We do not currently have any interest rate hedging arrangements. Our lending rates may increase in the future as a result of reasons beyond our control, and may result in an adverse effect on our business, financial condition and results of operations.

We do not make use of hedging instruments to hedge foreign exchange risks in respect of U.S. dollar denominated loans, and the natural cash flow hedge created by hedging a portion of these loans against our U.S. dollar denominated sales may not be sufficient to offset our foreign exchange losses.

We do not currently use bank issued instruments to hedge foreign exchange risks in respect of U.S. dollar denominated loans. However, the scheduled repayment of the principal amounts on our U.S. dollar denominated loans are designated to hedge the

cash flow risks on the portion of forecast U.S. dollar denominated sales that are not hedged through bank issued instruments, resulting in a natural cash flow hedge. Specifically, U.S. dollar denominated loan repayments within a six-month period are designated to hedge the forecast U.S. dollar denominated sales during the same period after the designation of the hedge relationship based on a dollar for dollar basis until the hedge ratio reaches one.

Unrealised foreign exchange gains or losses arising on the translation of hedged U.S. dollar denominated loans are deferred on our balance sheet to a cash flow hedge reserve in equity. Such deferred gains or losses are recycled to the income statement during the six-month period in which the loan is scheduled to be repaid. There is no guarantee that this natural cash flow hedge will be sufficient to offset our foreign exchange losses, and material foreign exchange losses could negatively affect our financial condition. As at 30 June 2018, we had A$791 million of unrealised foreign exchange losses before tax and A$554 million of unrealised foreign exchange losses after tax deferred on our balance sheet in equity through our natural cash flow hedge.

Our Controlling Shareholders are state-owned enterprises in the PRC, and will be able to exercise significant influence over certain activities of the Group.

Yanzhou, which currently holds 65.45% of the Shares and will be interested in [**REDACTED**]% of the Shares immediately following the completion of the Global Offering, and Yankuang, as the majority shareholder of Yanzhou, will be in a position to exercise significant influence over matters which require approval of the Shareholders. The interests of Yanzhou and Yankuang may not necessarily be aligned with the interests of other Shareholders. In particular, Yanzhou, Yankuang, and their respective subsidiaries conduct business in the coal mining industry. Actions of Yanzhou and Yankuang could favour their own respective interests over the interests of other Shareholders, which could materially affect our business, financial condition, results of operations and prospects.

Furthermore, Yanzhou and Yankuang are state-owned enterprises in the PRC. As a consequence, they are required in their capacity as our Controlling Shareholders to obtain regulatory approvals in the PRC in respect of a range of actions that we may engage in. These approvals may not be received in a timely manner or at all, which could delay or prevent actions that we may wish to undertake.

We have existing contractual arrangements, and may in the future continue to enter into contractual arrangements, with our Controlling Shareholders.

We have entered into loan, guarantee and coal sales agreements with the Yanzhou Group, a management and transitional services agreement with Yanzhou and Yankuang and certain other arrangements and transactions with Yanzhou and Yankuang, further details of which are set out in "*Connected Transactions*." These connected transactions were reviewed and approved according to the procedures under relevant regulations and policies. However, we may continue to enter into related party transactions with our Controlling Shareholders and, as such, any material financial or operational developments experienced by our Controlling Shareholders that lead to the disruption of their operations or impair their ability to perform their obligations under their agreements with us could materially affect our business, financial condition and results of operations and future prospects.

Our business, financial condition and results of operations are subject to government royalties on the production of coal.

In addition to corporate income tax, we are required to pay government royalties, direct and indirect taxes and other imposts in the jurisdictions in which we operate. The production of coal in Queensland and New South Wales is subject to the payment of royalties to the state governments. In both states, these royalties are calculated as a percentage of the value for which the coal is sold and payable on an *ad valorem* basis. The relevant State Governments may increase these royalties or change their method of calculation or the interpretation or application of the relevant policies, or impose new royalties or similar taxes. Any resulting increase in our tax cost could have a material adverse effect on our business, financial condition and results of operations.

The Company may lose the benefit of existing and carried forward tax losses, which may have an adverse effect on its profits.

As at 30 June 2018, our tax consolidated group had approximately A$2.4 billion of available carried forward tax losses which can be applied to reduce future liability for income tax on its taxable profits, so long as they remain available. The Company's ability to use carried forward losses in the future will depend, in part, on its continued satisfaction of the loss recoupment tests under Australian tax laws and be subject to the availability of sufficient future taxable profits. Further, the Company's ability to obtain the benefit of existing tax losses and claim other tax attributes will depend on future circumstances and may be affected by any changes in our ownership structure (including the ownership structure of Yanzhou). Such changes may be beyond our control, and there is no guarantee that the Company will be able to utilise the benefit of all (or any) of the carried forward tax losses.

If the Company's ability to utilise its tax losses is impacted, it will be required to pay higher levels of corporate income tax in future periods than may otherwise have been the case, which will reduce the available profit to be applied towards the payment of dividends or use for other purposes such as investment or the reduction of debt.

There is uncertainty about the applicability or recoverability of our deferred tax assets, which may affect our taxes payable for future periods.

Our deferred tax assets include unused tax losses and tax credits which we carry forward to the extent that our management believes it is probable that taxable profits will be available against which such unused tax losses and credits can be utilised. Our deferred tax assets amounted to A$1,166 million, A$1,339 million, A$1,219 million and A$1,086 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. There is no expiry date on our ability to utilise such tax losses, although they are subject to the continuous satisfaction of certain tax rules. See notes 4 and 30 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on our accounting policy with respect to deferred tax assets and on the movements of our deferred tax assets during the Track Record Period. Such determination requires significant judgment from our management on the tax treatment of certain transactions as well as an assessment of the probability, timing and adequacy of future taxable profits for the deferred tax assets to be recovered. If such judgments turn out to be imprecise, we may need to adjust our tax provisions accordingly. In addition, when we utilise carried forward tax losses against our future taxable profit, our taxable profits are reduced, which in turn reduces the tax payable. We cannot predict any future movements in our deferred tax assets or the effect that such movements could have on our taxes payable for future periods.

Transactions with international related parties may be impacted by the application of Australia's transfer pricing rules, which may have an adverse effect on the Company's profits.

Australian transfer pricing rules adopt the arm's length principle. The application of the arm's length principle in relation to financing issues has evolved in recent years following the decision of the Full Federal Court in *Chevron Australia Holdings Pty Ltd v FCT* [2017] FCAFC 62. Following this decision, the Australian Taxation Office has published formal guidance setting out its approach to assessing risk in respect of related party cross-border financing arrangements, and has increased its review activities. It is expected that further guidance will also be released by the Australian Taxation Office in the near future to provide specific risk indicators for particular types of financing arrangements, such as financial guarantees and interest free loans.

The Company has undergone a significant transformation with its 2017 capital raising and the C&A Acquisition, which has resulted in a change in its operational and capital structure. These, together with recent increases in coal prices, have led to an improved financial position of the Company. In addition, the Global Offering [**REDACTED**] will result in a further change to the Company's capital structure.

The Company engages in several international related party transactions on an annual basis in relation to its operations in Australia that are subject to the arm's length principle, which include loan, guarantee, coal sale and administrative service arrangements. See "*Connected Transactions*" for further details. No specific formal review of our connected transactions has been undertaken by the Australian Taxation Office within the relevant review periods. However, changes in Australian law and guidance from the Australian Taxation Office may affect the interpretation of the arm's length principle in relation to our related party transactions. Such changes may adversely impact the taxation outcomes associated with our connected transactions, and consequently could have a material adverse effect on our business and financial condition.

Australia's thin capitalisation rules impose limits on the level of debt deductions that can be claimed for income tax purposes, which may have an adverse effect on the Company's profits.

Australia's thin capitalisation measures apply to the total debt of the Australian operations of the Company (including foreign and domestic related-party and third-party debt), and may result in a denial of certain debt related deductions after application of transfer pricing measures applicable to related party debt. The Company has at certain points in the past exceeded the safe harbour thin capitalisation limits (which prescribe a debt to asset ratio of 60%), and as a consequence has not claimed those debt deductions. The Company is currently operating outside the safe harbour thin capitalisation limits and, while the Global Offering [**REDACTED**] are expected to improve its thin capitalisation position, there is no guarantee that our position will improve.

Our coal operations are extensively regulated in Australia, and government regulations may limit our activities and adversely affect our business, financial condition and results of operations.

Our operations are subject to laws and regulations of general application governing the use and granting of mining rights, land tenements, access and use, exploration licences, mining operation time and recovery rates, environmental requirements including site-specific environmental licences, permits and statutory authorisations, workplace health and safety, trade and export, competition, access to infrastructure, pricing of transportation services, foreign investment and return on investments and taxation. These regulations may be implemented by various federal, state and local government departments and authorities including the Australian Department of Industry and the Department of Environment. The adoption of new legislation or regulations or the new interpretation of existing legislation or regulations or changes in conditions attaching to approvals may materially and adversely affect our operations, our tax costs and cost structure or product demand. The occurrence of any of the foregoing may cause us to substantially change our existing operations, incur significant compliance costs and increase the risk of our future investment or prevent us from carrying out mining operations, which could have a material adverse effect on the profitability of our operations and our overall business, financial condition and results of operations. See also "– *Our business, financial condition and results of operations may be adversely affected by present or future environmental regulations in Australia and other countries, and we may be exposed to legal claims and increased costs due to the environmental impacts of our operations*".

In particular, changes in laws and regulations in the following areas may substantially affect our business, financial condition and results of operations:

- *Environment and planning*: In recent years, the State governments of Queensland and New South Wales have introduced various policies in the interests of protecting high-value agricultural and urban land and environment areas from the effects of mining. These include the Queensland government's Regional Planning Interests Act and the New South Wales government's Strategic Regional Land Use Policy, Aquifer Interference Policy, and 2015 amendments to the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007. In 2013, the New South Wales State government introduced the fit and proper person consideration which allows it to consider a miner's conduct, financial capabilities and technical expertise in making decisions about mining rights, including the grant, transfer, renewal, cancellation and suspension of such rights. In the last five years, the maximum penalties for breaches of mining and environmental legislation have also been significantly increased. In the same time period, the Queensland State government has reviewed the method of calculating the financial assurance required to be provided by mining companies in respect of their rehabilitation liability, which has led to a significant increase in financial assurance amounts that are required to be covered by bank guarantees. Further, the Audit Office of New South Wales has carried out a review of rehabilitation liabilities in respect of mines and the Department of Planning and Environment is implementing a number of reforms to strengthen operational rehabilitation requirements for all mining projects in New South Wales. These reforms may lead to a material increase in the amount of security required in respect of rehabilitation liabilities.

- *Workplace health and safety*: In Australia, workplace safety is regulated by the States and Territories, and almost all States and Territories have introduced virtually identical general safety legislation. Many States have also prescribed specific mining legislation. The process of harmonising the mining legislation across the country has been undertaken, but as at the Latest Practicable Date, New South Wales has been the only major mining State to amend its mining legislation (Western Australia and Queensland are yet to adopt the national model). Since 2016, there has been a focus on the re-emergence of black lung disease (Coal Workers' Pneumoconiosis) in the mining sectors in Queensland and New South Wales, and in September 2016 the Queensland government established a parliamentary committee to inquire and report on the re-emergence of the disease. As a result, it is likely that workplace health and safety regulations may be amended in the near future. Western Australia is currently considering introducing a modernised Work Health and Safety Act, which is expected to include amended mine safety legislation and to mirror parts of the national model.

Our business, financial condition and results of operations may be adversely affected by present or future environmental regulations in Australia and other countries, and we may be exposed to legal claims and increased costs due to the environmental impacts of our operations.

Our coal mining operations require water and other materials, and produce waste water, gas emissions and solid waste materials. In addition, surface mining operations also result in noise and air quality impacts. As an Australian coal producer, we are subject to extensive and increasingly stringent environmental protection laws and regulations. These laws and regulations:

- restrict and impose conditions on usage of water and waste water management;
- impose fees and limits on the discharge of waste substances into the air, water and land, including carbon emissions;
- require provisions for land reclamation and rehabilitation;
- impose fines and other penalties for serious environmental offences; and
- establish the conditions (including environmental requirements) for domestic mining operations.

Extensive environmental regulations in Australia, and in other countries that could affect our business, may impose costs on our mining operations, and future regulations could increase those costs, limit our ability to produce and sell coal, or reduce demand for our coal products. In particular, the regulatory response to the risk of climate change, including unilateral and collective action by Australia and other countries, may affect demand for coal, coal prices and the competitiveness of our products in the world energy market. Our operations (including the operations of any assets or companies acquired by us) may not have met or may not in the future meet all environmental or related regulatory requirements.

Further, our operations may substantially impact the environment or cause exposure to hazardous materials. While we regularly assess the major environmental impacts of our operations, these assessments may not constitute a comprehensive evaluation of all possible environmental impacts. Historical or future contamination or other incidents could lead to opposition from community and action groups and may also subject us to legal claims or increased expenses. For example, a number of penalty notices were issued by the New South Wales Environment Protection Agency against our Hunter Valley operations over the last three years in relation to excessive blast pressure and water leakages and overflows, for which we paid fines amounting to A$15,000 each. We may also be subject to requirements in relation to the investigation and clean-up of soil, surface water, groundwater and other media.

Environmental legislation may change in a manner that requires compliance with additional standards and introduce a heightened degree of responsibility for companies and their directors and employees. In particular, there may be increased regulation on the usage and treatment of water at mining operations. 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 mine closure and relinquishment costs and obligations for which we may become liable as a result of our activities may increase as a result of legislative and policy changes. In addition, our budgeted amount for environmental regulatory compliance may not be sufficient, and we may need to allocate additional funds for this purpose. If we breach applicable environmental or related regulatory requirements, we may incur fines or penalties, be required to curtail or cease operations or be subject to increased compliance costs or costs for rehabilitation or rectification works at one or more of our sites, any of which may have a material adverse effect on our business, financial condition and results of operations.

Our ability to generate the expected economic returns from our mining assets may be adversely affected by present or future environmental regulations in Australia and other countries.

Our mining operations are subject to extensive and increasingly stringent environmental regulations in Australia and in other countries. Changes in and future environmental regulations could increase the standards and costs of compliance, and adversely affect our ability to generate the expected economic returns from our mining assets over their useful lives. We may not always be able to comply with future laws and regulations in relation to environmental protection economically or at all. There can be no assurance that we will be able to fully and economically utilise the entire coal resources of the mines we operate currently or in the future or that some of our mining assets will not become "stranded assets" that are not able to generate the expected economic returns over their useful lives.

We may not be able to obtain all necessary approvals, permits and licences.

Pursuant to applicable laws and regulations in Australia, we are required to obtain and renew from to time a number of regulatory approvals, permits and licences with respect to our exploration activities, mining operations for our existing mines as well as our development-stage or exploration projects, including obtaining planning approvals, land access and land owner consents, and address any native title issues, impacts on the environment and objections from local communities. While the requirement to obtain such approvals and to address potential and actual issues for existing and future mining projects is applicable to all companies in the coal sector, there is no guarantee that we will be in a position to secure all of the required consents, approvals and rights

necessary to maintain our current production profile from our existing operations or to develop our growth projects in a manner which will result in profitable mining operations and the achievement of our long-term production targets. We are still in the process of obtaining or renewing some of the regulatory approvals, permits and licences required for our business operations, and may experience substantial delays in obtaining such regulatory approvals, permits and licences. As at 14 November 2018, we had the following material regulatory approvals, permits and licences with respect to our mines that are subject to pending renewals:

Regulatory Approval, Permit and Licences	Expiry Date
HVO	
Mining lease ("**ML**") 1324	19 August 2014
ML 1337	9 September 2014
ML 1359	1 November 2015
ML 1428	14 April 2019
ML 1482	14 April 2019
Exploration licence ("**EL**") 5291	28 April 2018
EL 5417	8 May 2018
EL 5418	8 May 2017
EL 8175	23 September 2018
Authorisation 72	24 March 2018
MTW	
ML 1412	10 January 2018
Moolarben	
EL 6288	22 August 2017
Stratford Duralie	
Authorisation 311	28 November 2017
Authorisation 315	28 November 2017
EL 6904	9 October 2017
ML1409	6 January 2018
ML1427	5 April 2019
Oaklands	
Assessment Lease 18	25 June 2018
Ashton	
EL4918	17 December 2015
Donaldson	
EL 6964	10 December 2015
Yarrabee	
ML 80050	31 October 2018
Austar	
Mining Purposes Lease 269	7 December 2018

As at 14 November 2018, we had the following material regulatory approvals, permits and licences with respect to our mines that have been applied for but were yet to be granted:

- HVO: Assessment lease application ("**ALA**") 52, ALA 58 and ALA 59; Mining Lease Application ("**MLA**") 489, MLA 495, MLA 496, MLA 520, MLA 534, MLA 535, MLA 542, MLA 543; Exploration Licence Application ("**ELA**") 5525, ELA 5526 and ELA 5527;

- MTW: ELA 5678 and MLA 548;

- Stratford Duralie: MLA 552;
- Middlemount: ML 700027;
- Ashton: MLA 500, MLA 351 and MLA 394; and
- Austar: MLA 521.

If any of these or our other mining licences, safety production licences, environmental or other certificates, approvals or permits are revoked, not renewed or not obtained, we could be required to cease operations of the affected tenement, mine or production facility, rehabilitate the disturbed area and be subject to regulatory or administrative penalties. Depending on the size of the ML and activities being conducted (or to be conducted) on that ML, the impact could be material. Moreover, if an EL is not renewed, it may preclude future potential expansion projects and earnings. As a result, the loss of some or all of our mining licences, coal production licences, safety production licences, environmental or other certificates, approvals or permits may have a material adverse effect on our business, financial condition and results of operations. See "*Business – Mining and Exploration Licences*".

In addition, some regulatory consents in New South Wales may contain conditions which grant the owners of prescribed properties affected by the operation of a mine a right to have their properties acquired by the mine operator. The exercise of this right by affected owners of prescribed properties (both individually and in the aggregate) may impact our operational and financial performance. Moreover, Australian environmental approval processes require a technical environmental assessment to be prepared prior to granting approval, as well as public consultation. Community groups may lobby for more restrictive conditions to be imposed on approvals granted or for the approval to be declined, either of which may result in a material adverse effect on our business and results of operations.

Our risk management and internal control systems may not fully protect us against the various risks inherent in our business.

While we manage regulatory compliance by monitoring and evaluating our internal controls and risk management systems to ensure that we are in compliance with all relevant statutory and regulatory requirements, there can be no assurance that deficiencies in our internal controls and compliances will not arise, or that we will be able to implement, and continue to maintain, adequate measures to rectify or mitigate any such deficiencies in our internal controls, in a timely manner or at all. As we continue to grow, there can be no assurance that there will be no instances of such inadvertent non-compliances with statutory requirements, which may subject us to regulatory action, including monetary penalties, which may adversely affect our business and reputation.

Any changes in accounting standards may have an adverse effect on our reported financial performance or financial position.

We prepare our financial statements in accordance with the International Financial Reporting Standards ("**IFRS**") and other authoritative pronouncements and interpretations issued by the International Accounting Standards Board ("**IASB**"). The IASB may amend IFRS and the related pronouncements and interpretations or replace them with new standards, and such amendment or replacement is beyond our control. Any changes to IFRS or to the interpretation of those standards, or any disagreements by authorities of the judgments or estimates applied by us as required by IFRS, may have an adverse effect on our reported financial performance or financial position.

The future adoption of IFRS 16 on the accounting treatment of our leases may impact our financial results.

Our business operations involve leases for certain items of property, plant and equipment, including operating leases for mining equipment, office space and small items of office equipment. As at 31 December 2015, 2016 and 2017 and 30 June 2018, we had total operating lease commitments of A$6 million, A$92 million, A$187 million and A$177 million, respectively.

We will adopt IFRS 16 on 1 January 2019. Under IFRS 16, which replaces certain other accounting standards for leases, at the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). The right-of-use asset is subsequently measured at cost less accumulated depreciation and any impairment losses unless the right-of-use asset meets the definition of investment property in IAS 40. The lease liability is subsequently increased to reflect the interest on the lease liability and reduced for the lease payments. Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset. Lessees will also be required to remeasure the lease liability upon the occurrence of certain events, such as change in the lease term and change in future lease payments resulting from a change in an index or rate used to determine those payments. Lessees will generally recognise the amount of the re-measurement of the lease liability as an adjustment to the right-of-use asset.

With respect to our future leases under IFRS 16, we expect that for our property, plant and equipment which have minimum lease payments over the lease term, the combination of straight-line depreciation of the right-of-use asset and the effective interest rate method applied to the lease liability will result in a higher total charge to the statement of profit or loss in the initial years of the lease, and decreasing expenses during the latter part of the lease term, but there would otherwise be no impact on the total amount of expenses recognised over the lease term. We expect that during the lease term, a certain portion of these lease commitments will be recognised in our consolidated statement of financial position as right-of-use assets and lease liabilities. As a result, if we were to simultaneously enter into a large number of leases with similar durations, under IFRS 16, we would expect to record higher expenses and liabilities attributable to such leases towards the beginning of the lease period, resulting in a lower net assets position. Towards the end of the lease period, we would to expect to record lower expenses and liabilities. As a result, while under this scenario, the total expenses attributable to each lease over the course of the respective lease period would not change, our financial results may be materially affected on a year-to-year basis. See note 3 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on IFRS 16 and how we expect the adoption of IFRS 16 to affect our financial results.

We are dependent on key personnel as well as the availability of qualified technical personnel.

We are dependent on certain key senior management employees. If we lose the services of any of our key management employees, we may have difficulties in finding, relocating and integrating adequate replacement personnel, which could seriously hamper our operations. We are also dependent on attracting qualified technical employees to provide services in relation to certain of our coal and other mining operations.

Coal mining is a labour-intensive industry. Our future success will depend greatly on our and our mining contractors' continued ability to attract and retain skilled and qualified personnel. Even if we are able to attract, integrate and retain new qualified technical personnel, this may be achieved on uneconomic terms. Any failure by us to retain our current workforce or hire comparable personnel in the future could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our operations may be affected by uncertain mining conditions and we may suffer losses resulting from mining safety incidents, which may not be covered by our insurance.

Mining activities are inherently risky and hazardous. Our business is subject to a number of risks and hazards generally which may affect the safety of our workforce as well as our costs of producing coal. Specifically, our operations are subject to adverse environmental conditions, deterioration in the quality or variations in the thickness of coal seams, industrial accidents such as roof collapses, mine water discharge and flooding, explosions from methane gas or coal dust, ground falls and other mining hazards, labour disputes, power interruptions, critical equipment failure (including in particular any protracted breakdown of, or issues with, our coal handling and preparation plants or major excavators and longwalls), unusual or unexpected geological conditions, ground or slope failures, changes in the regulatory environment and natural phenomena such as inclement weather conditions, floods, earthquakes and fires. The occurrence of any of the foregoing events or conditions would have a material adverse impact on our business, financial condition and results of operations.

Although we conduct geological and geotechnical assessments on mining conditions and adapt our mining plans to the mining conditions at each mine, any such occurrences could result in damage to mineral properties or production facilities, personal injury or death, environmental damage to our properties or properties of others, reduction in the amount of coal produced, delays in development or mining, increased costs, monetary losses and possible legal liability. Although we have implemented safety measures at our mining sites which are subject to independent audits, trained our employees on occupational safety and maintain liability insurance for personal injuries as well as limited property damage for certain of our operations, safety incidents may occur.

Consistent with what we believe to be industry practice, we maintain insurance to protect against certain risks in amounts we consider to be reasonable. However, our insurance may not cover all the potential risks associated with our operations. We may also be unable to maintain insurance to cover these risks at economically feasible premiums and may not be able to pass on any increased costs relating to insurance to our customers. If such costs exceed the levels which we expect, there could be a material adverse effect on our business, financial condition and results of operations.

We may not always be able to detect or prevent fraud, bribery or other misconduct by our employees, customers or other third parties on a timely basis.

Any fraud, misrepresentation, money laundering or other misconduct by our employees, customers, service providers, business partners or other third parties could result in violations of relevant laws and regulations by us and subject us to corresponding regulatory sanctions. These unlawful activities and other misconduct may have occurred in the past and may occur in the future, and may result in civil and criminal liability under increasingly stringent laws or cause serious reputational or financial harm

to us. While we have in place and are implementing measures aimed at detecting and preventing employees' and external parties' fraud, misrepresentation, money laundering, commercial bribery and other misconduct, we may not be able to timely detect or prevent such activities, which could subject us to regulatory investigations and criminal and civil liability, harm our reputation and have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not be able to protect our other intellectual property rights, which could have a material adverse effect on our business.

We own intellectual property such as trademarks and know-how. See "*Business – Intellectual Property*".

We believe that our intellectual property rights are important to our success. Besides applicable laws, we rely on a combination of confidentiality policies and agreements, nondisclosure and other contractual arrangements to protect our intellectual property rights. We cannot assure you that we will be able to detect any unauthorised use of, or take appropriate, adequate and timely actions to enforce, our intellectual property rights. Consequently, we may not be able to effectively prevent unauthorised use of our patents in other countries where such patents are not registered.

The measures we take to protect our intellectual property rights may not be adequate, and monitoring and preventing unauthorised use is difficult. The protection of our intellectual property may be compromised as a result of (i) expiration of the protection period of our registered intellectual property rights; (ii) infringement by others of our intellectual property rights; and (iii) refusal by relevant regulatory authorities to approve our pending patent applications. If we are unable to adequately protect our intellectual property rights, our reputation may be negatively impacted and our business may be materially and adversely affected.

Failure of our information technology systems could adversely affect our business.

Our business relies on the performance, reliability and availability of our information technology systems. The proper functioning of our significant information technology systems, including in particular enterprise software from SAP that we use to manage our business operations and customer relations, Citect SCADA used to manage our control systems, and Intelex, Damstra and Pegasus used for our environment, health and safety systems, is important for our business. These systems and our information technology infrastructure in general may be adversely affected by factors such as server damage, equipment faults, power failure, computer viruses, misuse by employees or contractors, telecommunications failures, external malicious intervention such as hacking, terrorism, fire, natural disasters, or weather interventions. Such events are largely beyond our control, and may affect our ability to carry on our operations efficiently, which could harm our business and results of operations.

Our business and industry may be affected by the price of natural gas as well as the development of alternative energy sources and climate change.

We supply coal as fuel to, among others, the thermal power generation industry and, as a result, are affected by the demand and growth of the thermal power industry. Thermal coal as a fuel source competes, among others, with natural gas, and the price of natural gas can therefore affect coal sales. The natural gas market has been volatile

historically and prices in this market are subject to wide fluctuations in response to relatively minor changes in supply and demand. Changes in supply and demand could be prompted by any number of factors, such as worldwide and regional economic and political conditions; the level of global exploration, production and inventories; natural gas prices; and transportation availability. If natural gas prices decline significantly, it could lead to reduced coal sales and have a material adverse effect on our financial condition, results of operations and cash flows.

The thermal power generation industry is also affected by the development of alternative energy sources, climate change and global environmental factors. While the majority of global energy consumption is from conventional energy sources such as coal, alternative energy industries are rapidly developing and are gradually gaining widespread acceptance. Coal combustion generates significant greenhouse gas and other pollutants, and the effects of climate change resulting from global warming and increased pollution levels may provide incentives for governments to promote or invest in "green" energy technologies such as wind, solar, nuclear and biomass power plants, or to reduce their consumption of conventional energy sources such as coal. On 4 November 2016, the Paris Agreement within the United Nation's Framework Convention on Climate Change came into force, which aims to control the increase in global temperatures, increase the ability of countries to adapt to the adverse impacts of climate change and provide channels to finance projects that lead to greenhouse gas reductions. As at the Latest Practicable Date, the Paris Agreement had been signed by 197 countries, including Australia and the PRC. In recent years, the PRC has also taken steps to address severe air pollution in many cities by adopting a range of policies to lower carbon emissions and reduce coal usage, and is targeting increasing the share of non-fossil fuels in primary energy consumption to 20% by 2030.

With the increased concern and development on low-carbon economy and environmental protection globally, coal consumption is expected to gradually decrease. If alternative energy technologies continue to develop and prove suitable for wide commercial application, demand for conventional energy sources such as coal could gradually be reduced. Further, efforts to increase energy efficiency, control greenhouse gas emissions and enhance environmental protection may also result in a decrease in coal consumption. In 2017, coal accounted for approximately 41% of global electricity generation. This proportion is expected to decline to 39% of global electricity generation by 2020, driven by growth in non-hydro renewable energy sources. While new thermal generation capacity is being installed in countries in Asia, there is no assurance that this will continue to be the case, particularly given the proliferation of renewable energy assets and other energy sources in our key markets. For further details, see "*Industry Overview*". A decrease in the demand and consumption of thermal coal, particularly in Asia and other developing countries, would have a material adverse effect on the coal mining industry and, consequently, our business, financial condition and results of operations. See "– *Our business, financial condition and results of operations may be adversely affected by present or future environmental regulations in Australia and other countries, and we may be exposed to legal claims and increased costs due to the environmental impacts of our operations*".

Decreases in demand for steel in our principal markets, and the consequent decline in demand for metallurgical coal, could adversely affect our business, financial condition and results of operations.

A significant proportion of demand growth for metallurgical coal is expected to come from increased steel production in developing nations in Asia. In the past decade, the PRC became a net importer of coal from being a net exporter, which was a major contributor to the growth in seaborne coal demand during this period. The pace of economic growth in the PRC has now slowed, and it is uncertain whether the "One Belt, One Road" initiative will result in a new surge in infrastructure building across Asia in a manner that will boost steel, and metallurgical coal, demand. Global metallurgical coal import demand growth between 2017 and 2020 is forecast to be around 2.8% CAGR, lower than the estimated 3.6% CAGR between 2012 and 2017. The demand outlook for export metallurgical coal in the near to medium term is expected to shift from a focus on demand growth in the PRC to growth in India and other emerging markets in Southeast Asia. Indian demand is expected to be assisted by the country's comparatively strong economic growth and is likely to receive an additional boost from the government's plans to increase spending on infrastructure development, including railways. Although India aims to reduce reliance on imported coals, high Indian demand and the relatively poor quality of most domestic coals is expected to result in increased metallurgical coal imports, including from Australia. There is, however, no assurance that increased steel demand in India and Southeast Asian countries will be able to offset reduced demand in the PRC, or that consequently, metallurgical coal demand and prices will remain stable or increase in the future.

Future governmental policy changes in the PRC may be detrimental to the global coal market and impact our business, financial condition or results of operations.

The PRC government has from time to time implemented regulations and promulgated new laws or restrictions, sometimes with little advance notice, which may impact worldwide coal demand, supply and prices. In early 2016, the PRC government announced a 276-work day limitation on the annual operating days for coal mines. As a result of these and other restrictions, the PRC's domestic thermal coal production in 2016 decreased by 10% to 2.7 Bt, while thermal coal imports in 2016 increased by 26%. The PRC's domestic coal production is expected to be further impacted by the government's plan to close 800 Mt of coal capacity by 2020. In addition, the PRC has recently introduced domestic supply restrictions focused on enforcing environmental and safety rules at existing operations as well as consolidating production around larger, more modern operations. For further details, see "*Industry Overview*". In 2018 China imposed a quota on imports of coal, which we understand was reached in mid-November, following which China has halted coal imports for the remainder of the year. We believe that this development will not have a material impact on us. If the Chinese government were to impose stricter import quotas for 2019 or future periods then, unless we are able to find alternative destinations for the coal we designate for export to China, our revenues and results of operations in future periods could be adversely affected. It is possible that further policy changes in the PRC may negatively impact the global coal market and, consequently, impact our business, financial condition or results of operations.

In addition, similar actions by government entities in countries that produce and/or consume large quantities of coal and other energy related commodities may have a material impact on the prices at which we sell our products.

RISKS RELATING TO THE GLOBAL OFFERING

The trading price of our Shares has been volatile and the Minimum Offer Price is higher than the recent trading price of the Shares, which may result in substantial losses for investors subscribing for or purchasing our Shares pursuant to the Global Offering.

There has been significant volatility in the trading price of our Shares on the ASX. In the 52 weeks preceding 18 November 2018, the Latest Practicable Date, the trading price of our Shares has ranged between A$2.60 and A$5.95. As at the Latest Practicable Date, our Share price was A$3.18, which is lower than the Minimum Offer Price. Although the trading price of our Shares on the ASX might not be indicative of the expected market price for our Shares on the Stock Exchange following the Global Offering, unless the trading price of our Shares increases between the date of this prospectus and the listing date, investors subscribing for Shares in the Global Offering will incur an immediate mark-to-market loss. Further, trading in the Shares on the ASX has historically been low, which has contributed to the substantial fluctuations in their trading price. The trading price of our Shares on the ASX might continue to be, and the trading price of our Shares on the Stock Exchange following Listing could be, subject to substantial fluctuations and high volatility as a result of various factors. Some of these factors are beyond our control, including:

- low levels of liquidity in trading in our Shares;
- actual or anticipated fluctuations in our results of operations (including variations arising from foreign exchange rate fluctuations or from variations in the price that we can realise for our coal sales);
- news regarding recruitment or loss of key personnel by us or our competitors;
- announcements of competitive developments, acquisitions or strategic alliances in our industry;
- changes in earnings estimates or recommendations by financial analysts;
- potential litigation, regulatory investigations and environmental interruptions;
- tariffs and other trade restrictions, other governmental actions, changes in general economic conditions or other developments affecting us or our industry;
- general investor perception and inflation and interest rates;
- price movements on international stock markets, the operating and stock price performance of other companies, other industries and other events or factors beyond our control; and
- release of lock-up or other transfer restrictions on our outstanding Shares or sales or perceived sales of additional Shares by us, our Controlling Shareholder or other Shareholders.

The liquidity of our Shares on the Stock Exchange could be limited.

Our Shares have not been traded on the Stock Exchange before the Global Offering and there could be limited liquidity in our Shares on the Stock Exchange. As at the Latest Practicable Date, approximately 11% of the Shares are held by public investors and trading in the Shares on the ASX has historically been low. This low liquidity may continue on the ASX and may also be experienced on the Stock Exchange following the Global Offering, including on account of, among other things, a substantial portion of the Global Offering being placed with the Cornerstone Investor who is restricted from disposing of its Shares for six months following the Listing Date. Although Shareholders will be able to transfer our Shares from the Australian register to the Hong Kong register, and vice versa, there is no certainty as to the number of Shares that Shareholders may elect to transfer to Hong Kong. This could adversely affect investors' ability to purchase or liquidate Shares on the Stock Exchange. There is also no assurance that an open market will in fact develop for our Shares on the Stock Exchange. There can also be no guarantee that the price at which our Shares are traded on the Stock Exchange will be substantially the same as or similar to the price at which our Shares are traded on the ASX or that any particular volume of our Shares will trade on the Stock Exchange.

The time lag of moving Shares between the Hong Kong and Australian markets could be longer than expected, and our Shareholders might not be able to settle or undertake any Share sale during this period.

There is no direct trading or settlement between the Stock Exchange and ASX. To enable the movement of Shares between the two stock exchanges, our Shareholders are required to comply with specific procedures and bear the necessary costs. Under normal circumstances and assuming that there are no deviations from the usual cross-border share movement procedures, our Shareholders can expect normal cross-border movement between the principal register of members in Australia and the branch register of members in Hong Kong, and vice versa, to complete within three to six Business Days depending on how their Shares are or will be registered (i.e. in certificated form or within CCASS in Hong Kong). However, we cannot assure you that the transfer of Shares will be completed in accordance with this timeline. There could be unforeseen market circumstances or other factors that could delay the movement, thereby preventing our Shareholders from settling or effecting the sale of their Shares.

There may be differences between the Australian and Hong Kong stock markets, and undue reliance should not be placed on prior ASX trading data.

Our Shares have been listed and traded on the ASX since 2012. Following the Global Offering, it is our current intention that our Shares will continue to be traded on the ASX. Our Shares traded on the Stock Exchange will be registered by our Hong Kong branch share registrar. As there is no direct trading or settlement between the stock markets of Australia and Hong Kong, the time required to move shares between the principal register of members in Australia and the branch register of members in Hong Kong could vary and there is no certainty when Shares being moved will be available for trading or settlement. The ASX and the Stock Exchange have different trading hours, trading characteristics (including trading volume and liquidity), trading and listing rules and investor bases (including different levels of retail and institutional participation). As a result, the trading price of our Shares on the ASX and the Stock Exchange might not be the same.

Further, fluctuations in the price of our Shares on the ASX could adversely affect the price of our Shares on the Stock Exchange and vice versa. Moreover, fluctuations in the exchange rate between Australian dollars and Hong Kong dollars can also adversely affect the trading prices of our Shares on the ASX and the Stock Exchange. Due to the different characteristics of the stock markets of Australia and Hong Kong, the historical prices of our Shares on the ASX might not be indicative of the performance of our Shares on the Stock Exchange after the Global Offering. You should therefore not place undue reliance on the prior ASX trading information.

We will be concurrently subject to Hong Kong and Australian listing and regulatory requirements.

As we are listed on the ASX and will be listed on the Stock Exchange, we will be required to comply with the listing rules (where applicable) and other regulatory regimes of both jurisdictions, unless otherwise agreed by the relevant regulators. Accordingly, we may incur additional costs and resources in complying with the requirements of both jurisdictions.

Australian taxes may differ from tax laws of other jurisdictions, including Hong Kong.

The Company is incorporated in Australia. Prospective investors should consult their tax advisers concerning the overall tax consequences of acquiring, owning, or selling the Shares. Australian tax law may differ from the tax laws of other jurisdictions, including Hong Kong. Please see "*Appendix IV – Taxation and Regulatory Overview*" for further information.

Investments in our Company may be subject to restrictions under Australian foreign investment laws.

The Foreign Investment Review Board ("**FIRB**") is a non-statutory body which provides advice to the Australian Treasurer ("**Treasurer**") in connection with foreign investment proposals pursuant to the Foreign Acquisitions and Takeovers Act 1975 (Cth) ("**Australia Foreign Acquisitions and Takeovers Act**"), the Foreign Acquisitions and Takeovers Fees Imposition Act 2015 and the Foreign Acquisitions and Takeovers Regulation 2015.

Whether FIRB approval is required for a foreign investor to acquire an interest in the Company is determined on a case by case basis. It is the responsibility of the investor to determine if it requires FIRB approval before acquiring Offer Shares under the Global Offering or Shares in the secondary market. Further, it is the responsibility of the investor to otherwise ensure that it complies with the Australia Foreign Acquisitions and Takeovers Act in relation to investments in Australian companies or businesses, including obtaining any governmental or other consents which may be required, and that it complies with other necessary approval and registration requirements and other formalities.

A "foreign person" (as defined in the Australia Foreign Acquisitions and Takeovers Act) ("**Foreign Person**") is required to obtain FIRB approval from the Treasurer to acquire Offer Shares as part of the Global Offering, or acquire Shares in the secondary market, if they are a Foreign Government Investor from the PRC. Due to the operation of association rules under the Australia Foreign Acquisitions and Takeovers Act and the current level of ownership of the Company by Foreign Government Investors from the PRC, any acquisition of Offer Shares by Foreign Government Investors from the PRC

will require prior approval by the Treasurer. In addition, a Foreign Person is required to obtain prior approval from the Treasurer to acquire Offer Shares as part of the Global Offering if they are a Foreign Government Investor from a country other than the PRC and they are acquiring 10% or more of the Shares as part of the Global Offering. These approvals are "notifiable actions", which means that failure to notify them is an offence under the law.

Investors should seek independent legal advice prior to making an acquisition of Offer Shares as part of the Global Offering or acquire Shares in the secondary market. For more information, please see "*Appendix IV – Taxation and Regulatory Overview – Regulations in Relation to Foreign Investment in Australia*" and "*Appendix V – Summary of the Constitution of the Company and the Australia Corporations Act*".

We may not declare dividends on our Shares in the future.

Our Constitution provides that, subject to applicable laws, the ongoing cash needs of the business, the statutory and common law duties of the Directors and shareholders' approval, the Directors may pay interim and/or final dividends, and must:

(i) subject to (ii) below pay as interim and/or final dividends not less than 40% of net profit after tax (prior to any abnormal items) in each financial year; and

(ii) if the Directors determine that it is necessary in order to prudently manage our financial position, pay as interim and/or final dividends not less than 25% of net profit after tax (prior to any abnormal items) in any given financial year.

As a result, the amount of any dividends to be declared or paid will depend on, among other things, our results of operations, cash flows, financial condition, operating and capital requirements and applicable laws and regulations and will be subject to the approval of our Shareholders. See "*Financial Information of the Group – Dividends and Dividend Policy*". There is no assurance that dividends of any amount will be declared or distributed in any year.

The Company has an obligation to withhold tax on distributions of dividends paid to non-residents to the extent the distributions are unfranked.

Australia follows an imputation system in relation to corporate tax whereby the concept of franking broadly represents the net Australian corporate tax paid. When a corporate tax entity makes a distribution to its members, it can impute tax credits to the distribution to alleviate withholding tax payable by non-resident shareholders.

Dividends paid by the Company may be franked with an imputation credit to the extent that Australian corporate income tax has been paid by the Company. Where the Company pays a dividend from untaxed profits, no franking credit would be available. Such distributions are referred to as unfranked dividends.

To the extent dividends paid by the Company to non-resident shareholders are unfranked, such dividends are subject to Australian dividend withholding tax of up to 30% (which may be reduced if dividends are paid to residents of treaty countries). In particular, unfranked dividends paid to Shareholders resident in Hong Kong will be subject to withholding tax at 30% while unfranked dividends paid to Shareholders resident in the PRC eligible for treaty relief will be subject to withholding tax at 15%. Due to the current tax profile of the Company, any dividends paid by the Company during FY2018 to FY2019 would be expected to be unfranked. Accordingly, dividend withholding tax would be expected to be deducted from such dividend payments made during this period.

Future sales or perceived sales or conversion of substantial amounts of our Shares in the public market, including any future offering of Shares or conversion of our unlisted Shares into listed Shares, could have a material adverse effect on the prevailing market price of our Shares and our ability to raise additional capital in the future, or may result in dilution of your shareholding.

The market price of our Shares could decline as a result of future sales or issuances of a substantial number of our Shares or other securities relating to our Shares in the public market, or the perception that such sales or issuances may occur. Moreover, such future sales or perceived sales may also adversely affect the prevailing market price of our Shares and our ability to raise capital in the future at a favourable time and price. The Shares held by our Controlling Shareholders are subject to certain lock-up undertakings after the Listing Date. See "*Underwriting – Underwriting Arrangements and Expenses*". We cannot assure you that our Controlling Shareholders will not dispose of the Shares they may own now or in the future. In addition, a substantial portion of the Offer Shares will be subscribed to by the Cornerstone Investor who is restricted from disposing of its Shares for six months following the Listing Date. For further details, see "*Cornerstone Investor*". We cannot assure you that upon the expiry of the six-month lock-up, there will not be a sale of a substantial number of Shares by the Cornerstone Investors.

Moreover, if additional funds are raised through our issuance of new equity or equity-linked securities other than on a pro-rata basis to existing Shareholders, the percentage ownership for such Shareholders may be reduced. Such new securities may also confer rights and privileges that take priority over those conferred by the Shares.

[**REDACTED**]

The market price of our Shares when trading begins could be lower than the Offer Price.

The Offer Price will be determined on the Price Determination Date. However, the Offer Shares will not commence trading on the Stock Exchange until they are delivered, which is expected to be on the fifth Business Day after the Price Determination Date. As a result, investors may not be able to sell or otherwise deal in the Offer Shares during

that period. Accordingly, holders of the Offer Shares are subject to the risk that the price of the Offer Shares when trading begins could be lower than the Offer Price as a result of adverse market conditions or other adverse developments that may occur between the time of sale and the time trading begins.

We cannot assure you that the Shares will remain listed on the Stock Exchange.

Although it is currently intended that the Shares will remain listed on the Stock Exchange, there is no guarantee of the continued listing of the Shares. Among other factors, the Company may not continue to satisfy the listing requirements of the Stock Exchange. Holders of Shares would not be able to sell their Shares through trading on the Stock Exchange if the Shares were no longer listed on the Stock Exchange.

You may face difficulties in enforcing your shareholder rights since the laws of Australia for minority shareholders' protection could be different from those under the laws of Hong Kong and other jurisdictions.

We are a company incorporated in Australia with limited liability, and the laws of Australia differ in some respects from those of Hong Kong or other jurisdictions where investors might be located. Our corporate affairs are governed by our Constitution and related charters and policies, the Corporations Act 2001 (Cth) ("**Australia Corporations Act**") and the laws of Australia. The laws of Australia relating to the protection of the interests of minority shareholders differ in some respects from those established under statutes and judicial precedents in existence in Hong Kong and other jurisdictions. This could mean that the remedies available to our Company's minority Shareholders could be different from those they would have under the laws of Hong Kong and other jurisdictions.

Certain facts and other statistics with respect to the coal market and industry in this prospectus may not be fully reliable.

Certain facts and other statistics in this prospectus relating to the global and regional coal market and industry have been derived from various official government publications and other publicly available data. However, we cannot guarantee the quality or reliability of these sources. They have not been prepared or independently verified by us or any of our affiliates or advisors and, therefore, we make no representation as to the accuracy of such facts and statistics. Due to possibly flawed or ineffective collection methods or discrepancies between published information and market practice and other problems, the facts and statistics herein may be inaccurate or may not be comparable to facts and statistics produced for other economies. As a result, prospective investors should consider carefully how much weight or importance they should attach to or place on such facts or statistics. Investors should read the entire prospectus carefully and should not consider any particular statements in published media reports without carefully considering the risks and other information contained in this prospectus.

There may be coverage in the media regarding the Global Offering and our operations.

We do not accept any responsibility for the accuracy or completeness of the information and make no representation as to the appropriateness, accuracy, completeness or reliability of any information disseminated in the media. To the extent that any of the information in the media is inconsistent or conflicts with the information contained in this prospectus, we disclaim it. Accordingly, prospective investors should read the entire prospectus carefully and should not rely on any of the information in press articles or other media coverage. Prospective investors should only rely on the information contained in this prospectus and the Application Forms to make investment decisions about us.

The members of the Board are as follows:

Name	Address	Nationality
Executive Director		
Fucun WANG (王福存)	3711/101 Bathurst Street Sydney NSW 2000 Australia	Chinese
Non-executive Directors		
Baocai ZHANG (張寶才)	Room 104, Unit 2, Building 57 Chunqiuhuating Xiao Qu 77 Boxue Road Qufu, Shandong Province China	Chinese
Cunliang LAI (來存良)	Room 301, Unit 2, Building 16 XingLong Coal Mine East District 88 Xinglong Road Xing Long Zhuang County Yanzhou City Shandong Province China	Chinese
Xiangqian WU (吳向前)	Room 201, Unit 2, Building 9 1676 Kuangjian East Road Zoucheng City Shandong Province China	Chinese
Fuqi WANG (王富奇)	Room 401, Unit 1, Building 5 899 Kangfu Road Zoucheng City Shandong Province China	Chinese
Qingchun ZHAO (趙青春)	Room 501, Unit 1, Building 27 436 Jianshe Road, Zoucheng Shandong Province China	Chinese
Xing FENG (馮星)	19-9-301 Yilin Jiayuan Chaoyang District Beijing China	Chinese

Name	Address	Nationality
Independent Non-executive Directors		
Gregory James FLETCHER	296 Woolooware Road Burraneer NSW 2230 Australia	Australian
Geoffrey William RABY	Room 9D, Tower 4 GuangCai International Mansion No 18 Gongrentiyuchang West Road Chaoyang District Beijing China	Australian
David James MOULT	73 Fingal Avenue Glenhaven NSW 2156 Australia	Australian
Helen Jane GILLIES	105 Rowntree Street Birchgrove NSW 2041 Australia	Australian

See "*Directors and Senior Management*" for further details.

DIRECTORS AND PARTIES INVOLVED IN THE GLOBAL OFFERING

Joint Sponsors

Morgan Stanley Asia Limited
46/F, International Commerce Centre
1 Austin Road West, Kowloon
Hong Kong

CMB International Capital Limited
45/F, Champion Tower
3 Garden Road, Central
Hong Kong

BOCI Asia Limited
26/F, Bank of China Tower
1 Garden Road
Hong Kong

Joint Global Coordinators

[**REDACTED**]

Joint Bookrunners

[**REDACTED**]

I

[**REDACTED**]

Joint Lead Managers

[**REDACTED**]

Financial Adviser	Morgan Stanley Asia Limited 46/F, International Commerce Centre 1 Austin Road West, Kowloon Hong Kong
Legal Advisers to the Company	*As to Hong Kong and U.S. laws:* Freshfields Bruckhaus Deringer 55th Floor, One Island East Taikoo Place, Quarry Bay Hong Kong *As to Australian laws:* Gilbert + Tobin Level 35, Tower Two, International Towers Sydney, 200 Barangaroo Avenue Barangaroo NSW 2000 Australia *As to PRC laws:* King & Wood Mallesons 40th Floor, Tower A, Beijing Fortune Plaza 7 Dongsanhuan Zhonglu, Chaoyang District Beijing, 100020, PRC
Legal Advisers to the Joint Sponsors and the Underwriters	[**REDACTED**]

	[**REDACTED**]
Auditor	ShineWing Australia *Chartered Accountants, Australia* Level 8, 167 Macquarie Street Sydney, NSW 2000 Australia
Joint Reporting Accountants	SHINEWING (HK) CPA Limited *Certified Public Accountants, Hong Kong* 43/F, Lee Garden One 33 Hysan Avenue Causeway Bay Hong Kong ShineWing Australia *Chartered Accountants, Australia* Level 8, 167 Macquarie Street Sydney, NSW 2000 Australia
Competent Person	RPM Advisory Services Pty Ltd 13/F, 68 Yee Wo Street Causeway Bay Hong Kong
Industry Consultant	AME Consulting Pty Ltd 342 Kent St Sydney, NSW 2000 Australia
Taxation Adviser	KPMG Level 38, Tower Three, International Towers 300 Barangaroo Avenue, Sydney Barangaroo NSW 2000
Receiving Bank	
	[**REDACTED**]

CORPORATE INFORMATION

Registered Office	Level 18, Darling Park 2 201 Sussex Street Sydney, NSW 2000 Australia
Place of Business in Hong Kong Registered under Part 16 of the Companies Ordinance	Level 54, Hopewell Centre 183 Queen's Road East Hong Kong
Company Secretary	Laura Ling ZHANG (張凌) (*Member of the Hong Kong Institute of Chartered Secretaries*)
Authorised Representatives	Baocai ZHANG (張寶才) 298 Fushan South Road Zoucheng City Shandong Province China
	Laura Ling ZHANG (張凌) Level 18, Darling Park 2 201 Sussex Street Sydney, NSW 2000 Australia
Audit and Risk Management Committee	Gregory James FLETCHER (*Chair*) Qingchun ZHAO David James MOULT Helen Jane GILLIES
Nomination and Remuneration Committee	Helen Jane GILLIES (*Chair*) Baocai ZHANG Xiangqian WU Gregory James FLETCHER David James MOULT
Health, Safety and Environment Committee	David James MOULT (*Chair*) Fucun WANG Fuqi WANG Geoffrey William RABY
Strategy and Development Committee	Baocai ZHANG (*Chair*) Qingchun ZHAO Fuqi WANG Xing FENG Geoffrey William RABY
Compliance Adviser	Somerley Capital Limited 20th Floor, China Building 29 Queen's Road Central Hong Kong

CORPORATE INFORMATION

Principal Bankers

Commonwealth Bank of Australia
240 Queen Street
Brisbane QLD 4000
Australia

Bank of China Ltd, Sydney Branch
39-41 York Street
Sydney NSW 2000
Australia

Australian Share Registry

[**REDACTED**]

Hong Kong Share Registrar

[**REDACTED**]

Company's Website

www.yancoal.com.au
(A copy of this prospectus is available on the Company's website. Except for the information contained in this prospectus, none of the other information contained on the Company's website forms part of this prospectus)

HISTORY

The Company was established on 18 November 2004 as Yancoal Australia Pty Limited by Yanzhou when Yanzhou acquired the Austar underground mine in the Hunter Valley region of New South Wales in Australia. The Group has subsequently grown its business via strategic acquisitions to become the largest pure-play coal producer in Australia.

On 23 December 2009, the Group completed the successful takeover of Felix Resources, a coal producer then listed on the ASX, which included interests in the Moolarben, Yarrabee and Ashton mines. On 23 March 2010, the Company was converted to a public company named Yancoal Australia Ltd.

On 6 July 2012, the Group completed the strategic merger with Gloucester Coal, a coal producer then listed on the ASX, and became listed on the ASX. The Group acquired interests in the Middlemount joint venture, the Stratford Duralie and Donaldson mines and the Monash exploration project through the merger with Gloucester Coal.

On 31 December 2014, Yancoal SCN Limited ("**Yancoal SCN**"), a wholly-owned subsidiary of the Company, issued 18,005,102 subordinated capital notes ("**SCNs**") at US$100 each which were listed on ASX on 2 January 2015. As at 31 January 2018, all outstanding SCNs were redeemed by Yancoal SCN or converted into Shares of the Company, and Yancoal SCN was delisted from the ASX on 2 February 2018. See "*Financial Information of the Group – Indebtedness – Subordinated Capital Notes*" for further details on the SCNs.

On 31 March 2016, as a result of certain financing arrangements, the Group transferred its interests in the Ashton, Austar and Donaldson mines to Watagan, which is wholly-owned but not controlled from an accounting perspective by the Group. Further details of the Watagan Agreements are set out in "*Financial Information – Acquisitions, Disposals and Deconsolidation*".

On 1 September 2017, the Group completed the C&A Acquisition which included interests in HVO and MTW. On 7 March 2018, the Group increased its interest in the Warkworth joint venture pursuant to the Warkworth Transaction. On 4 May 2018, the Group completed the Glencore Transaction pursuant to which a joint venture with Glencore was established in relation to HVO and the Group's interest in HVO was reduced. Further details of each of these transactions are set out in "*– Major Acquisitions and Disposals – C&A Acquisition*".

KEY MILESTONES

The following table sets out the key milestones of the Group since its founding:

Year	Event
2004	Acquisition of 100% of Southland Mine (renamed Austar)
2009	Acquisition of 100% of Felix Resources (which included assets of an 80% interest in Moolarben, Yarrabee and a 60% interest in Ashton)
2011	Acquisition of a further 30% interest in Ashton

Year	Event
2012	Merger with Gloucester Coal (which included assets of a near 50% interest in Middlemount, Stratford Duralie, Donaldson and Monash) and listing on the ASX
2014	Acquisition of the remaining 10% interest in Ashton
2015	Acquisition of a further 1% interest in Moolarben
2016	Transfer of 100% of Ashton, Austar and Donaldson to Watagan
2017	Completion of the C&A Acquisition
2018	Acquisition of a further 28.9% in the Warkworth joint venture
2018	Completion of the Glencore Transaction

MAJOR ACQUISITIONS AND DISPOSALS

C&A Acquisition

On 1 September 2017, the Group completed the acquisition of the entire issued share capital of C&A from Rio Tinto for US$2.69 billion in value, comprising US$2.45 billion cash paid on completion and US$240 million in future non-contingent royalty payments over five years following completion, and a coal price linked contingent royalty.

C&A is a leading Australian producer of high quality thermal coal and semi-soft coking coal, indirectly owning, at the time of acquisition, participating interests in three coal mine operations, namely a 67.6% interest in HVO, a 80.0% interest in the Mount Thorley mine and a 55.6% interest in the Warkworth mine, and other associated assets (the "**C&A Acquisition**"). Further details of the assets of C&A are set out in "*Business – Our Mining Operations"*.

To support the funding of the C&A Acquisition, the Company conducted a pro-rata renounceable entitlement offer of 23,464,929,520 Shares to raise US$2.35 billion (the "**Entitlement Offer**"), and an associated placement of 1,000,000,000 Shares to Shandong Taizhong Energy Co., Ltd ("**Taizhong**") and 500,000,000 Shares to Evercharm International Investments Ltd ("**General Nice**") to raise a further US$150 million (the "**Placement**"). The Company completed the Entitlement Offer and the Placement on 31 August 2017 and the Shares issued under the Entitlement Offer and the Placement commenced trading on ASX on 1 September 2017.

Warkworth Transaction

On 7 March 2018, the Group completed its purchase of an additional 28.9% interest in the Warkworth joint venture from MDP for US$230 million (which is subject to finalisation of a working capital adjustment which includes cash), increasing its interests in the Warkworth joint venture from 55.6% to 84.5% and its share of coal production from the integrated Mount Thorley Warkworth operations from 64.1% to 82.9% .

Glencore Transaction

On 27 July 2017, the Company entered into a binding agreement to establish a 51:49 unincorporated joint venture with Glencore in relation to HVO. Glencore acquired a 32.4% interest from Mitsubishi Development Pty Ltd ("**MDP**") for cash consideration of US$710 million and a 16.6% interest from Group for cash consideration of US$429 million. Pursuant to the terms of the joint venture agreement, Glencore is also responsible for a 27.9% share of US$240 million of non-contingent royalties and 49% of HVO contingent royalties payable by the Company in respect of the C&A Acquisition. The cash consideration amount of US$429 million which was paid by Glencore for its interest in HVO is subject to post-completion finalisation of purchase price adjustments for HVO's net debt, working capital and cash flows. The Glencore Transaction including the establishment of the joint venture was completed on 4 May 2018, further details of which are set out in *"Business – Joint Venture Agreements – HVO"*. The Group's interest in HVO was reduced from 67.6% to 51.0% on completion of the Glencore Transaction.

Moolarben Acquisition

The Company has entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019, and adjusted for the economic benefit of the 4% interest from 15 April 2018, that will flow to the Company. The Moolarben Acquisition will raise our interest in the unincorporated Moolarben JV to 85%.

LISTINGS ON THE ASX

The Shares of the Company have been listed on the ASX since 28 June 2012. On 31 December 2014, Yancoal SCN issued 18,005,102 SCNs which were listed on ASX on 2 January 2015. On 2 February 2018, Yancoal SCN was delisted from the ASX following the redemption by Yancoal SCN or conversion into the Company's Shares of all outstanding SCNs. See "*Financial Information of the Group – Indebtedness – Subordinated Capital Notes"* for further details on the SCNs.

To the best of the Directors' knowledge and belief as at the date of this prospectus, the Company has complied with its financial reporting obligations (which are contained in Chapter 2M of the Australia Corporations Act) and its continuous disclosure obligations (which are contained in section 674 of the Australia Corporation Act) during the period that those obligations have applied since listing on the ASX.

The Company intends to maintain its primary listing on the ASX alongside its proposed primary listing of Shares on the Stock Exchange. Application has been made to the Listing Committee for the listing of, and permission to deal in, the Shares in issue and to be issued pursuant to the Global Offering [**REDACTED**]. The Directors consider that it would be desirable and beneficial to the Company to have the Shares listed on the Stock Exchange as the dual primary listing of the Company on the ASX and the Stock Exchange will allow the Company to increase diversity of its investor base and increase liquidity in the Shares, provide the Company better access to a wider range of private and institutional investors, increase its exposure to the Hong Kong and Mainland China markets, enhance the Company's profile in the Asia region and better position the Company for organic and inorganic growth in the future.

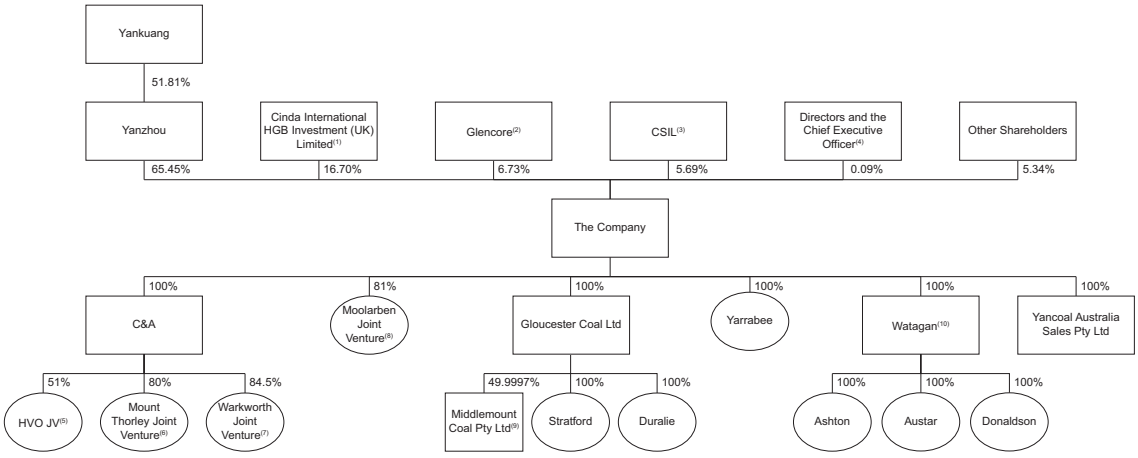
THE REORGANISATION

In preparation for the Listing, the Shareholders approved the Share Consolidation by ordinary resolution at the general meeting of the Company held on 26 September 2018 pursuant to section 254H of the Australia Corporations Act. The Share Consolidation took effect on 28 September 2018 which resulted in the issued capital of the Company being consolidated on the basis of one Share for every 35 Shares in issue on 1 October 2018, and fractional entitlements as a result of holdings not being evenly divisible by 35 were rounded up to the nearest whole number. The issued share capital of the Company immediately following the Share Consolidation was 1,256,071,756 Shares.

CORPORATE STRUCTURE

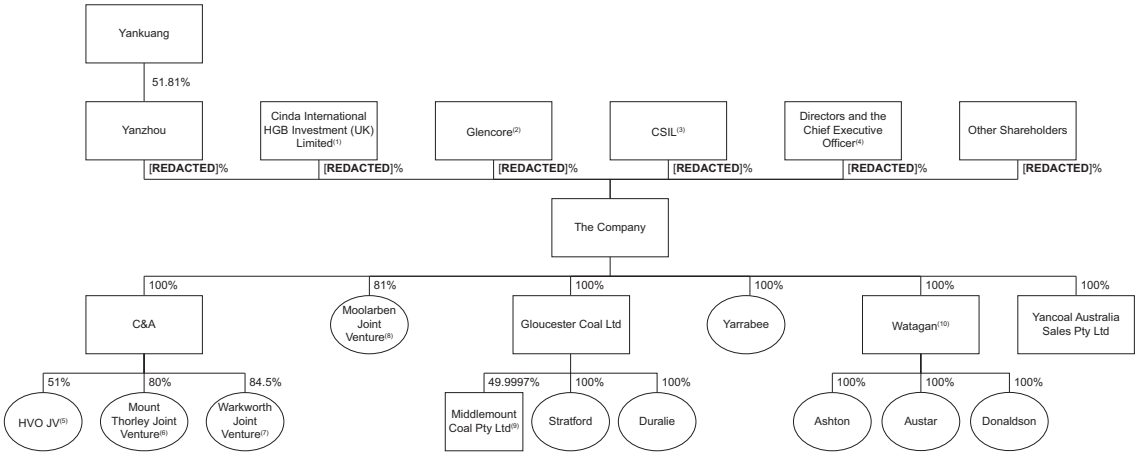
Corporate Structure as at the date of this prospectus

The simplified corporate structure of the Group as at the date of this prospectus is as follows:



Corporate Structure Immediately Following the Completion of the Global Offering

Immediately following the completion of the Global Offering [**REDACTED**] (assuming the Over-allotment Option is not exercised [**REDACTED**]), the simplified corporate structure of the Group will be as follows:



Notes:

(1) Cinda International HGB Investment (UK) Limited is a wholly owned subsidiary of China Cinda Asset Management Co., Ltd.. Its interests in the Shares are held by J P Morgan Nominees Australia Limited as nominee.

(2) Glencore is a wholly owned subsidiary of Glencore Holdings Pty Limited which is in turn wholly owned by Glencore plc.

(3) CSIL is a wholly owned subsidiary of Shandong Lucion Investment Holdings Group Co., Ltd.

(4) Mr. Baocai Zhang, the Chair of the Board and a Non-executive Director, is interested in Shares representing approximately [**REDACTED**]% of the issued share capital of the Company. Mr. Gregory Fletcher, an Independent Non-executive Director, is interested in Shares representing approximately [**REDACTED**] of the issued share capital of the Company. Dr. Geoffrey Raby, an Independent Non-executive Director, is interested in Shares representing approximately [**REDACTED**] of the issued share capital of the Company. Mr. Reinhold Schmidt, the Chief Executive Officer, is interested in Shares representing approximately [**REDACTED**]% of the issued share capital of the Company. The remaining Shares are held by directors of subsidiaries of the Company.

(5) The HVO JV is an unincorporated joint venture. Coal & Allied Operations Pty Ltd (a wholly owned subsidiary of the Company) is interested in 51.0% and Anotero Pty Ltd (a wholly owned subsidiary of Glencore) is interested in 49.0% of the HVO Joint Venture.

(6) The Mount Thorley joint venture is an unincorporated joint venture. Mount Thorley Operations Pty Limited (a wholly owned subsidiary of the Company) and POSCO Australia Pty Ltd (a wholly owned subsidiary of Pohang Iron & Steel Company Limited, an independent third party) are interested in 80% and 20% of the Mount Thorley joint venture, respectively.

(7) The Warkworth joint venture is an unincorporated joint venture. CNA Resources Limited and CNA Warkworth Australia Pty Limited (wholly owned subsidiaries of the Company) collectively hold 84.5%, and Mitsubishi Materials Corporation (an independent third party), and Nippon Steel & Sumitomo Metal Corporation (an independent third party) are interested in 6% and 9.5% of the Warkworth Joint Venture, respectively.

(8) The Moolarben JV is an unincorporated joint venture. Moolarben Coal Mines Pty Ltd (a wholly owned subsidiary of the Company), Sojitz Moolarben Resources Pty Limited (an independent third party), and a consortium of Korean companies (comprising Korea Resources Corporation, Korea Southern Power Co., Ltd, Korea Midland Power Co., Ltd, Korea Western Power Co., Ltd and Korea South-East Power Corporation, each an independent third party) are interested in 81%, 10% and collectively 9% of the Moolarben Joint Venture, respectively. Upon completion of the Moolarben Acquisition, the Group's interest in the Moolarben JV will increase to 85%.

(9) Middlemount Coal Pty Ltd is an incorporated joint venture. Gloucester (SPV) Pty Ltd (a wholly owned subsidiary of the Company) and Peabody Custom Mining Pty Ltd (a wholly owned subsidiary of Peabody Energy, an independent third party) are interested in 49.997% and 50.003% of Middlemount Coal Pty Ltd, respectively.

(10) Watagan is wholly owned but not controlled from an accounting perspective by the Company. See "*Business – Our Mining Operations – Watagan Mines – Watagan Agreements*" for further details.

*This section contains information relating to our markets. Certain facts, statistics and data presented in this section and elsewhere in this prospectus have been derived, in part, from various publicly available government and official sources, industry statistics and publications. We also commissioned an independent industry consultant, AME Consulting Pty Limited ("**AME**"), to prepare an industry research report ("**Industry Report**") upon which this Industry Overview section is based. Unless otherwise indicated, all historical and forecast statistical information, including trends, sales, market share and growth, is from the Industry Report. See "– Sources of Information". All price forecasts are presented in real 2018 terms while historical data is presented in nominal terms. For the purposes of forecasts, A$:US$ exchange rates have been assumed to remain constant at a rate of A$1:US$0.76. All cost curves are prepared on the basis of publicly available financial and technical information published by companies. Historical cost information is reconciled to company financial reports, where available.*

While we have taken all reasonable care to ensure that the relevant official facts and statistics are accurately reproduced from these sources, such facts and statistics have not been independently verified by us or the Relevant Persons. Although we have no reason to believe that such information is false or misleading in any material respect, or that any fact has been omitted that would render such information false or misleading in any material respect, we make no representation as to the accuracy or completeness of such information, which may not be consistent with other information available. Accordingly, you should not place undue reliance on such information or statistics.

SOURCES OF INFORMATION

In connection with the Global Offering, we have commissioned AME, an independent third party, to conduct research and analysis of, and to produce a report on, the global coal market. AME is a research and advisory firm headquartered in Sydney, Australia, with offices in Hong Kong, Toronto, London and Johannesburg. AME provides professional resource engineering and industry analysis services across the energy, metals and mining industries. AME's independent research was undertaken through both primary and secondary research through various resources. Primary research involved contacting market participants and industry experts, such as producers, steelmakers and industry consultants and associations. Secondary research involved desktop research of government departments and statistics, trade data, industry journals, company reports, information in the public domain and data from AME's proprietary research database. AME attempted to obtain information from multiple sources to cross-reference and ensure consistency. Information and data collected was analysed, assessed and reasonably validated using AME's in-house techniques.

The Industry Report has been prepared by AME independent of our influence. We have paid AME a fee of US$70,000 for the preparation of the report which we consider in line with market rates. Except as otherwise noted, all data and forecasts in this section are derived from the Industry Report. Our Directors confirm, after taking reasonable care, that there is no adverse change in the market information since the date of the Industry Report which may qualify, contradict or have an impact on the information disclosed in this section.

OVERVIEW

Coal Types and Uses

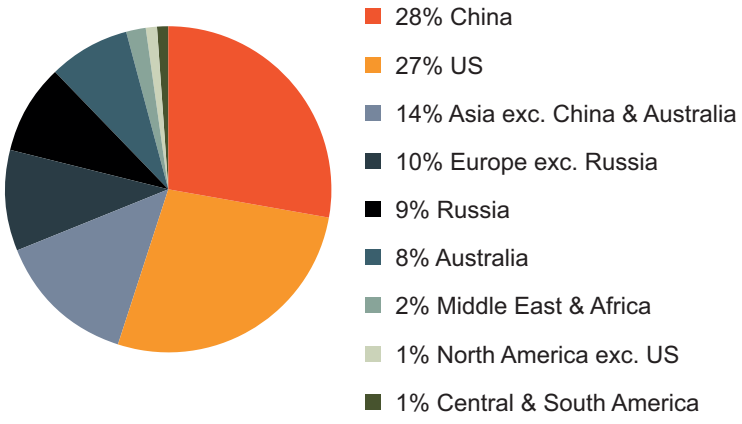
Coal falls broadly into two main types based on its end-use, namely thermal coal and metallurgical coal. Thermal coal, also referred to as steaming coal, is primarily used as an energy source in the generation of electricity. Other applications include direct heating, space and water heating, process heating and cement manufacturing. Metallurgical coals include premium and standard HCC, SHCC, SSCC and low-volatile or high volatile PCI coal. Premium HCC generally represents a substantial portion of the coal in major steel mill coking coal blends and merchant coke plant blends. Lower ranked coking coals, including SHCC and SSCC, are used as a coking blend component. PCI coal is generally a high calorific value coal which is injected directly into a blast furnace to provide the carbon and heat in the iron-making process.

Coal Quality

Generally, the most important factors that determine coal quality include energy content, mineral matter content (i.e. ash), volatile matter, fixed carbon, sulphur, nitrogen, trace elements and moisture levels. The major controllable determinants are mineral matter content and moisture, both of which are non-useful material and often have detrimental effects on the combustion process, present environmental problems in collection and disposal or, if not properly collected, in air quality, and result in added transportation cost. For metallurgical coal, specific physical and plastic properties are also important.

Global Hard Coal Reserves

At the end of 2016, total proved global coal reserves were estimated to be approximately 1,139 Bt, of which global hard coal reserves were estimated to be 816 Bt. In 2016, the PRC was estimated to hold the largest hard coal reserve base at 230 Bt followed by the U.S. with 221 Bt, while Russia and Australia were estimated to have 70 Bt and 68 Bt, respectively. The following chart shows the geographical breakdown of estimated global hard coal reserves as at the end of 2016.



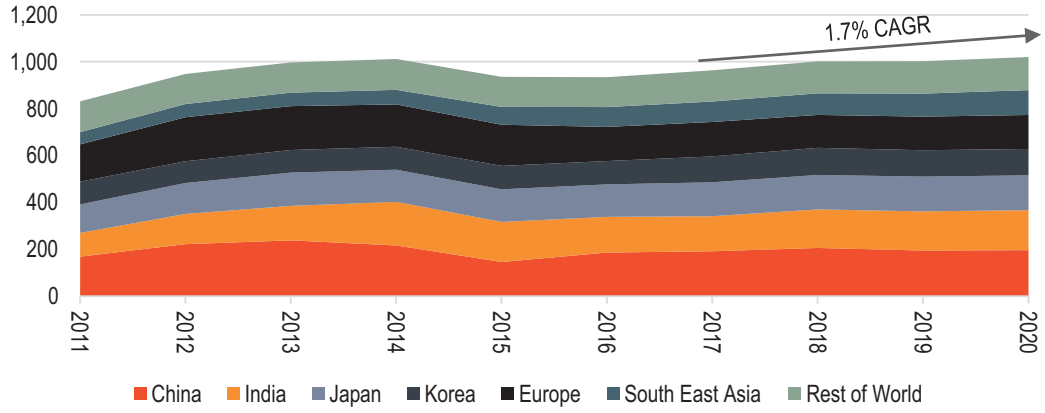
Source: Industry Report; British Petroleum Statistical Review 2017.

Despite significant coal consumption over the last 15 years, total reserves of hard coal as at the end of 2016 increased by over 50% from the prevailing reserve levels in 2002. The greatest increase in reserves came from the PRC and other major producing countries such as Australia and Russia.

SEABORNE THERMAL COAL

Demand Analysis

AME estimates that global seaborne thermal coal import demand in 2016 declined for the third straight year to 934 Mt. However, demand in 2017 grew by approximately 3% to 964 Mt and AME forecasts that demand will reach 1,020 Mt by 2020, representing a CAGR of 1.7% over that period. The following chart shows the estimated seaborne thermal coal demand for key countries and regions in Mt.



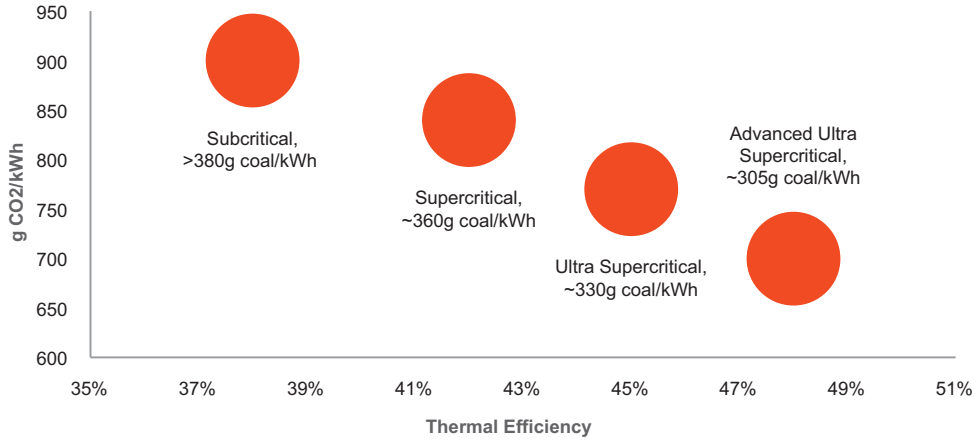
Source: Industry Report.

During the first half of 2016, the PRC imported 70 Mt of thermal coal, an increase of 4.3% year on year. As a result of the PRC government's restrictions on domestic coal supply, domestic thermal coal production in 2016 decreased by 10% to 2.7 Bt. Thermal coal imports in 2016 increased by 26% to 196 Mt, of which 187 Mt was seaborne coal, and grew further in 2017 to 201 Mt, of which 192 Mt was seaborne coal. A shortage of gas in the north of the PRC, which caused end users to switch to coal, saw imports of almost 23 Mt in January 2018, the highest monthly figure since January 2014. Domestic coal production in the PRC is expected to be further impacted by the government's plan to close 800 Mt of coal capacity by 2020, and seaborne coal, which is not subject to these policies, is expected to benefit as a result. In addition, the PRC has recently introduced domestic supply restrictions focused on enforcing environmental and safety rules at existing operations as well as consolidating production around larger, more modern operations.

Japanese thermal coal demand accounted for an estimated 14% of global seaborne thermal coal demand in 2017, and Japanese imports are expected to grow to approximately 148 Mt by 2020. With an estimated 70% of its thermal coal being imported from Australia in 2017, Japan is a key market for Australian thermal coal. Power utilities in Japan generally prefer purchasing high calorific value thermal coal and the Hunter Valley's coal is well suited for the Japanese market. South Korea imported a record 111 Mt of thermal coal in 2017, an increase of 11% over 2016, and South Korean imports are expected to grow to approximately 113 Mt by 2020. However, coal's market share is expected to decline over the long term as South Korea works towards achieving its policy objective of 20% non-hydro renewables by 2030.

Thermal coal's primary use is in electricity production, and thermal coal demand is therefore driven strongly by electricity generation. In 2017, coal accounted for approximately 41% of global electricity generation. This proportion is expected to decline to 39% by 2020, driven by the growth in non-hydro renewables. However, countries in Asia and developing countries continue to install new thermal generation capacity in addition to renewable energy capacity. Over the next few years, coal is expected to continue to be the dominant source of energy, particularly in large developing regions such as the PRC and India, and electricity generation from coal is expected to grow in absolute terms.

A key reason for the continuing role of coal in power generation is the increasing replacement of sub-critical boilers with super-critical and ultra super-critical boilers. This technology, generally referred to as high efficiency, low emissions ("**HELE**"), results in the increase of thermal efficiency in the burning of coal and reduction in the amount of coal burned per kWh, which reduces carbon emissions per kWh. Currently, 14 units of HELE plants are under construction in Japan, eight in South Korea and three in Taiwan, which are key markets in North Asia. Combined with the use of higher energy, lower ash coals, this can lead to further reductions in the emissions intensity of power generation as well as the levels of other pollutants. The following chart shows the increasing efficiency of new coal fired technologies.

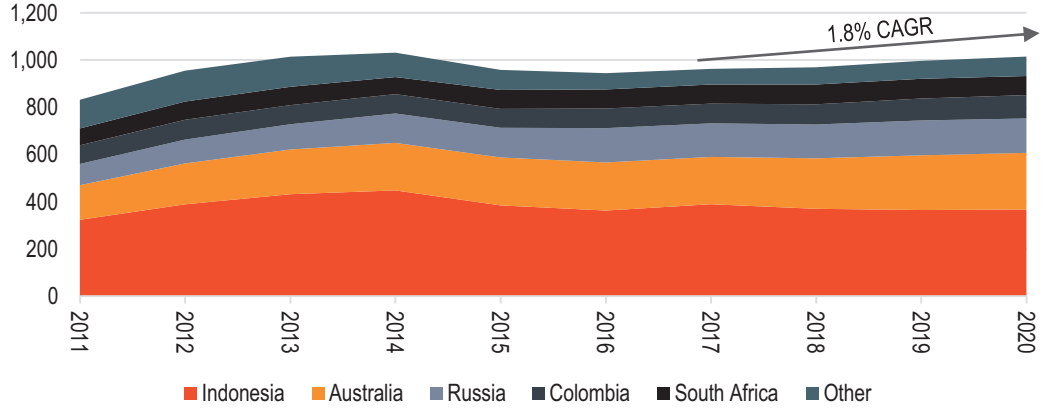


Source: Industry Report; International Energy Agency.

The installation of new thermal coal generation capacity in South and Southeast Asia is expected to result in seaborne thermal coal demand increasing at a CAGR of approximately 1.7% over 2017 to 2020. As markets for domestic coal decline in these regions, producers exposed to the export market will be able to take advantage of diversified marketing opportunities in other markets more reliant on imported coal. Further, producers of high quality coal will be better able to access the PRC market as the government restricts coal production and imports that do not meet their increasingly strict requirements on energy content and trace element levels.

Supply Analysis

AME estimates that global seaborne thermal coal exports fell by 1.5% in 2016. The declining pricing environment from 2014 to the first half of 2016 saw investment in uncommitted new capacity dry up. During this period, several financing institutions began implementing rules limiting their ability to invest in coal related projects, making the financing of new projects more difficult. Despite this, AME estimates that global seaborne thermal coal exports rose by approximately 1.9% in 2017 to 962 Mt and global thermal coal exports are expected to further increase by 0.5% in 2018. AME forecasts that thermal coal supply will grow at a CAGR of approximately 1.8% over the period between 2017 and 2020 to reach 1,014 Mt. The following chart shows the estimated seaborne thermal coal exports from key countries and regions in Mt.



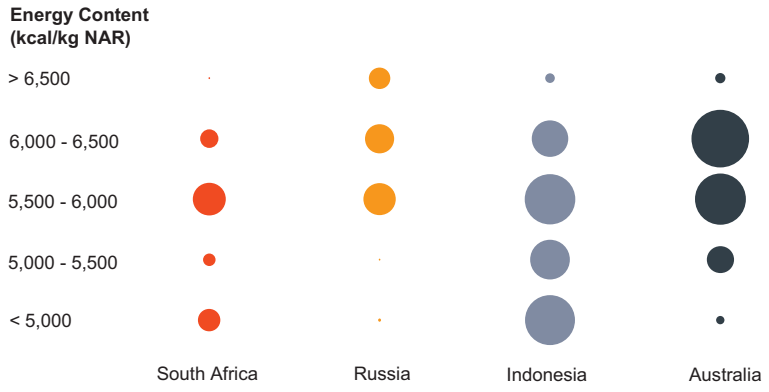
Source: Industry Report.

Australia is the second-largest seaborne thermal coal exporting country by volume, having exported approximately 205 Mt in 2017 which accounted for approximately 20% of the global thermal coal market. Australian seaborne thermal coal exports are estimated to grow by 12% in 2018 and continue to grow to reach 240 Mt in 2020. Australian seaborne thermal coal export products can largely be characterised as low-sulphur, high-energy coals, and are generally compared against either the Newcastle 5,500 kcal/kg net as received ("**NAR**") benchmark or the premium Newcastle 6,300 kcal/kg gross as received benchmark. Extensive historic investment in Australian coal assets by Japanese and South Korean companies has generally seen power plants in these countries designed to run on Australian benchmark coals. The following table sets out the estimated average energy content of seaborne thermal coal in 2017 by country.

	New South Wales	Australia	Indonesia	Colombia	Russia	South Africa
Ash (% adb)	15.7	15.6	4.8	6.9	12.6	17.2
Volatile matter (% adb)	31.6	30.2	40.1	35.1	31.8	25.4
Total sulphur (% adb)	0.6	0.6	0.6	0.6	0.3	0.7
Calorific value NAR (kcal/kg)	5,950	5,800	5,100	6,000	6,050	5,700

Source: Industry Report.

The following chart sets out the energy content of the estimated seaborne thermal coal exports in 2017 of the major coal producing countries.



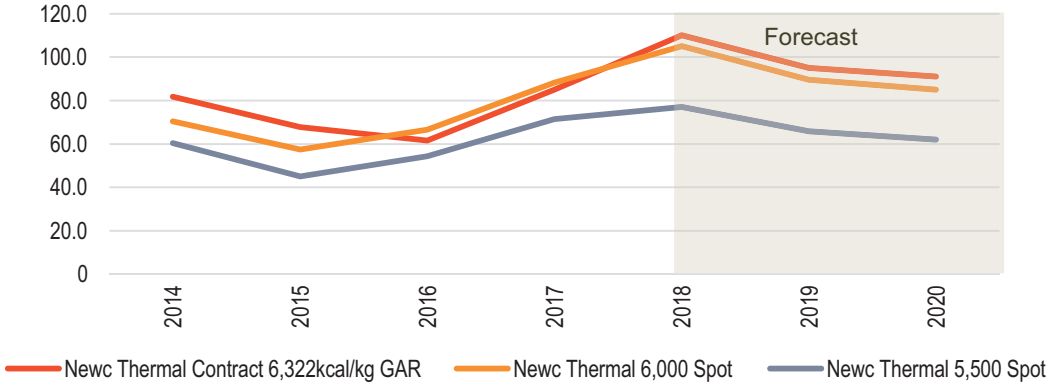
Source: Industry Report.

Note: Ball size represents relative market contribution.

Price Analysis

Historically, thermal coal was priced on the basis of annual supply contracts, with the main contract being the Japanese Financial Year negotiated between Japanese utilities and New South Wales producers for Newcastle benchmark coal. The first spot market developed in Northwest Europe. While the size of the spot market has grown, seaborne thermal coal is still primarily priced on contracts.

Strong demand and limited supply saw the Newcastle spot price in 2017 trade above the Newcastle Japanese Financial Year contract price for the second consecutive year, which is unusual. With the PRC temporarily relaxing its domestic production restrictions in December 2016, premium thermal coal spot prices fluctuated from US$98.5 per tonne at the end of 2016 to US$71 per tonne in May 2017 and US$123 per tonne in July 2018. The average spot price is expected to be approximately US$105 per tonne for the full year and thereafter steadily decline to US$85 per tonne in 2020. This decline is expected based on the assumption that certain projects will commence production over the next two years and ease the tight market conditions that have led to recent high prices. Any delay in the supply of additional coal would result in this tightness persisting longer than expected. As high coal prices have prevailed since the middle of 2017, the discount for high ash coal 5,500 kcal/kg NAR against 6,000 kcal/kg NAR has increased compared to 2011 and 2012. The following chart shows the historical and forecast annual average thermal coal prices in US$ per tonne.

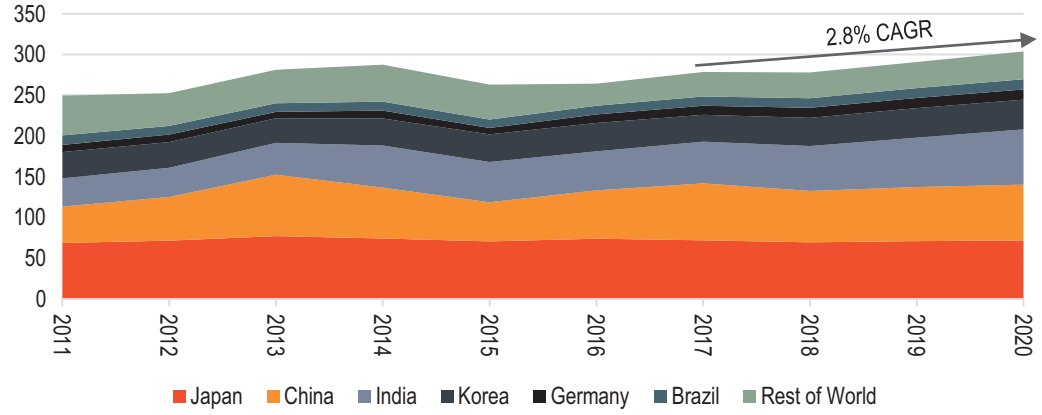


Source: Industry Report.

SEABORNE METALLURGICAL COAL

Demand Analysis

AME estimates that global seaborne metallurgical coal demand will grow from approximately 279 Mt in 2017 to 304 Mt in 2020. The following chart shows the estimated seaborne metallurgical coal demand for key countries and regions in Mt.



Source: Industry Report.

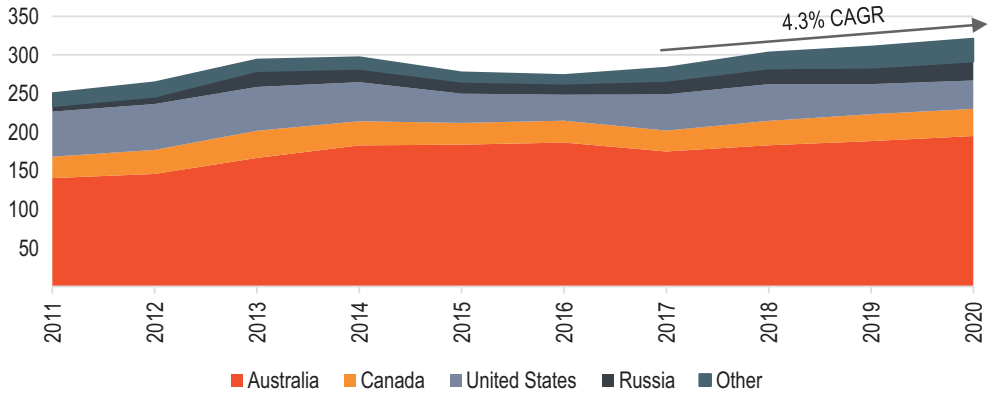
Demand for seaborne export metallurgical coal over the next ten years is expected to shift from a focus on the PRC to India and other emerging markets, particularly in Southeast Asia. The PRC's move from being a net exporter of coal to a net importer was a major contributor to the growth in coal demand in the past decade. The pace of economic growth in the PRC has slowed, and while there is optimism regarding demand in India over the long term the scale of the PRC's boost to demand between 2009 and 2013 is unlikely to be replicated.

Metallurgical coal's primary use is in the production of coke for blast furnace steelmaking, and demand for metallurgical coal is therefore heavily dependent upon crude steel production. Global steel demand growth is expected to increase in the medium term as the PRC's strong property sector and growing infrastructure investment result in higher steel demand. However, as steel demand moves toward more consumer-related sectors such as white goods, demand per capita consumption will begin to level out. The key upside potential to this assumption is the PRC's 'One Belt One Road' policy; the successful implementation of this global infrastructure pathway could see demand per capita continue to rise to the upper end of the demand per capita curve witnessed in developed economies.

In 2017, global crude steel production grew by approximately 4% to 1,688 Mt as steel output was supported by strong demand and prices. In the PRC, crude steel production rose by 3.3% to 832 Mt. Indian crude steel output increased by 6.4% to 102 Mt, benefitting from new projects and robust demand. Finished steel demand is estimated to have grown by 1.3% in 2016 and a further 4.3% in 2017 to reach 1,584 Mt, and is forecast to grow at a CAGR of 1.5% between 2017 and 2020.

Supply Analysis

AME estimates that the global supply of seaborne metallurgical coal will grow from 283 Mt in 2017 to 321 Mt in 2020, representing a CAGR of 4.3%. Over this period, Australia is forecast to continue to account for approximately 53% of seaborne export metallurgical coal supply. The following chart shows the estimated seaborne metallurgical coal exports from key countries and regions in Mt.

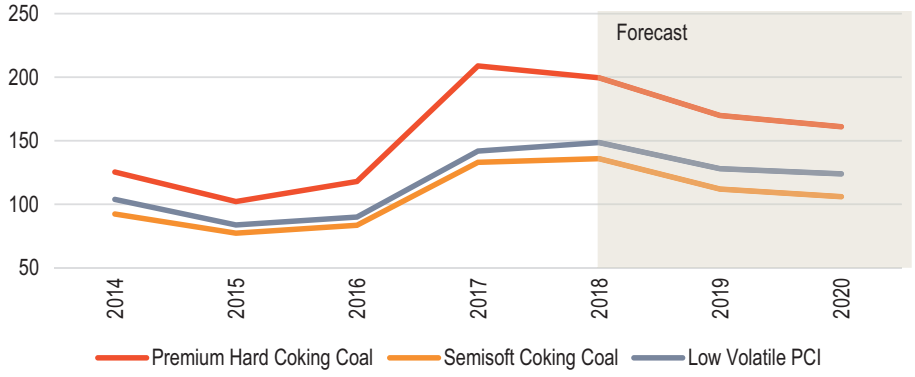


Source: Industry Report.

AME estimates that seaborne metallurgical coal supply was 274 Mt in 2016, and in 2017 increased by an estimated 3.5% year on year to 283 Mt. This strong growth is expected to continue in 2018 with supply increasing to approximately 303 Mt. It is estimated that seaborne metallurgical coal supply will hit 321 Mt by 2020, an increase of approximately 17% from 2016, and grow further in the long term to meet the demand growth from India and other industrialising countries.

Price Analysis

Historically, metallurgical coal prices were negotiated between key Japanese steel mills and large Australian producers on an annual basis. With the rise of spot pricing indices due to the emergence of the PRC and India as large import markets and the resulting pressure on Japanese end users to move to spot pricing, the markets have moved to a quarterly pricing basis. The following chart shows the historical and forecast annual average metallurgical coal prices in US$ per tonne.



Source: Industry Report.

With Cyclone Debbie impacting Queensland in the middle of quarterly benchmark negotiations, Japanese steel producers temporarily moved from the negotiated contract system for HCC to a price reflecting the average of the HCC indices. This led to agreement on quarterly premium benchmark prices approximately equal to the concurrent spot prices and representing an average of US$209 per tonne across 2017. AME expects this price to decline in 2018 to US$200 per tonne. The contract prices for low-volatile PCI coal and SSCC continue to be negotiated on a quarterly basis. Metallurgical coal prices are expected to decline further and bottom out in 2020 before increasing in the long term.

COMPETITIVE LANDSCAPE

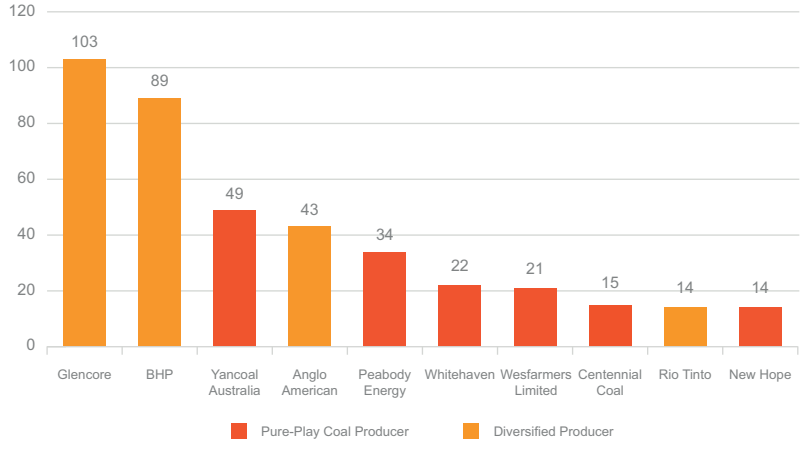
Market Share Analysis

According to AME, we operate in four distinct market segments: thermal coal, HCC, low-volatile PCI coal and SSCC. Thermal coal accounts for nearly 81% of our overall production (on an attributable basis). Our market share in the seaborne export markets for each of these segments as well as in the Hunter Valley thermal seaborne export coal market, on a pro forma basis (as if the C&A Acquisition had been completed on 1 January 2017) for production in 2017 on a 100% basis, are as follows:

Product	Seaborne market share
Hunter Valley thermal coal	21%
Global thermal coal	3%
HCC	1%
Low-volatile PCI coal	10%
SSCC	10%

Source: Industry Report.

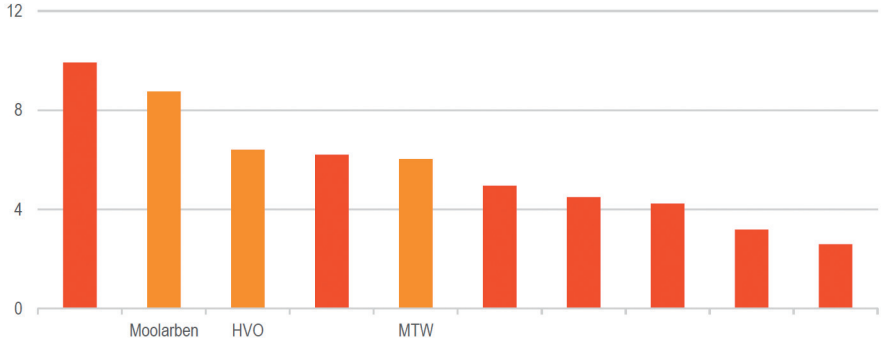
On a pro forma basis, we were the third largest coal producer and the largest pure-play coal producer in Australia in 2017 in terms of both coal production and reserves. The following chart shows the coal production in Mt of the largest coal producers in Australia by production in 2017, on a 100% basis.



Source: Industry Report.

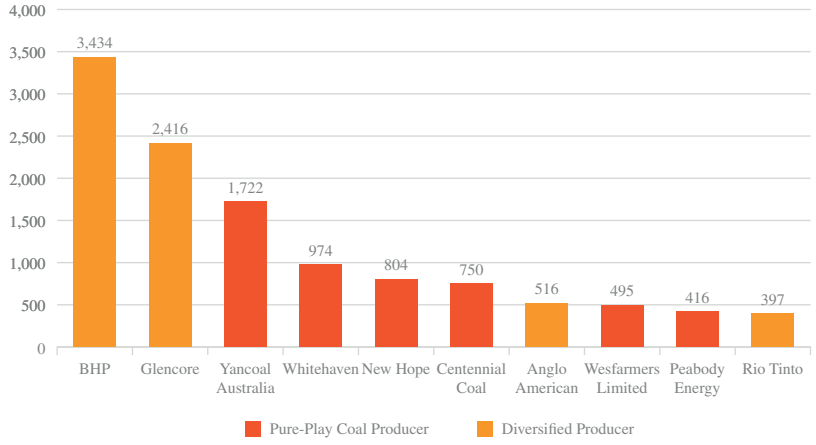
Note: On a pro forma basis assuming the C&A Acquisition completed on 1 January 2017.

Moreover, the Moolarben, HVO and MTW mines are three of the top five majority Australian-owned thermal coal mines (meaning mines for which thermal coal comprises at least 50% of saleable production) in terms of aggregate thermal and metallurgical coal production on a 100% basis in the first half of 2018, as shown in the chart below (in Mt).



Source: Industry Report.

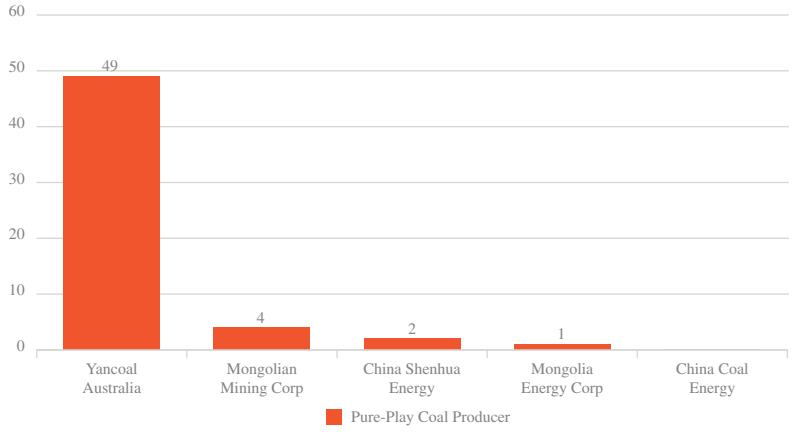
The following chart shows the coal reserves in Mt of the largest coal producers in Australia by reserves in 2017, on a 100% basis.



Source: Industry Report.

Note: On a pro forma basis for the Company assuming the C&A Acquisition completed on 1 January 2017.

When compared to pure-play coal producers listed on the Stock Exchange, we are the largest exporter of coal and the only coal producer whose coal is entirely sold for export overseas, whether directly, through overseas traders or through other Australian coal companies. Coal producers listed on the Stock Exchange largely operate in the PRC and Mongolia, and as a result are exposed to changes in PRC government policy regarding coal mining and coal imports, including policies such as the 276-working day restriction and closure of the border between the PRC and Mongolia. The following chart shows a comparison of our seaborne coal exports in Mt against that of the largest pure-play coal producers listed on the Stock Exchange by exports in 2017, on a 100% basis.

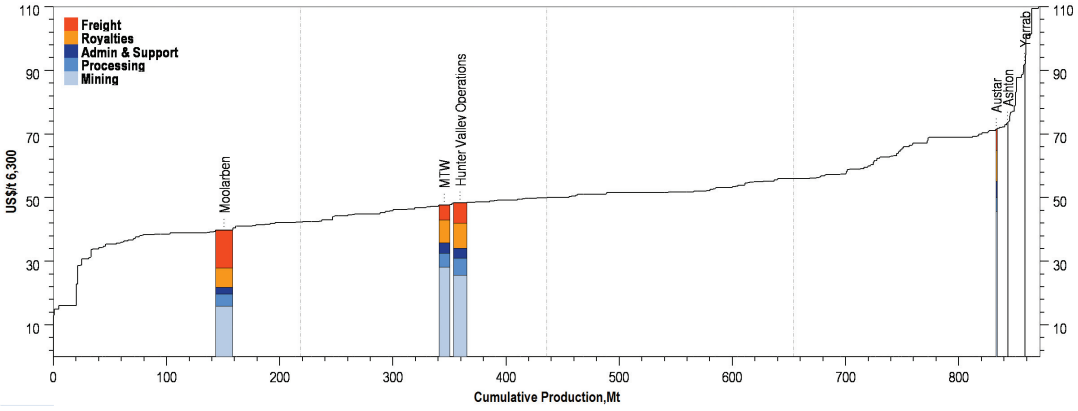


Source: Industry Report.

Note: On a pro forma basis for the Company assuming the C&A Acquisition completed on 1 January 2017.

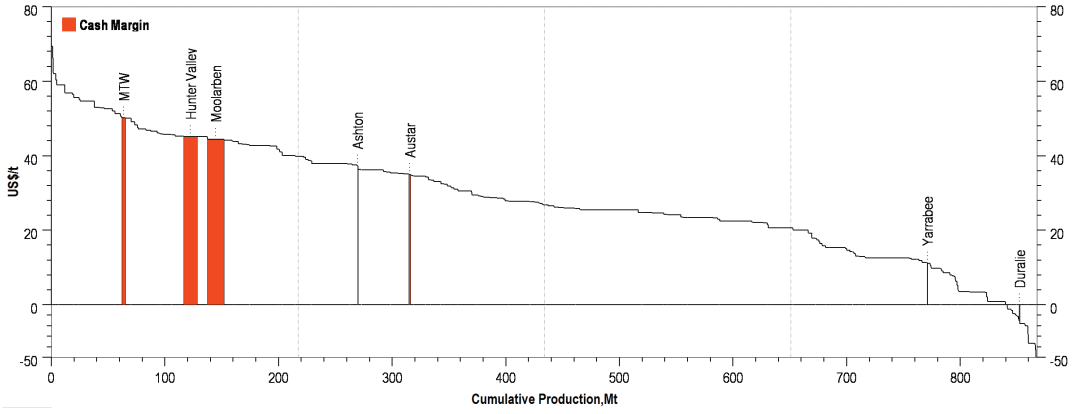
Cost Competitiveness Analysis

On a cash cost curve, the cash costs of Moolarben, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW, our largest thermal coal production assets which together accounted for approximately 88.7% of the total coal sales (on an attributable basis) from our mines in 2017 on a pro forma basis (as if the Moolarben Acquisition, the C&A Acquisition, the Warkworth Transaction and the Glencore Transaction had been completed on 1 January 2017), are all located in the first and second quartiles. The following chart shows the estimated free on board ("**FOB**") cash cost curve for 2018 of our thermal coal producing assets in US$ per tonne on a calorific adjusted basis.



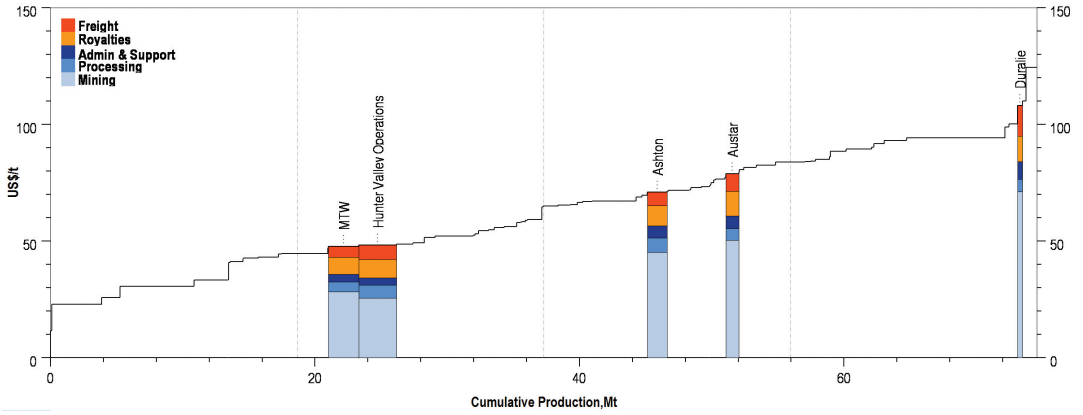
Source: Industry Report.

On a cash margin curve, the majority of our thermal coal production is located in the first and second quartiles, accounting for the higher pricing received for higher quality offsetting higher cost of production. The following chart shows the estimated FOB cash margin curve for 2018 of our thermal coal producing assets in US$ per tonne.



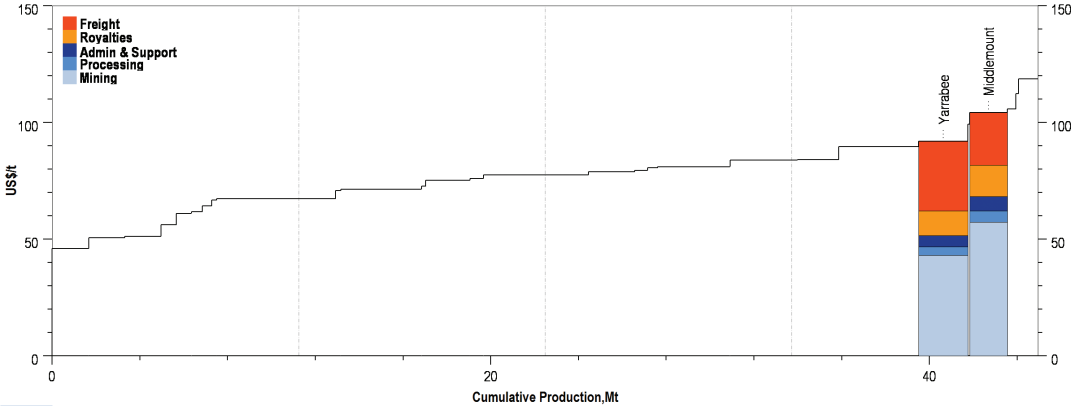
Source: Industry Report.

As most of our SSCC is produced at our large-scale thermal coal operations in the Hunter Valley, the cash costs for these are relatively low. The following chart shows the estimated FOB cash cost curve for 2018 of our SSCC producing assets in US$ per tonne.



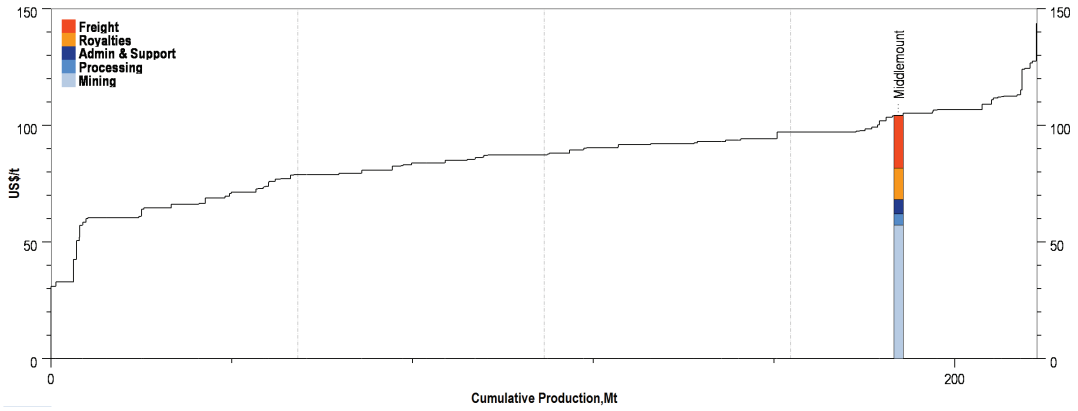
Source: Industry Report.

Our low-volatile PCI coal production is sourced from Middlemount and Yarrabee, where higher strip ratios and complex geology result in higher operational costs. The following chart shows the estimated FOB cash cost curve for 2018 of our low-volatile PCI coal producing assets in US$ per tonne.



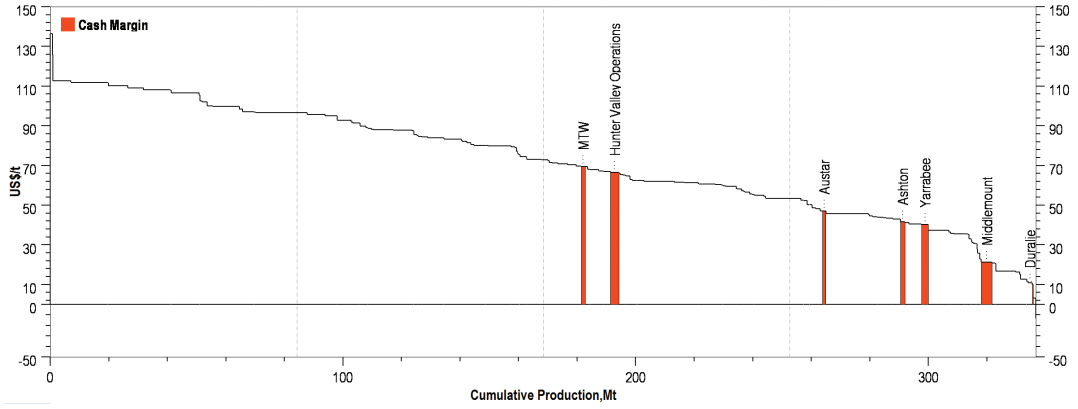
Source: Industry Report.

The following chart shows the estimated FOB cash cost curve for 2018 of our only HCC producing asset, Middlemount, in US$ per tonne.



Source: Industry Report.

As our metallurgical coal operations typically produce lower priced coal, these products have lower margins despite our operations having moderate costs. The following chart shows the estimated FOB cash margin curve for 2018 of our metallurgical coal producing assets in US$ per tonne.



Source: Industry Report.

OVERVIEW

Introduction

We are Australia's largest pure-play coal producer based on aggregate Coal Reserves and marketable coal production, and have been listed on the ASX since 2012. Of all Australian coal producers, we rank third on both these aforementioned metrics, behind only Glencore and BHP. Our principal business activity is the production of thermal and metallurgical coal for use in the power generation and steel industries in Asian markets. In contrast to coal companies that are currently listed on the Hong Kong Stock Exchange, all of the coal we produce is sold for export to customers located overseas, whether directly, through overseas traders or through other Australian coal companies. We believe that the export-oriented nature of our business is a key differentiator as it allows us to obtain global and market-determined indexed pricing for most of our coal sales.

We have ownership interests in, and operate, five coal mine complexes across New South Wales and Queensland, and manage five others across New South Wales, Queensland and Western Australia. Our mining interests in New South Wales include HVO, which is now operated as an unincorporated joint venture with Glencore, the integrated operations of the MTW open cut mines which are located adjacent to each other, the open cut and underground mines comprising Moolarben, and the integrated operations of Stratford Duralie. Our mining interests in Queensland are located in the Bowen basin and include Yarrabee, and a near-50% share in Middlemount through an incorporated joint venture with Peabody Energy. Our mining interests also include the Ashton, Austar and Donaldson mines in New South Wales, which we manage on behalf of Watagan, our unconsolidated, wholly-owned subsidiary. Additionally, we manage the Cameby Downs and Premier coal mines in Queensland and Western Australia, respectively, on behalf of our Shanghai and Hong Kong listed controlling shareholder, Yanzhou. We also have shareholding interests in three major coal export terminals in Australia.

As at 30 June 2018, the mines we have ownership interests in and operate, Middlemount and the Watagan Mines had, in the aggregate, Coal Reserves of 1,710 Mt, Marketable Coal Reserves of 1,218 Mt, and Measured and Indicated Coal Resources of 5,414 Mt (all on a 100% basis). On an attributable basis, we had Coal Reserves of 1,178 Mt, Marketable Coal Reserves of 837 Mt and Measured and Indicated Coal Resources of 3,964 Mt as at that date. In 2017 and the six months ended 30 June 2018, we sold 19.3 Mt and 16.2 Mt of coal products, respectively, and reported revenue from continuing operations of A$2,601 million and A$2,347 million, respectively.

Our mines and operations employ approximately 4,000 people in addition to the contractors and service providers who support our business, and we seek to continue contributing to the economic growth of the regional Australian areas in which we operate.

History

We have become the largest Australian pure-play coal producer through both organic growth and a series of corporate acquisitions since our incorporation in November 2004.

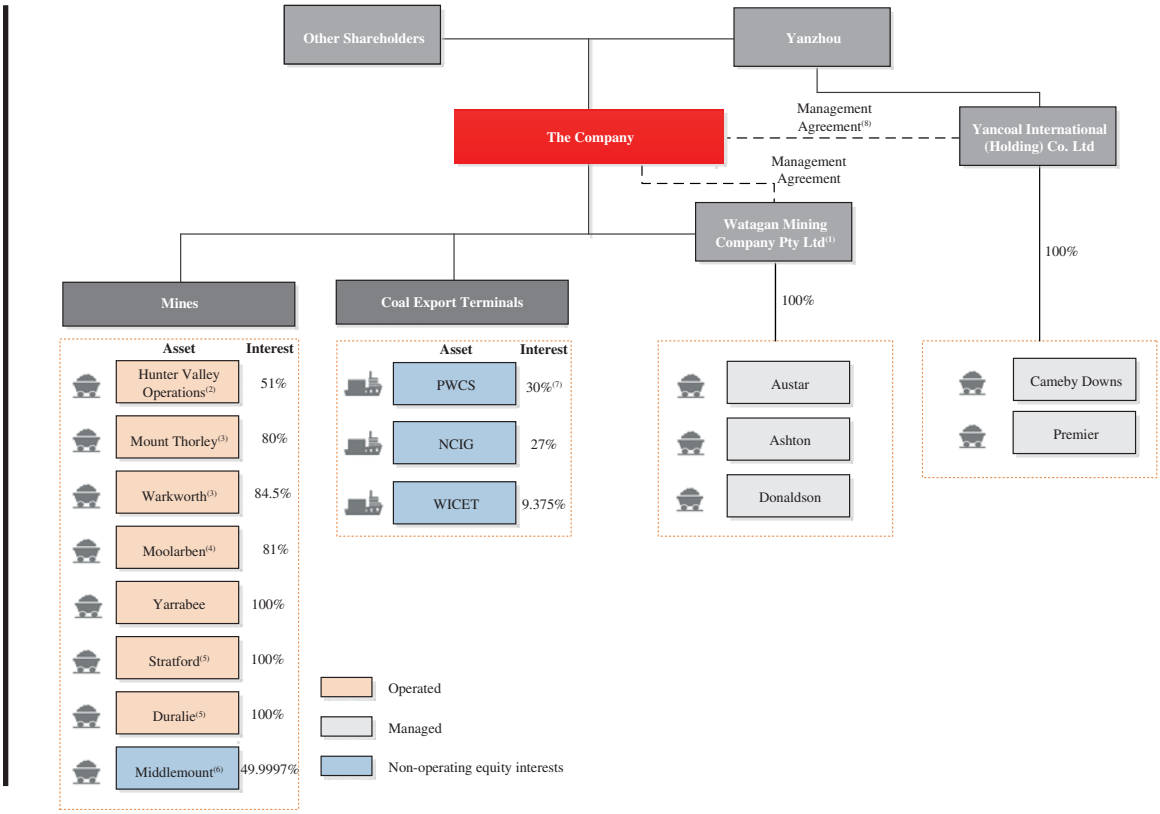
We acquired the Southland mine (renamed Austar) in 2004 and Felix Resources (assets of which included interests in the Moolarben, Yarrabee and Ashton mines) in December 2009. We acquired further interests in the Ashton mine in 2011. We listed on the ASX in June 2012, following our merger with Gloucester Coal, assets of which included interests in the Middlemount, Stratford Duralie and Donaldson mines and the Monash exploration project. Since our listing on the ASX, we have acquired the remaining interests in the Ashton mine and further interests in the Moolarben mine.

In 2014, during the global coal market downturn, we made a major strategic commitment to expand mining operations at Moolarben. Development approval for the Moolarben Stage Two expansion project was received in early 2015 and provided for an increase in ROM production capacity at the low cost Moolarben complex from 8 Mtpa of open cut production to 21 Mtpa across both open cut (13 Mtpa) and underground operations (8 Mtpa). With efficient project management and careful cost control, we were able to execute the Moolarben expansion ahead of schedule and within budget. With construction now complete at both the open cut and underground operations, Moolarben is one of the ten largest producers of thermal coal in Australia based on 2017 saleable production. We have entered into an agreement to increase our interest in Moolarben by 4%, subject to satisfaction of certain conditions precedent.

In March 2016, we transferred our interests in the Ashton, Austar and Donaldson mines to Watagan as part of a structured financing transaction, further details of which are set forth in "*– Our Mining Operations – Watagan Mines – Watagan Agreements*". In September 2017 we completed the acquisition of C&A from Rio Tinto, as a consequence of which we acquired interests in HVO and MTW, which are among the ten largest thermal coal operations in Australia, as well as related export infrastructure. In May 2018, we established a 51:49 unincorporated joint venture with Glencore in relation to HVO, one of the mines we acquired as part of the C&A transaction.

Organisational Structure

The chart below sets forth our simplified organisational structure and provides an overview of our assets and operations:



Notes:

(1) Watagan is a wholly-owned subsidiary of the Company. However, Watagan is managed by a board of directors (which we do not control) and therefore under the applicable accounting standards we do not consolidate Watagan in our financial statements. However, we manage and operate the Watagan Mines and receive fees in respect of the management services we provide. See "*Financial Information – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation"* and "*– Our Mining Operations – Watagan Mines – Watagan Agreements*" for further details.

(2) The Hunter Valley Operations, or HVO, are an amalgamation of three previously independent mining operations. We acquired our interest in HVO as part of the C&A Acquisition, following which we managed HVO directly and owned 67.6% of HVO. Upon the completion of the Glencore Transaction on 4 May 2018, our ownership of HVO was reduced to 51.0%, and HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See *"– Joint Venture Agreements"* for further details of the joint venture agreement with Glencore.

(3) Mount Thorley and Warkworth are separate mines; however, they are located adjacent to each other and are managed as an integrated operation (pursuant to an operations integration agreement) referred to as MTW. We acquired an 80% interest in Mount Thorley and a 55.6% interest in Warkworth on 1 September 2017 as part of the C&A Acquisition, following which we began managing MTW. On 7 March 2018, we purchased an additional 28.9% of Warkworth from Mitsubishi, which increased our ownership of Warkworth to 84.5% and increased our share of MTW's coal production from 64.1% to 82.9%.

(4) We hold an 81% interest in, and we are the manager of, Moolarben (through our joint venture with Sojitz, which holds 10%, and a consortium of South Korean companies which collectively hold 9%. The Company has entered into an agreement, subject to satisfaction of certain conditions precedent, with one of the Korean consortium members, to acquire an additional 4% interest in Moolarben for total consideration of A$84 million. The acquisition will raise our interest in Moolarben to 85%.

(5) Stratford and Duralie are separate mines; however they are located in proximity to each other and we consider them as an integrated operation which we refer to as Stratford Duralie.

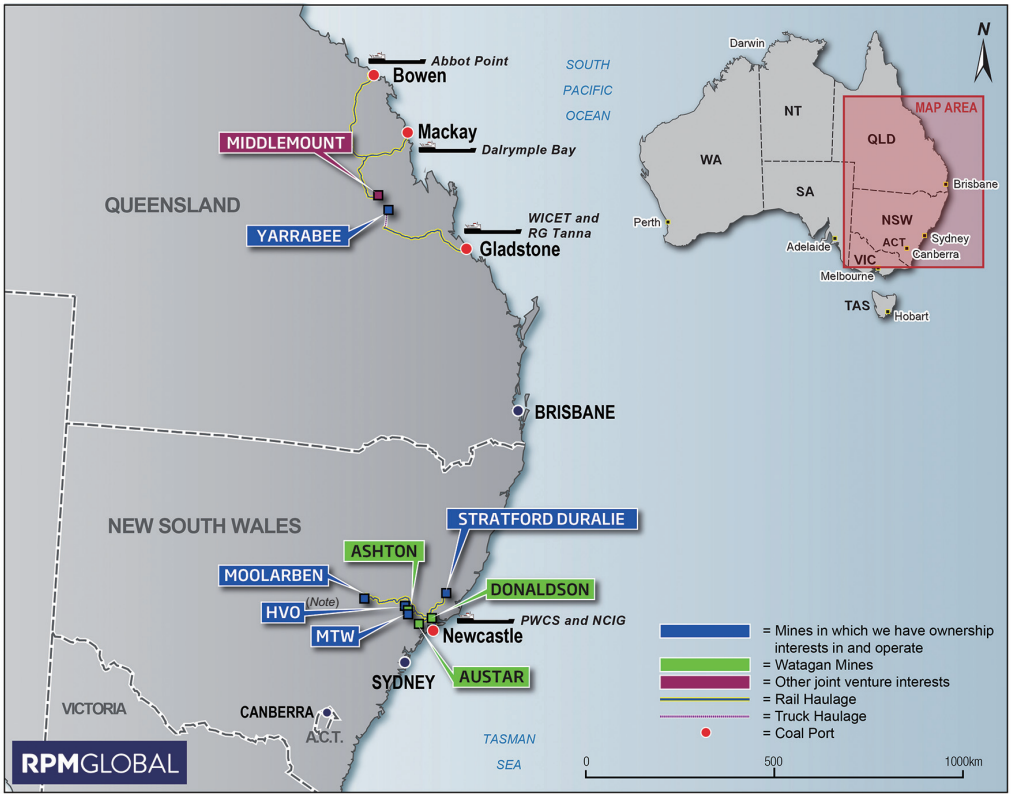
(6) Middlemount is operated by an incorporated joint venture between Peabody Energy and the Company, with the Company having a near-50% interest in the joint venture.

(7) On completion of the Glencore Transaction, the beneficial interest in C&A's shareholdings in Newcastle Coal Shippers, through which we indirectly hold 6.5% of PWCS, was transferred to Glencore Coal (NSW) Pty Limited, a subsidiary of Glencore. As a result, C&A's beneficial interest in PWCS was reduced to 30%. Legal title in Newcastle Coal Shippers remains with C&A until completion of a pre-emptive process, at which time C&A's legal interest in PWCS will transfer to Glencore Coal (NSW) Pty Limited.

(8) The Company provides services to Yancoal International (Holding) Co. Ltd's subsidiaries under the management agreement.

Locations

The following map shows the location of the coal mines we have ownership interests in and operate, the Middlemount joint venture, the Watagan Mines, and the ports and railway network serving these areas:



Note:

HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See "– *Joint Venture Agreements*" for further details of the joint venture agreement with Glencore.

OUR COMPETITIVE STRENGTHS

We are Australia's largest pure-play coal producer with a seaborne business focused on major Asian export markets including the PRC.

Our business is focused exclusively on coal production and we are the largest pure-play coal producer in the Australian coal sector based on aggregate Coal Reserves and marketable coal production. As at 30 June 2018 the mines we have ownership interests in and operate, Middlemount and the Watagan Mines had, in the aggregate, Coal Reserves of 1,710 Mt (on a 100% basis) and in 2017 they produced, on a pro forma, 100% basis (assuming the completion of the C&A Acquisition as at 1 January 2017) 49 Mt of coal and coal products. In comparison, Whitehaven and New Hope, which are the second and third largest pure-play coal producers in Australia in terms of Coal Reserves, reported 974 Mt and 804 Mt, respectively, of Coal Reserves as at 31 December 2017 each on a 100% basis. In terms of production volume in 2017, Whitehaven and New Hope produced 22 Mt and 14 Mt, respectively, while Peabody Energy, the second largest

pure-play coal producer in Australia, produced 34 Mt, of coal and coal products. Only BHP and Glencore produce more coal in Australia than we do, though both are diversified miners who operate a number of other significant commodities businesses in Australia and globally.

Our business is substantially based on exporting the coal we produce to major Asian markets including the PRC. In 2017 we derived all of our revenue from sales of coal for export to customers located overseas, whether directly, through overseas traders or through other Australian coal companies. We believe that the export-oriented nature of our business is a key differentiator, because we are able to obtain global and market determined indexed pricing for most of our coal sales. Conversely, the Chinese coal companies that are currently listed on the Stock Exchange mainly produce and sell coal domestically in the PRC, and are more susceptible to locally regulated pricing, or local production restrictions. Production restrictions on the coal industry that are imposed by the government in China also favour the global seaborne coal market, in which we are a competitive player. Furthermore, the availability of proximate rail and port connectivity to our mines, and the relatively short voyage times from the east coast of Australia to our key export markets, enable us to price our coal competitively for those markets.

We have a diversified portfolio of world class assets that produce high value coal products for our major export markets.

We have ownership interests in, and operate, five mine complexes, namely HVO (which is operated as an unincorporated joint venture with Glencore), MTW, Moolarben, Stratford Duralie and Yarrabee, and also manage the Ashton, Austar and Donaldson mines on behalf of Watagan. We also have a near 50% share of the Middlemount joint venture. We believe that the geological characteristics of our coal deposits enables us to extract coal at a relatively lower cost, with many of our mines receiving some of the highest margins in the market for our coal, according to the Industry Report. Further, our mines are located in close proximity to rail and port facilities, which provides us with a competitive transportation cost advantage. We produce and export a variety of coal grades, which presents significant coal blending and marketing opportunities, and allows us to manage customers' coal quality specifications to maximise financial performance.

Thermal coal accounts for approximately 81% of our overall production (on an attributable basis), and Moolarben, HVO and MTW are the second, third and fifth largest producers majority Australian-owned thermal coal mines (meaning mines for which thermal coal comprises at least 50% of saleable production) in terms of aggregate thermal and metallurgical coal production on a 100% basis in the first half of 2018. All three mining operations have long mine life and produce coal at relatively low cost that is in the first and second quartiles of the FOB cash cost curve and the first quartile of the FOB cash margin curve (see *"Industry Overview – Cost Competitiveness Analysis"*). We believe that Australian thermal coal, with its high energy content and relatively low impurities, is highly valued in our key export markets such as Japan, South Korea and the PRC. Historically, a consequence of extensive investment in Australian coal assets by Japanese and South Korean companies has been that power plants in those countries are designed to efficiently utilise Australian benchmark coals such as those we produce, and as a result Japanese and South Korean power plants are significant end users of our thermal coal.

Furthermore, we anticipate that with the increasing emphasis on reducing greenhouse gas emissions globally and environmental policies that are encouraging a shift to cleaner fuels, the focus of new coal fired power generation in many of our key Asian markets will be on high efficiency, low emission (HELE) technology, in order to reduce the carbon emission intensity of each kWh of electricity produced. It is expected that the focus of coal demand for these HELE plants will be on higher energy, lower ash coals, such as those produced by our mines.

We have a sustainable platform for future growth.

We have a large high quality reserve and resource base that we believe provides us with a sustainable asset base to maintain current and anticipated production, as well as to exploit future brownfield and greenfield opportunities. As at 30 June 2018, the mines we have ownership interests in and operate, Middlemount and the Watagan mines had, in the aggregate, Coal Reserves of 1,710 Mt and Marketable Coal Reserves of 1,218 Mt, and Measured and Indicated Coal Resources of 5,414 Mt (all on a 100% basis). Based on current Marketable Coal Reserves, the average remaining mine life of our mines is 24 years, with HVO (which is operated as an unincorporated joint venture with Glencore), MTW and Moolarben, our flagship mines, having 43, 23 and 20, years of remaining mine life, respectively. These mine lives could increase if we are able to convert Coal Resources to Coal Reserves.

All of our assets are located in Australia, which is a developed economy characterised by a stable political system, well established mining laws and industrial policies, world class safety and environmental standards, as well as favourable investment conditions in the mining sector. We have been listed on the ASX since 2012 and have been subject to its strong corporate governance regime. We have also conducted our business to the required health and safety standards and in compliance with the high standards of environmental regulation in Australia.

We believe that the volume and quality of our coal reserves and resources, together with our operating environment in Australia, provide us with a sustainable platform to capitalise on market opportunities and deliver value to our shareholders.

Our experienced management team is well positioned to pursue growth opportunities and create further shareholder value.

Our management team consists of executives with deep experience in the coal sector and the financial sector. Given their diverse backgrounds, our executives are familiar with operating in a developed, Western-style environment and in pursuing revenue and growth opportunities in Eastern markets. With a strong focus on optimising execution and delivering growth, our current senior management team and board of directors have worked closely together to enable us to attain our current position as the largest Australian pure-play coal producer over the past few years. This has been achieved through a mix of organic strategies, such as the efficient project management and successful implementation of the Stage Two Moolarben expansion project ahead of schedule and below budget, which enabled us to increase ROM production capacity at the low cost Moolarben complex from 8 Mtpa of open cut production to 21 Mtpa across both open cut (13 Mtpa) and underground operations (8 Mtpa), and through inorganic transactions such as the successful acquisition of C&A and the HVO joint venture with Glencore. We believe that given their experience and recent track record, our management is well positioned to create shareholder value through revenue growth, the successful delivery of brownfield and greenfield projects, and opportunistic strategic transactions.

We have valuable and strategic operational and trade relationships as well as strong support from our key shareholders.

We have operational and trade partners who are highly experienced in our industry, as well as key shareholders in Yanzhou and Cinda, who have been instrumental in our development and strategy.

Glencore is one of our key operational partners and is also our shareholder. Our joint venture in relation to HVO combines the experience and efficiencies of two of Australia's largest coal producers, enabling us to benefit from operational synergies. We also expect to benefit from Glencore's economies of scale, through access to group-wide contracts for equipment replacement and parts, overheads and support services rationalisation and mining technology.

We have long-term relationships with end-users in key global markets. Our strong trade relationships with customers in Japan, South Korea, the PRC, Singapore and Taiwan underline our successful marketing efforts in our key export markets. We have also been able to establish long-term relationships with customers through a strategy of focusing on major end-users such as power utilities and steel mills. We are also focused on maximising new sales opportunities generated from the C&A Acquisition, including the marketing of semi-soft coal products into India and Europe and premium thermal coals across Asian markets.

Yanzhou and Cinda, our key shareholders, play an important role in the success of our business and have been supportive of our growth. Yanzhou is one of the leading underground coal producers in the PRC and is listed on the Hong Kong and Shanghai stock exchanges. As a highly regarded and competitive player in the market, Yanzhou has supported us with various aspects of our business, including by taking up US$1.0 billion of its entitlements during the C&A US$2.45 billion entitlement offer in 2017. Cinda, one of the leading coal investors in the PRC, made a strategic investment by underwriting US$734.3 million of the US$2.45 billion entitlement offer in 2017 to finance the acquisition of C&A and subsequently obtained representation on our board of directors.

OUR BUSINESS STRATEGIES

We are committed to continuing our strategic growth and to maximising new opportunities to build our business as a leading low cost coal producer in the global seaborne market with a focus on creating long term value for our shareholders. Our management team remains focused on investing in the Australian resources sector, implementing operational efficiencies, reducing costs, exploring new market opportunities and providing our customers with the certainty of product quality and delivery.

Evaluate and execute portfolio expansion and improvement through value accretive organic and inorganic opportunities.

We believe that we have demonstrated our ability to pursue successful organic and inorganic growth focused on improving our portfolio production mix, i.e., increasing the percentage of sales from our lowest cost operations. We have continued to deliver brownfield expansion projects on time and budget through efficient and robust project management such as our recent execution of the Moolarben Stage Two expansion project which provided for an increase in ROM production capacity at the low cost Moolarben complex from 8 Mtpa of open cut production to 21 Mtpa across both open cut

(13 Mtpa) and underground operations (8 Mtpa), and that our proven project identification and execution expertise positions us well to pursue organic growth opportunities within our existing asset portfolio. The recent successful completion of the acquisition of the low cost C&A operations and the related HVO joint venture with Glencore demonstrate our ability to pursue and complete major strategic transactions, and we will continue to be opportunistic in pursuing such inorganic growth opportunities, with a strong focus on transactions that will be value-accretive to our shareholders.

We believe that our portfolio offers further potential organic growth opportunities, particularly following our acquisition of the C&A assets. These include underground expansion opportunities at MTW, maximising the potential of the open cut operations at Moolarben, and evaluating, together with Glencore, exploitation of opportunities with respect to "barrier coal" deposits in and around HVO. We believe that we have demonstrated the ability to deliver projects on time and within budget.

Continued focus on operational efficiencies to increase mine productivity and reduce operating costs.

We continue to implement operational efficiency initiatives across all our mines, with a commitment to reducing costs and supporting future growth opportunities. We believe that the scale of our operations provides us with an opportunity to share our core operating principles across our business, driving efficiency, performance and productivity to achieve enhanced revenue and profitability.

As we complete the integration of the assets acquired as part of the C&A Acquisition, we aim to improve operational synergies among HVO, MTW and Moolarben in particular, by maximising the benefits of the mines' adjacent geographic locations. These benefits include the potential of increased marketable reserves, mine life and reduced strip ratio/costs as a result of mining coal from barriers between the mining leases (at HVO specifically), equipment optimisation across various sites, as well as coal blending and reduction in take-or-pay liabilities through the optimisation of logistics and port allocation. We continue to explore how varying mining methods may be implemented across these assets and our other operations to improve mine productivity and operational performance, and reduce costs. HVO, MTW and Moolarben are amongst the ten largest thermal coal mines in Australia and are situated in close proximity to a common railway network.

Specific recent synergy initiatives we have undertaken with regard to the C&A assets include a focus on utilisation requirements for heavy mobile machinery, review of loading fleet capacity, implementation of greater operational accountability and monitoring measures, as well as a dragline shutdown cost reduction project at MTW. We have also obtained benefits from our enhanced scale of operations resulting in cost reductions from vendors and other counterparties, including negotiated price reductions for rail haulage services at HVO and MTW.

We intend to continue increasing productivity across our fleet of excavators, bulldozers, graders and haul trucks, by optimising our maintenance practices to ensure improvements in equipment availability, and by providing best practice training to our personnel to enhance equipment utilisation. To optimise costs, we continue to seek more favourable terms across the procurement contracts that support our business. The combination of our strategic portfolio improvement and our productivity and cost optimisation initiatives across all operations in recent years have been effective, resulting in our FOB cash costs (excluding royalties) decreasing from A$78/saleable tonne in 2013 to A$63/saleable tonne in the six months ended 30 June 2018 (with respect to coal from the mines we operated in the respective years).

Grow our business in existing markets and new markets, aided by a dynamic product mix strategy.

We intend to continue growing our business in our key thermal and coking coal markets, which are Japan, South Korea, the PRC and Taiwan. During the Track Record Period, we also supplied coal to power plants and steel mills in other Asian countries such as Malaysia, Vietnam, Thailand, India and Indonesia, as well as customers in South America and Europe on an ad hoc basis. We plan to pursue market opportunities that can generate profitable medium to long term returns, particularly against a backdrop of policies intended to reduce long term carbon density. We believe that we have had success in the PRC, where our dedicated focus on key major end users such as Huaneng Power International, Baosteel Stainless Steel and Yuan Li Steel resulted in the PRC's share of our total revenue by end user increasing from 8.3% in 2015 to 24.9% in 2017. We plan to continue targeting a more diverse market portfolio across our focus markets. The Industry Report predicts growth in coal demand in major markets such as India, which continue to be dependent on thermal power and where there are widespread coal supply shortages. While India sources most of its coal from South Africa and Indonesia, Australia is expected to remain an alternative and competitive source of coal for this growing market, which may offer us growth opportunities there.

We believe that anticipating and responding to our customers' changing needs and requirements is an important aspect of our growth strategy and a competitive advantage. Our operating scale combined with the diversity of our assets enables us to deliver a range of coals to meet our customers' specifications. We collaborate with our customers to provide suitable blends, including the generation of new blends, across the product spectrum. The acquisition of C&A has provided us with access to a wider range of coal grades, which has enabled us to realise blending synergies on certain contracts. We also anticipate the further growth of HELE plants across our key Asian markets, which should provide additional opportunities to blend coal to meet the high energy, low emission requirements and specifications of those plants.

Sustain financial discipline and strengthen our balance sheet to support future growth.

We intend to maintain our focus on financial discipline and look for ways to further strengthen our balance sheet to support our future growth. We intend to use a portion of the proceeds of the Offering to refinance our existing indebtedness and reduce our overall weighted average cost of capital.

We also believe that our acquisition of the C&A assets has materially strengthened our balance sheet and created a pathway to a long term sustainable capital structure and future cash flow generation. We believe that following the acquisition our balance sheet is well capitalised, with a gearing ratio (which we define as gross debt divided by total equity at the end of the period) of 0.8 as at 30 June 2018 compared to 3.7 as at 31 December 2016. In addition, we repaid debt of US$450 million in May 2018 and US$50 million in June 2018, which we believe has further improved our financial position. We intend to explore further opportunities to reduce our finance costs, through voluntary prepayments or lower cost refinancings. For example, on 17 September 2018 and 17 October 2018, we further repaid US$150 million and US$100 million, respectively, of our bank and related party debt using excess cash flows generated from operations. Following the completion of the Global Offering [**REDACTED**], we expect our leverage ratio to further improve, providing us with the balance sheet and cash flow strength to consider the possibility of meeting the dividend mandate set forth in our Constitution and to pursue strategic opportunities when they become available.

Maintain high standards of safety and responsible working practices.

We believe that we have a strong record of compliance with environmental, health and safety legislation in Australia's highly regulated environment. We aim to maintain high standards of safety across our business. We believe that sound safety practices are a cornerstone of our business and we strive to ensure the provision of a safe workplace for the approximately 4,000 people who work in our mines. To support this commitment, we continue to implement safety training and incident response practices across each of our operations; for example, we have introduced the Critical Controls initiative to identify and mitigate against significant onsite risks.

KEY DATA AND OPERATIONAL METRICS

The following tables set forth certain information relating to each of the coal mines in which we have ownership interests and operate, the Middlemount joint venture and the Watagan Mines:

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Background data										
Location	NSW	NSW	NSW	NSW	QLD	QLD	NSW	NSW	NSW	–
Date of initial operation	1949	1981	2010	1995	1982	2011	2005	1916	2006	–
Interest at the Latest Practicable Date (%)	51.0	Mount Thorley: 80 Warkworth: 84.5 Share of coal production: 82.9	81	100	100	49.9997	100	100	100	–
Designed annual production capacity (Mt)[4]	20.0	18.5	21.0	4.6	3.5	5.4	5.5	5.0	5.1	88.6
Permitted annual production capacity (Mt)[4]	38.0	28.0	21.0	5.6	4.0	5.7	8.6	3.6	6.1	120.6
Tenement expiry dates[5]	14 Apr 2019 – 19 Apr 2038	23 Feb 2020 – 17 Mar 2038	12 Feb 2020 – 31 Aug 2036	5 Apr 2019 – 8 Apr 2037	13 Nov 2018 – 31 May 2044	30 Apr 2020 – 30 Sep 2031	21 May 2020 – 16 May 2035	7 Dec 2018 – 3 Feb 2039	21 Jul 2019 – 30 Jun 2038	–
Remaining mine life (years)	43	23	20	35	38	20	13	17	11	–

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Coal Resources[4][12] (as at 30 June 2018)										
Measured (Mt) (100% basis)	704	MT:27 W:197	OC:438 UG: 287	OC:11 UG: –	94	73	OC:25 UG: 52	70	OC: 10 UG: 178	2,165
Indicated (Mt) (100% basis)	1,430	MT:75 W:713	OC:105 UG: 131	OC:196 UG: 1	80	47	OC:49 UG: 18	80	OC: – UG: 326	3,249
Measured and Indicated (100% basis)	2,134	MT:102 W:910	OC: 543 UG: 418	OC:207 UG: 1	174	120	OC:74 UG: 70	150	OC: 10 UG: 503	5,414
Inferred (Mt) (100% basis)	1,654	MT: 153 W: 527	OC: 69 UG: 129	OC:76 UG: 35	20	1	OC:70 UG: 15	69	OC: – UG: 95	2,913
Total (100% basis)	3,788	MT:255 W: 1,437	OC:612 UG: 547	OC:283 UG: 36	194	121	OC:144 UG: 85	219	OC: 10 UG: 598	8,327
Attributable to the Group[7]										5,916

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Coal Reserves[6][12] (proved and probable, as at 30 June 2018)										
Coal Reserves (Mt)										
100% basis	796	MT:8 W:314	OC:189 UG: 67	44	55	87	OC:14 UG: 33	41	62	1,710
Attributable to the Group[7]										1,178
Marketable Coal Reserves (Mt)										
100% basis	554	MT:5 W:220	OC:148 UG: 67	26	42	67	OC:7.8 UG: 18	31	32	1,218
Attributable to the Group[7]										837
Product type	Met/ Thermal	Met/ Thermal	Thermal	Met/ Thermal	Met/ Thermal	Met/ Thermal	Met	Met/ Thermal	Thermal	–

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total
ROM coal production (Mt)[8]										
2015	–	–	9.0	1.9	3.4	5.5	3.0	0.8	1.8	25.4
2016	–	–	12.2	1.2	3.6	5.3	2.4	1.2	0.3	26.2
2017	19.5	17.7	14.7	0.9	3.4	5.3	2.8	2.0	–	66.3
1H2018	9.1	8.5	9.8	0.3	1.3	2.5	1.0	0.4	–	32.9
Marketable coal production (Mt)[8]										
2015	–	–	6.9	1.4	2.8	4.4	1.4	0.7	1.3	18.9
2016	–	–	9.3	0.9	3.1	4.1	1.1	1.1	0.2	19.8
2017	14.8	11.8	12.4	0.7	2.9	3.9	1.2	1.9	–	49.4
1H2018	6.4	6.0	8.8	0.2	1.1	2.1	0.4	0.4	–	25.4
Coal sales volume (Mt)[9]										
2015	–	–	5.6	1.5	3.0	–	1.3	0.6	1.4	13.4
2016	–	–	7.4	0.9	3.2	–	0.4	0.1	0.1	12.1
2017	3.1	2.5	10.2	0.7	2.8	–	–	–	–	19.3
1H2018	3.8	4.5	6.5	0.3	1.1	–	–	–	–	16.2

Notes:

(1) UG refers to underground mining operations and OC refers to open cut mining operations.

(2) HVO is operated as a 51%:49% unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See "*– Joint Venture Agreements – HVO*" for further details of the joint venture agreement with Glencore.

(3) Owned but not controlled by us under the applicable accounting standards. See "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*", *"– Our Mining Operations – Watagan Mines – Watagan Agreements*" and "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*" for further details.

(4) As defined in the JORC Code and as at 30 June 2018.

(5) See "*– Mining and Exploration Licences – Approvals, Permits and Licences to be Obtained*" and "*Appendix III – Competent Person's Report – Appendix F. Tenements*" for further details of the expiry dates of the tenements for each mine site.

(6) As defined in the JORC Code and as at 30 June 2018.

(7) Attributable data is based on our effective ownership interest as at the Latest Practicable Date and is provided on an aggregate, not per mine, basis.

(8) Reported on a 100% basis and subject to the limitations and qualifications set forth in *"Appendix III – Competent Person's Report"*.

(9) Represents ex-mine sales volume reported on an attributable basis and does not include the sales of Middlemount, which is an incorporated joint venture, and Watagan following its deconsolidation from the Group in March 2016.

(10) HVO and MTW were not part of the Group in 2015 and 2016.

(11) Data is subject to rounding, which may result in minor tabulation differences.

(12) The coal resources and reserves stated above must be read in conjunction with the Competent Person's Report in Appendix III to this prospectus which includes the disclosures required as per the JORC Code.

COAL PROPERTIES

Our principal coal products are thermal coal and metallurgical coal, which are widely used in the thermal power and steel production industries, respectively. All of the coal we produce is sold for export to customers located in various key markets across the Asia Pacific region, whether directly, through overseas traders or through other Australian coal companies. The end users for our coal products include major power utilities and steel mills in Japan, South Korea, the PRC, Singapore and Taiwan. During the Track Record Period, we have also supplied coal to power and steel mills in other Asian countries, such as Malaysia, Vietnam, Thailand and Indonesia, as well as customers in South America and Europe on an ad hoc basis.

Thermal coal

Thermal coal is primarily used as an energy source in the generation of electricity. Thermal coal is also used in cement manufacturing and other major energy intensive industries which use heat and/or steam in their production processes. As a result, thermal coal demand is strongly driven by electricity generation and is generally sold at prices which reflect demand and quality.

A wide range of thermal coals are available from Australian coal producers with coal characteristics varying from mine to mine. Australian export thermal coal typically has high energy content, moderate ash levels and is generally low in contaminants such as sulphur and other trace elements that reduce the value of the coal.

Historically, the Hunter Valley region, where two of our flagship mining assets, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW, are located, has been the source of large volumes of high quality bituminous coal. As a result, for several decades these coals have been used as the basis for the design of power plants in the major developed economies of Japan, South Korea and Taiwan, and the developing economies in South-east Asia. Japanese power utilities and some customers in South Korea and Taiwan seek high energy, low ash coal to enhance boiler efficiency and/or reduce ash disposal costs. Our operations typically produce three thermal product coal types based on ash content: low ash, medium ash and high ash. These three product types attract different customers and prices with specifications varying between customers. The PRC remains a major market for imported coal, with demand over 200 Mt per annum. The thermal coal the PRC typically imports coal has a net calorific value ranging from 4,500 – 5,500 kcal/kg, although environmental concerns are likely to drive increased demand for higher quality, lower ash coals.

Metallurgical coal

Metallurgical coal is also known as coking coal. HCC is essential for the production of a strong coke which is used primarily in the steel making process. SHCC and SSCC are lower grades of coking coal that are often blended with HCC to reduce the overall cost of coal for steel production. SSCC can also be used as a substitute for thermal coal. PCI coal can be used as a cost effective replacement for coking coal to some extent.

Australian coking coals are known for their high quality coking characteristics and are generally low in contaminants such as sulphur and phosphorous.

Semi-hard coking coal

SHCC is produced at the Stratford, Austar and Middlemount mines. SHCC is highly regarded by steel mills throughout Asia for various reasons as a blend coal for steel making. For example, Austar SHCC has the highest fluidity levels of any coking coal in Australia and blends well with coking coals of low fluidity.

Semi-soft coking coal

SSCC can be produced in a limited number of seams in the lower Hunter Coalfield within which we have a large footprint. SSCC is highly regarded by steel mills throughout Asia for various reasons, most particularly the low impurities in the coal. Our SSCC is sought in significant and increasing proportions by North Asian steel mills for their coking coal blends.

Pulverised coal injection

PCI coal is generally a high calorific value coal, which is injected directly into a blast furnace to provide the carbon and heat in the iron-making process and can be used as a cost effective replacement for coking coal to some extent. The PCI process increases the economic efficiency of steel-making by using lower cost coals to reduce consumption of higher cost hard coking coals. PCI has become a standard practice in many of the world's major steelworks, particularly in Asia where substantially all of our customers are located.

Coal deposits in the Bowen Basin of central Queensland, where our owned Yarrabee mine and the near 50% owned Middlemount joint venture are located, include extensive resources of low and medium volatile coals that are well-suited to the PCI market.

The table below sets forth average coal characteristics of the coal sold by the mines we have ownership interests in and operate, and Middlemount:

Coal type	Region	Calorific value (Kcal/kg)	Ash (%)	Total moisture (%)	Fixed carbon (%)	Sulphur (%)	Phosphorous (%)	Volatile matter (%)	HGI	Free swelling index	Fluidity (ddpm)
Low Ash Thermal	Hunter Valley	6,322	⩽15%	10	53	0.55	0.008	31	50	NA	NA
High Ash Thermal	Hunter Valley	<6,322	>15%	10	53	0.55	0.008	31	50	NA	NA
SSCC	Hunter Valley	6,784	9.5	10	52	0.65	0.023	36	50	7	150
PCI	Queensland	6,767	11.5	9	77.8	0.68	0.096	9.2	72	NA	NA
Coking Coal	Queensland	NA	10	10	69.5	0.43	0.039	19	85	6	20

Note:

Coal qualities are at air dried basis with the exception of Calorific Value which is "gross as received". Total Moisture is as received.

OUR MINING OPERATIONS

Overview of coal mining operations

The table below sets forth the mines in which we have ownership interests and operate and from which we generate income primarily through the sale of coal to the export market. For a description of the ownership interests, see *"– Organisational Structure".*

New South Wales		Queensland	
Mine	**Ownership**	**Mine**	**Ownership**
HVO(*Note*)	51.0%	Yarrabee	100.0%
Mount Thorley	80.0%		
Warkworth	84.5%		
Moolarben	81.0%		
Stratford	100.0%		
Duralie	100.0%		

Note:

HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See "*– Joint Venture Agreements – HVO*" for further details of the joint venture agreement with Glencore.

We have a 49.9997% shareholding interest in Middlemount Coal Pty Ltd, the incorporated joint venture which operates the Middlemount mine.

The table below sets forth our managed mines, from which we generate income through management fees:

New South Wales		Queensland		Western Australia	
Mine	**Owner**	**Mine**	**Owner**	**Mine**	**Owner**
Ashton	Watagan	Cameby Downs	Yanzhou	Premier	Yanzhou
Austar	Watagan				
Donaldson	Watagan				

The Ashton, Austar and Donaldson mines are owned by Watagan, which is wholly-owned but not controlled by us under applicable accounting standards, and therefore not consolidated, by us. We receive fees in respect of management services provided to the Watagan Group for the management of the Ashton, Austar and Donaldson mines. See "*Financial Information – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation"* and *"– Our Mining Operations – Managed Mines – Watagan Mines – Watagan Agreements*" for further details.

During the Track Record Period, mining ceased at Donaldson's Abel underground mine in June 2016. Donaldson's coal operation was moved to a "care and maintenance" phase and feasibility studies have been commenced to explore potential future mining options including the introduction of a longwall mining method. As at the Latest Practicable Date, Donaldson had not recommenced operations.

During the Track Record Period, Austar experienced geotechnical issues, safety issues and suspension of longwall production as a result of coal burst incidents, which resulted in investigations and discussions with the Resources Regulator and certain prohibition notices being issued against Austar. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. On 30 August 2018 operations were halted on account of technical issues related to de-stressing activity in certain areas of the long wall, and on 5 September 2018 a prohibition notice was received relating to this activity which was cancelled on 28 September 2018. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. Further details of geotechnical issues at Austar are set out in "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*", "*Appendix III – JORC Coal Reserves – Reserves Comments*" and in "*Health, Safety and Environmental Matters – Safety Incidents*".

Mines we have ownership interests in and operate

Our flagship mines are Moolarben, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW, which are respectively the second, third and fifth largest majority Australian-owned thermal coal mines (meaning mines for which thermal coal comprises at least 50% of saleable production) in terms of aggregate thermal and metallurgical coal production on a 100% basis in the first half of 2018. These mines in aggregate accounted for approximately 91.6% of the total coal sales (on an attributable basis) from our mines in the six months ended 30 June 2018 on a pro forma basis (as if the C&A Acquisition, the Warkworth Transaction, the Glencore Transaction and the Moolarben Acquisition had been completed on 1 January 2017). All three mining operations are large, with long mine life, and produce coal at relatively low cost that is in the first and second quartiles of the cost curve (see *"Industry Overview – Cost Competitiveness Analysis" for further details*).

(a) New South Wales mines

(i) HVO

Overview. HVO is a multi-pit open cut mine located 24 kilometres north-west of Singleton in the Hunter Valley Basin of NSW. HVO produces a mixture of thermal and semi-soft coking coal for export to international markets and produced approximately 14.8 Mt of thermal and semi-soft coking product coal in 2017. As at 30 June 2018, HVO had Coal Reserves of 796 Mt and Marketable Coal Reserves of 554 Mt.

History. HVO is an amalgamation of three previously independent mining operations, namely Howick, Hunter Valley No.1 and Lemington. The current West Pit, which was part of the Howick mine, began coal production in 1968. Lemington began coal production in 1971. Hunter Valley No. 1 began coal production in 1979. In 2000, C&A merged Howick and Hunter Valley No.1 to create HVO, and in 2001, Lemington was acquired and merged with these two mines.

Ownership. We acquired our interest in HVO on 1 September 2017 as part of the C&A Acquisition, following which we managed HVO directly and owned 67.6% of HVO. Upon the completion of the Glencore Transaction on 4 May 2018, our ownership of HVO was reduced to 51.0%, and HVO is currently operated as a 51:49 unincorporated joint venture with Glencore. See "– *Acquisitions and Disposals"* below for further details on the C&A Acquisition and the Glencore Transaction and *"– Joint Venture Agreements – HVO"* for further details of the joint venture agreement with Glencore.

Operations. HVO uses dragline and truck and shovel methods, and is operational 24 hours a day, seven days a week. ROM coal is processed through two on-site coal preparation plants to produce low, medium and high ash thermal coals and a semi-soft coking coal for the export market. Product coal is loaded onto trains for transportation 99 kilometres through the Hunter Valley rail network to the PWCS and NCIG loading terminals at Newcastle where it is shipped to international customers.

Expansion potential. The current coal reserves and life of mine plans of HVO exclude potentially significant coal within the boundary pillar of the tenement holding due to restrictions on mining across the tenement boundary on the neighbouring tenement. The establishment of the joint venture with Glencore presents potential for the barrier coal neighbouring Glencore tenements to be exploited together with Glencore. According to the Competent Person's Report, the majority of this coal is within the breakeven strip ratio which would become economic if mining were to occur across the tenement and as such presents upside to the current life of mine plan. We engaged a third party consultant to estimate the potential boundary coal at HVO which indicates that an additional coal tonnage of between 100 and 120 Mt could be exploited with extensions of the current mining pits. Further detailed integrated planning will need to be conducted to confirm the estimated tonnage. As at the Latest Practicable Date, we have no current plans to develop this potential expansion project.

(ii) MTW

Overview. MTW is an integrated operation of two open cut mines, Mount Thorley and Warkworth, located adjacent to each other 15 kilometres south-west of Singleton in the Hunter Valley of NSW. MTW produces a mixture of thermal coal and semi-soft coking coal for export to international markets and produced more than 11.8 Mt of thermal and semi-soft coking product coal in 2017. As at 30 June 2018, Mount Thorley had Coal Reserves of 8 Mt and Marketable Coal Reserves of 5 Mt, and Warkworth had Coal Reserves of 314 Mt and Marketable Coal Reserves of 220 Mt.

History. Both Mount Thorley and Warkworth have been in operation since 1981. C&A became the manager of Mount Thorley in 1989 and purchased an interest in Warkworth in 2001. Under an operational integration agreement entered into in January 2004, the two mines were integrated and managed together to realise operational and mine planning efficiencies.

Ownership. We acquired our interest in MTW on 1 September 2017 as part of the C&A Acquisition, following which we began managing MTW and owned 80% of Mount Thorley and 55.6% of Warkworth. On 7 March 2018, we purchased an additional 28.9% of Warkworth from Mitsubishi Development Pty Ltd which increased our ownership of Warkworth to 84.5% and increased our share of coal

production from the integrated MTW mine from 64.1% to 82.9%. See "– *Acquisitions and Disposals"* below for further details on the C&A Acquisition and the Warkworth Acquisition.

Operations. MTW uses a dragline and truck and shovel methods, and is operational 24 hours a day, seven days a week. ROM coal is processed through two on-site coal preparation plants to produce low, medium and high ash thermal coal and semi-soft coking coal for the export market. Product coal is loaded onto trains for transportation 80 kilometres through the Hunter Valley rail network to the PWCS loading terminal at Newcastle where it is shipped to international customers.

Expansion potential. Within the MTW lease areas there is a significant amount of coal identified as potential underground targets. Based on a conceptual level study, potential underground targets at MTW have been identified in the Mount Arthur, Vaux and Bayswater seams which have seam characteristics generally favourable for longwall mining that is currently utilised at our Moolarben, Ashton and Austar mining operations. The conceptual underground mine has an estimated 270 Mt of potential ROM coal mineable reserves over an approximate 40 year mine life. Further details and assumptions of the production estimates of the underground mining targets are set out in *"Appendix III – Competent Person's Report – HVO/MTW Underground Mining Potential – Production Estimate".*

To date, all underground mine planning that has been completed is at a conceptual level only and no capital estimate is available. Further drilling and mining studies are required to determine if any resource is economically viable and before any decision on whether to develop the potential expansion project and commit material resources on developing the project can be made.

(iii) Moolarben

Overview. The Moolarben Coal Complex is an open cut and underground coal asset located approximately 40 kilometres north of Mudgee in the Western Coalfields of NSW. Moolarben produces thermal coal for export to international markets and produced more than 12.4 Mt of product thermal coal in 2017. As at 30 June 2018, the Moolarben open pit operation had Coal Reserves of 189 Mt and Marketable Coal Reserves of 148 Mt and the Moolarben underground operation had Coal Reserves of 67 Mt and Marketable Coal Reserves of 67 Mt.

History. Moolarben open cut mining areas commenced operations in 2010 and underground mining areas commenced operation in 2016. We committed to developing the Moolarben Stage Two expansion project in 2014 during the global coal market downturn. Now fully developed, mining operations at the Moolarben Coal Complex comprise a multi-pit open cut mine, a longwall underground mine, and mining related infrastructure (including coal processing and transport facilities). The integrated Moolarben Coal Complex has approval to produce up to 13 Mt ROM coal from the open cut mine and 8 Mt from the underground mine for a total of 21Mt ROM coal per annum. Moolarben is now one of the top ten thermal coal mines in Australia by saleable production.

We have applied for modification approval to optimise the open cut mine and related infrastructure and increase the production limit of the open cut mine to 16 Mt ROM coal per annum. All necessary documentation has been lodged with the regulator, which is now finalising its assessment. While the timing of a decision will be determined by the Department of Planning and by the Independent Planning Commission, we expect that the application will be determined by the end of 2018.

Ownership. We acquired our interest in Moolarben in December 2009 as part of our acquisition of Felix Resources. We hold an 81% interest in, and we are the manager of, Moolarben (through our joint venture with Sojitz Moolarben Resources Pty Ltd, which holds 10%, and the Australian subsidiaries of a consortium of South Korean companies (comprising Korea Resources Corporation ("**KORES**"), Korea Southern Power Co., Ltd, Korea Midland Power Co., Ltd, Korea Western Power Co., Ltd and Korea South-East Power Corporation), which collectively hold 9%). We have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019, and adjusted for the economic benefit of the 4% interest from 15 April 2018 that will flow to the Company (the "**Moolarben Acquisition**"). The Moolarben Acquisition will raise our interest in Moolarben to 85%. See note 45 to the Accountants' Report of the Group in Appendix IA to this prospectus for certain stand-alone financial information of Moolarben during the Track Record Period.

Operations. Moolarben utilises conventional truck and excavator methods in its open-cut mining areas, and longwall operations in its underground mining areas. Moolarben is operational 24 hours a day, seven days a week. ROM coal from the open cut operation is processed through an on-site coal preparation plant while ROM coal from the underground operation is bypassed, in each case to produce thermal coals for the export market. Product coal is loaded onto trains for transportation 270 kilometres through the Hunter Valley rail network to the NCIG and PWCS loading terminals at Newcastle where it is shipped to international customers.

Modification. We are seeking approval from the NSW Department of Planning & Environment and Federal Department of the Environment and Energy to modify the current approvals. The modification involves optimisations to approved Stage 1 and Stage 2 operations to increase ROM coal production, minor extensions or reductions to open cut pit limits, rehabilitation, water management and relocated/additional surface infrastructure.

(iv) Stratford Duralie

Overview. Stratford is an open-cut mine located approximately 100 km north of Newcastle in the Gloucester Basin in New South Wales. Duralie is an open-cut mine located in the Southern part of the Gloucester Basin, 20 km south of the Stratford mine. The Duralie operation is integrated with the Stratford Operation through its use of the Stratford infrastructure and processing facilities. Stratford Duralie produces high fluidity semi-hard coking and thermal coals for export to international markets and supplied approximately 0.7 Mt of thermal and semi-soft coking coal in 2017. As at 30 June 2018, Stratford Duralie had Coal Reserves of 44 Mt and Marketable Coal Reserves of 26 Mt.

Ownership. Stratford Duralie is 100% owned by us as a result of our merger with Gloucester Coal Ltd in June 2012 and has been managed by us since.

History. Stratford commenced operations in June 1995 and Duralie commenced mining operations in 2003. Stratford ceased coal production in July 2014 and recommenced operations in May 2018 under the Stratford Extension Project, which was approved in June 2015. This allows for the efficient extraction of additional coal resources within an existing mine and ensures the continuation of Stratford's strong association with the nearby Duralie mine.

Operations. Stratford Duralie uses conventional truck and excavator methods. ROM coal from the Duralie and Stratford coal mines is processed at the centralised Stratford Coal Handling and Preparation Plant. ROM coal from each of the Stratford and Duralie mining areas is washed and blended if required to produce the required export coking and thermal product coal specifications. Product coal is then transported 110 kilometres by rail to the Port of Newcastle for export to international markets. It may also be blended with coals from our other mines to realise premium coal prices for the blended product.

While the Duralie mine is reaching the end of its current mining operations, the Stratford extension project has commenced production, which we expect will contribute to sustained coal production at Stratford Duralie.

(b) Queensland mine

Yarrabee

Overview. Yarrabee is an open cut coal mine located approximately 40 kilometres north-east of Blackwater in central Queensland's Bowen Basin. Yarrabee produces low volatile PCI and thermal coal for export to international markets and produced approximately 2.9 Mt product coal in 2017. As at 30 June 2018, Yarrabee had Coal Reserves of 55 Mt and Marketable Coal Reserves of 42 Mt.

History. Yarrabee commenced production in 1982 as a small open-cut mine with a limited life. Since acquiring the mine, we have delineated further Coal Resources and Coal Reserves that have extended the mine life and increased production.

Ownership. We acquired 100% of Yarrabee in December 2009 as part of our acquisition of Felix Resources.

Operations. Yarrabee uses conventional truck and excavator methods. ROM coal is mined from a number of pits and is either processed at the site's coal handling preparation plant or bypassed for crushing only. About 40% of the ROM coal is bypassed due to its superior in situ quality. Product coal is road hauled to the Boonal load out facility on the Blackwater railway system and then railed 280 kilometres to the RG Tanna and Wiggins Island Coal Terminals at the Port of Gladstone for export to steelmakers in the Asian region.

Yarrabee produces a low volatile, low ash coal that can be blended to produce PCI or thermal coal. In 2017, Yarrabee prioritised PCI coal over thermal coal to maximise increased PCI market demand opportunities.

Middlemount joint venture

Overview. Middlemount is an open cut mine located 90 kilometres north-east of Emerald in Queensland's Bowen Basin. Middlemount produces low volatile PCI coal and hard coking coal used for export to international markets and produced 3.9 Mt of product coal in 2017. As at 30 June 2018, Middlemount had Coal Reserves of 87 Mt and Marketable Coal Reserves of 67 Mt.

History. Full-scale operations at the open cut mine commenced in late 2011.

Ownership. Middlemount is operated by Middlemount Coal Pty Ltd, an incorporated joint venture between Peabody Energy and the Company (with the Company having a near 50% interest in the joint venture). We acquired our interest in the joint venture as a result of our merger with Gloucester Coal Ltd in June 2012.

Operations. Middlemount uses conventional truck and excavator methods. ROM coal is washed at an onsite facility with a ROM capacity of about 5.4 Mtpa. Middlemount produces low volatile PCI coal and hard coking coal for export markets. Product coal is transported 306 kilometres by rail via the Goonyella System to the Port of Hay Point or 306 kilometres by rail via the Newlands network to the Port of Abbot Point. Middlemount has contracted rail and port capacity through Dalrymple Bay Coal Terminal at the Port of Hay Point and Abbot Point Coal Terminal at the Port of Abbot Point.

Watagan Mines

Our interests in Ashton, Austar and Donaldson are held under Watagan, which is one of our wholly-owned subsidiaries. On account of certain financing transactions, however, it was determined that from 31 March 2016 we lost accounting control of Watagan and its subsidiaries and ceased to consolidate it, further details of which are set forth in "*Financial Information – Acquisitions, Disposals and Deconsolidation*". We manage and operate the mines and receives fees in respect of management services provided by us, further details of which are set forth in "– *Watagan Agreements*" below.

(a) Ashton

Overview. Ashton is an operating underground mine and a potential open cut project located 14 kilometres north of Singleton in the Upper Hunter Valley region of NSW. Ashton produces semi-soft coking coal for export to international markets and produced approximately 1.2 Mt semi-soft coking product coal in 2017. As at 30 June 2018, the Ashton underground operation had Coal Reserves of 33 Mt and Marketable Coal Reserves of 18 Mt and the Ashton open cut project had Coal Reserves of 14 Mt and Marketable Coal Reserves of 7.8 Mt.

History. Ashton commenced underground operations in 2005. We acquired 60% of Ashton in December 2009 as part of our acquisition of Felix Resources. We acquired a further 30% interest and the remaining 10% interest in 2011 and 2014, respectively. In June 2016, the NSW Planning Assessment Commission granted approval for an integration modification of Ashton. The modification enables Ashton's underground and open cut project to be integrated with a combined production up to output of 8.6 Mtpa ROM with an underground output of 5.45 Mtpa.

The Ashton operation includes an approved open cut project (the "**South East Open Cut**") which has the potential to produce up to 3.6 Mtpa of ROM coal. While the NSW Land and Environment Court granted approval for the South East Open Cut project (subject to conditions) on 17 April 2015, the NSW Court of Appeal determined to uphold a condition attached to the South East Open Cut project approval, which provides that no development work associated with the project can occur until Ashton Coal Operations Pty Ltd has come to a commercial arrangement with respect to a privately owned property which forms part of the proposed mining area. We have until April 2020 (or April 2022 if extended) to secure such an arrangement. No such arrangement has been agreed to date. We may seek to extend the deadline beyond 2022 to reach agreement with the owner of such property. Given that the South East Open Cut is not included in the Ashton mine's current five-year plan forecasts and Ashton otherwise remains fully operational, we do not expect any material near-term impact on our operations.

Operations. The current Ashton operation consists of a underground multi-seam longwall operation, which will be supplemented by the approved open cut truck and excavator operation in 2025, coal handling and preparation plant and a rail siding. The underground Ashton mine is operational 24 hours a day, seven days a week.

ROM coal from the underground operation is processed through an on-site coal preparation plant to produce a semi-soft cooking coal product.

Ashton is located next to the main northern railway. Product coal is loaded onto trains at a dedicated rail siding and railed 94 kilometres where coal is exported via PWCS at the Port of Newcastle. Product coal is exported to international markets for sale to a number of Asian based steel mills.

(b) Austar

Overview. Austar is an underground mine located 8 kilometres southwest of Cessnock in the Newcastle Coalfields. Austar produces a premium semi-hard coking coal which has very high fluidity, low ash and low phosphorous which makes it a premium blending coal for our customers. Austar produces coal for export to international markets and produced approximately 1.9 Mt of semi-hard coking product coal in 2017. As at 30 June 2018, Austar had Coal Reserves of 41 Mt and Marketable Coal Reserves of 31 Mt.

ROM coal is processed at Austar's Coal Handling and Preparation Plant using a combination of dense medium cyclones and spiral techniques with capacity to process 5.0 Mtpa. Product coal is transported by rail 65 kilometres to the Port of Newcastle for shipping.

History. We purchased 100% of the Southland Coal Mine, which consisted of the former Ellalong Pelton and Southland Collieries with mining operations dating back to 1916, and renamed it Austar in December 2004. Austar commenced operation in April 2005.

Operations. Austar is an underground mine using conventional longwall methods or Longwall Top Coal Caving ("**LTCC**") methods depending on the seam thickness. ROM coal is processed through the on-site coal preparation plant to produce semi-hard coking coal for the export market. Product coal is transferred by conveyor to the rail line for transportation through the Hunter Valley rail network to the PWCS loading terminal at Newcastle where it is shipped to international customers.

Austar faces geotechnical issues relating to coal bursts, rib control and periodic weighting. Investigations are also being conducted into challenging geological structures in the Stage 3 area, which may lead to adverse impact on mine life or permanent shutdown. Longwall production at Austar was suspended for periods of time as a result of coal burst incidents during The Track Record Period, which resulted in investigations and discussions with the Resources Regulator and certain prohibition notices being issued against Austar. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. On 30 August 2018 operations were halted on account of technical issues related to de-stressing activity in certain areas of the long wall, and on 5 September 2018 a prohibition notice was received relating to this activity which was cancelled on 28

September 2018. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. Further details of geotechnical and safety issues at Austar are set out in "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*", "*Appendix III – JORC Coal Reserves – Reserves Comments*" and in "*– Health, Safety and Environmental Matters – Safety Incidents*".

(c) Donaldson

Overview. Donaldson is located in the northeast corner of the Sydney Basin, 25 kilometres northwest of the Port of Newcastle. Donaldson includes an open cut mine which closed in April 2013, and the Abel underground mine which was placed on care and maintenance in June 2016. As at 30 June 2018, Donaldson had Coal Reserves of 62 Mt and Marketable Coal Reserves of 32 Mt.

History. Donaldson is 100% owned by us as a result of our merger with Gloucester Coal Ltd in June 2012 and has been managed by us since. Abel previously produced thermal and semi-soft coking coal for export. However the mine ceased operations in June 2016 and was placed on care and maintenance. Feasibility studies to consider potential future mining options, including possible longwall mining methods, have commenced and the majority of Abel's underground mining employees were successfully redeployed to the neighbouring Ashton and Austar mines.

Operations. Historically, the large majority of past mining at the Donaldson mine was extracted by bord and pillar method. Following extraction, ROM coal was hauled to the third party coal washing and loading facilities at Bloomfield Coal Handling and Preparation Plant. Product coal was transported by rail and exported through the Port of Newcastle.

We moved Donaldson to care and maintenance in 2016 in response to ongoing global market challenges as the operation considers the future development of new underground working areas. Care and maintenance includes the ongoing rehabilitation of the Donaldson site in accordance with existing approvals, as well as the management of the site both above and below ground as we works to consider all options for the potential further mining of the Abel underground. As Donaldson has all required permits and contains coal reserves, recommencement of production is at our discretion, and is dependent on optimal market conditions and the performance of our other operations to best fit our asset portfolio. As at the Latest Practicable Date, Donaldson had not recommenced operations.

(d) Watagan Agreements

Effective on and from 31 March 2016, the Company entered into certain financing arrangements with Watagan and the Bondholders. These arrangements involved the issue of the Watagan Bonds, a loan facility agreement between Watagan and us, and certain other agreements or deeds ancillary to the issue of the Watagan Bonds.

While we wholly own Watagan, upon the issuance of the Watagan Bonds, the Bondholders were given the power to nominate two of its three directors, which together with other terms included in the Watagan Agreements resulted in the determination that we had lost accounting control of Watagan. The loss of accounting control resulted in us

deconsolidating the financial results of Watagan as a subsidiary from our consolidated financial statements with effect from 31 March 2016. From that time, we began to account for our equity interest in Watagan as an associate rather than a subsidiary.

Watagan is required to redeem all of the outstanding Watagan Bonds on the maturity date of 8 January 2025 (if the put option is exercised on or after 1 January 2025, the maturity date would be deferred to 1 April 2025), and may elect to redeem any or all of them commencing from 31 March 2019. Additionally, the Bondholders have a put option that allows them to transfer the issued Watagan Bonds at face value to Yankuang during specified put option exercise windows during the first week of January in each of 2019, 2021, 2023 and 2025. The Bondholders may also exercise the put option after 1 January 2019 while an event of default under the bond terms is subsisting in relation to Watagan or Yankuang. The put option must be exercised by a Bondholder in respect of all (but not some) of its respectively held bonds. If the put option is exercised (i) by UNE, as the instructing Bondholder of the investor syndicate, or (ii) with respect to at least 50.1% of the face value of the Watagan Bonds, the put option will be deemed to have been exercised as to all of the bonds.

In accordance with the Watagan Agreements, if Yankuang becomes the sole bondholder of the Watagan Bonds following the purchase of the bonds by Yankuang consequent to the exercise of the put option, certain bondholder rights, including the right to nominate a majority of the board of directors, would terminate, and these rights would revert to the Company as the sole shareholder of Watagan. Watagan would thereafter owe an amount payable to Yankuang for the face value of the put bonds, minus any capitalised interest. Watagan would separately pay to the exercising Bondholders the accrued interest and any capitalised interest on the put bonds.

If (i) Bondholders holding a sufficient proportion of the principal amount of the Watagan Bonds exercise their put option to Yankuang such that Yankuang acquires all of the bonds, (ii) Watagan redeems all of the Watagan Bonds or (iii) certain other events occur (such as a change to the terms and conditions of the Watagan Bonds that gives us the power to nominate the majority of the board of Watagan) that would result in us regaining control of Watagan, we will be required to reconsolidate Watagan as a subsidiary into our consolidated financial statements from the time that control is determined to be regained. See *"Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation"* and "*Risk Factors – We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations*" for a discussion of the potential accounting consequences of reconsolidating Watagan. See note 23(a) to the Accountants' Report of the Group in Appendix IA to this prospectus for certain stand-alone financial information of Watagan during the Track Record Period. We do not currently have any plan or intention to effect an early redemption of the Watagan Bonds.

The material decisions of Watagan are made by the Watagan Board. Mine plans for each year and annual capital expenditure and operational expenditure budgets are approved by the Watagan Board. We, as the manager and operator of the mines, have day-to-day operational jurisdiction over the operations (save for any significant revision to the mine plan which must be reverted back to the Watagan Board for approval).

As part of the Watagan Agreements, the following agreements were entered into:

- a Management and Mining Services Agreement between the Company, Yancoal Mining Services Pty Ltd ("**Yancoal Mining Services**", a wholly-owned subsidiary of the Company) and Watagan dated 31 March 2016 for a term of ten years appointing Yancoal Mining Services as the mine operator of each of Ashton, Austar and Donaldson to provide mining services (at a fee of cost plus 5%) and the Company as the exclusive provider of management services (which are largely back office support functions) (for certain fees adjustable based on a consumer price index); and

- a Marketing and Logistics Representation and Infrastructure Agreement each for a term of ten years appointing the Company as (i) the sole and exclusive marketing and logistics representative of the Watagan Group for the promotion, marketing, sale, transportation and handling of all saleable coal produced from the three mines and the purchase of any coal for the Watagan Group from third parties; and (ii) the sole and exclusive provider of infrastructure services and representative of the Watagan Group in relation to management of the port and rail access and rail haulage contracts for the three mines.

These services are generally capable of termination by Watagan on six months' notice, subject to payment of an agreed termination fee.

Managed Mines

We manage the Cameby Downs and Premier Coal mines, located in Queensland and Western Australia, respectively, on behalf of Yanzhou, our majority shareholder. The management services provided by us include corporate support (comprising human resources, treasury, payroll, insurance, financial accounting, reporting, compliance, management support, technical support, marketing and logistics, corporate communications, government and industry relations, business development, IT services and corporate procurement services), operations management (comprising carrying out exploration programs, preparing business plans, using all reasonable endeavors to meet business KPIs, preparing plans of operations as may be required by laws, and other operational services) and other general services. For the provision of these services, we charge a fee on cost plus 5% margin basis, except for any third party charges attributable to the provision of the management services which will be charged (proportionately) at cost. Further details of the agreements are set out in *"Connected Transactions – Provision of Management Services by the Company"*. We will also purchase coal produced by the managed mines for back-to-back on-sale to end customers, with the purchase price being determined with reference to industry index prices and coal quality characteristics.

EXPLORATION PROJECTS

We have two exploration projects, Monash and Oaklands, both located in NSW. The Monash underground project is situated in the Hunter Valley and has reported Coal Resources of 96.8 Mt of thermal coal (16.8 Mt Indicated and 80 Mt Inferred as at 30 June 2018). The Oaklands project is a sub-bituminous thermal coal deposit located near the Victoria border. No Coal Resources have been reported for this project. Both of these projects are long term greenfield development opportunities which require additional exploration, scoping studies and development strategies to realise a path to commercial development. As at the Latest Practicable Date, we have no current plan to develop these projects.

JOINT VENTURE AGREEMENTS

HVO

Pursuant to the Glencore Transaction, Coal & Allied Operations Pty Ltd ("**CNAO**", a wholly owned subsidiary of the Company), Anotero Pty Ltd ("**Anotero**", a wholly owned subsidiary of Glencore) and HV Ops which is 51% owned by CNAO and 49% owned by Anotero) entered into a joint venture agreement dated 4 May 2018 to form an unincorporated joint venture. CNAO has a 51% interest in and Anotero has a 49.0% interest in the HVO JV. The HVO JV is jointly controlled through the JVMC whose powers include the approval of budgets, life of mine and year-by-year five year plans governing the HVO JV's activities, supervision of the manager of the HVO JV, and the approval of development and expansion proposals. The day to day management is delegated to HV Ops as manager of the HVO JV. The JVMC comprises three representatives nominated by CNAO and three representatives nominated by Anotero. The general manager of the HVO JV is nominated by Anotero while the financial controller is nominated by CNAO. Glencore provides corporate support services to the JV including human resources, treasury, payroll, insurance, compliance, technical support, logistics, corporate communications, government and industry relations, corporate procurement and IT services.

MTW

Pursuant to the Co-Venture Deed entered into between R.W. Miller & Company Pty. Limited ("**Millers**", a wholly owned subsidiary of the Company), Pohang Steel Australia Pty. Limited and Pohang Iron & Steel Company Limited dated 10 November 1981, an unincorporated joint venture was established between Millers and Pohang Steel for the Mount Thorley co-venture with Millers appointed as the manager of the Mount Thorley co-venture. Following the C&A Acquisition, we are, through Millers, interested in 80% and POSCO is interested in 20% of the Mount Thorley Co-Venture.

Pursuant to the joint venture agreement dated 15 March 1977 and the deed of assignment and assumption dated 6 March 2018 entered into among, *inter alios*, Warkworth Mining Limited, CNA Resources Limited (CNAR), CNA Warkworth Australasia Pty Ltd (CNAW), Mitsubishi Materials (Australia) Pty Ltd (MMA), Nippon Steel & Sumitomo Metal Australia Pty Ltd (NSSMA), the parties established an unincorporated joint venture for the Warkworth joint venture. The Operating Committee is responsible for the management and control of the Warkworth Joint Venture and representation on the Operating Committee is based on participating interests.

Pursuant to the Operational integration Agreement dated 4 March 2004, the parties to the Mount Thorley Co-Venture and the Warkworth Joint Venture were integrated at an operational level to share the costs and production of coal between the two joint ventures. Following the C&A Acquisition and the Warkworth Acquisition as described above, we have an economic interest in 82.9% of the integrated MTW operations.

Moolarben

Pursuant to a joint venture agreement entered into between Moolarben Coal Mines Pty Ltd ("**MCM**", a wholly owned subsidiary of the Company), Sojitz Moolarben Resources Pty Limited ("**Sojitz**") dated 21 September 2007, the deed of variation and assumption entered into among, *inter alia*, MCM, Sojitz, Moolarben Coal Operations Pty Ltd ("**MCO**"), a consortium of South Korean companies (comprising Korea Resources Corporation, Korea Southern Power Co., Ltd, Korea Midland Power Co., Ltd, Korea

Western Power Co., Ltd and Korea South-East Power Corporation (collectively, the "**Korean Consortium**") and Hanwha Resources (Australia) Pty Ltd ("**Hanwha**") dated 20 February 2008, and the sale and purchase deed entered into between MCM and Hanwha dated 30 April 2015, an unincorporated joint venture was established among MCM, Sojitz, the Korean Consortium ("**Moolarben JV**") with MCO as manager of the Moolarben JV. MCM is interested in 81%, Sojitz is interested in 10% and the Korean Consortium is interested in collectively 9% of the Moolarben JV. The Joint Venture Policy Committee (the "**JVPC**") is responsible for the management and control of the Moolarben JV. The JVPC's powers include the adoption or modification of mine development and annual programs and budgets and the supervision of MCO. The JVPC comprises representatives nominated by MCM and Sojitz. Each participant can appoint one representative for each 10% interest they hold.

Middlemount with Peabody Energy

Middlemount Coal Pty Ltd ("**Middlemount**") is 49.9997% owned by Gloucester (SPV) Pty Ltd ("**GSPV**", a wholly owned subsidiary of the Company) and 50.0003% owned by Peabody Custom Mining Pty Ltd ("**PCMP**", a wholly owned subsidiary of Peabody Energy), and is governed by an interim shareholders agreement dated 24 December 2010 and six subsequent deeds of amendment and agreement entered into among Middlemount, GSPV and PCMP.

MINING AND EXPLORATION LICENCES

The major mining and exploration licences and authorisations for our operations are set forth in *"Appendix III – Competent Person's Report – Appendix F. Tenements".*

New South Wales

Our mining operations are conducted in accordance with the conditions of Mining Leases and Coal Leases granted under the NSW Mining Act, 1992. Each mine in New South Wales is required to develop a Mining Operations Plan ("**MOP**") as part of the Mining Lease conditions. MOPs provide information about the specific mine operations over the following years, including mining, rehabilitation, decommissioning and closure. Each of our mines' MOPs requires approval of the Department of Industry Division of Resources and Energy.

Our exploration activities are undertaken in accordance with Exploration Licences, Authorisations and Assessment Leases (as applicable) issued by the NSW Department of Resources and Energy which approves exploration of resources, and applies conditions to ensure that exploration activities are undertaken to the satisfaction of the Department.

All tenements (including mining and exploration tenements) under the NSW Mining Act 1992 are subject to periodic renewal. We monitor the expiry dates of our tenements and renew our tenements periodically in the ordinary course of business. Whilst there can be no guarantee that a mining or exploration tenement will be renewed, or that the area of land over which the tenement renewed remains the same, the Directors are not aware of any issues that would compromise the likelihood of a Tenement being renewed in full.

All material environmental permits are in place for the current mining areas at our operations in NSW. These operations also hold ancillary permits, licences, leases and easements that allow the mining activates to operate under the relevant laws, such as water extraction licences. Our licences and permits are subject to regular review and renewal, and additional conditions and/or operational requirements can be imposed.

The material mining and planning and environmental approvals required to operate a coal mine in NSW are as follows:

- a planning approval (or development consent) granted under the *Environmental Planning and Assessment Act 1979 (*"**EP&A Act**");
- an Environment Protection Licence issued under the Protection of the *Environment Operations Act 1997* ("**POEO Act**");
- If required, an approval granted by the Commonwealth under the *Environment Protection and Biodiversity Conversation Act 1999 (Cth)* ("**EPBC Act**");
- a Mining Lease granted under the *Mining Act 1992* (NSW); and
- ancillary approvals for development and activities such water access licences under the *Water Act 1912* (NSW) or the *Water Management Act 2000* (NSW) to authorise the extraction of water, and the consent for road works under the *Roads Act 1993.*

(a) Planning approvals

The EP&A regulates the assessment and approval of coal mining development in NSW. Typically, a coal mining proponent will carry out exploration activities to determine whether an appropriate resource exists. If an appropriate resource is discovered, approval is then obtained under the EP&A Act to authorise production. After planning approval is granted under the EP&A Act, most major environmental approvals (including an Environment Protection Licence under the POEO Act and a Mining Lease under the *Mining Act 1992* (NSW)) are granted.

Our operations in NSW are currently authorised under the EP&A Act (including various modification currently under assessment) and are carried out subject to a suite of conditions issued under the planning approvals.

(b) Environmental approvals

Our mining operations are undertaken in accordance with Environment Protection Licences issued by the NSW Environment Protection Authority under the POEO Act. Environmental Protection Licences outline requirements and limits for activities such as mining coal and emissions. They also establish environmental monitoring and reporting requirements. Environmental Protection Licences for coal mines will most often contain conditions which authorise certain water, noise and air pollution and will typically have monitoring and reporting commitments, and may require a pollution reduction program.

(c) Commonwealth approvals for NSW mining operations

Our mining operations in NSW have an approval from the Commonwealth Minister for the Environment and Energy in accordance with the EPBC Act authorising it to carry out open cut mining operations at mines in NSW subject to specific conditions.

Queensland

Our mining operations are conducted in accordance with the conditions of Mining Leases granted under the *Mineral Resources Act 1989* (QLD). Our exploration activities are undertaken in accordance with Exploration Permits for Coal and Mineral Development Licences (as applicable) issued pursuant to the *Mineral Resources Act 1989* (QLD).

All tenements (including mining and exploration tenements) under the *Mineral Resources Act 1989* (QLD) are subject to periodic renewal. We monitor the expiry dates of our tenements and renew our tenements periodically in the ordinary course of business. Whilst there can be no guarantee that a mining or exploration tenement will be renewed, or that the area of land over which the tenement renewed remains the same, the Directors are not aware of any issues that would compromise the likelihood of a Tenement being renewed in full.

All material environmental permits are in place for the current mining areas at our operations in Queensland. These operations also hold ancillary permits, licences, leases and easements that allow the mining activates to operate under the relevant laws, such as water extraction licences. Our licences and permits are subject to regular review and renewal, and additional conditions and/or operational requirements can be imposed.

Depending on the nature and size of the mining project, the proponent may be required to obtain the following material approvals under Queensland law:

- a declaration that a mining project is a 'coordinated project' subject of an environmental impact assessment under the *State Development and Public Works Organisation Act 1971* (Qld) if the project is a large development which may trigger a State level planning approval pathway. An environmental impact assessment would require an approval by the Coordinator-General;

- a Regional Interest Development Approval under the *Regional Planning Interests Act 2014* (Qld); and

- a development permit for project infrastructure or for a material change of use of an environmentally relevant activity under the *Sustainable Planning Act 2009* or associated planning scheme.

The material mining and environmental approvals required to operate a coal mine in Queensland are as follows:

- an Environmental Authorisation issued by the Queensland Department of Environment and Sciences ("**Queensland DES**") under the *Environmental Protection Act 1994* (Qld) ("**Queensland EP Act**") which authorises and regulates the mining resource activity;

- If required, an approval granted by the Commonwealth under the EPBC Act;

- a Mining Lease granted under the *Mineral Resources Act 1989* (QLD); and

- a water licence under the *Water Act 2000 (*Qld) for the allocation and use of surface water and groundwater for mining activities.

(a) Planning approvals

Our mining projects and operations in Queensland are carried out in accordance with relevant planning approvals and applicable state, regional and local planning laws and controls.

(b) Environmental approvals

Our mining coal activities in Queensland are undertaken in accordance with Environmental Authorities issued by Queensland DES under the Queensland EP Act. Our Environmental Authorities are subject to conditions which regulate mining activities and emissions.

Typically, an Environmental Authority contains a condition requiring a plan of operations to be prepared on how rehabilitation obligations will be met. The Queensland DES then makes a decision about amount and form of financial assurance that needs to be provided to the Queensland Government to guarantee that there are funds available to the Government to carry out rehabilitation if required. Our operations are carried out in compliance with the conditions of the Environmental Authority including the provision of the plan of operation and financial security to the Queensland Government in respect of our mining activities in Queensland.

(c) Commonwealth approvals for Queensland mining operations

Our mining operations in Queensland have an approval from the Commonwealth Minister for the Environment and Energy in accordance with the EPBC Act authorising it to carry out mining operations at mines in Queensland.

Western Australia

The *Mining Act 1978* (WA) ("**WA Mining Act**") and the *Environmental Protection Act 1986* (WA) ("**WA EP Act**") are the principle pieces of legislation which regulate the environmental impacts of mining in Western Australia.

The key environmental related approvals that are typically required for a large scale mining operation are as follows:

- Mining Proposal, Mine Closure Plan, and Mining Lease approved by the WA Department of Mines and Petroleum ("**DMP**") under the WA Mining Act;

- Ministerial Statement Issued by the WA Minister for Environment under Part IV of the WA EP Act (also referred to as a Part IV Approval);

- Works Approval to construct prescribed polluting activities on premises and an Operating Licence to operate prescribed polluting activities on premises issued by the Department of Water and Environmental Regulation ("**DWER**") under the WA EP Act;

- If required, an approval granted by the Commonwealth under the EPBC Act; and

- ancillary environmental approvals including Groundwater Licence issued by the DWER under the *Rights in Water and Irrigation Act 1914* ("WA Water Act") to take groundwater.

Approvals, Permits and Licenses to be Obtained

As at 14 November 2018, we had the following material regulatory approvals, permits and licences with respect to our mines that are subject to pending renewals:

Regulatory Approval, Permit and Licences	Expiry Date
HVO	
Mining lease ("**ML**") 1324	19 August 2014
ML 1337	9 September 2014
ML 1359	1 November 2015
ML 1428	14 April 2019
ML 1482	14 April 2019
Exploration licence ("**EL**") 5291	28 April 2018
EL 5417	8 May 2018
EL 5418	8 May 2017
EL 8175	23 September 2018
Authorisation 72	24 March 2018
MTW	
ML 1412	10 January 2018
Moolarben	
EL 6288	22 August 2017
Stratford Duralie	
Authorisation 311	28 November 2017
Authorisation 315	28 November 2017
EL 6904	9 October 2017
ML1409	6 January 2018
ML1427	5 April 2019
Oaklands	
Assessment Lease 18	25 June 2018
Ashton	
EL4918	17 December 2015
Donaldson	
EL 6964	10 December 2015
Yarrabee	
ML 80050	31 October 2018
Austar	
Mining Purposes Lease 269	7 December 2018

As at 14 November 2018, we had the following material regulatory approvals, permits and licences with respect to our mines that have been applied for but were yet to be granted:

- HVO: ALA 52, ALA 58 and ALA 59; MLA 489, MLA 495, MLA 496, MLA 520, MLA 534, MLA 535, MLA 542, MLA 543; ELA 5525, ELA 5526 and ELA 5527;
- MTW: ELA 5678 and MLA 548;
- Stratford Duralie: MLA 552;
- Middlemount: ML 700027;
- Ashton: MLA 500, MLA 351 and MLA 394; and
- Austar: MLA 521.

The Company does not carry out any activities the subject of an Assessment Lease application or Exploration Licence application until the tenement that is the subject of the application is granted. Similarly, the Company does not carry out any activities the subject of a Mining Lease Application until the production tenement that is the subject of the application is granted.

NSW legislation and regulations passed in 2017 require mining leases to be held in respect of "ancillary mining activities", being processes and infrastructure that support a principal mining operation such as pipelines and roads. Under a NSW Government Gazette, a person will be exempt from the requirement to hold a mining lease in respect of ancillary mining activities carried out or under construction prior to 15 November 2010 ("**Exempt Mining Activities**"), provided those activities had not been abandoned for a continuous period exceeding 12 months (other than for repair or maintenance) and certain other conditions are satisfied, including lodgement of an application prior to 16 November 2017 for the variation of a mining lease or a separate mining lease in respect of Exempt Mining Activities. The Company will have the benefit of this exemption in respect of Exempt Mining Activities in NSW until the relevant applications are determined.

The loss of some or all of our mining licences, coal production licences, safety production licences, environmental or other certificates, approvals or permits may have a material adverse effect on our business, financial condition and results of operations. See "*Risk Factors – We may not be able to obtain all necessary approvals, permits and licences"*. Over the past five years, we have not had any tenement renewal application rejected, and given that there are no material non-compliances identified on any of the current tenements and that we believe that we have appropriate systems in place for managing the timely renewal of tenements, we have no reason to doubt that all production tenements will be successfully renewed in due course. Similarly, the Directors are not aware of any issues that would compromise the likelihood of a production tenement being renewed. On the basis of the above, we believe that there is no material legal impediment for us to obtain or renew the material regulatory approvals, permits and licenses needed for our mines, and no material risk of failing to do so.

INFRASTRUCTURE, TRANSPORTATION AND LOGISTICS

Product coal from our mines is transferred from loading points within the mines to coal wagons (save for Yarrabee in Queensland which is road hauled to the Boonal load out facility on the Blackwater railway system) for transport by rail to the PWCS or the NCIG coal export terminals in the Port of Newcastle (for HVO, MTW, Moolarben, Ashton, Austar and Donaldson in NSW) or Abbot Point Coal Terminal at the Port of Abbot Point or the Dalrymple Bay Coal Terminal at the Port of Hay Point (for Middlemount in Queensland) or RGTCT or WICET coal export terminals at the Port of Gladstone (for Yarrabee in Queensland). Our port and rail capacity is generally contracted via long-term take-or-pay arrangements. Further details of which are set forth in *"– Take-or-pay arrangements"* below.

New South Wales

The NSW network is a regulated network that is often referred to as the Hunter Valley Coal Chain ("**HVCC**") of which our supply chains form a sub-set. Both rail networks and port facilities are regulated and operated by third parties with which we have contracted capacities. According to the Competent Person's Report, the current HVCC and the contracts we have in place for rail and port capacities are sufficient to support our forecast production. Any expansion, including the potential expansion described in *"– Our Mining Operations"* above will require additional rail and port capacity to be secured, as we have done with previous expansion of operations.

NSW Rail Supply Chain

We have contracted "below rail" access to train tracks with the Australian Rail Track Corporation ("**ARTC**"), a federal government owned corporation which manages the interstate rail network in Australia and coordinates rail allocation on the HVCC for each coal producer, for below-rail access in the HVCC. ARTC is regulated by the Australian Competition and Consumer Commission. We have "above rail" contracts for locomotives and wagons with Pacific National, Aurizon Operations, and Genesee & Wyoming Australia. With the exception of Austar (contracted to Pacific National), all our NSW mines can use at least two of the three rail providers named above.

Our rail allocation is under take-or-pay contracts. During the Track Record Period, we have experienced under-utilisation of our contracted railway capacities.

NSW Port Facilities

Coal products from our NSW operations are transported by rail to the Port of Newcastle and exported via PWCS or NCIG, which are operated by third parties. PWCS and NCIG have a combined capacity of 211 Mtpa of which we had aggregate contracted capacity of 54.56 Mt in 2017. We currently have take-or-pay contracts with PWCS and NCIG. During the Track Record Period, we have experienced on-going under-utilisation of contracted port capacities.

(a) PWCS

We acquired a 36.5% interest in PWCS as part of the C&A Acquisition in September 2017. This interest comprises a direct shareholding of 30%, which is held by C&A (and its subsidiaries), and an indirect shareholding of 6.5%, which is held through direct and indirect shareholdings in Newcastle Coal Shippers (which holds a 36.9% shareholding in PWCS). On completion of the Glencore Transaction, the beneficial interest in C&A's shareholdings in Newcastle Coal Shippers was transferred to Glencore Coal (NSW) Pty Limited, a subsidiary of Glencore. As a result, C&A's beneficial interest in PWCS was reduced to 30%. Legal title in Newcastle Coal Shippers remains with C&A until completion of a pre-emptive process, at which time C&A's legal interest in PWCS will transfer to Glencore Coal (NSW) Pty Limited.

PWCS consists of two sub terminals, namely Carrington Terminal and Kooragang Terminal. Carrington Terminal has throughput capacity of 25 Mtpa. Coal is received mainly by rail and some quantities by road, to two offloading facilitates. Kooragang Terminal has throughput capacity of 120 Mtpa. All coal is received via rail into four offloading facilities. HVO, MTW, Moolarben, Stratford Duralie, Ashton, Austar and Donaldson have an aggregate allocation of approximately 35.1 Mtpa with PWCS.

(b) NCIG

We are one of five shareholders, and own 27%, of NCIG, which owns the Newcastle coal export terminal. The terminal has storage capacity of 5.7 Mt, which is allocated based on their respective capacity allocations. NCIG has a current throughput capacity of 66 Mtpa, and we have contracted port capacity allocation of approximately 19.6 Mtpa.

Queensland

The mines of Bowen Basin, including our Yarrabee and Middlemount operations, are connected to the ports by four separate rail networks: Moura, Blackwater, Goonyella and Newlands, which are collectively referred to as the Central Queensland Coal Network ("**CQCN**"). The CQCN have a total capacity of approximately 360 Mtpa.

QLD Rail Supply Chain

Coal from Yarrabee is transported by rail via the Blackwater rail system to the Port of Gladstone while coal from Middlemount is railed via the Goonyella and Newlands rail networks to the Port of Abbot Point.

The "below rail" infrastructure of train tracks of CQCN is owned and managed by Aurizon Network, which is governed by lease arrangements with the State of Queensland. Access to CQCN is regulated by the Queensland Competition Authority. The "above rail" infrastructure of locomotives and wagons is operated by Aurizon and Pacific National. Middlemount has rail contracts with Pacific National while Yarrabee has rail contracts with Aurizon.

QLD Port Facilities

Coal products from our Yarrabee mine is transported by rail to the Port of Gladstone and exported via Wiggins Island Coal Terminal ("**WICET**") or RG Tanna Coal Terminal ("**RGTCT**"). Coal products from Middlemount is transported by rail to the Port of Abbot Point and exported via Abbot Point Coal Terminal or to Port of Hay Point and exported via Dalrymple Bay Coal Terminal.

(a) Abbot Point Coal Terminal

Abbot Point Coal Terminal has coal handling and stockpile areas, a rail unloading facility, a single trestle jetty and a conveyer connected to a berth and shiploader. The terminal has capacity of 50 Mtpa and Middlemount has contracted port capacity entitlements of 3 Mtpa.

(b) Dalrymple Bay Coal Terminal

Dalrymple Bay Coal Terminal has four berths, three shiploaders, a train loading facility and coal stockyards. The terminal has capacity of 85 Mtpa.

(c) Wiggins Island Coal Export Terminal

We are one of five shareholders of, and hold a 9.38% voting interest in, WICET. WICET has offshore wharf and loading facilities, rail unloading facilities, train unloader and stockyard. WICET has a current design capacity of 27 Mtpa and a current contracted capacity of 16 Mtpa.

Details in relation to the insolvency of other shareholders of WICET are set forth in *"Risk Factors – Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders"*.

(d) RG Tanna Coal Terminal

RGTCT is operated by Gladstone Ports Corporation which is owned by the Queensland government. RGTCT has four berths, three ship loaders, three train unloading stations and coal stockyards with live capacity of 5.8 Mt in up to 22 separate stockpiles. RGTCT has a current capacity of 74 Mtpa.

Take-or-pay arrangements

Port and rail (consisting of above rail infrastructure of locomotives and wagons and below rail infrastructure of train tracks) capacity in New South Wales and Queensland is generally contracted via long-term take-or-pay contracts. We will generally be required to pay for our contracted rail or port tonnage irrespective of whether it is utilised. Unused port or rail capacity can arise as a result of circumstances including insufficient production from a given mine, a mismatch between port and rail capacity for a mine, including timing of new capacity, or an inability to transfer the used capacity due to contractual limitations such as required consent of the provider of the port or rail services, or because the coal must emanate from specified source mines or be loaded onto trains at specified load points. See also *"Risk Factors – Fluctuations in transportation costs and disruptions to our railway and port linkages could disrupt our coal deliveries and adversely affect our business, financial condition and results of operations".*

In 2017, we significantly reduced our take-or-pay exposure for contracted but unutilised capacity from A$74 million to A$65 million in rail and port commitments in excess of planned sales (A$4.7 million of which is attributable to the assets acquired in the C&A Acquisition). Our logistics team continues to implement strategic measures to reduce our take or pay exposures, including the trading of our under-utilised contracted capacity between sites and with third parties on an ad hoc basis.

The table below sets forth the allocated capacity and utilisation of our port and rail allocations in 2017:

Infrastructure[(Note)]	Service provider	Capacity allocated to	Contracted capacity in 2017 (Mt)	Utilisation percentage	Excess (Mt)
New South Wales					
Port	PWCS, NCIG	Austar, Ashton, Donaldson, Hunter Valley Operations, Moolarben, Mt Thorley Warkworth, Stratford	54.56	77%	12.63
Above Rail	Pacific National, Aurizon		42.40	96%	1.50
Below Rail	ARTC		46.13	95%	2.44
Queensland					
Port	RGTanna, WICET, APCT		6.20	92%	0.47
Above Rail	Aurizon, Pacific National	Yarrabee, Middlemount	6.20	94%	0.37
Below Rail	Aurizon Network		6.20	94%	0.37

Note:

The above rail infrastructure consists of locomotives and wagons and the below rail infrastructure consists of train tracks.

New South Wales

We currently have port and rail capacity commitments across our NSW operations in excess of our production volumes, which represents a cost to our NSW operations. While NSW infrastructure capacity is contracted per mine-site, total contracted capacity can be considered available to all mine-sites as a group as industry mechanisms exist to trade capacity amongst contracted parties. We utilise trading opportunities between our mining operations and with third party mines as a key part of the strategy to reduce overall take-or-pay exposure in NSW in the long term, capture savings as a result of economies of scale; as well as respond to short and mid-term sales or production peaks and troughs without increasing overall cost for the Group.

Upon completion of the C&A Acquisition in September 2017, we became liable for infrastructure capacity under a number of Mount Pleasant related infrastructure agreements, which are currently held by C&A and its subsidiaries or MACH Energy and subject to an infrastructure utilisation deed between the parties. The infrastructure agreements included take-or-pay rail and port commitments with an aggregate annualised A$37 million potential order of magnitude take-or-pay exposure which expired on 31 March 2018 (the "**RT Payment Date**") and our commitment for this period was A$22 million.

Among the infrastructure agreements, a contract for NCIG capacity is in the name of the C&A subsidiary, which is subject to a novation deed transferring that capacity to MACH Energy on first commercial production from Mount Pleasant. MACH Energy must indemnify C&A for all take-or-pay liability in relation to the NCIG capacity following the RT Payment Date, until such time that MACH Energy becomes the holder of that NCIG capacity.

Queensland

Our Queensland mine sites are members of separate coal chains, therefore the opportunity to offset excess take-or-pay capacity is not easily achievable. We have identified synergies between the Middlemount and Yarrabee mine-sites where the opportunity may exist to mitigate the impact of major events or incidents affecting a whole coal chain.

Site Infrastructure

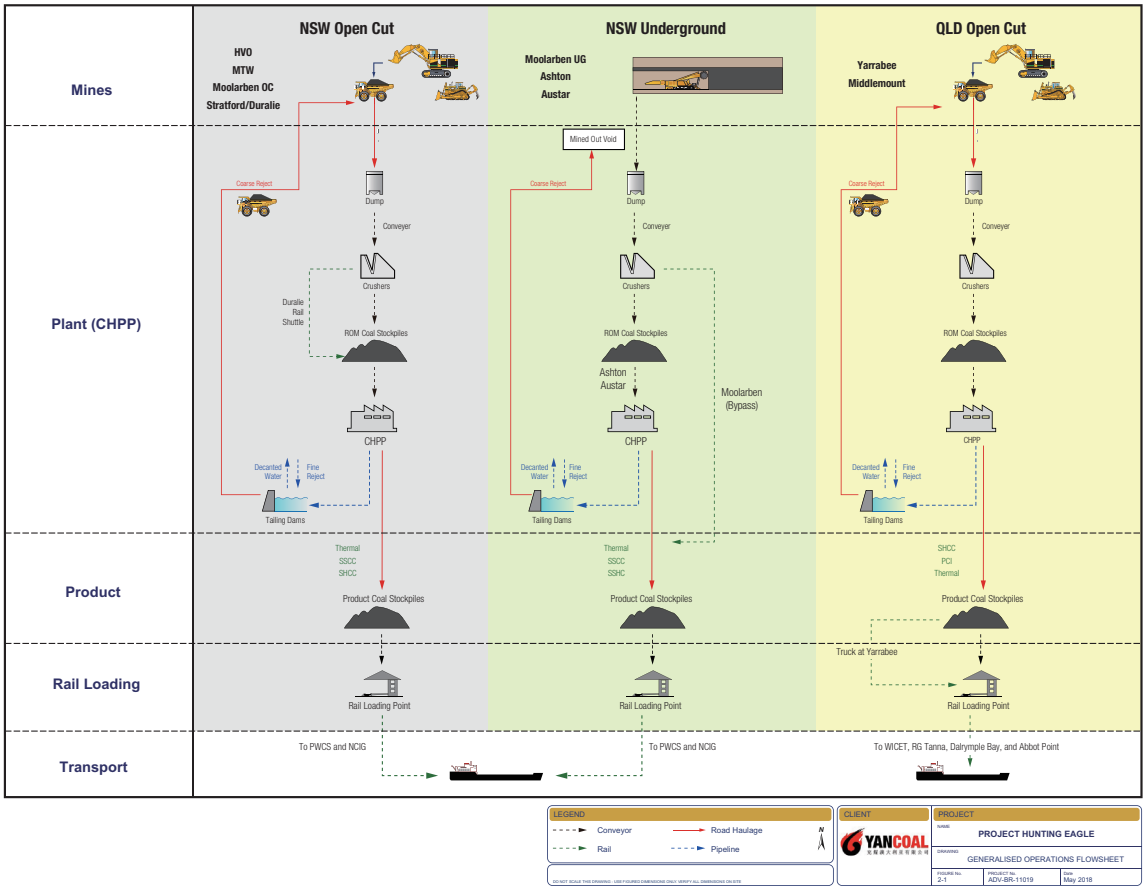
We believe that the supporting regional and local infrastructure for our mines are well established and have capacity to continue supporting our life of mine operation. Our mines are located in close proximity to regional townships and are serviced by national highways and good quality tarred roads. Each of our mining sites has infrastructure that we believe is fit for purpose and in suitable condition to support the estimated project life.

All of our operating mines have installed transport infrastructure such as rail loading facilities, and site access roads conveyers which are generally in good working condition. Our open cut mining projects require periodic construction of haul roads and site access roads which is standard market practice for operating open cut mines.

Our operations are also equipped with facilities such as warehouses, storage yards and emergency-service facilities to support mining activities.

PRODUCTION PROCESS

The following diagram sets forth the key processes in mining operations:



Extraction and conveyance

We utilise large scale open cut mining methods in our open cut mining operations, which include the removal and storage of topsoil material via truck and FEL methods, drilling of a blast pattern, blasting of fragment rock, excavation of waste material with truck and shovel or excavator in the upper benches and by draglines in lower benches, and digging, loading and hauling of coal via truck and excavator or FEL methods. We utilise additional equipment in some of our operations that are typically lower in unit operating costs if the geological structure permits, such as draglines in HVO and MTW and dozer push in Moolarben and Middlemount for additional waste removal.

We utilise longwall mining in our underground mining operations. Longwall mining roadways are cut by continuous miners around the perimeter of a rectangular block or panel of coal to form ventilation and access passageways. A longwall shearer is set up at one end of the panel and travels back and forth across the width of the panel, cutting a slice of coal with each pass. Coal is then transferred to the surface by conveyers. The area at the coal face is supported by a series of large hydraulic roof supports which provide a protective cocoon for workers to operate safely. Longwall mining is generally considered to be the safest underground extraction method for coal.

Longwall top coal caving ("**LTCC**") is a type of longwall mining applicable to very thick seams (greater than 4.5 metres) where coal is being left because "conventional" longwall equipment typically cannot mine beyond a mining height of around five metres. As a result it generally enables an increased recovery for only an incremental additional cost. LTCC is utilised at Austar when the coal seam is of sufficient thickness.

Coal handling preparation plants ("CHPPs")

CHPPs are typically separated into four functional areas: (1) ROM coal receival, (2) beneficiation or washing, (3) reject disposal, and (4) product coal stockpiling and train loading.

ROM coal receival

ROM coal from the open cut or underground coal faces is trucked or conveyed to the ROM coal receival area where it is crushed to a maximum size (typical <50mm) that enables it to be efficiently washed. ROM coal can also be stockpiled in this area prior to crushing to assist with wash scheduling, blending or when the CHPP is down for maintenance. After crushing, coal is then either stockpiled, and later reclaimed, or fed directly into the plant for washing.

Beneficiation or washing

Washing or beneficiation is the separating of the coal from the waste products. Once fed into the plant, the coal is separated into up to three washing streams being coarse, mid-size and fine-size which are each washed using different types of separating equipment. Coarse coal is washed in a mixture of water and magnetite to create a dense medium in which coal will float and waste will sink. Fine coal uses gravity separation or froth flotation. The washed coal from the streams is conveyed to product stockpiles which may or may not be combined dependent on product types. The sunk waste or reject goes to disposal areas.

Reject disposal

The coarse and fine waste, or reject, can be disposed of together or more commonly disposed separately with coarse reject being trucked to the waste dumps (to be disposed of with the overburden from the mine) and fine reject, or tailings, being pumped to a tailing storage facility.

Product coal stockpiling and train loadout

Washed coal (commonly called product coal, saleable coal or marketable coal) is stockpiled into separate stockpiles depending on its quality. It is then loaded onto trains for railing to the port. Blending can occur on the product stockpiles when two or more separate coal products are combined to meet a particular market specification.

Bypass coal is ROM coal that does not require washing to meet the marketing specification. ROM coal is crushed and bypass coal is placed directly onto the product coal stockpile.

Each of our mining operations has one or two CHPPs on-site, save for Donaldson which historically utilised the third party Bloomfield Coal Handling and Preparation Plant. Most of our on-site CHPPs have sufficient designed and production capacity and are generally well maintained to support the current ROM coal targets at each mine.

Processing and Blending

The products produced by our operations are a mix of premium thermal coal (<15% Ash), semi-soft coking and PCI coals together with mid – high ash thermal coals (15% – 30% Ash). Our premium grade products are typically sold to premium markets where the value of the coal can be reflected by the quality of the product. However, in some circumstances and some markets coal may be blended to satisfy customer requirements. We focus on ensuring that blends satisfy customer requirements, but we also pursue blending strategies to augment our revenue return that would otherwise have been received by selling the products independently. Due to the number of pits, product types and required product specification of our customers, we have the ability to blend ROM coal and washed coal to optimise products and add value. We have a dedicated marketing department which analyses both short term and medium term market conditions with the aim of strategically blending the various coal products from each operation to maximise the revenue generated. In addition, as we further integrate HVO and MTW into our operations, we plan to deploy our blending strategy to further optimise our mining operations.

Blending of our coal products starts at the pits which have the ability to blend coal on the ROM coal stockpiles. Coal is then reclaimed via FEL and trucks for separate stacking and reclaiming based on coal quality prior to processing through our coal processing plants.

Product coal is conveyed or trucked from the CPP to rail loading points and segregated into product coal stockpiles at each loading point. Product coal may be blended from the stockpiles to meet specific customer and marketing requirements, and is then transported by rail to port terminals for seaborne export.

Transportation and Export

Details of the transportation of coal product from our mines to the ports of export are set forth in *"– Infrastructure, Transportation and Logistics"* above.

CUSTOMERS

All of the coal we produce is sold for export to customers located in various key markets across the Asia Pacific region, whether directly, through overseas traders or through other Australian coal companies. The end users for our coal products include major power utilities and steel mills in Japan, South Korea, the PRC, Singapore and Taiwan. During the Track Record Period, we have also supplied coal to power and steel mills in other Asian countries, such as Malaysia, Vietnam, Thailand, India and Indonesia, as well as customers in South America and Europe on an ad hoc basis.

In addition to major power utilities and steel mills in Asia, we also sell coal to customers in the commodities trading business, who purchase our coal for trading purposes or to on-sell the coal to their end customers. We sell to coal traders primarily to (i) enable access into markets where we have no direct relationship with end users and (ii) provide flexibility to sell any short-term unsold positions. Once we have developed relationships with new end users, we may opt to sell to them directly rather than through coal traders. For example, during the Track Record Period, we implemented a sales strategy of shifting away from coal traders in Singapore to sell directly to end users, which resulted in an overall decrease in the percentage of revenue attributable to customers located in Singapore, though total revenue from Singapore increased in line with our overall sales growth.

For the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, revenue from our five largest customers in aggregate amounted to A$630 million, A$480 million, A$839 million and A$788 million, respectively, representing approximately 47.8%, 38.8%, 32.3% and 33.8% of our revenue, respectively, and revenue from our largest customer in those periods amounted to A$247 million, A$162 million, A$216 million and A$225 million, respectively, representing approximately 19%, 13%, 8% and 9.7% of our revenue, respectively. To the best of our knowledge, as at the Latest Practicable Date, our five largest customers, except for Glencore, were independent third parties.

We have a mix of long term, annual and spot customer contracts. Some of our customer contracts are evergreen in nature, which are annual contracts with the same customer for the same coal type, have been ongoing for several years, and are renewed every year. However, as our strategy is to have a mix of contract tenures in our customer portfolio, we have contracts with tenures for the next three to five, eight to ten and fifteen year periods.

Our strategy is to have a mix of pricing structures in our contractual base. This mix includes fixed prices for contracts of three, six and 12 month periods and spot contracts. Adjustment to fixed prices are typically based on the quality of coal supplied and variation to contract specifications. Sales are also priced on an index basis using indices such as the globalCOAL benchmark price for seaborne thermal coal, API5 and Platts coking coal index for the various product categories.

We have an experienced in-house team responsible for marketing and the co-ordination of marketing of coal for all our mine sites. In addition, there are certain third party marketing arrangements applicable to certain mine sites.

Marketing And Sales Arrangements

Middlemount

Following the merger with Gloucester Coal in June 2012, we acquired the rights to receive a royalty of free on board trimmed sales from the Middlemount Mine. This royalty continues for the life of the Middlemount Mine. The marketing function of Middlemount coal is split between us and Peabody Energy, the joint venture partner.

Moolarben

Moolarben Coal Sales Pty Ltd, a wholly owned subsidiary of the Company, is the exclusive marketing agent for coal produced by Moolarben. The Company has entered into the Moolarben Japan marketing agency agreement, pursuant to which Sojitz has the exclusive marketing rights in respect of all coal produced by Moolarben which is sold to certain entities in Asia.

Ashton

Under the terms of a market representation agreement between Ashton Coal Mines Limited ("**ACM**") and Itochu, Itochu has exclusive marketing rights in Japan in respect of coal produced by Ashton. Itochu has retained these exclusive marketing rights following completion of the Company's acquisition (via its wholly owned subsidiary, White Mining (NSW) Pty Ltd) of the outstanding interests in Ashton.

C&A Marketing and Sales Arrangements

Pursuant to the Glencore Transaction, we were appointed as the exclusive marketing representative for sales of HVO coal products in the PRC, Taiwan (other than for certain specified customers), Thailand and Malaysia.

In connection with the C&A Acquisition, we have entered into coal sale and marketing arrangements with Evercharm International Investments Ltd ("**General Nice**", an entity associated with General Nice Development Ltd.) and Shandong Taizhong Energy Co., Ltd ("**Taizhong**"). General Nice and Taizhong were placement investors in the Company in August 2017.

Under the agreements, we will provide thermal coal to each of Tianjin Belong Faith Energy Minerals Co., Ltd, a subsidiary of General Nice, and Hong Kong Taizhong Energy Pty Ltd, a subsidiary of Taizhong, for a term not exceeding 36 months at a price linked to a published index on terms otherwise materially consistent with market standards. In addition, we have appointed Taizhong to be the exclusive marketing agent for the sale of coal by us to a specified customer in the PRC.

Noble marketing services

Gloucester Coal entered into a marketing services agreement with Noble and Noble Marketing in connection with Gloucester Coal's acquisition of 100% of Noble's interest in Donaldson (prior to the merger between the Company and Gloucester Coal in 2012).

The marketing services agreement appoints Noble Marketing to provide, as and when required by Gloucester Coal, long-term international marketing services, advice and information from time to time in relation to the sale and marketing of coal produced or sold by Gloucester Coal.

These arrangements are obligations of the Company as a consequence of its merger with Gloucester Coal. This appointment of Noble Marketing does not preclude the Company from using its own internal resources instead of Noble Marketing but is otherwise exclusive, with the exception of other pre-existing exclusive marketing arrangements entered into by members of the Gloucester Coal group.

The marketing services fee to be provided for Noble Marketing's services in each calendar year is to be calculated based on the sales of coal by Gloucester Coal. As the transaction amounts had been below the threshold stipulated under the agreement, we have not incurred any fees under the agreement during the Track Record Period. The marketing services agreement will expire on 31 December 2040.

We are involved in certain legal proceedings which involve members of the Noble Group. See "– *Legal Proceedings and Non-compliance*".

QUALITY CONTROL AND PRODUCT DEVELOPMENT

Most of our coal supply agreements require the delivery of coal meeting specified quality thresholds for characteristics such as moisture content, sulphur content and ash content.

We blend and maximise utilisation of our different coal products from our diverse controlled and managed operations to better manage coal quality specifications, meet changing demands and realise higher overall coal product price.

SUPPLIERS

Our main supply contracts include infrastructure, fuel and electricity, explosives for blasting and critical spare parts from original equipment manufacturer suppliers.

Arrangements with Suppliers

Our contracts for port and rail infrastructure are generally under long-term take-or-pay agreements with the relevant operators, as further described in "– *Infrastructure, Transportation and Logistics*" above. We have entered into master supply agreements at the Group level with fuel suppliers for the supply of diesel and lubricants to our mining operations. We contract with blasting services experts for the provision of explosives and related explosive application and blasting services. We also have master supply agreements for the supply of spare parts which support our heavy mining equipment. For the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, our purchases from our five largest suppliers in aggregate amounted to A$333 million, A$353 million, A$508 million and A$326 million, respectively, representing 20.8%, 24.8%, 21.5% and 23.4% of our total purchases for the relevant period, and our purchases from our largest supplier amounted to A$89 million, A$94 million, A$133 million and A$89 million, respectively, representing 5.6%, 6.6%, 5.6% and 6.4% of our total purchase for the relevant period. As at the Latest Practicable Date, none of the Directors, their associates or the Controlling Shareholders is related to or owns any interest in any of our five largest suppliers. We usually make payments to our suppliers and settle trade payables by account transfer or remittance. Save for infrastructure which is operated by government-owned or regulated entities, there are generally multiple potential suppliers for each product or service. We procure products and services through a tender process for the most competitive value proposition. We have not experienced any shortage of supplies and were not dependent on any single supplier during the Track Record Period.

Utilities

We use electricity and water in our operations. Prices are determined by the relevant utility suppliers and there are typically multiple suppliers for electricity and water. We procure utilities through a tender process for the most competitive prices.

All of the operating sites have fully developed electrical reticulation systems in place. The sites have access to sufficient power supply to achieve the proposed life of mine development plans with routine ongoing maintenance to the supply network. We have not experienced any material disruption in electricity supply during the Track Record Period.

Water required for our operations is sourced by various methods, including wells, surface sumps and local rivers. As such, numerous water rights permits are required for our mines. All permits are currently in good standing to support current production. Mine sites have on-site storage for water.

Water management systems are established for each mine and include the capture of surface water and groundwater within licensed limits for the ongoing use at each mine site. Water is used primarily for dust suppression and use in coal processing plants. Potable water is produced from a number of sources including town water supply, surface and groundwater, processed water from onsite water treatment plants and purchases of water that are transported by truck onto the mine sites.

Coal Purchased Externally

In addition to selling coal produced from our operated or managed mines, we purchase coal from both related and third parties primarily as part of our coal blending strategy where by combining the qualities of our own coal with the qualities of others producers' coal results in an enhanced end-product capable of achieving a higher sale price. Our coal purchases amounted to A$158 million, A$211 million, A$340 million and A$182 million in 2015, 2016, 2017 and the six months ended 30 June 2018, respectively, representing 12.0%, 17.0%, 13.1% and 7.7% of our total revenue in those periods.

ACQUISITIONS AND DISPOSALS

Through organic and strategic acquisitive growth, we became Australia's largest pure-play coal producer. During the Track Record Period, we entered into the following transactions as part of our commitment to continued strategic growth:

C&A Acquisition

We acquired 100% of C&A from Rio Tinto on 1 September 2017. We entered into a binding agreement US$2.69 billion in value comprised US$2.45 billion cash payable on completion and US$240 million in non-contingent royalty payments payable over five years following completion which are not conditional on the volume of saleable coal produced by C&A and are secured with bank guarantees provided at completion, and a coal price linked contingent royalty of US$2.0 per tonne (indexed for the consumer price index) for a period of 10 years commencing on the third anniversary of completion payable if the Newcastle benchmark thermal coal price exceeds US$75 per tonne (indexed for the consumer price index) which is capped at US$410 million.

On completion in September 2017, we acquired the following interests in two of Australia's leading large-scale, long-life and low-cost coal mines located in the Hunter Valley region of New South Wales, as well as required export infrastructure:

- a 67.6% interest in HVO;
- an 80.0% interest in the Mt Thorley mine and a 55.6% interest in the Warkworth mine; and
- a 36.5% interest in PWCS.

See "*Financial Information – Acquisitions, Disposals and Deconsolidation – C&A Acquisition*" for further details.

Warkworth Acquisition

On 7 March 2018, we completed the purchase of an additional 28.9% interest in the Warkworth joint venture from MDP for US$230 million (which is subject to finalisation of a working capital adjustment which includes cash), increasing our interest in the Warkworth joint venture from 55.6% to 84.5% and our share of coal production from the integrated Mount Thorley Warkworth operations from 64.1% to 82.9%.

Glencore Transaction

On 27 July 2017, we entered into a binding agreement to establish a 51:49 unincorporated joint venture with Glencore Coal Pty Ltd ("**Glencore**") in relation to HVO, following completion of Yancoal's acquisition of C&A.

The joint venture arrangement provides significant synergies and commercial opportunities for both the Group and Glencore, combining the management experience and operational skills of two of Australia's leading coal producers. The HVO joint venture came into effect on 4 May 2018.

To establish the HVO JV, Glencore paid cash consideration of US$1,139 million for 49% of HVO, of which US$710 million was paid to HVO Resources Pty Ltd, a wholly owned subsidiary of Mitsubishi Development Pty Ltd, and US$429 million was paid to the Company (with further post-closing adjustments), plus a 27.9% share of US$240 million of non-contingent royalties and 49% of HVO contingent royalties payable by the Company in respect of the C&A Acquisition. Our ownership of HVO was reduced to 51.0%, and in PWCS to 30%, following the completion of the Glencore Transaction.

For further details on the management and marketing arrangements of HVO, see *"– Marketing and Sales Arrangements" and "Connected Transactions – Management Services in relation to the HVO JV"*.

Moolarben Acquisition

The Company has entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019, and adjusted for the economic benefit of the 4% interest from 15 April 2018, that will flow to the Company. The Moolarben Acquisition will raise our interest in the unincorporated Moolarben JV to 85%. The Moolarben Acquisition is subject to customary conditions precedent to completion.

COMPETITION

The global coal industry features a large number of both multinational coal producers with global supplies and reach as well as regional players which may have a more limited operating scale but a locally strong presence. As a pure-play Australian coal producer for which all of our products are exported to end customers located in the Asia-Pacific region, our main competitors consist of other Australian coal producers whose primary export markets overlap with ours. These competitors include Peabody Energy, Whitehaven, Centennial Coal and New Hope among the pure-play coal producers, and Glencore, BHP and Anglo American among the diversified mining companies. We also compete with Indonesian coal producers in the Asian seaborne market, which together are the largest exporters of thermal coal by volume but whose products are generally of lower quality, according to the Industry Report. These competitors include PT Bumi Resources Tbk. and PT Adaro Energy Tbk. which, in addition to having large coal deposits, also have the advantage of proximity to key Asian markets. In addition, within our end user markets, we may compete with domestic suppliers, particularly in the PRC, which is the world's largest overall coal producer and where major local producers may enjoy home market advantages. Furthermore, we may also face competition from other major coal exporting nations such as the United States, Canada, South Africa, Colombia and Russia.

Players in the export coal industry generally compete on cost and product quality. Higher quality coal is generally able to command higher market prices, which in turn could generate greater profitability and offset what may be a higher cost of production. Factors that directly influence coal producers' production costs include the geological characteristics of their coal deposits such as the depth of underground reserves (for underground mines) and the strip ratio of open cut reserves (for open cut mines),

transportation costs, and labour availability and cost. Coal producers may achieve cost advantages through greater scale of operations and producing from multiple mines, which may generate economies of scale synergies and enable coal blending to yield higher quality products for export.

There are significant barriers to entry in the coal industry, including high capital expenditure requirements and expertise and resources needed to identify and develop new mines, as well as regulatory barriers in the form of various government approvals and ongoing inspection and compliance obligations.

See *"Industry Overview – Competitive Landscape"* and *"Risk Factors – Coal markets are highly competitive and are affected by factors beyond our control"* for further details.

SEASONALITY

Our operations in Queensland and to a lesser extent in NSW are subject to seasonal weather conditions such as heavy rainfall and cyclones which may cause interruptions to production or disrupt access to coal transportation and handling services. During the Track Record Period, we did not experience material suspensions or delays in our production. In 2017, we successfully planned and completed drainage works prior to the arrival of Cyclone Debbie in Queensland which mitigated the impact of heavy weather impact at Yarrabee. Seasonal factors may also affect demand; for example, an unusually severe winter in the PRC in 2017-18 had an impact on global coal prices.

HEALTH, SAFETY AND ENVIRONMENTAL MATTERS

Environmental policies

Operating to stringent environmental management conditions, including the on and off-site management and monitoring of potential dust and noise impacts, we continue to work with Australian State and Federal Government departments to ensure full transparency in our environmental reporting. Each of our operations also implements robust rehabilitation plans, working to minimise potential impacts on the local environment and ultimately return completed mining areas to quality pastoral, woodland, forestry or native vegetation (as required) for future use. Leading edge sustainability practices ensure we are instituting and updating our water management, land use and monitoring plans throughout every stage of the mining process, from prior-to-commencement, until well after eventual close.

As part of our rehabilitation plans, we seed and plant across our operations. Total seeding and planting across all operations in 2017 is 285 hectares. Total new disturbance across all operations in 2017 is 442 hectares. We seed and plant disturbed areas at each operation progressively.

Environmental non-compliances

On 24 December 2015 (prior to the C&A Acquisition), C&A notified the Commonwealth Department of the Environment that 16.5 hectares of a critically endangered ecological community (Central Hunter Valley eucalypt forest and woodland ecological community) ("**CHVEF**") was inadvertently cleared without the relevant approvals under the (Commonwealth) *Environment Protection and Biodiversity Conservation Act 1999*. C&A subsequently sought and obtained the relevant approvals

under that act for future clearing of CHVEF. As those approvals do not operate retrospectively, C&A has entered into an enforceable undertaking with the Australian Minister for the Environment and Energy to provide a compensatory offset property, and to vegetate it appropriately.

On 15 December 2016 (prior to the C&A Acquisition), the Environment Protection Authority (New South Wales) commenced a prosecution against Warkworth Mining Limited, a subsidiary of C&A and an operator of the Warkworth joint venture, for an alleged breach of section 64 of the (NSW) Protection of the Environment Operations Act 1997 (breach of a licence condition, being the failure to carry out activities in a competent manner) relating to the partial failure of a temporary sediment dam wall at MTW and the uncontrolled release of water from the dam. Warkworth Mining Limited is a joint venture company owned by each of the Warkworth joint venture participants in proportion to their respective joint venture shares. Warkworth Mining Limited is the statutory operator of the Warkworth mine and holds the mining tenements. Our Australian legal advisers, Gilbert + Tobin, has advised us that that Warkworth Mining Limited, as holder of the Environment Protection Licence, is primarily exposed to a risk of regulatory action and prosecution in the event that there is a non-compliance with that Licence. The conviction was recorded prior to our acquisition of this asset and the fine and costs order were paid.

While we are committed to high levels of environmental protection and sustainability practices, we may also be involved in other environment non-compliance incidents from time to time in the ordinary course of business, which we believe would not individually or in the aggregate have a material adverse impact on our business or financial condition.

Occupational safety measures and policies

We have adopted policies to comply with occupational health, safety, environment and other laws. The Board has approved a Health, Safety and Environment Policy which applies across the Company. In addition, each mine site has its own health, safety and environment ("**HSE**") policies and procedures to deal with their particular HSE issues. The Board has established a Health, Safety and Environment Committee which assists the Board to fulfil its responsibilities in relation to the HSE matters arising out of the Group's activities, consider, assess and monitor whether or not the Group has in place the appropriate policies, standards, systems and resources required to meet the Company's HSE commitments and provide necessary focus and guidance on HSE matters across the Group. The committee meetings are held at one of the Company's mine sites, whenever possible, to receive feedback from the health, safety and environment forum held at the mine site and to address any mine specific health, safety and environment issues.

All of our mine sites are independently audited to ensure compliance with the relevant legislation and regulations, and audited to ensure the health and safety management system is effective. We have an ongoing process to ensure safe, compliant and effective mine sites. We address areas of improvement with specific training for individuals or crews, and redesigning of processes or system enhancements.

Health and safety duties and obligations

Officers (including directors) have certain duties and obligations under workplace health and safety laws in each jurisdiction in which we operate. These duties are generally non-delegable and can be held concurrently by multiple persons. The Yancoal directors hold such duties for each mine that is operated or managed by Yancoal,

including the Watagan Mines. In the case of the Watagan Mines, such duties are held concurrently between the Yancoal and Watagan boards. In respect of joint venture mines that are partly owned but not operated, by Yancoal (including the HVO and Middlemount mines), the Yancoal directors do not hold due diligence duties because Yancoal is not the operator of those mines (although certain officers of Yancoal who sit on joint venture subsidiary boards may hold such duties).

Safety incidents

On 15 April 2014, a major incident in the maingate A9 development panel in the Stage 3 area of the Austar mine on 15 April 2014 led to the death of two workers. The Resources Regulator, which is now part of the Department of Planning and Environment of the New South Wales government, regarded the incident as serious and a possible contravention of health and safety laws, and conducted an investigation into the matter including the mine's safety management systems and the level of compliance with health and safety laws by officers. The investigation identified that the incident was a result of a pressure burst of such magnitude and volume as to render the installed rib support ineffective. Following the investigation, the Resources Regulator notified Yancoal Australia Ltd and Austar Coal Mine Pty Ltd in April 2016 that it had decided not to institute prosecution proceedings.

On 19 August 2016, a coal burst occurred in longwall panel B2 in the Bellbird South working area of the Austar mine. A prohibition notice was issued by the Resources Regulator in relation to the incident. A prohibition notice is a direction to prohibit an activity issued when a mine inspector reasonably believes that there is a serious risk emanating from an immediate or imminent exposure to a hazard. The prohibition notice in relation to the Austar mine was cancelled on 14 September 2016. Additional safety controls were implemented at the mine, including the introduction of coal burst protection conveyor mats supported from the flippers of the longwall shields, the deployment of restricted face zones on the longwall face and the use of shield flippers to provide protection to workers, and these controls have been subsequently improved over time. No proceedings were commenced by the Resources Regulator in relation to this incident and the option of the Resources Regulator to commence such proceedings expired on 19 August 2018.

On 2 February 2018, an initial coal burst occurred in longwall panel B4 of the Bellbird South area of the Austar mine which resulted in minor injuries to a worker. A prohibition notice was issued as a result of that incident. This notice was varied by a replacement prohibition notice on 8 February 2018 which ceased to have effect on 21 February 2018. Subsequently, a series of coal bursts occurred in longwall panel B4 in the Bellbird South area of the Austar mine on 21 February 2018, 23 February 2018, 13 March 2018 and 15 March 2018, none of which resulted in any injuries to workers although the 23 February 2018 event caused damage to the longwall shearer. Another coal burst occurred on 16 March 2018, and while no injuries were caused a prohibition notice was issued by the Resources Regulator. This prohibition notice was subsequently replaced with a fresh prohibition notice on 9 April 2018, which was in turn replaced by another notice on 12 May 2018 that allowed limited mining activities. An additional coal burst occurred on 17 May 2018 which did not result in any injuries, but caused damage to the longwall shearer and resulted in another prohibition notice being issued on 18 May 2018.

Between 19 February 2018 and 24 May 2018, we made a series of submissions to the Resources Regulator seeking to have the prohibition notices dated 12 May 2018 and 18 May 2018 cancelled. On 1 June 2018, we were notified by the Resources Regulator that its investigation unit had commenced an investigation into all coal bursts that have occurred at the Austar mine since 15 April 2014. As part of this investigation, four notices to obtain documents, information and evidence were issued, which were complied with on 22 June 2018, 27 June 2018, 31 July 2018 and 15 August 2018 respectively, as required. Inspectors from the investigation unit commenced interviews with longwall deputies in the last week of July 2018 and their investigation is ongoing and the results are pending. Four further notices to obtain documents, information and evidence were issued by a separate section of the Resources Regulator, which were complied with on 26 June 2018, 10 July 2018, 20 August 2018 and 24 August 2018 respectively, as required.

Following agreement as to the provision of limited information to the Resources Regulator, the two prohibition notices dated 12 May 2018 and 18 May 2018 were cancelled on 30 July 2018 and 3 August 2018, respectively. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This new prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining to up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. On 30 August 2018 operations were halted on account of technical issues related to de-stressing activity in certain areas of the long wall, and on 5 September 2018 a prohibition notice was received relating to this activity which was cancelled on 28 September 2018. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. The nature of the geological and technical challenges faced at the Austar mine exposes us to the risk of future prohibition notices and production delays at the mine.

Additional risk mitigation controls (meeting the statutory health and safety standard of "so far as is reasonably practicable" as stipulated by the relevant legislation) to manage and mitigate the hazard of coal bursts have been implemented on the current longwall panel B4 operation and are proposed to be implemented on any future longwall operations where high coal burst hazard exists. These consist of measures including, but not limited to (i) increased longwall equipment automation whereby workers are located 50 metres from the operating shearer, (ii) introduction of variable web cutting method instead of bi-directional cutting methods, (iii) implementation of de-stress drilling from the tailgate roadway and/or the longwall face (if required) into the longwall block in advance of the retreating longwall face, (iv) extension of the coal burst protection mats supported from the tips of the longwall shields across the entire longwall face, (iv) installation of polypropylene "spikes" across the body of the operating shearer to contain coal bump and burst material on the armoured face conveyor and (v) ongoing borescope holes and cuttings tests to determine the level of "softening" and areas of increased stress as the longwall face retreats, respectively.

Due to the nature of coal burst risk in longwall mining, the location, timing and magnitude of coal bursts cannot be predicted and as a result are difficult to prevent. As such, the coal burst control strategy employed at Austar emphasises mitigation, which is in line with industry practice. Since the initial coal burst on 2 February 2018, which resulted in minor injuries to a worker, the mitigation controls implemented had been effective at preventing injuries in subsequent coal burst events at the longwall B4 panel.

The Directors are of the view that (a) these risk mitigation controls are sufficient to minimise risks to health and safety to any persons in the vicinity of the longwall face at the Austar Coal Mine while the shearer is in operation so far as is reasonably practicable as required by the relevant legislation; and (b) any matters giving rise, or that will give rise, to a serious risk to the health or safety of any person emanating from an immediate or imminent exposure to a hazard associated with production or use of the shearer at the longwall have been remedied. However, these measures may not be sufficient to prevent similar incidents or production shutdowns in the future. See "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown.*" for further details.

As a result of the C&A Acquisition, we inherited a safety prosecution that was underway in respect of an incident at MTW which happened prior to the acquisition of our interests in MTW. These proceedings were discontinued in 2017 upon MTW agreeing to undertake an enforceable undertaking social project that will be completed in 2019.

After considering the remedial actions taken by the Group and the nature and scale of our business, the Directors are of the view that our internal control system is adequate and effective for our current operations and that the incidents listed above do not have any material impact on the suitability of the Directors under Rules 3.08 and 3.09 of the Listing Rules or our suitability for listing under Rule 8.04 of the Listing Rules.

Save as disclosed above, no significant events were recorded at our mine sites during the Track Record Period, with sites continuing to operate to legislative and safety standards. We remain committed to proactively improving the systems and processes employed across sites to educate, communicate and record employee safety initiatives. Under the direction of the Health, Safety and Environment Committee, we continue to build the leadership, capabilities, systems and reporting procedures required to deliver on its objectives of achieving zero harm at its operations.

While we are committed to the health and safety of our employees and contractors, there are safety incidents and personal injury claims made against the Group in the ordinary course of business which are generally covered by our insurance policies and which we believe would not individually or in the aggregate have a material adverse impact on our business or financial condition.

SOCIAL SUSTAINABILITY AND COMMUNITY DEVELOPMENT

In the ordinary course of business, we receive complaints from local communities, generally in respect of noise, blasting and air quality. We keep comprehensive records of complaints received at each mine site. In addition to maintaining complaints and information hotlines, we also engage with our surrounding communities through community consultative committees. During the Track Record Period, none of these complaints received was as a result of any material breach of mining approval conditions by our mining operations.

We allocate funds at both the site and corporate levels to financially support community groups and programmes on health, environment, sport, education, community and training. We also invest in local initiatives, fund environmental projects and support social and education initiatives. We work cooperatively with community stakeholders through community consultative committees, local newsletters and media

to help ensure our surrounding communities are engaged and informed of matters relevant to our operations. Amongst other matters, we provide annual funding to The Clontarf Foundation, which runs programmes in NSW, Queensland, Victoria, WA and the Northern Territory. This Foundation's mission is to ensure education and social engagement for Aboriginal school-aged male students.

PROPERTIES

As at the Latest Practicable Date, we owned freehold properties and leased long-term leasehold properties at each of our operated and managed mines which consisted of approximately 1,640 parcels of land with a total site area of approximately 71,000 hectares and approximately 270 dwellings (excluding properties in Middlemount). These properties include real property within tenements, ancillary properties surrounding the mining leases and remote properties acquired for housing accommodation, as well as offset properties to compensate for disturbance of native vegetation.

As none of our properties had a carrying amount of 15% or more of our consolidated total assets, we are not required to include a valuation report in this prospectus with respect to our property interests.

INTELLECTUAL PROPERTY

We began employing the LTCC technology for the first time in Australia at Austar in September 2006. LTCC technology is ideal in thick coal seams and enables greater resource recovery, and is utilised in Austar depending on the mining conditions.

As at the Latest Practicable Date, we have applied for the registration of one trademark and have registered 14 domain names which are material to our business. See "*Appendix VII – Statutory and General Information – Further Information About the Business – Intellectual Property*" for further details.

As at the Latest Practicable Date, the Group has not been engaged in any material litigation or legal proceedings relating to the violation of intellectual property rights.

RISK MANAGEMENT AND INTERNAL CONTROLS

Our future operating performance may be affected by risks relating to our business. Some of these risks are specific to us while others relate to economic conditions and the general industry and markets in which we operate. See "*Risk Factors*" for further discussion.

Our risk management policies and procedures have been designed and implemented to identify, manage and mitigate any exposure to risks relating to our business, including economic, environmental, safety and social sustainability risks. We undertake regular monitoring and assessment of these risks and implements risk mitigation strategies to minimise its exposure to such risks where appropriate.

The Board, through the Audit and Risk Management Committee, is responsible for satisfying itself that a sound system of risk oversight and management exists and that internal controls are effective. The Audit and Risk Management Committee receives periodic reports on the performance of our risk management framework, as well as on key risk exposures to satisfy itself that it continues to be sound. A review of the risk management framework was conducted in 2017.

Formal risk identification activities are undertaken on an annual basis, with Risk Identification and Analysis undertaken at a functional level, as well as at each of the organisation's mine sites. In addition, where appropriate, project specific risk assessments are conducted. The EGM of Risk Management and Auditing is responsible for establishing and managing the company wide risk management system, risk management framework and practices, reviewing the impact of the risk management framework on its control environment and insurance arrangements and reviewing the risk of major investment projects. Together with the Chair of the Executive Committee, the Board and the Audit and Risk Management Committee, the Executive General Manager of Risk Management and Auditing is responsible for developing a risk matrix and framework and for implementing related risk assurance processes and audits of compliance for the Group.

The responsibility for managing risks, risk controls or risk management action plans is embedded within the business and undertaken as part of everyday activities.

INSURANCE

We maintain director and officer liability insurance, property damage insurance for our properties, plant and equipment and third-party liability insurance to cover claims in respect of third party injury or property damage arising from incidents occurring on our properties or as a result of our operations. We do not currently maintain business interruption insurance. Insurance coverage and terms are benchmarked against industry peers. After taking into account the assessment of the risk exposure of our operations, the Directors are of the view that our insurance coverage is appropriate.

We will continue to review and assess our risk portfolio and make necessary and appropriate adjustments to our insurance practice in line with business needs and industry practice. See "*Risk Factors – Our operations may be affected by uncertain mining conditions and we may suffer losses resulting from mining safety incidents, which may not be covered by our insurance*".

EMPLOYEES

We had 1,890,1,866, 3,983 and 3,041 employees (including casual labour which are full-time equivalents) as of 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. After giving effect to the Glencore Transaction and as at the Latest Practicable Date, we had 3,064 employees. The following table shows a breakdown of our employees by function and location as at 30 June 2018:

Function	Total
Mining operations	1,781
Maintenance	808
General administration	452
Total	3,041

Our recruitment process is merit based and we recruit internally and externally through recruitment agencies. Employee individual training plans are managed by each employee and endorsed and supported by their line managers. Our remuneration policies are to ensure remuneration is equitable, align with the long-term interests of the Company and Shareholders, comply with diversity policy, provide market competitive remuneration to attract and retain skilled and motivated employees and structure incentives to link reward with performance.

Labour Unions and Disputes

A substantial portion of our employees are members of the Construction, Forestry, Maritime, Mining and Energy Union ("**CFMMEU**"). Each of our mine sites (except for Yarrabee) has made collective agreements known as enterprise agreements with CFMMEU. These agreements primarily cover employees' responsibilities, remuneration, benefits and grounds for termination of employment. Current enterprise agreements are typically three to four years in duration. As employees have the right to take protected industrial action during the negotiation of new enterprise agreements, we occasionally experience industrial action from CFMMEU members in the ordinary course of business. In March 2018, during the renegotiation of the enterprise agreement at Ashton, we experienced an industrial action from CFMMEU members which resulted in a 24-hour stoppage, which was withdrawn by CFMMEU. We are also involved in labour disputes and unfair dismissal claims in the ordinary course of business. During the Track Record Period, we did not experience any strikes, work stoppages, labour disputes or actions which individually or in the aggregate had a material adverse impact on our business or financial condition.

Third Party Contractors

While our mining operations are self-operated and not contracted, we enter into agreements with independent third party contractors and other third party services providers for ancillary or specialised mining services and contracted labour for the provision of additional mining services when required. In 2015, 2016, 2017 and the six months ended 30 June 2018, we had incurred total contracting fees of A$155 million, A$78 million, A$134 million and A$96 million, respectively.

Contractors at our mine sites are required to comply with the site's health and safety management system. While the contractors are generally responsible for compliance with applicable legislation and regulations and safety standards and liable for workers' compensation and employer's liability in relation to any death of or injury to any employee of the contractor, we are also accountable for ensuring their compliance. To give flexibility to our operations, we generally contract with such third party contractors on a short term or project basis.

In the selection of third party contractors, we take into account a variety of factors, including qualifications, relevant skills and experience, ability to perform the activity, price and reputation in the industry. To the best of our knowledge, each of our third party contractors has obtained the relevant material licences and permits to conduct activities it engaged.

As there are a number of local contractors providing similar services for coal mines, we believe we are able to engage replacement contractors on similar terms and conditions if any of our existing contractors discontinues its services.

LEGAL PROCEEDINGS AND NON-COMPLIANCE

We are involved in certain disputes which involve members of the Noble Group, which was one of our largest customers from 2015 to 2017. Brief details of these disputes are set out below:

(1) We commenced arbitration proceedings against the Noble Group in May 2018 seeking relief, including damages, on account of the Noble Group's failure to purchase coal from us between 2015 and 2017 under an existing contract between us and the Noble Group dated 30 June 2014. The contract provides for the sale to the Noble Group of coal mined from operations owned and/or managed by us, and includes *de facto* liquidated damages payments where the Noble Group fails to purchase coal from us. We estimate these liquidated damages to be approximately US$35.7 million, excluding interest, and have claimed this amount in these proceedings. As at the Latest Practicable Date, this claim is in the early stages of arbitration proceedings.

(2) On 3 August 2018, the Noble Group commenced proceedings against us in the Supreme Court of New South Wales (an Australian State court) claiming, among other things, amounts in respect of certain marketing fees that are alleged to have become payable under a contract and for damages (as described in more detail below) flowing from an alleged repudiation of that same contract. These claims arise from a contract entered into in 2011 between Noble Resources Pte Ltd ("**Noble Resources**"), a subsidiary of the Noble Group, and Gloucester Coal, a subsidiary of the Company, which has a term ending in 2040. Under this contract, Gloucester Coal appointed Noble Resources to provide marketing services in relation to coal exports, and Gloucester Coal pays a marketing fee to Noble Resources calculated on the basis of tonnage of export coal mined from the Stratford, Duralie and Donaldson mines (which were acquired by the Company in 2012; Duralie is the only one of these mines currently producing). As Noble Resources does not operate those mines, Noble Resources regularly requests information as to the quantity and timing of exports from those mines in order to verify the marketing fee payable, if any.

The Noble Group's claims derive mainly from its allegation that Gloucester Coal failed to notify and pay marketing fees, and failed to provide certain information to the Noble Group so as to allow the Noble Group to verify the marketing fees payable (if any), which allegedly had the effect of Gloucester Coal repudiating the contract. The Noble Group also alleges that the Company caused or procured Gloucester Coal to breach the contract. The Noble Group asserts that Gloucester Coal is in breach of contract in the sum of approximately US$172.5 million, comprising claimed losses for 2014 of approximately US$1.5 million, claimed estimated losses for 2015 to 2017 of US$44 million, and claimed estimated damages for "loss of bargain" of US$127 million (which represents the amount Noble Group alleges would be payable from 2018 to 2040). That is, the maximum claim that has been asserted against the Company by the Noble Group is US$172.5 million in relation to these proceedings. As at the Latest Practicable Date, the parties continue to exchange pleadings in respect of the proceedings. We and Gloucester Coal intend to vigorously defend the proceedings.

(3) Gloucester SPV Pty Ltd ("**Gloucester SPV**"), a subsidiary of the Company, is one of several respondents to proceedings commenced in 2015 by Oceltip Pty Ltd ("**Oceltip**") against Noble Resources in the Supreme Court of Queensland. Oceltip is an independent third party of the Group and we have no commercial relationship with Oceltip. The subject of the dispute involves the transfer of Noble Resources' right to receive certain royalty payments under a royalty deed to Gloucester SPV, who since the transfer now enjoys the right to those royalty payments. The consideration for the transfer was A$168 million and as at the Latest Practicable Date we estimate the potential value of the royalty streams to be approximately A$195 million. Oceltip's claim disputes the validity of the transfer and seeks to enforce its pre-emptive rights under the royalty deed against Noble Resources. There is no claim for damages against Gloucester SPV in those proceedings, and as such those proceedings did not involve a dispute between the Noble Group and the Company. The damages claim was directed only to Noble Resources (and was pleaded in the alternative to its primary claim for declarations and specific performance). As a consequence, there is no ability for Oceltip to seek compensation from Gloucester SPV, Gloucester Coal or Yancoal in the event it is successful in these proceedings). On 14 November 2018, a related claim was served on Gloucester Coal and Gloucester SPV in which Oceltip has alleged that Gloucester SPV induced or procured Noble Resources' alleged breach of the royalty deed by reason of transferring the rights to receive those payments to Gloucester SPV, and has claimed unspecified damages.

As at the Latest Practicable Date, the Oceltip matters remain at preliminary stage and may be consolidated into a single proceeding, and we are unable to assess the Group's potential exposure (if any) on account of these matters.

Given the early stage nature of these matters above and ongoing fact-finding, we are not yet in a position to determine whether the potential impact on us will be material. The Noble Group is undertaking a financial restructuring through proposed schemes of arrangement, which were sanctioned by the relevant courts in the United Kingdom and Bermuda on 13 and 14 November 2018, respectively. As of the Latest Practicable Date we are not able to predict the outcome of such schemes or the effect, if any, that such schemes (or any compromise or arrangement reached in connection therewith), may have on our rights or entitlements against the Noble Group.

Save as disclosed above, during the Track Record Period and up to the Latest Practicable Date, neither we nor any of the Directors was engaged in any litigation, claim or arbitration of material importance nor, to the best of the Directors' knowledge, is any litigation, claim or arbitration of material importance pending or threatened against us or the Directors in relation to the Group.

In addition, as at the Latest Practicable Date, neither we nor any of the Directors was the subject of any actual, pending or threatened bankruptcy or receivership claims.

Save as disclosed in *"– Health, Safety and Environmental Matters – Safety Incidents"* above, during the Track Record Period and up to the Latest Practicable Date, we had complied with the relevant laws and regulations in relation to our business in all material respects and there were no material breaches or violations of laws or regulations applicable to us that would have a material adverse effect on our business or financial condition taken as a whole.

Save for the regulatory approvals, permits and licences set out in "– *Mining and Exploration Licences – Approvals, Permits and Licenses to be Obtained*" which have been applied for but have yet to be granted, during the Track Record Period and up to the Latest Practicable Date, we had obtained all material licences and permits necessary for the operation of our business in the jurisdictions in which we operate and such licences and permits are still valid and in force. We have not experienced any refusal of the renewal application of any material licences and permits necessary for the operation of our business. Further information on the material licences and permits necessary for the operation of our business is set out in below in "– *Mining and Exploration Licences*" and *"Appendix IV – Taxation and Regulatory Overview"*.

You should read the following discussion and analysis in conjunction with our audited consolidated financial statements as at and for the years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, including the notes thereto, set out in the "Appendix IA – Accountants' Report of the Group". Our audited consolidated financial statements have been prepared in accordance with IFRS, which may differ in material aspects from generally accepted accounting principles in other jurisdictions. Historical results are not indicative of future performance.

The following discussion contains forward-looking statements that involve risks, uncertainties and assumptions. We caution you that our business and financial performance are subject to substantial risks and uncertainties. Our actual results could differ materially from those projected in the forward-looking statements. In evaluating our business, you should carefully consider the information provided in "Risk Factors" and "Responsibility Statement and Forward-looking Statements".

We also present in this prospectus a discussion and analysis of the financial condition and results of operations of C&A. See "Financial Information of C&A" for further details. The pro forma effects of the C&A Acquisition, along with certain other transactions as described in more detail in this "Financial Information" section, are set out in "Appendix IIB – Unaudited Pro Forma Financial Information of the Enlarged Group".

OVERVIEW

We are Australia's largest pure-play coal producer based on aggregate Coal Reserves and marketable coal production, and have been listed on the ASX since 2012. Of all Australian coal producers, we rank third on both these aforementioned metrics, behind only Glencore and BHP. We have ownership interests in, and operate, five mine complexes across New South Wales and Queensland and manage five others across New South Wales, Queensland and Western Australia.

Our principal business activity is the production of thermal and metallurgical coal for use in the power generation and steel industries in Asian markets. On an ex-mine basis, in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our average selling price for thermal coal was A$68, A$71, A$102, A$90 and A$117 per tonne, respectively, and our average selling price for metallurgical coal was A$100, A$106, A$165, A$174 and A$191 per tonne, respectively. Total ex-mine sales volume in the same periods was 8.1 Mt, 8.8 Mt, 15.5 Mt, 4.9 Mt and 13.8 Mt for thermal coal, respectively, and 5.3 Mt, 3.3 Mt, 3.8 Mt, 1.3 Mt and 2.4 Mt for metallurgical coal, respectively.

In contrast to coal companies that are currently listed on the Hong Kong Stock Exchange, all of the coal we produce is sold for export to customers located overseas, whether directly, through overseas traders or through other Australian coal companies. During the Track Record Period, our largest jurisdictions by revenue were the South Korea, the PRC, Singapore and Japan. We had revenue of A$1,319 million, A$1,238 million, A$2,601 million, A$832 million and A$2,347 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, and a loss after income tax of A$291 million, A$227 million and A$14 million in 2015 and 2016 and the six months ended 30 June 2017, respectively, and a profit after income tax of A$246 million and

A$361 million in 2017 and the six months ended 30 June 2018, respectively. The increases in 2017 and the six months ended 30 June 2018 were largely attributable to the C&A Acquisition, the Moolarben expansion and a substantial increase in coal prices.

BASIS OF PRESENTATION

Our consolidated financial statements have been prepared in accordance with IFRS and on a going concern basis. All financial information presented in this section relates to the historical audited financial information of the Group, unless indicated otherwise as being pro forma financial information. In addition, due to significant acquisitions, disposals and deconsolidation which have taken place since the beginning of the Track Record Period (as described in more detail below), this historical financial information is not necessarily indicative of the Group's current financial performance and position, and results from earlier periods may not be comparable to those from later periods going forward.

All sales and production volume data in this section is presented on an attributable basis, unless indicated otherwise as being presented on a 100% basis.

ACQUISITIONS, DISPOSALS AND DECONSOLIDATION

This discussion and analysis should be reviewed in the context of certain material acquisitions, disposals and deconsolidation of mines and other assets and interests that we have undertaken during the Track Record Period. These are described below. In addition, the pro forma effects of the C&A Acquisition, Glencore Transaction, and Warkworth Transaction, each as described in further detail below, are presented in "– *Pro Forma Financial Information of the Enlarged Group*" and Appendix IIB to this prospectus.

C&A Acquisition

On 1 September 2017, we completed the C&A Acquisition, for which the consideration was US$2.69 billion, comprising US$2.45 billion cash payable on completion, US$240 million in future non-contingent royalty payments over five years following completion, and a coal price-linked contingent royalty (with further post-closing adjustments). On completion, we acquired:

(i) interests in two of Australia's leading tier-one large-scale, long-life and low-cost coal mines located in the Hunter Valley region of New South Wales, including:

  (a) a 67.6% interest in the HVO mine; and

  (b) an 80.0% interest in the Mount Thorley mine and a 55.6% interest in the Warkworth mine, which are located adjacent to each other and are operationally integrated as MTW; and

(ii) a 36.5% interest in PWCS, which provides the export infrastructure for the acquired mines.

Prior to its acquisition by us, C&A itself had disposed of certain of its mining operations in 2016, including interests in projects located in Bengalla and Mount Pleasant, and undertook a restructuring of its interest in HVO. As a result, the financial information of C&A as disclosed in "*Financial Information of C&A*" is presented on a carve-out basis as if such interests were disposed of on 1 January 2015. However, the audited consolidated financial statements of C&A as disclosed in the Accountants' Report of C&A as set out in Appendix IB to this prospectus are presented without the carve-outs applied, save as indicated in note 36 therein.

The C&A Acquisition contributed to a substantial increase in our total assets from A$7,660 million as at 31 December 2016 to A$11,914 million as at 30 June 2018. In addition, we began consolidating the profit and loss accounts of C&A from 1 September 2017, the date of completion of the C&A Acquisition, and our results of operations for 2017 and the six months ended 30 June 2018 reflect the consolidation of C&A's results from 1 September 2017 to 30 June 2018. This contributed to the increase in our total revenue from A$1,238 million in 2016 to A$2,601 million in 2017, and our profit after income tax of A$246 million in 2017 compared to a loss after income tax of A$227 million in 2016. Similarly, our total revenue increased from A$832 million in the six months ended 30 June 2017 to A$2,347 million in the six months ended 30 June 2018, and we had a loss after income tax of A$14 million and a profit after income tax of A$361 million in the same periods, respectively.

Glencore Transaction

On 4 May 2018, we completed the Glencore Transaction by selling a 16.6% interest in the HVO mine to Glencore, reducing our interest in the unincorporated HVO JV from 67.6% to 51% and resulting in a 51%:49% unincorporated JV between us and Glencore. Glencore acquired its 49% interest for consideration of US$1,139 million, of which (i) US$710 million was paid to HVOR for its 32.4% interest in HVO and (ii) US$429 million (with further post-closing adjustments) was paid to us for a 16.6% interest in HVO. Glencore will also pay us a 27.9% share of US$240 million of future non-contingent royalty payments and 49% of coal price-linked royalty payments associated with HVO, which are payable by us to Rio Tinto pursuant to the terms of the C&A Acquisition agreements. HVOR is wholly owned by Mitsubishi Development Pty Ltd. ("**MDP**"), which exercised its tag-along right in connection with the C&A Acquisition.

We classified our 16.6% interest in HVO to be sold to Glencore as assets held for sale as at 31 December 2017, based on our determination that the Glencore Transaction was likely to be completed. Following completion, we will continue to account for the financial results of HVO under the proportional consolidation method of accounting. The pro forma income statement of the Enlarged Group for the year ended 31 December 2017 and the six months ended 30 June 2018 gives effect to the Glencore Transaction as if it had been completed on 1 January 2017.

Warkworth Transaction

On 7 March 2018, we completed the Warkworth Transaction to acquire an additional 28.9% interest in the unincorporated Warkworth JV from MDP for consideration of US$230 million, subject to post-closing working capital adjustments, which increased our ownership of the Warkworth JV from 55.6% to 84.5%. The Warkworth Transaction was executed pursuant to a call option that we held in connection with the C&A Acquisition. As MTW is an integrated operation consisting of the Mount Thorley mine (owned by the unincorporated Mount Thorley JV, of which we own 80.0%) and the Warkworth mine (owned by the unincorporated Warkworth JV),

following the Warkworth Transaction, our share of coal production from the MTW mine has increased from 64.1% to 82.9%. We will continue to account for the financial results of the MTW mine under the proportional consolidation method of accounting. As with the Glencore Transaction, the pro forma income statement of the Enlarged Group for the year ended 31 December 2017 and the six months ended 30 June 2018 gives effect to the Warkworth Transaction as if it had been completed on 1 January 2017.

Moolarben Acquisition

We have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019 (the "**Moolarben Acquisition**"), and adjusted for the economic benefit of the 4% interest from 15 April 2018 that will flow to us. We intend to finance the Moolarben Acquisition with a portion of the expected proceeds from the Global Offering. See "*Future Plans and Use of Proceeds*" for further details.

The Moolarben Acquisition will raise our interest in the unincorporated Moolarben JV to 85%. As a result, following the completion of the Moolarben Acquisition, we will proportionally consolidate 85% of the financial results of Moolarben. See note 45 to the Accountants' Report of the Group in Appendix IA to this prospectus for certain stand-alone financial information of Moolarben during the Track Record Period.

Watagan Deconsolidation

Effective on and from 31 March 2016, the Company entered into certain financing arrangements with Watagan and the Bondholders. These arrangements involved the issue of the Watagan Bonds, a loan facility agreement between Watagan and the Company, and certain other agreements or deeds ancillary to the issue of the Watagan Bonds.

In accordance with the terms of the Watagan Agreements, our interests in the Ashton, Austar and Donaldson mines were transferred to Watagan for consideration of A$1,363 million (equal to the book value of the three mines at the time). Watagan fully funded the purchase with the Watagan Loan. The outstanding interest and principal of this loan is guaranteed by Yankuang, our ultimate controlling shareholder. Watagan can make prepayments of the outstanding loan balance at any time, and (subject to there being no default continuing and other customary conditions) any amounts prepaid may be redrawn by Watagan in the future for specified permitted purposes. As at 30 June 2018, the loan receivable from Watagan was A$730 million (re-drawable to A$1,363 million).

While we wholly-own Watagan, upon the issuance of the Watagan Bonds, the Bondholders were given the power to nominate two of its three directors, which together with other terms included in the Watagan Agreements resulted in the determination that we had lost accounting control of Watagan. The loss of accounting control resulted in us deconsolidating the financial results of Watagan as a subsidiary from our consolidated financial statements with effect from 31 March 2016. From that time, we began to account for our equity interest in Watagan as an associate rather than a subsidiary. We also designated the value of the Ashton, Austar and Donaldson mines as assets classified as held for sale as at 31 December 2015, pending completion of their transfer to Watagan in early 2016. While Watagan is deconsolidated from our consolidated financial statements for accounting purposes, Watagan remains within our tax consolidated group as a result of our ongoing 100% equity ownership of Watagan.

The determination of loss of accounting control of Watagan is a matter of accounting judgement, which could be subject to review and change. The International Financial Reporting Standards ("**IFRS**") under which we prepare our financial statements requires us to make certain judgements and estimates when preparing our financial statements, and are issued by the International Accounting Standards Board ("**IASB**"), along with other authoritative pronouncements and interpretations. The IASB or other agencies and authorities may not agree with the judgements or estimates applied by us. Moreover, the IASB may amend IFRS and the related pronouncements and interpretations or replace them with new standards, and such amendment or replacement is beyond our control. Any changes to IFRS or to the interpretation of those standards, such as a change which would require us to reconsolidate Watagan's results and financial position ahead of the scheduled date in 2025, may have an adverse effect on our reported financial performance or financial position.

Watagan is required to redeem all of the outstanding Watagan Bonds on the maturity date of 8 January 2025 (if the put option is exercised on or after 1 January 2025, the maturity date would be deferred to 1 April 2025), and may elect to redeem any or all of them commencing from 31 March 2019. Additionally, the Bondholders have a put option that allows them to transfer the issued Watagan Bonds at face value to Yankuang during specified put option exercise windows during the first week of January in each of 2019, 2021, 2023 and 2025. The Bondholders may also exercise the put option after 1 January 2019 while an event of default under the bond terms is subsisting in relation to Watagan or Yankuang. The put option must be exercised by a Bondholder in respect of all (but not some) of its respectively held bonds. If the put option is exercised (i) by UNE, as the instructing Bondholder of the investor syndicate, or (ii) with respect to least 50.1% of the face value of the Watagan Bonds, the put option will be deemed to have been exercised as to all of the bonds. In accordance with the Watagan Agreements, if Yankuang becomes the sole bondholder of the Watagan Bonds following the purchase of the Watagan Bonds by Yankuang consequent to the exercise of the put option, certain bondholder rights including the right to nominate a majority of the board of directors, would terminate, and these rights would revert to the Company as the sole shareholder of Watagan. Watagan would thereafter owe an amount payable to Yankuang for the face value of the put bonds, minus any capitalised interest. Watagan would separately pay to the exercising Bondholders the accrued interest and any capitalised interest on the put bonds.

If (i) Bondholders holding a sufficient proportion of the principal amount of the Watagan Bonds exercise their put option to Yankuang such that Yankuang acquires all of the bonds, (ii) Watagan fully redeems the Watagan Bonds or (iii) certain other events occur (such as a change to the terms and conditions of the Watagan Bonds that gives us the power to nominate the majority of the board of Watagan) that would result in us regaining control of Watagan, we will be required to reconsolidate Watagan as a subsidiary into our consolidated financial statements from the time that control is determined to be regained. We do not currently have any plan or intention to effect the early redemption of the Watagan Bonds.

Upon reconsolidation we will: (i) cease to recognise interest income on the Watagan Loan, which in the year ended 31 December 2017 and the six months ended 30 June 2018 was A$67 million and A$32 million, respectively, as well as forgo the margin recognised under the various service agreements, and de-recognise the Watagan loan receivable, which as at 30 June 2018 was drawn to A$730 million, as these amounts will become intercompany balances and eliminate on consolidation; (ii) recognise an interest expense on the Watagan Bonds (or the Yankuang loan payable if the put option has been fully exercised), which during the year ended 31 December 2017 and the six months

ended 30 June 2018 was A$102 million and A$35 million, respectively, and recognise the fair value of the Watagan Bonds at that time, which as at 30 June 2018 had a book value of A$1,049 million; and (iii) recognise the operating results of Watagan, including the three Watagan Mines, in our statement of profit and loss and recognise the fair value of the assets and liabilities of Watagan (including the Watagan Bonds) on our balance sheet at that time. In 2016 and 2017 and the six months ended 30 June 2017 and 2018, Watagan had loss after tax of A$162 million, A$58 million, A$7 million and A$90 million, respectively. See note 23(a) to the Accountants' Report of the Group in Appendix IA to this prospectus for further stand-alone financial information of Watagan during the Track Record Period.

The loss after tax of A$162 million in 2016 was due in significant part to the Austar mine only commencing longwall mining activities in the Bellbird South area half way through the year following a fatal incident in the Stage 3 area in 2014. The improvement in performance to a loss after tax of A$58 million in 2017 was primarily due to an improvement in coal prices between the periods and a full year of production at Austar, partially offset by an increase in finance costs primarily due to an additional A$30 million of interest owing to the bondholders due to Watagan achieving an EBITDA related threshold. The loss of A$90 million in the six months ended 30 June 2018 was primarily due to a significant reduction in production at the Austar mine due to the occurrence of multiple coal bursts resulting in repeated shutdowns during the period. See "*Risk Factors – We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations*" and "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*".

Since Watagan has thus far been loss-making and, moreover, has incurred ordinary course depreciation and amortisation, the book value of Watagan's net assets has declined since inception and at 30 June 2018 was negative A$311 million as noted in Appendix IA to this prospectus. While the book value decline is not necessarily an indicator of Watagan's fair value, if the fair value of Watagan's net assets is negative (meaning that the value of its assets is lower than the value of its liabilities, including any outstanding loan balances) at the time of reconsolidation, goodwill will be recognised by us. This goodwill will be subject to impairment testing based on the cash generating units to which it is allocated. To the extent that any goodwill recognised cannot be supported by an impairment model, it will be written off by us as a loss on acquisition. Similarly, if prior to reconsolidation, and whilst we recognise a loan receivable from Watagan, there is any such determination of a decline in the fair value of Watagan, this would trigger an impairment assessment of the carrying value of the outstanding balance of the Watagan Loan. As at 30 June 2018, the total assets of the Company were A$11,914 million and the total liabilities of the Company were A$6,649 million, and the total assets of Watagan were A$1,783 million and the total liabilities of Watagan were A$2,094 million. The impact of reconsolidating Watagan as at 30 June 2018, without reflecting any fair value adjustments that may arise on reconsolidation (including the recognition of any potential goodwill as noted above), and after intercompany balance eliminations of A$827 million for both total assets and total liability, would be material. Our gearing ratio (which is calculated as gross debt divided by total equity at the end of the relevant period) would exhibit a material increase from our gearing ratio of 0.81x as at 30 June 2018, primarily due to Watagan's interest-bearing debt and negative equity position as at that date.

During the Track Record Period, Donaldson's remaining Abel underground mine was moved to a care and maintenance phase and feasibility studies have subsequently commenced to explore potential future mining operations. In addition, multiple incidents have recently occurred in Austar's Bellbird South area due to coal bursts and other occurrences. These incidents have resulted in property and site damage and consequent loss of production and shutdowns, including as a result the regulator issuing notices to stop production for periods of time, during the Track Record Period. Ongoing work and investigations are being undertaken by Watagan in respect of the very challenging geological and geotechnical conditions at the Austar mine, including both the Bellbird South and Stage 3 areas that may have a significant adverse impact on future commercial operations, including, potentially, permanent shutdown. See "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown*" for further details.

The future prospects of the Donaldson and Austar mines are therefore uncertain, and will depend upon the work currently being conducted by Watagan and its advisers. If it is determined, by Watagan, that either or both mines are unable to restart operations or return to previously forecast levels of production or there are materially negative changes to other operating assumptions, including coal prices, exchange rates, operating costs or capital expenditure, it is likely that the fair value of these mines, and therefore Watagan, would be reduced materially. In that event, a material impairment charge may be recognised on the Watagan loan receivable, prior to reconsolidation, or any goodwill recognised on reconsolidation. In addition, the Bondholders may be more inclined to exercise the put option which, as described above, will result in the reconsolidation of Watagan. We do not control Watagan and as such are not able to control or predict the amount of any such impairment or the extent of the resulting effect on our financial condition and results of operations, which could be material and adverse.

See "*Risk Factors – We will be required to reconsolidate Watagan once we reacquire control of it, which could result in adverse consequences to our financial condition and results of operations*" for further details.

SIGNIFICANT FACTORS AFFECTING OUR RESULTS OF OPERATIONS AND FINANCIAL CONDITION

Our results of operations and financial condition have been, and are expected to continue to be, affected by a variety of factors, including those set forth below:

Demand for Our Coal Products

Our financial results are largely dependent on the demand for thermal and metallurgical coal, which in turn depends on macroeconomic trends, including regional and global economic activity, and the price and availability of alternative forms of energy production. In addition, our customers are located throughout the Asia-Pacific region, with South Korea, the PRC, Singapore and Japan comprising our largest jurisdictions by revenue during the Track Record Period. Consequently, major regional events which may affect coal supply and demand, such as Cyclone Debbie adversely affecting coal production in Queensland in March 2017, a severe 2017-2018 winter season in the PRC which increased demand and changes in coal supply and consumption policies in the PRC and elsewhere, may result in significant fluctuations in demand and, in turn, price volatility.

Thermal coal is primarily used in electricity generation and its end users are typically power and utilities companies. According to the Industry Report, aggregate electricity generation from coal in the PRC, Japan and South Korea, which are some of

our key markets in the Asia-Pacific region, increased from 4,389 billion kWh in 2015 to 4,625 billion kWh in 2017, representing a CAGR of 2.7%. This has partially contributed to an increase in aggregate demand for imported thermal coal in these countries from 395 Mt in 2015 to 458 Mt in 2017, representing a CAGR of 7.6%.

Metallurgical coal is primarily used to produce coke for blast furnace steel production. End users of metallurgical coal are thus typically steel plants. According to the Industry Report, aggregate crude steel production in the PRC, Japan and South Korea increased from 979 Mt in 2015 to 1,007 Mt in 2017, representing a CAGR of 1.5%. This has partially contributed to an increase in aggregate demand for imported metallurgical coal in these countries from 153 Mt in 2015 to 176 Mt in 2017, representing a CAGR of 7.6%.

We also sell coal to customers in the commodities trading business, who purchase our coal for trading purposes or to on-sell the coal to their end customers. Commodities traders are similarly exposed to global and regional demand trends in the coal market. As a result, fluctuations in their demand for coal products may directly affect their purchases from us. We sell to coal traders primarily to (i) enable access into markets where we have no direct relationship with end users and (ii) provide flexibility to sell any short-term unsold positions. Once we have developed relationships with new end users, we may opt to sell to them directly rather than through coal traders. For example, during the Track Record Period, we implemented a sales strategy of shifting away from coal traders in Singapore to sell directly to end users, which resulted in an overall decrease in the percentage of revenue attributable to customers located in Singapore, though total revenue from Singapore increased in line with our overall sales growth.

In November 2018, China imposed a quota on imports of coal, following which China has halted coal imports for the remainder of the year. We believe that this development will not have a material impact on us. However, if the Chinese government were to impose stricter import quotas for 2019 or future periods, our revenues and results of operations in future periods could be adversely affected, unless we are able to find alternative destinations for the coal we designate for export to China.

Price and Sales Volume of Coal

Our revenue is determined by the sale price and sales volume of our coal. The sale price depends on market demand and macroeconomic trends as discussed above. The table below sets forth, for the periods indicated, a breakdown of our ex-mine[(1)] sales volume and average selling price between thermal and metallurgical coal[(2)], presented on an attributable basis:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
Thermal coal					
Average selling price (A$ per tonne)	68	71	102	90	117
Sales volume (Mt)	8.1	8.8	15.5	4.9	13.8
Total ex-mine thermal coal revenue (A$ million)	548	617	1,585	447	1,607
Average Newcastle 6,000 NAR spot price (A$ per tonne)[(3)]	76	90	115	107	135

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
Metallurgical coal					
Average selling price (A$ per tonne)	100	106	165	174	191
Sales volume (Mt)	5.3	3.3	3.8	1.3	2.4
Total ex-mine metallurgical coal revenue (A$ million)	526	350	619	224	468
Average premium hard-coking coal FOB spot price (A$ per tonne)[3]	118	195	246	240	273
Total coal					
Average selling price (A$ per tonne)	80	80	114	108	128
Sales volume (Mt)	13.4	12.1	19.3	6.2	16.2
Total ex-mine coal revenue (A$ million)	1,074	967	2,204	671	2,075
Coal purchases[4]	214	232	355	164	156
Other[5]	–	–	64	–	19
Total coal revenue from customers	1,288	1,199	2,623	835	2,250

Notes:

(1) Ex-mine coal represents coal directly produced at our mines, and excludes coal purchased from other parties.

(2) Includes our attributable interest in production from (a) in 2015, the Moolarben, Yarrabee, Stratford Duralie and Watagan mines, (b) in 2016, the Moolarben, Yarrabee, Stratford Duralie and Watagan mines (until 31 March 2016), (c) in 2017, the Moolarben, Yarrabee, Stratford Duralie, and C&A mines (HVO (67.6%) and MTW (64.1%), from 1 September 2017) and (d) in 2018, the Moolarben, Yarrabee, Stratford Duralie, and C&A mines (HVO (67.6% until 30 April 2018 and 51% thereafter) and MTW (64.1% until 28 February and 82.9% thereafter). Does not include the results of Middlemount, which is an incorporated joint venture in which we hold a 49.9997% interest. For accounting purposes, we equity account for our share of the profit or loss after tax of Middlemount as a single line item.

(3) According to the Industry Report. The A$ per tonne is calculated at an US$:A$ foreign exchange rate of 1.33, 1.35, 1.30, 1.33 and 1.33 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The average premium HCC price represents the most readily-available index price for metallurgical coal.

(4) Represents sales made as part of our coal blending strategy attributable to coal purchased from related parties and third parties and any increase or decrease in ex-mine revenue recognised on coal purchased from our mines. See "– *Description of Major Line Items in Our Consolidated Statements of Profit or Loss and Other Comprehensive Income – Coal Purchases*" for further details.

(5) Other coal revenue mainly represented acquisition accounting fair value adjustments with respect to the below market customer contract with BLCP, which we took on as part of the C&A Acquisition and which obligates us to deliver coal to BLCP at a price that we deem to be below market relative to our long-term coal price forecast.

Sales price

Regional and global trends in the demand for coal, taken together with coal supplies, are key drivers of prevailing market prices for coal. According to the Industry Report, in general, the majority of export coal is priced starting from supply contracts negotiated between Japanese end users (primarily utilities companies for thermal coal and steel mills for metallurgical coal) and Australian coal producers, from which the benchmark prices are established. The supply contracts have historically been negotiated on an annual basis but have more recently shifted to a quarterly basis. Coal sales are then priced by reference to this benchmark and adjusted for quality and loading port costs. In 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our average selling price per tonne for thermal coal was A$68, A$71, A$102, A$90 and A$117, respectively, while our average selling price per tonne for metallurgical coal was A$100, A$106, A$165, A$174 and A$191, respectively. While we did not experience any significant fluctuations in our average selling prices in 2015 and 2016, we had a significant increase in 2017 and the six months ended 30 June 2018, primarily due to:

(i) supply-side measures implemented by the PRC in late 2016 to curb domestic coal production, which had the effect of supporting global coal prices. This resulted in a significant increase in the global price for both thermal and metallurgical coal. Thermal prices increased from approximately US$50 per tonne to US$100 per tonne and semi-soft coking coal increased from approximately US$70 per tonne to US$130 per tonne. These developments contributed to increases in our prices towards the end of 2016 and for much of the first quarter of 2017;

(ii) Cyclone Debbie which struck Queensland in March 2017, causing a significant supply disruption in thermal and metallurgical coal;

(iii) industrial action at Glencore's Australian mine sites which supported the thermal coal price;

(iv) long vessel queues at Australia's Queensland ports, which supported the metallurgical coal price; and

(v) low-ash thermal prices continued to strengthen in the first half of 2018 due to a significant tightness in supply out of NSW together with increased demand, while high-ash thermal prices have been supported by higher demand from India.

These factors were partially offset by:

(i) environmental reform policies and the later easing of supply-side restrictions implemented by the Chinese government during part of 2017, which resulted in certain price decreases;

(ii) a softening of prices in the third quarter of 2017, though global prices continued to remain at above US$70 per tonne for thermal coal and above US$100 per tonne for semi-soft coking coal; and

(iii) towards the end of the first half 2018, the Chinese government re-implemented import restrictions on both thermal and metallurgical coal, which led to a decrease in demand.

During the Track Record Period, we largely priced our coal products by reference to the appropriate market price or benchmark, whilst also taking into consideration the quality of the coal relative to the market benchmark. Our customer contracts typically set out the coal sales amount by volume, with price determined either on a quality-adjusted fixed or index-linked price. Over the Track Record Period, we have sought to control our exposure to price volatility by targeting more end users to develop direct business relationships and diversify our customer base, while shifting away from selling to coal traders or engaging the spot market, which is more sensitive to price fluctuations. As a result, our customer base became increasingly dispersed over the Track Record Period. In 2015, 2016 and 2017 and the six months ended 30 June 2018, our top five customers accounted for 47.8%, 38.8%, 32.3% and 33.8% of our revenue, respectively, in the aggregate, and our top three customers accounted for 39.5%, 29.1%, 21.7% and 26.5% of our revenue, respectively, in the aggregate. No single customer represented more than 8.5% of our total revenue in 2017 or 10% in the six months ended 30 June 2018. See "*Business – Customers*" for further details.

The table below sets forth, for the periods indicated, a sensitivity analysis of the impact of hypothetical fluctuations in the average selling price of our coal products on our revenue and profit/loss after tax, assuming a 7% state government royalty and a 30% corporate income tax rate, and excluding the results of Middlemount:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Thermal coal					
Increase in ASP of 5%					
Revenue	27	31	79	22	80
Profit/loss after tax	18	20	52	15	52
Decrease in ASP of 5%					
Revenue	(27)	(31)	(79)	(22)	(80)
Profit/loss after tax	(18)	(20)	(52)	(15)	(52)
Increase in ASP of 10%					
Revenue	55	62	159	45	161
Profit/loss after tax	36	40	103	23	105
Decrease in ASP of 10%					
Revenue	(55)	(62)	(159)	(45)	(161)
Profit/loss after tax	(36)	(40)	(103)	(29)	(105)
Metallurgical coal					
Increase in ASP of 5%					
Revenue	26	18	31	11	23
Profit/loss after tax	17	11	20	7	15
Decrease in ASP of 5%					
Revenue	(26)	(18)	(31)	(11)	(23)
Profit/loss after tax	(17)	(11)	(20)	(7)	(15)

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Increase in ASP of 10%					
Revenue	53	35	61	22	47
Profit/loss after tax	34	23	40	15	30
Decrease in ASP of 10%					
Revenue	(53)	(35)	(61)	(22)	(47)
Profit/loss after tax	(34)	(23)	(40)	(15)	(30)
Total coal					
Increase in ASP of 5%					
Revenue	54	48	110	34	104
Profit/loss after tax	35	31	72	22	68
Decrease in ASP of 5%					
Revenue	(54)	(48)	(110)	(34)	(104)
Profit/loss after tax	(35)	(31)	(72)	(22)	(68)
Increase in ASP of 10%					
Revenue	107	97	220	67	208
Profit/loss after tax	70	63	144	44	135
Decrease in ASP of 10%					
Revenue	(107)	(97)	(220)	(67)	(208)
Profit/loss after tax	(70)	(63)	(144)	(44)	(135)

Sales volume

In 2015, 2016, and 2017 and the six months ended 30 June 2017 and 2018, our sales volume for thermal coal was 8.1 Mt, 8.8 Mt, 15.5 Mt, 4.9 Mt and 13.8 Mt, respectively, while our sales volume for metallurgical coal was 5.3 Mt, 3.3 Mt, 3.8 Mt, 1.3 Mt and 2.4 Mt, respectively, in each case exclusive of sales of purchased coal. Thermal coal sales volume increased during the Track Record Period due to the C&A Acquisition in 2017 and the expansion of Moolarben from 9.0 Mtpa ROM in 2015 to 17.0 Mtpa ROM in 2018 (on a 100% basis). Metallurgical coal sales volume decreased in 2016 due to the deconsolidation of the Austar, Ashton and Donaldson mines and increased in 2017 and the six months ended 30 June 2018 with the C&A Acquisition. Our coal sales volume is largely dependent on our production volume and transportation capacity. In particular, our ability to increase our sales volume in line with our planned growth strategies relies on efficiently increasing both our production capacity and transportation capacity over time to respond suitably to coal demand. Conversely, any bottlenecks in respect of either capacity could restrict our growth potential.

Production volume

We produced coal at five mine complexes (HVO (which is operated as an unincorporated joint venture with Glencore), MTW, Moolarben, Yarrabee and Stratford Duralie) as at 30 June 2018, all located across Australia. As at 31 December 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our total saleable

production volume for thermal coal was 8.1 Mt, 8.8 Mt, 15.5 Mt, 5.2 Mt and 14.4 Mt, respectively, while our total saleable production volume for metallurgical coal was 5.2 Mt, 3.3 Mt, 3.8 Mt, 1.3 Mt and 2.6 Mt, respectively. Similar to our sales volumes, our production volume has historically grown organically, through a mix of capital investment in the expansion and upgrade of existing mines, as well as inorganically, through significant acquisitions that we have undertaken, particularly during the Track Record Period. See "– *Acquisitions, Disposals and Deconsolidation*".

With respect to growth through acquisitions, during the Track Record Period we most notably acquired C&A in September 2017 for US$2.69 billion, which included interests in two mine complexes. The C&A Acquisition increased our total ROM production volume by approximately 152% based on 2017 annual ROM production. We intend to continue to expand our production capacity both organically and inorganically in the future, which will require significant further investments. See "*Business – Our Business Strategies*" and "*Risk Factors – We may experience difficulty in integrating our acquisitions, which could result in a material adverse effect on our business, financial condition and results of operations"* for further details.

Transportation capacity

We primarily rely on rail and port networks in Australia to transport our products to our customers. The rail networks that we utilise include:

- the Hunter Valley rail network to transport coal from the HVO, MTW, Moolarben and Stratford Duralie mines to PWCS and NCIG;
- the Blackwater rail network to transport coal from the Yarrabee mine to WICET and RGTCT; and
- with respect to the Middlemount JV, the Goonyella railway system to transport coal from the Middlemount mine to APCT.

In 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, we transported 13.3 Mt, 12.0 Mt, 19.3 Mt, 6.5 Mt and 16.6 Mt, respectively, of coal products through the rail networks available to us (excluding Middlemount). Over the Track Record Period, we did not experience any shortage of railway capacity for transportation of our coal. We do not have any priority or exclusivity over railway utilisation. Given the location of the mines, the bulk nature of coal and the export nature of all of our coal, we expect to continue to rely extensively on rail networks for our coal transportation needs to port in respect of both maintaining support for our current transportation needs (including the C&A mines that we acquired) as well as any future transportation needs arising out of mines under exploration or development coming into production.

We have contracted five port terminals in three locations in Australia (two in Queensland and one in New South Wales) for our freight transport needs. Our total freight allocation (on a 100% basis including Middlemount) across PWCS, NCIG, WICET, RGTCT and APCT was 60.8 Mtpa as at both 30 June 2018 and 31 December 2017, 32.6 Mtpa as at 31 December 2016 and 28.9 Mtpa as at 31 December 2015. As at the Latest Practicable Date, we were also a 30.0% equity shareholder in PWCS, a 27.0% shareholder in NCIG and held 9.38% voting entitlements in WICET. We believe that shareholding in ports generally provides us with better access to capacity commitments from these ports. As our mines under exploration or development enter production, we intend to increase our freight allocation by contracting for additional capacity with these ports. We may also identify additional ports to contract with, depending on business needs, location and other commercial considerations.

We currently have excess port capacity commitments across our NSW operations (where the substantial majority of our coal production volume is generated), which allows us to increase production volume at our existing mines and bring new mines online in the near future without experiencing significant bottlenecks in our port capacity. However, excess capacity also results in incurred costs for us. We generally contract for both our port and rail capacity under long-term take-or-pay contracts, under which we are required to pay for the contracted port or rail tonnage regardless of whether it is utilised. Unused port or rail capacity can arise as a result of circumstances including insufficient production from any given mine, or an inability to transfer the unused capacity due to a lack of demand from third parties. As a result, we constantly aim to achieve a sustainable balance between our contracted transportation capacity (taking into account potential fluctuations in production volume) and our costs incurred for excess capacity. With this aim in mind, in 2017 we reduced our take-or-pay exposure to A$65 million (including take-or-pay contracts obtained under the C&A Acquisition) from A$74 million in 2016 (on a 100% basis including Middlemount) by (i) increasing our production, particularly at Moolarben, and (ii) utilising opportunities to trade port capacity commitments with other coal producers who need additional capacity from time to time on a spot basis. In the medium to long-term, we aim to reduce our overall take-or-pay exposure in NSW by continuing to seek opportunities for organic growth and capture savings as a result of economies of scale, as well cancelling the long-dated rollovers on certain contracts, which reduces our overall port capacity in the longer term to align more closely with our actual expected production. See "*– Description of Major Line Items in Our Consolidated Statements of Profit and Loss and Other Comprehensive Income – Transportation*" for further details on our transportation costs and a sensitivity analysis of hypothetical fluctuations in our transportation costs during the Track Record Period.

See "*Business – Infrastructure, Transportation and Logistics*" and "*Risk Factors – Fluctuations in transportation costs and disruptions to our railway and port linkages could disrupt our coal deliveries and adversely affect our business, financial condition and results of operations*" for further details.

Operating and Production Costs

Our all-in total production costs, which include cash and non-cash operating costs, represent costs directly attributable to the production, transportation and selling of coal as well as indirect corporate costs, in particular corporate employee costs, but excluding transaction costs incurred on the C&A Acquisition and in connection with the Listing. Cash operating costs comprise the cost of raw materials and consumables used, employee benefits, contractual services and plant hire and transportation. Non-cash operating costs include depreciation and amortisation. See "*– Description of Major Line Items in Our Consolidated Statements of Profit or Loss and Other Comprehensive Income*" for further details on the nature of our cash operating costs and "*– Review of Historical Results of Operations*" for a discussion of the year-on-year changes and trends in these line items. Our total production cost per sales tonne, excluding royalties, was A$84, A$74, A$76, A$77 and A$81 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan underground mines and reduced operations at Stratford Duralie, together with ongoing cost saving initiatives across all sites. The increase in 2017 and 2018 was primarily due to the additional depreciation and amortisation of property, plant and equipment and mining tenements recognised on the C&A Acquisition and an increase in raw materials and consumables used.

Given the significant amounts of our production costs, our profitability is directly affected by our ability to control them. At the same time, we must balance cost considerations with ensuring that we have a reliable and adequate supply of materials and manpower in order to carry out our operations at the scale that we seek to achieve or maintain. These costs may fluctuate significantly due to market or other forces which may be out of our control. For example, our suppliers for raw materials and consumables may experience changes in their own operating or supply costs, which they may pass on to us. Similarly, changes in macroeconomic conditions may affect the cost and availability of labour, which, depending on our own staffing needs as we adjust our operating scale through capital expenditure, acquisitions and disposals, may result in us incurring higher average labour costs in certain periods than others. See "*Risk Factors – Our coal production is subject to conditions and events beyond our control that could result in high expenses and decreased supply*" for further details.

The table below sets forth, for the periods indicated, a breakdown of our total production costs:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Cash operating costs					
Raw materials and consumables used	213	187	349	109	337
Employee benefits	229	188	302	102	254
Transportation	261	267	312	122	274
Contractual services and plant hire	218	121	241	69	196
Cash operating costs (excluding royalties)	921	763	1,204	402	1,061
Royalties	77	71	173	53	161
Total cash operating costs	998	834	1,377	455	1,222
Non-cash operating costs					
Depreciation and amortisation	200	133	256	80	244
Total production costs	1,198	967	1,633	535	1,466
Total production costs (excluding royalties)	1,121	896	1,460	482	1,305

During the Track Record Period, the overall increase in total production costs (excluding royalties) was in line with the overall increase in production volume and revenue, particularly when taking into account the Moolarben expansion and the operating results of C&A. Our production costs in the future are likely to continue to be driven by material changes in the amount of coal produced and to a lesser extent by the cost per tonne produced.

The table below sets forth, for the periods indicated, a breakdown of our total production costs per sales tonne, excluding the impact of movements in coal inventory:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
	A$ per tonne				
Cash operating costs					
Raw materials and consumables used	16	15	18	18	21
Employee benefits	17	16	15	16	16
Transportation	20	22	16	20	17
Contractual services and plant hire	16	10	13	11	12
Cash operating costs (excluding royalties)	69	63	62	65	66
Royalties	6	6	9	9	10
Cash operating costs	75	69	71	74	76
Non-cash operating costs					
Depreciation and amortisation	15	11	14	12	15
Total production costs	90	80	85	86	91
Total production costs (excluding royalties)	84	74	76	77	81

During the Track Record Period, our total production costs (excluding royalties) decreased from A$84 per saleable tonne in 2015 to A$81 per saleable tonne in the six months ended 30 June 2018. Our cash operating cost per sales tonne before royalties was A$69, A$63, A$62, A$65 and A$66 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan underground mines and reduced operations at Stratford Duralie, together with ongoing cost saving initiatives across all sites. Between 2016 and 2017, there was a slight decrease from A$63 to A$62 per sales tonne, and between the six months ended 30 June 2017 and the six months ended 30 June 2018 there was a slight increase from A$65 to A$66 per sales tonne. Cash operating costs between these periods remained relatively unchanged despite an increase in market-driven costs of consumables such as diesel and electricity and despite the fact that in each of the former periods Moolarben (which is a low cost mine that is in the first quartile

of the cash cost curve) had a materially high weighting in our overall portfolio. While HVO and MTW are higher operating cost mines than Moolarben, they still fall within the second quartile of the cash cost curve (and rank higher than Moolarben on the cash margin curve) and as such are considered low cost mines. See "*Industry Overview – Competitive Landscape – Cost Competitiveness Analysis*". Our total production costs in the future are likely to continue to be driven by material changes in the amount of coal produced at each site, further synergies from the C&A Acquisition and further cost saving initiatives.

The table below sets forth, for the periods indicated, a breakdown of our total and per tonne production costs by: (i) workforce employment; (ii) consumables; (iii) fuel, electricity, water and other utilities services; (iv) contractual services and plant hire, (v) on and off-site administration; (vi) environmental protection and monitoring; (vii) transportation of workforce; (viii) product marketing and transport; (ix) non-income taxes, royalties and other governmental charges; and (x) contingency allowances, in each case as applicable.

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Cash operating costs					
Workforce employment	227	184	299	100	253
Consumables	149	138	248	76	227
Fuel, electricity, water and other utilities services	64	49	101	33	109
Contractual services and plant hire	195	110	213	62	181
On and off site administration	17	14	22	5	12
Environmental protection and monitoring	8	5	9	4	5
Transportation of workforce	–	–	–	–	–
Product marketing and transport	261	267	312	122	274
Non-income taxes, royalties and other government charges	77	71	173	53	161
Contingency allowances	–	–	–	–	–
Total cash operating costs	998	838	1,377	455	1,222

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ per tonne		
Cash operating costs					
Workforce employment	17	15	15	16	16
Consumables	11	11	13	12	14
Fuel, electricity, water and other utilities services	5	4	5	5	7
Contractual services and plant hire	15	9	12	10	11
On and off site administration	1	1	1	1	1
Environmental protection and monitoring	1	1	–	1	–
Transportation of workforce	–	–	–	–	–
Product marketing and transport	19	22	16	20	17
Non-income taxes, royalties and other government charges	6	6	9	9	10
Contingency allowances	–	–	–	–	–
Total cash operating costs	75	69	71	74	76

Workforce employment

Workforce employment primarily consists of salaries, wages, benefits, short-term and long-term incentives and employee onboarding costs for all our employees. Workforce employment amounted to A$227 million, A$184 million, A$299 million, A$100 million and A$253 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, with per tonne workforce employment costs of A$17, A$15, A$15, A$16 and A$16, respectively. The decrease in per tonne costs was primarily due to the deconsolidation of the Watagan Mines, the expansion of Moolarben and the C&A Acquisition.

Consumables

Our consumables include maintenance, explosives, tyres and other general consumables. Consumables used amounted to A$149 million, A$138 million, A$248 million, A$76 million and A$227 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne consumables used of A$11, A$11, A$13, A$12 and A$14, respectively. The increase in per tonne costs in 2017 and the six months ended 30 June 2018 was primarily due to larger truck fleets at the acquired C&A mines due to longer haulage distances.

Fuel, electricity and water

Fuel, electricity and water amounted to A$64 million, A$49 million, A$101 million, A$33 million and A$109 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne fuel, electricity and water costs of A$5, A$4, A$5, A$5 and A$7 over the same period with the increase in the six months ended 30 June 2018 primarily due to an increase in diesel and electricity prices.

Contractual services and plant hire

Contractual services and plant hire primarily consists of contractors, including contract mining, consultants and equipment hire costs, but excluding contracted service expenses for environmental protection and monitoring. These costs amounted to A$195 million, A$110 million, A$213 million, A$62 million and A$181 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne costs of A$15, A$9, A$12, A$10 and A$11, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan mines and the shift in Stratford Duralie's operations from outsourced contractual management to an insourced owner-operator model. The increase in 2017 was primarily due to the acquisition of C&A mines which utilise a significant number of contractors and hire equipment. We believe that contractual services and plant hire costs are most appropriately categorised as a separate component of cash operating costs. In particular, contractual services and plant hire costs include contractors who are not full-time workforce employees nor administrative in nature, as well as equipment hires which are not consumables nor used for transportation.

On and off site administration

On and off site administration primarily consists of administrative expenses, including legal, accounting and tax and other professional service fees, and excluding transaction costs incurred on the C&A Acquisition and in connection with the Listing. These costs amounted to A$17 million, A$14 million, A$22 million, A$5 million and A$12 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, with per tonne on and off site administration costs of A$1 in each period.

Product marketing and transport

Product marketing and transport costs consist of our transport costs incurred primarily in connection with the cost of transporting our coal products to customers, including handling and delivery of coal from our mines to the relevant port via rail for export to overseas end customers (typically on a FOB basis). Our transportation costs amounted to A$261 million, A$267 million and A$312 million, A$122 million and A$274 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne costs of A$19, A$22, A$16, A$20 and A$17, respectively. The increase in per tonne costs in 2016 was primarily due to an increase in take-or-pay port commitments. The decrease in 2017 and the six months ended 30 June 2018 was primarily due to lower average rail costs and spreading our take-or-pay port exposure across a larger transport volume.

Non-income taxes, royalties and other government charges

Non-income taxes, royalties and other government charges consist of royalties paid to the governments of New South Wales and Queensland on coal produced in these states. These royalties amounted to A$77 million, A$71 million, A$173 million, A$53 million and A$161 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne costs of A$6, A$6, A$9, A$9 and A$10, respectively. The increase in 2017 and the six months ended 30 June 2018 was primarily due to the increase in average selling prices and the higher volume of coal produced in open-cut mines in part due to the C&A Acquisition. Royalties are determined on an ad valorem basis by reference to the value of the coal sold and the type of mine, with open-cut mines generally having higher royalty rates than underground mines.

Capital Expenditure

We undertake both sustaining and expansionary capital expenditure. Sustaining capital expenditure is generally undertaken to maintain our current level of production for existing operations. Expansionary capital expenditure includes growth projects with the aim of increasing our production. Capital expenditure in respect of mine expansions and business improvement projects was A$159 million, A$237 million, A$165 million, A$87 million and A$19 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. This was mainly attributable to our Moolarben mine, which during the Track Record Period has expanded from a 9.0 Mtpa ROM mine in 2015 to 14.7 Mtpa in 2017, and which we intend to further expand to 17.0 Mtpa ROM in 2018 (each on a 100% basis). Capital expenditure investments in Moolarben primarily consisted of developing and expanding the open cut portions of the mine as well as the underground complex, together with investments in the equipment needed. We undertake expansionary capital expenditure following a strict business case analysis, including in respect of viability, source and cost of funds and the timing and sensitivity to movements in coal prices. We also incurred exploration expenditure of A$2.7 million, A$0.4 million, A$2.8 million, A$1.4 million and A$1.9 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, in relation to mines in operation, which we capitalised. See "– *Capital Expenditure*" for a breakdown of our total capital expenditure during the Track Record Period.

The costs associated with capital expenditure plans could have a significant impact on our financial condition and results of operations, particularly if we are unable to generate sufficient coal production and sales to recover our investment or generate a profit. See "*Risk Factors – We may not be able to meet our capital expenditure requirements or secure additional financing on favourable terms, whether from external sources or our major shareholders, in the future*" for further details.

Financing Arrangements and Interest Rate Movements

We operate in a capital-intensive industry that requires a significant investment of funds. We have historically relied heavily on borrowings from banks and related parties, including Yanzhou, our direct Controlling Shareholder, for these funding needs. As at 31 December 2015, 2016 and 2017 and 30 June 2018, our total interest-bearing loans and lease liabilities amounted to A$4,732 million, A$4,950 million, A$4,699 million and A$4,284 million, respectively, of which the majority were subject to floating interest rates based on US$ LIBOR and secured against corporate guarantees from Yanzhou and certain of our assets. See "– *Indebtedness*" for further details. Our finance costs, which primarily consist of interest expenses on our borrowings as well as bank fees and other charges associated with those borrowings (which are classified under other operating

expenses) amounted to A$278 million, A$323 million, A$403 million, A$154 million and A$214 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, for an average cost of funds of 6.45%, 7.29%, 7.93%, 7.85% and 8.42%, respectively. Given that global interest rates are currently increasing and are expected to further increase in the foreseeable future, our finance costs could increase as well. See "*Risk Factors – We are exposed to fluctuations in exchange rates and interest rates*" for further details.

At the same time, we also derive interest income from loans to other parties. For example, as part of the transfer of interest in the Ashton, Austar and Donaldson mines to Watagan on 31 March 2016, the purchase consideration was effectively funded through a loan provided to Watagan bearing interest at the bank bill swap bid rate plus 7.06%. The loan matures in 2025 and is repayable earlier at Watagan's option. The transfer of ownership on 31 March 2016 occurred between wholly owned subsidiaries of the Company at book value with the loan representing non-cash consideration.

Foreign Exchange Rate Fluctuations

We have export sales across the Asia-Pacific region and significant debt funding, both largely denominated in US dollars, and our imported plant and equipment may be priced in US dollars or another foreign currency. At the same time, we operate entirely in Australia with an Australian dollar functional currency. As a result, our financial results are exposed to foreign exchange rate movements, particularly those relating to the Australian dollar and US dollar rate exchange rate.

During the Track Record Period, the A$:US$ exchange rate experienced frequent fluctuations. For example, according to the H.10 statistical release of the Federal Reserve Board, the Australian dollar generally weakened against the US dollar throughout 2015 and early 2016, with the A$:US$ ratio reaching a low of approximately 0.6864 as at 16 January 2016. During this time, our US dollar-denominated sales generated higher revenue as reported in Australian dollars (without taking into account fluctuations in coal prices generally). The A$:US$ rate then gradually strengthened over 2016 and 2017 to reach a high of approximately 0.8071 as at 8 September 2017, during which time our sales and costs experienced the inverse effect.

As foreign exchange rates can vary significantly based on factors outside our control, we seek to hedge our currency exposures. We apply a natural hedge strategy whereby the scheduled repayment of our US dollar denominated loans is nominated against forecast US dollar denominated revenue in the future period matching the scheduled loan repayment date. Through this strategy any unrealised foreign exchange rate gains or losses incurred through the periodic translation of the US dollar denominated loans is deferred on the balance sheet within a hedge reserve. This hedge reserve reverses to the profit and loss in the financial period corresponding with the scheduled loan maturity date. We also enter short term forward exchange contracts to manage the currency exposure between the invoice date of US dollar denominated sales and the cash collection date. Our hedging policy aims to protect against reduced collection of receivables and to reduce the volatility of our US dollar debt. See "*– Qualitative and Quantitative Disclosures on Market Risk"* and "*Risk Factors – We are exposed to fluctuations in exchange rates and interest rates*" for further details.

Taxation

As all our operating entities and operational activities, including those of C&A, are located in Australia, we are generally subject to the statutory corporate tax rate in Australia of 30%. Broadly, as we recorded a loss before income tax in 2015 and 2016 and the six months ended 30 June 2017, we recorded an income tax benefit of A$63 million, A$85 million and A$4 million, respectively. On the other hand, we had profit before income tax in 2017 and the six months ended 30 June 2018, resulting in an income tax expense of A$89 million and A$178 million, respectively. As a result of accumulated tax losses incurred through 2016, we did not pay any cash income tax during the Track Record Period, and do not expect to pay any cash income tax for the near future as we continue to carry forward, and expect to recoup, our prior tax losses. As at 30 June 2018, we had approximately A$2.4 billion of available carried forward tax losses which can be applied to reduce future liability for income tax on our taxable profits, so long as they remain available. Our ability to use these carried forward tax losses will depend, in part, on our continued satisfaction of the loss recoupment tests under Australian tax laws. See "*Risk Factors – The Company may lose the benefit of existing and carried forward tax losses, which may have an adverse effect on its profits*" for further details.

Our effective income tax benefit/expense rate was 17.8%, 27.2%, 26.6%, 22.2% and 33.0% in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, which was lower than the statutory tax rate. This was primarily due to non-temporary differences arising (i) in 2015 and 2016, from non-deductible expenses and prior year under or over provisions for taxes, (ii) in 2015 and 2017, from share of profit or loss non-deductible of equity-accounted investees and (iii) in the six months ended 30 June 2018, from non-deductible expenses, in particular, the impairment of investments in GILTs and WIPs in connection with the WICET senior debt refinancing. See note 10 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details. We expect taxation to continue to materially affect our operating results going forward, regardless of whether we generate a profit before tax or not.

In addition, our tax expenses are not currently affected by the tax benefits/expenses of Watagan. While Watagan is part of the tax consolidated Group, each member entity of the Group is responsible for its own tax obligations. As Watagan is currently deconsolidated for accounting purposes, any resultant tax expense or benefit of Watagan results in a payable or receivable balance between us and Watagan, but the Group's overall tax expenses are otherwise not affected by Watagan.

Impact of Acquisitions, Disposals and Deconsolidation

We have historically have a number of significant transactions in the form of acquisitions, disposals and deconsolidation which had a substantial impact on our historical financial results. See "– *Acquisitions, Disposals and Deconsolidation*" for further details. We may continue to explore and evaluate undertaking these and similar types of transactions going forward, which may further impact our financial results, including to a degree where prior periods are not necessarily comparable with future periods.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

This discussion and analysis of our financial position and results of operations is based on our consolidated financial statements, which have been prepared in accordance with IFRS. The preparation of our consolidated financial statements requires management to make estimates, judgments and assumptions that affect the

reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities at the end of each reporting period. Uncertainty about these estimates and assumptions could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods. Our more critical accounting policies and significant estimates, assumptions and judgments are described below. See notes 4 and 5 to the Accountants' Report of the Group in Appendix IA in this prospectus for further details on our accounting policies, judgments and estimates.

Business Combinations

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs incurred to effect a business combination are recognised in profit or loss as incurred.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date, except that:

- deferred tax assets or liabilities arising from the assets acquired and liabilities assumed in the business combination are recognised and measured in accordance with IAS 12 *Income Taxes*;

- assets or liabilities related to the acquiree's employee benefit arrangements are recognised and measured in accordance with IAS 19 *Employee Benefits*;

- liabilities or equity instruments related to share-based payment transactions of the acquiree or the replacement of the acquiree's share-based payment transactions with the share-based payment transactions of the Group are measured in accordance with IFRS 2 *Share-based Payment* at the acquisition date (see the accounting policy below); and

- assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that standard.

Goodwill is measured as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of our previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after re-assessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the aggregate of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a gain on bargain purchase.

Non-controlling interests, unless as required by another standards, are measured at acquisition-date fair value except for non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation are measured either at fair value or at the present ownership instruments' proportionate share in the recognised amounts of the acquiree's identifiable net assets on a transaction-by-transaction basis.

Where the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with the corresponding adjustments being made against goodwill or gain on bargain purchase. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed as of the acquisition date. Measurement period does not exceed one year from the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounting for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates at fair value with corresponding gain or loss being recognised in profit or loss.

When a business combination is achieved in stages, our previously held equity interest in the acquiree is remeasured to fair value at the acquisition date (i.e., the date when we obtain control), and the resulting gain or loss, if any, is recognised in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, we report provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised as of that date.

Interests in Other Entities

Associates

Associates are all entities over which we have significant influence but not control or joint control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting, after initially being recognised at cost. Our investments in associates includes goodwill identified on acquisition.

Our share of our associates' post-acquisition profits or losses is recognised in profit or loss, and our share of post-acquisition other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. Dividends receivable from associates are recognised as a reduction in the carrying amount of the investment.

When our share of losses in an associate equals or exceeds our interest in the associate (which includes any long-term interests that, in substance, form part of our net investment in the associate), we do not recognise further losses, unless we have incurred obligations or made payments on behalf of the associate.

Unrealised gains on transactions between us and our associates are eliminated to the extent of the our interest in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the associates have been changed where necessary, to ensure consistency with the policies adopted by us.

Joint arrangements

A joint arrangement is a contractual arrangement whereby two or more parties undertake economic activities under joint control. Joint control exists only when the strategic, financial and operational policy decisions relating to the activities of the joint arrangement require the unanimous consent of the parties sharing control.

A joint arrangement is either a joint operation or a joint venture. The structure of each joint arrangement is analysed to determine whether the joint arrangement is a joint operation or a joint venture. The classification of a joint arrangement is dependent on the rights and obligations of the parties to the arrangement.

Joint operations

We recognise our proportional right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses. These have been incorporated in the financial statements under the appropriate headings.

Joint ventures

A joint venture is structured through a separate vehicle and the parties have rights to the net assets of the arrangement. Joint ventures are accounted for using the equity method where the assets and liabilities will be aggregated into one line item on the face of the consolidated statements of financial position, after adjusting for the share of profit or loss after tax, which is shown as a separate line item on the face of the consolidated statements of profit or loss and other comprehensive income, after adjusting for amounts recognised directly in equity.

When our share of losses in a joint venture equals or exceeds our interest in the joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint venture), we do not recognise further losses, unless we have incurred obligations or made payments on behalf of the joint venture.

Unrealised gains on transactions between us and our joint ventures are eliminated to the extent of our interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary, to ensure consistency with the policies adopted by us.

Coal Reserves and Resources

We estimate our coal resources and reserves based on information compiled by competent persons as defined by the JORC Code and the ASX Listing Rules.

Mineral resources and ore reserves are based on geological information and technical data relating to the size, depth, quality of coal, suitable production techniques and recovery rates. Such an analysis requires complex geological judgements to interpret the data. The estimation of recoverable reserves is based on factors such as estimates of foreign exchange rates, coal price, future capital requirements, rehabilitation obligations and production costs, along with geological assumptions and judgements made in estimating the size and quality of the reserves. Management forms a view of forecast sales prices based on current and long-term historical average price trend.

As the economic assumptions used may change and as additional geological information is produced during the operations of a mine, estimates of reserves may change. Additionally the amount of reserves that may actually be mined in the future and our current reserve estimate may vary. Such changes may impact our reported financial position and results including:

- the carrying value of the exploration and evaluation assets, mine properties, property, plant and *equipment* and goodwill may be affected due to changes in estimated future cash flows;

- depreciation and amortisation charges in the statement of profit and loss and other *comprehensive* income may change where such charges are determined using the units of production method, or where the useful life of the related assets change; and

- the carrying value of deferred income tax assets may change due to changes in the judgements regarding the existence of such assets and in estimates of the likely recovery of such assets.

Revenue Recognition

Revenue is recognised when the control of the products or services has transferred to the customer. Revenue is measured at the amount of consideration to which we expect to be entitled in exchange for transferring control of products or services to the customer. Amounts disclosed as revenue are net of returns, trade allowances, rebates and amounts collected on behalf of third parties.

Descriptions of our performance obligations in contracts with customers and significant judgments applied in revenue recognition are as follows:

Sales of coal

We produce and sell a range of thermal and metallurgical coal products. Revenue from the sale of coal is recognised when control of the product has transferred to the customer. Control of the product is considered transferred to the customer at a point in time which is the time of delivery, usually on a Free On Board ("**FOB**") basis or a Cost and Freight ("**CFR**") basis. For CFR contracts the performance obligation relating to freight services is accounted for as a separate performance obligation pursuant to IFRS 15. On occasion revenue from the sale of coal is recognised as the ship pulls into harbour on a Free Alongside Ship ("**FAS**") basis or from the stockpile on an ex-works basis. The adoption of IFRS 15 has not had, and is not expected to have, a significant effect on our financial position or performance.

A receivable is recognised when the products are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due. Payment of the transaction price is usually due within 21 days of the date when control of the products is transferred to the customer.

Some of our coal sales contracts are long-term supply agreements which stipulate the nominal annual quantity and price negotiation mechanism. For those contracts, the actual quantity and transaction price applicable for future shipments are only negotiated or determined prior to the beginning of, or a date which is after, each contract year or delivery period. The transaction price for a future shipment is based on, or derived from, a market price prevailing at the time of the future shipment. As the future market price for coal is highly susceptible to factors outside the Group's influence, the transaction price for a shipment is not readily determinable until or nearing the time of the shipment. As a result, we have concluded that a contract with the customer does not exist for those shipments for which the actual delivery quantity and transaction price have not yet been negotiated or determined.

Other revenue

Interest

Interest income from a financial asset is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts the estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount. Interest income from a finance lease is recognised over the term of the lease based on a pattern reflecting a constant periodic rate of return on the net investment in the lease.

Mining services fees

We provide corporate support services, IT services and mining services which relates to the management of mines. The management and mining service agreements stipulate a fixed monthly service fee and payment of the service fees is usually due within 21 days after the end of each calendar month in which the service is rendered. Revenue from providing management and mining services is recognised in each month in which the services are rendered.

Sea freight services

When contracts for sale of coal include freight on a CFR basis the performance obligation associated with providing the shipping is separately measured and recognised as the service is provided.

Other

Other primarily consists of dividends, rents, sub-lease rental and management fees. Dividends are recognised as revenue when the right to receive payment is established, it is probable that the economic benefits associated with the dividend will flow to us and the amount of the dividend can be measured reliably. Rental income arising on land surrounding a mine site is accounted for on a straight-line basis over the lease term. Contingent rental income is recognised as income in the periods in which it is earned. Management fees are recognised upon the delivery of the service to the customer.

Other income

Gain on acquisition is recognised in line with the accounting for business combinations.

Taxation

The income tax expense or benefit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate enacted or substantially enacted at the end of the reporting period for each jurisdiction, adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses. The carrying value of the deferred tax asset is reviewed at each reporting period and reduced to the extent that it is no longer probable that future taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax liabilities and assets are recognised for taxable temporary differences between the carrying amount and tax bases of investments in controlled entities, except where the parent entity is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where we have a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax is recognised in the profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

Property, Plant and Equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses. The cost includes expenditure directly attributable to the acquisition of the items and the estimated restoration costs associated with the asset.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of any component accounted for as a separate asset is derecognised when replaced. All other repairs and maintenance are charged to profit or loss during the reporting period in which they are incurred.

Mine development assets include all mining related development expenditure that is not included under land, buildings and plant and equipment.

The open pit operations capitalise mine development costs including both direct and indirect costs incurred to remove overburden and other waste materials to enable access to the coal seams during the development of a mine before commercial production commences, and during future development of new open pit mining areas. Amortisation of those capitalised costs over the life of the operation commences at the time that commercial production begins for the mine for the new open pit mining area.

Underground mine development costs include both direct and indirect mining costs relating to underground longwall panel development and mains development (primary access/egress roads for the mine).

Mains development costs are capitalised net of the coal sales revenue earned from coal extracted as part of the mains development process. These capitalised costs are amortised over the life of the mine if the roads service the entire mine or over the life of the panels accessible from those mains if shorter than the mine life.

A regular review is undertaken of each area of interest to determine the appropriateness of continuing to carry forward mine development costs in relation to that area of interest. Accumulated costs in relation to an abandoned area are written off in full in the period in which the decision to abandon the area is made.

Assets under construction represent production site development projects under construction for production or for its own use purposes. Assets under construction are carried at cost less any impairment loss. Costs included costs of constructing the production plant and acquisition of mining rights, mining permits and licenses that form an integral part of the overall development projects. Assets under construction are classified to the appropriate category of property, plant and equipment or intangible assets when completed and ready for intended use. Depreciation or amortisation commences when the assets are ready for their intended use.

Open cut

During the commercial production stage of open pit operations, production stripping costs comprises the accumulation of expenses incurred to enable access to the coal seam, and includes direct removal costs (inclusive of an allocation of overhead expenditure) and machinery and plant running costs.

Production stripping costs are capitalised as part of an asset, if it can be demonstrated that it is probable that future economic benefits will be realised, the costs can be reliably measured and the entity can identify the component of the ore body for which access has been improved. The asset is called "stripping activity asset" included in mine development.

The stripping activity asset is amortised on a systematic basis, over the expected useful life of the identified component of the ore body that becomes more accessible as a result of the stripping activity. The units of production method shall be applied.

Production stripping costs that do not satisfy the asset recognition criteria are expensed.

Depreciation and amortisation

The depreciable amount of all fixed assets, excluding freehold land, is depreciated on a straight-line or units of production basis over the asset's useful life to us based on life of mine plans and JORC estimated reserves, commencing from the time the asset is held ready for use. Leased assets are depreciated over the asset's useful life or over the shorter of the asset's useful life and the lease term if there is no reasonable certainty that we will obtain ownership at the end of the lease term. Leasehold improvements are depreciated over the period of the lease or estimated useful life, whichever is the shorter, using the straight-line method.

For some assets, the useful life of the asset is linked to the level of production. In such cases, depreciation is charged on a units of production basis based on the recoverable reserves or the remaining useful hours. For example, the cost of mining development is depreciated using the unit of production method based on the estimated production volume for which the structure was designed. The management exercises their judgment in estimating the useful lives of the depreciable assets and the production volume of the mine. The estimated coal production volumes are updated at regular intervals and have taken into account recent production and technical information about each mine. These changes are considered a change in estimate for accounting purposes and are reflected on a prospective basis in related depreciation rates. Estimates of the production volume are inherently imprecise and represent only approximate amounts because of the subjective judgements involved in developing such information. Alternatively, the straight-line method may be used where this provides a suitable alternative because production is not expected to fluctuate significantly from one year to another.

Mining reserve and mining resources are amortised on a straight line basis or unit of production basis over the shorter of their useful lives and the contractual period. The expensing of overburden removal costs is based on saleable coal production over estimated economically recoverable reserves. The useful lives are estimated on the basis of the total proven and probable reserves of the mine. Proven and probable mining reserve estimates are updated at regular intervals and have taken into account recent production and technical information about each mine.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period and any change in estimate is taken into account in the determination of remaining depreciation charges.

The estimated useful lives are as follows:

- Buildings 10 – 25 years
- Mine development 10 – 40 years
- Plant and equipment 2.5 – 40 years
- Leased plant and equipment 2 – 20 years

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Any gain or loss arising on the disposal of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

Mining Tenements

Mining tenements have a finite useful life and are carried at cost less any accumulated amortisation and impairment losses. Mining tenements are amortised from the date when commercial production commences, or the date of acquisition. Amortisation is calculated over the life of the mine on a 'units of production' method based on the JORC estimated reserves.

Changes in the annual amortisation rate resulting from changes in the remaining estimated reserves, are applied on a prospective basis from the commencement of the next financial year. Every year the mining tenement's carrying amount is compared to its recoverable amount and assessed for impairment, or for possible reversals of prior year impairment (see the accounting policy in respect of impairment losses on tangible and intangible assets below).

Exploration and Evaluation Assets

Exploration and evaluation expenditure incurred is accumulated in respect of each separately identifiable area of interest which is at the individual exploration permit or licence level. These costs are only carried forward where the right of tenure for the area of interest is current and to the extent that they are expected to be recouped through successful development and commercial exploitation, or alternatively, sale of the area, or where activities in the area have not yet reached a stage which permits reasonable assessment of the existence of economically recoverable reserves and active and significant operations in, or in relation to, the area of interest are continuing.

Exploration and evaluation assets acquired in a business combination are recognised at their fair value at the acquisition date. The carrying amount of exploration and evaluation assets are assessed for impairment when facts or circumstances suggest the carrying amount of the assets may exceed their recoverable amount. A regular review is undertaken for each area of interest to determine the appropriateness of continuing to carry forward costs in relation to each area of interest. Accumulated costs in relation to an abandoned area are written off in full in the period in which the decision to abandon the area is made.

Once the technical feasibility and commercial viability of the extraction of mineral resources in an area of interest are demonstrable, the exploration and evaluation assets attributable to that area of interest are first tested for impairment and then reclassified to mining tenements.

Interest-bearing Liabilities

Interest-bearing liabilities (excluding financial guarantees) are initially recognised at fair value, net of transaction costs. They are subsequently measured at amortised cost using the effective interest rate method. US dollar interest bearing loans are designated as a hedge instrument in a cash flow hedge.

Leases

Property, plant and equipment held by us under leases that transfer substantially all of the risks and rewards of ownership to us are classified as finance leases.

The leased property, plant and equipment are initially measured at an amount equal to the lower of their fair value and the present value of the minimum lease payments. Subsequently they are accounted for in accordance with the property, plant and equipment accounting policy.

The corresponding minimum lease payments are included in lease liabilities within interest bearing liabilities. Each lease payment is allocated between finance cost and a reduction in the outstanding lease liability. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

The net gains arising on the sale of an asset and the leasing back of the same asset using a finance lease are included as deferred income in the statement of financial position and are released to the profit or loss on a straight-line basis over the term of the lease.

We expect to adopt IFRS 16 on leases commencing from 1 January 2019, which may affect our accounting results for leases going forward. See "*Risk Factors – The future adoption of IFRS 16 on the accounting treatment of our leases may impact our financial results*" for further details.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of assets that necessarily take a substantial period of time to prepare for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

All other borrowing costs are recognised as an expense in the period in which they are incurred.

DESCRIPTION OF MAJOR LINE ITEMS IN OUR CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

The table below sets forth our consolidated statements of profit or loss for the periods indicated:

	Year ended 31 December						Six months ended 30 June			
	2015		2016		2017		2017		2018	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*
Revenue	1,319	100.0	1,238	100.0	2,601	100.0	832	100.0	2,347	100.0
Other income	34	2.6	15	1.2	325	12.5	8	1.0	115	4.9
Changes in inventories of finished goods and work in progress	2	0.2	(7)	(0.6)	7	0.3	10	1.2	24	1.0
Raw materials and consumables used	(213)	(16.2)	(187)	(15.1)	(349)	(13.4)	(109)	(13.1)	(337)	(14.3)
Employee benefits expenses	(229)	(17.4)	(188)	(15.2)	(302)	(11.6)	(102)	(12.3)	(254)	(10.8)
Depreciation and amortisation	(200)	(15.2)	(133)	(10.7)	(256)	(9.8)	(80)	(9.6)	(244)	(10.4)
Transportation	(261)	(19.8)	(267)	(21.6)	(312)	(12.0)	(122)	(14.7)	(274)	(11.7)
Contractual services and plant hire	(218)	(16.5)	(124)	(10.0)	(274)	(10.5)	(90)	(10.8)	(206)	(8.8)
Government royalties expense	(77)	(5.8)	(71)	(5.7)	(173)	(6.7)	(53)	(6.4)	(161)	(6.9)
Changes in deferred mining costs	(7)	(0.5)	–	–	–	–	–	–	–	–
Coal purchases	(158)	(12.0)	(211)	(17.0)	(340)	(13.1)	(148)	(17.8)	(182)	(7.7)
Other operating expenses	(147)	(11.1)	(163)	(13.2)	(330)	(12.7)	(76)	(9.1)	(170)	(7.2)
Finance costs	(162)	(12.3)	(209)	(16.9)	(294)	(11.3)	(105)	(12.6)	(152)	(6.5)
Share of profit/(loss) of equity-accounted investees, net of tax	(37)	(2.8)	(5)	(0.4)	32	1.2	17	2.0	33	1.4
Profit/(loss) before income tax	(354)	(26.8)	(312)	(25.2)	335	12.9	(18)	(2.2)	539	23.0
Income tax (expense)/benefit	63	4.8	85	6.9	(89)	(3.4)	4	0.5	(178)	(7.6)
Profit/(loss) after income tax	(291)	(22.0)	(227)	(18.3)	246	9.5	(14)	(1.7)	361	15.4
Other comprehensive income for the year	(319)		63		404		274		(141)	
Total comprehensive income for the year	(610)		(164)		650		260		220	

Revenue

We present revenue in our consolidated statements of profit or loss as revenue from continuing operations, which primarily consists of revenue from sales to external customers (including both sales of coal produced from our operating mines and coal which we purchase from third party suppliers and onsell to customers). We then adjust revenue from external customers for fair value losses recycled from our hedge reserve in order to present segment revenue. To a lesser extent, our revenue also includes interest income, mining services fees, and other revenue. The table below sets forth, for the periods indicated, a reconciliation and breakdown of components of our revenue:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Revenue from external customers	1,288	1,199	2,623	835	2,250
Fair value losses recycled from hedging reserve[(1)]	(22)	(133)	(229)	(101)	(45)
Total segment revenue	1,266	1,066	2,394	734	2,205
Interest income	50	125	114	57	58
Mining services fees	–	38	52	29	26
Sea freight	–	–	12	–	37
Other revenue	3	9	29	12	21
Total revenue from continuing operations	1,319	1,238	2,601	832	2,347

Note:

(1) The scheduled repayment of the principal amounts on our U.S. dollar denominated loans are designated to hedge the cash flow risks on the portion of forecast U.S. dollar denominated sales that are not hedged through bank-issued instruments, resulting in a natural cash flow hedge. Unrealised foreign exchange gains or losses arising on the translation of hedged U.S. dollar denominated loans are deferred on our balance sheet to a cash flow hedge reserve in equity. Such deferred gains or losses attributable to a U.S. dollar denominated loan are then recycled to the income statement, in the future, during the six-month period in which the loan is scheduled to be repaid. During the Track Record Period this has resulted in net foreign exchange losses previously recognised in the hedge reserve being recycled to the income statement. Net unrealised hedge losses have resulted from a general weakening of the Australian dollar against the U.S. dollar resulting in an increase in the Australian dollar translated liability recognised on the balance sheet. As at 30 June 2018, we had A$791 million of unrealised foreign exchange losses before tax and A$554 million of unrealised foreign exchange losses after tax deferred on our balance sheet in equity. See "*Risk factors – We do not make use of hedging instruments to hedge foreign exchange risks in respect of U.S. dollar denominated loans, and the natural cash flow hedge created by hedging a portion of these loans against our U.S. dollar denominated sales may not be sufficient to offset our foreign exchange losses*".

Revenue from external customers

Our customers are primarily located in the Asia-Pacific region. The table below sets forth, for the periods indicated, a breakdown of our revenue from external customers by jurisdiction, as determined based on the jurisdiction in which the customer is located:

	Year ended 31 December						Six months ended 30 June			
	2015		2016		2017		2017		2018	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*
Australia	28	2.2	69	5.7	322	12.2	118	14.1	228	10.1
Singapore	315	24.4	261	21.8	337	12.9	161	19.3	451	20.0
South Korea	427	33.2	296	24.7	415	15.8	181	21.7	333	14.8
PRC	107	8.3	179	14.9	654	24.9	196	23.5	479	21.3
Japan	152	11.8	143	11.9	489	18.7	99	11.9	440	19.6
Taiwan	68	5.3	93	7.8	131	5.0	24	2.9	210	9.3
Others[(1)]	191	14.8	158	13.2	275	10.5	56	6.6	109	4.9
Total revenue from external customers	1,288	100.0	1,199	100.0	2,623	100.0	835	100.0	2,250	100.0

Note:

(1) Includes Malaysia, Vietnam, Thailand, India, Indonesia and Chile.

During the Track Record Period, our largest jurisdictions by revenue were the PRC, South Korea, Singapore and Japan. Revenue from the PRC increased at the fastest pace, from A$107 million in 2015 to A$654 million in 2017, representing 8.3% and 24.9% of our total revenue from external customers in the same years, respectively. Revenue from the PRC also increased from A$196 million in the six months ended 30 June 2017 to A$479 million in the six months ended 30 June 2018, representing 23.5% and 21.3% of our total revenue from external customers in the same periods, respectively. Import restrictions were imposed by the PRC government prior to 2015, resulting in a decrease in sales. Since then, we have employed dedicated sales staff for the PRC to work closely with potential customers in order to establish new business into the PRC in compliance with the import restrictions imposed, which has led to entering into long-term contracts with Chinese end customers.

Revenue from South Korea and Singapore as a percentage of our total revenue from external customers decreased at the fastest pace during the Track Record Period, from 33.2% and 24.4% in 2015, respectively, to 15.8% and 12.9% in 2017, respectively. Lower sales in South Korea in 2016 were partly the result of the deconsolidation of the Ashton, Austar and Donaldson mines, while lower sales in Singapore in 2016 were partly the result of our strategy to shift away from coal traders to coal end customers, for whom our sales are more profitable. The increase in absolute sales in South Korea and Singapore in 2017 was due to the increase in production volume driven by the C&A Acquisition. Total revenue from South Korea and Singapore in 2017 was largely in line with revenue in 2015. In the six months ended 30 June 2018 compared to the six months ended 30 June 2017, revenue from South Korea decreased from 21.7% of our total revenue from external customers to 14.8% of such revenue, while revenue from Singapore as a percentage of total revenue remained stable at 20.0% and 19.3% in those periods, respectively.

Revenue from Australia and Japan also saw an overall increase from 2015 to 2017 in terms of both absolute amounts and as a percentage of our total revenue. Revenue from Australia as a percentage of our total revenue then declined in the six months ended 30 June 2018 compared to the six months ended 30 June 2017, while revenue from Japan as a percentage of our total revenue increased over this period. For both jurisdictions, revenue increased in terms of absolute amounts over this period. The overall increases in revenue from Australia were primarily driven by the C&A Acquisition, which included an increase in sales made to other Australian coal companies. Similarly, the overall increases in revenue from Japan were primarily driven by the C&A Acquisition, with the quality of coal from the HVO and MTW mines being suitable for the Japanese market.

See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Price and Sales Volume of Coal*" for further details.

Segment revenue

We categorise our operating segments as (i) our coal mining segment, which consists of the New South Wales sub-segment and the Queensland sub-segment, where all our owned mines in operation are located and (ii) our corporate segment. We present our segment revenue net of intersegment sales, which are eliminated on consolidation. The table below sets forth, for the periods indicated, a breakdown of our segment revenue as reconciled with revenue from external customers:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Revenue from external customers					
New South Wales	998	873	2,163	616	2,051
Queensland	290	326	460	219	199
Corporate	–	–	–	–	–
Total	1,288	1,199	2,623	835	2,250
Fair value losses recycled from hedge reserve					
New South Wales	–	–	–	–	–
Queensland	–	–	–	–	–
Corporate	(22)	(133)	(229)	(101)	(45)
Total	(22)	(133)	(229)	(101)	(45)
Total segment revenue					
New South Wales	998	873	2,163	616	2,051
Queensland	290	326	460	219	199
Corporate	(22)	(133)	(229)	(101)	(45)
Total	1,266	1,066	2,394	734	2,205

Our New South Wales segment consists of revenue from the Moolarben, HVO, MTW and Stratford Duralie mines. Our Queensland segment consists of revenue from the Yarrabee mine. The increase in revenue reported in the New South Wales segment in 2017 and the six months ended 30 June 2018 resulted from the inclusion of sales from C&A from 1 September 2017.

Fair value losses recycled from hedge reserve represent retranslation losses on our US dollar-denominated loans which are attributable to changes in US$:A$ foreign exchange rates. Under our natural hedge policy, such losses are recycled to the income statement based on the scheduled loan maturity dates. The amount of any fair value loss or gain recycled from the hedge reserve in a period is a function of the amount of the hedged US dollar loan scheduled to mature in that period and the respective US$:A$ exchange rates at the time the hedge was put in place and at the time the loan matured. See note 6 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Interest income, mining services fees and other revenue

Interest income primarily consists of interest generated on our loan to Watagan, which we provided in 2016 to finance Watagan's purchase of control of the Austar, Ashton and Donaldson mines from us, while we retain full ownership interest in those mines. The loan is scheduled to be repaid in 2025. See "*– Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*" for further details.

Mining services fees primarily consist of fees that we charge for providing management services to the Austar, Ashton and Donaldson mines on behalf of Watagan and in 2017 and the six months ended 30 June 2018 for the management of the Cameby Downs and Premier mines on behalf of Yanzhou. In 2015 and 2016 the fees charged to the Cameby Downs and Premier mines were credited against the corporate costs incurred, mainly employee benefits. See "*Business – Our Mining Operations – Managed Mines*" for further details.

Sea freight revenue is recognised on a CFR contract, held by C&A, where the customer pays for the coal supplied inclusive of the sea freight incurred on transporting the coal from Australia to the discharge port. The sea freight component is recognised separately from revenue from coal sales. No sea freight was recognised prior to the C&A Acquisition.

Other revenue primarily consists of management fees charged for operating the unincorporated mine joint ventures.

Other Income

Our other income during the Track Record Period primarily consisted of (i) a gain on acquisition of A$177 million in connection with mine assets acquired from C&A benefiting from improved valuation assumptions on the completion date compared to the date of determining the acquisition price, (ii) a reversal of impairment of mining tenements of A$100 million for the Moolarben mine and (iii) a fair value gain on refinancing our secured bank loan at a lower margin of A$31 million on the adoption of IFRS 9. The gain on acquisition, reversal of impairment of mining tenements and the refinance gain were recorded in 2017. Our other income in the six months ended 30 June 2018 of A$115 million primarily consisted of (i) a gain on disposal of A$78 million on the sale of a 16.6% interest in HVO to Glencore and (ii) net foreign exchange gains of A$30 million primarily on US$ cash balances. Our other income in the six months ended 30 June 2017 primarily consisted of a one-off receipt from a joint venture partner. Our other income in 2015 and 2016 primarily consisted of net gains on foreign exchange.

Raw Materials and Consumables Used

Our raw materials and consumables used includes diesel, consumables, maintenance, explosives, tyres, electricity and other general consumables. The table below sets forth, for the periods indicated, a breakdown of our raw materials and consumables used:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Diesel	45	37	80	26	84
Consumables	40	29	68	22	57
Maintenance	53	44	66	18	69
Explosives	26	36	62	21	50
Tyres	16	17	29	9	28
Electricity	18	11	20	6	25
Other	15	13	24	7	24
Total raw materials and consumables used	213	187	349	109	337

Raw materials and consumables used amounted to A$213 million, A$187 million, A$349 million, A$109 million and A$337 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 16.2%, 15.1%, 13.4%, 13.1% and 14.3% of our total revenue in the same periods, respectively. Per tonne raw materials and consumables used were A$16, A$15, A$18, A$18 and A$21 over the same period.

The table below sets forth a sensitivity analysis of hypothetical fluctuations in the cost of utilities (consisting of diesel and electricity) on our profit/loss after tax:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Impact on profit/loss after tax of increase in utilities costs of:					
5%	(2)	(2)	(3)	(1)	(4)
10%	(4)	(3)	(7)	(2)	(8)
Impact on profit/loss after tax of decrease in utilities costs of:					
5%	2	2	3	1	4
10%	4	3	7	2	8

Raw materials and consumables used attributable to underground development is capitalised as mine development and amortised in future periods.

Employee Benefits Expenses

Employee benefits expenses consist of salaries, wages, benefits, short-term and long-term incentives and employee on-costs for all our employees. Employee benefits expenses amounted to A$229 million, A$188 million, A$302 million, A$102 million and A$254 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 17.4%, 15.2%, 11.6%, 12.3% and 10.8% of our total revenue in the same periods, respectively. Per tonne employee benefits expenses were A$17, A$16, A$15, A$16 and A$16 over the same period. In addition to employee benefits expenses recognised in our consolidated statements of profit and loss, we also capitalised A$45 million, A$26 million, A$17 million, A$12 million and A$2 million in such expenses in these periods, respectively, which related to underground development and the Moolarben expansion.

Depreciation and Amortisation

All fixed assets, excluding freehold land, are depreciated on a straight-line or units of production basis over the asset's useful life. Mining tenements are amortised on a life of mine units of production basis based on estimated reserves. Depreciation and amortisation expenses amounted to A$200 million, A$133 million, A$256 million, A$80 million and A$244 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 15.2%, 10.7%, 9.8%, 9.6% and 10.4% of our total revenue in the same periods, respectively. Per tonne depreciation and amortisation costs were A$15, A$11, A$14, A$12 and A$15 over the same period. See "– *Critical Accounting Policies and Estimates – Property, plant and equipment*" for further details.

Transportation

We incur transportation costs primarily in connection with the cost of transporting our coal products to customers, including handling and delivery of coal from our mines to the relevant port via rail for export to overseas end customers (typically on a FOB basis). The table below sets forth, for the periods indicated, a breakdown of our transportation costs:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Rail	158	143	165	70	124
Port	91	118	119	47	103
Sea freight	–	–	12	–	37
Other	12	6	16	5	10
Total transportation costs	261	267	312	122	274

Port costs consist of (i) the actual throughput charge incurred on tonnes discharged through the port and (ii) take-or-pay costs incurred on the unutilised capacity and (iii) other adjustments, which mainly include certain non-cash fair value accounting adjustments. The table below sets forth, for the periods indicated, a breakdown of our port costs:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Port throughput	68	74	100	37	79
Take-or-pay	37	52	42	15	38
Other	(14)	(8)	(23)	(5)	(14)
Total port costs	91	118	119	47	103

Our transportation costs amounted to A$261 million, A$267 million, A$312 million, A$122 million and A$274 million in 2015, 2016 and 2017 in the six months ended 30 June 2017 and 2018, respectively, representing 19.8%, 21.6%, 12.0%, 14.7% and 11.7% of our total revenue in the same periods, respectively. Per tonne transportation costs were A$20, A$22, A$16, A$20 and A$17 over the same period. The table below sets forth, for the periods indicated, a breakdown of our per tonne transportation costs:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ per tonne		
Rail	12	12	8	11	8
Port					
Throughput	5	6	5	6	5
Take or pay	3	4	2	3	2
Other	(1)	(1)	(1)	(1)	(1)
Subtotal	7	9	6	8	6
Sea freight	–	–	1	–	2
Other	1	1	1	1	1
Per tonne transportation costs	20	22	16	20	17

The table below sets forth a sensitivity analysis of hypothetical fluctuations in transportation costs on our profit/loss after tax:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Impact on profit/loss after tax of increase in transportation costs of:					
5%	(9)	(9)	(11)	(4)	(10)
10%	(18)	(19)	(22)	(9)	(19)
Impact on profit/loss after tax of decrease in transportation costs of:					
5%	9	9	11	4	10
10%	18	19	22	9	19

Contractual Services and Plant Hire

Contractual services and plant hire expenses represent contract labour, including contract mining, consultants and equipment hire costs. Excluding C&A Acquisition transaction costs and costs in connection with the Listing, contractual services and plant hire expenses amounted to A$218 million, A$121 million, A$241 million, A$69 million and A$196 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 16.5%, 9.8%, 9.3%, 8.3% and 8.4% of our total revenue in the same periods, respectively. Per tonne contractual services and plant hire expenses were A$16, A$10, A$13, A$11 and A$12 over the same period. The table below sets forth a sensitivity analysis of hypothetical fluctuations in the cost of contractual services and plant hire on our profit/loss after tax:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Impact on profit/loss after tax of increase in contractual services and plant hire of:					
5%	(8)	(4)	(9)	(2)	(7)
10%	(15)	(9)	(16)	(5)	(14)
Impact on profit/loss after tax of decrease in contractual services and plant hire of:					
5%	8	4	9	2	7
10%	15	9	16	5	14

Government Royalties

Government royalties primarily represent royalties paid to the governments of New South Wales and Queensland on coal produced in these states. Government royalties amounted to A$77 million, A$71 million, A$173 million, A$53 million and A$161 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 5.8%, 5.7%, 6.7%, 6.4% and 6.9% of our total revenue in the same periods, respectively. Royalties are determined on an ad valorem basis by reference to the value of the coal sold and the type of mine, and may be adjusted by the respective state governments separately at their discretion. See "*Appendix IV – Taxation and Regulatory Overview – Regulatory Overview*" and "*Risk Factors – Our business, financial condition and results of operations are subject to government royalties on the production of coal*" for further details.

Coal Purchases

We regularly purchase coal from both related party and third party coal producers located in Australia, which we then on-sell to our customers. Our coal purchases amounted to A$158 million, A$211 million, A$340 million, A$148 million and A$182 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 12.0%, 17.0%, 13.1%, 17.8% and 7.7% of our total revenue in the same periods, respectively. We purchase coal from both related (primarily Watagan) and third parties as part of our coal blending strategy whereby combining the qualities of our own coal with the qualities of others producers' coal results in an enhanced end-product capable of achieving a higher sale price. We do not undertake material amounts of coal purchases for the purpose of coal trading.

Other Operating Expenses

Our other operating expenses amounted to A$147 million, A$163 million, A$330 million, A$76 million and A$170 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 11.1%, 13.2%, 12.7%, 9.1% and 7.2% of our total revenue in those periods. During the Track Record Period, our other operating expenses primarily consisted of bank fees and other charges incurred in connection with our interest-bearing loans, whereby in addition to the finance costs discussed below, we also incurred bank guarantee fees, which amounted A$116 million, A$113 million, A$109 million, A$49 million and A$62 million, respectively, representing 78.9%, 69.3%, 33.0%, 64.5% and 36.5% of our total other operating expenses in those same periods. In addition, stamp duty incurred in connection with the C&A Acquisition was a major component of our other operating expenses in 2017, amounting to A$167 million and representing 50.6% of our other operating expenses. In the six months ended 30 June 2018, our other operating expenses included A$16 million in stamp duty incurred in connection with the Warkworth Transaction and A$50 million related to the partial impairment of our investment in GILTs and full impairment of our investment in WIPs issued by WICET as a result of the WICET senior debt refinancing, which together represented 38.8% of our other operating expenses in this period. Stamp duty expenses are only incurred if acquisitions are undertaken. Other components of our other operating expenses include travel and accommodation for our staff, net losses on disposal of property, plant and equipment, insurance, and other duties and levies.

Finance Costs

Our finance costs primarily consist of interest expenses incurred on our interest-bearing bank loans, loans from related parties and secured lease liabilities. Our finance costs amounted to A$162 million, A$209 million, A$294 million, A$105 million and A$152 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, representing 12.3%, 16.9%, 11.3%, 12.6% and 6.5% of our total revenue in those periods, respectively. See *"– Indebtedness*" for further details.

Income Tax Expense/Benefit

We are generally subject to the statutory corporate tax rate in Australia of 30%. We recorded a loss before income tax in 2015, 2016 and the six months ended 30 June 2017, resulting in an income tax benefit of A$63 million, A$85 million and A$4 million, respectively. On the other hand, we had profit before income tax in 2017 and the six months ended 30 June 2018, resulting in an income tax expense of A$89 million and A$178 million, respectively. As a result of accumulated tax losses incurred through 2016, we did not pay any cash income tax during the Track Record Period, and do not expect to pay any cash income tax for the near future as we continue to carry forward and expect to recoup our prior tax losses. Our effective income tax benefit/expense rate was 17.8%, 27.2%, 26.6%%, 22.2% and 33.0% in the same periods, respectively. See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Taxation*" and note 10 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Other Comprehensive Income

Our other comprehensive income consists of cash flow hedges involving US dollar denominated interest-bearing liabilities hedged against future coal sales. The table below sets forth, for the periods indicated, a breakdown of our other comprehensive income:

	As at 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Fair value gains/(losses) on US$ interest-bearing liabilities	(475)	(43)	348	290	(246)
Fair value losses transferred to profit or loss	22	133	229	101	45
Deferred income tax benefit/(expense)	134	(27)	(173)	(117)	60
Other comprehensive income/(expense), net of tax	(319)	63	404	274	(141)

REVIEW OF HISTORICAL RESULTS OF OPERATIONS

Six Months Ended 30 June 2018 Compared to Six Months Ended 30 June 2017

The below period-on-period comparison of our financial results in the six months ended 30 June 2018 with the six months ended 30 June 2017 is materially impacted by changes in our portfolio of assets, most significantly:

- The C&A Acquisition from 1 September 2017;
- The Warkworth Transaction from 1 March 2018;
- The Glencore Transaction from 4 May 2018; and
- The expansion of the Moolarben mine from 7.5 Mt ROM in the six months ended 30 June 2017 to 9.8 Mt in the six months ended 30 June 2018 (on a 100% basis).

Revenue

Our total revenue increased by 182% from A$832 million in the six months ended 30 June 2017 to A$2,347 million in the six months ended 30 June 2018, primarily due to a 169% increase in coal sales (which is revenue from external customers excluding revenue from sea freight services of A$37 million in the six months ended 30 June 2018 in accordance with IFRS 15) from A$835 million to A$2,250 million over this period, partially offset by a decrease in fair value losses recycled from the hedge reserve from A$101 million to A$45 million over this period. With respect to coal sales, the key factors were:

(i) an increase in our overall average selling price of coal from A$108 per tonne in the six months ended 30 June 2017 to A$128 per tonne in the six months ended 30 June 2018, mainly as a result of the increase in global coal market prices during this period, including thermal coal market prices increasing by approximately US$22 per tonne and metallurgical coal market prices increasing by approximately US$16 per tonne. Our average selling price of thermal coal increased from A$90 per tonne to A$117 per tonne, while our average selling price of metallurgical coal increased from A$174 per tonne to A$191 per tonne; and

(ii) an increase in our sales volume of coal from 6.2 Mt in the six months ended 30 June 2017 to 16.2 Mt in the six months ended 30 June 2018, mainly as a result of increased production volume from mines in New South Wales due to (a) the C&A Acquisition, for which all of C&A's mines in production are located therein and (b) the expansion of Moolarben from 4.7 Mt in the six months ended 30 June 2017 to 6.5 Mt in the six months ended 30 June 2018 (on an attributable basis).

The increase in production volume in New South Wales, together with the increase in average selling price of coal, resulted in our segment revenue (excluding freight services revenue) for New South Wales increasing from A$616 million in the six months ended 30 June 2017 to A$2,051 million in the six months ended 30 June 2018. Segment revenue for Queensland decreased from A$219 million in the six months ended 30 June 2017 to A$199 million in the six months ended 30 June 2018, primarily due to lower sales volume.

We achieved an increase in revenue (excluding freight services revenue) from external customers across each of our key geographic markets. In particular, we experienced substantial increases in revenue from the six months ended 30 June 2017 to the six months ended 30 June 2018 from (i) A$196 million to A$479 million in the PRC, (ii) A$99 million to A$440 million in Japan and (iii) A$118 million to A$228 million in Australia. The increase in the PRC was primarily due to our efforts to increase sales of our higher ash products to end users in the PRC following the implementation of import restrictions by the Chinese government prior to 2015. The increase in Japan was primarily attributable to the C&A Acquisition, with the quality of coal from the HVO and MTW mines being suitable for the Japanese market. The increase in sales within Australia was also driven by the C&A Acquisition, and included sales made to other Australian coal companies.

See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Price and Sales Volume of Coal*" for further details.

Other income

Our other income significantly increased from A$8 million in the six months ended 30 June 2017 to A$115 million in 30 June 2018, primarily due to (i) a gain on disposal of A$78 million on the Glencore Transaction and (ii) net foreign exchange gains of A$30 million primarily on US$ cash balances.

Raw materials and consumables used

Our raw materials and consumables increased by 209% from A$109 million in the six months ended 30 June 2017 to A$337 million in the six months ended 30 June 2018, primarily due to the impact of the C&A Acquisition and the Moolarben expansion that contributed to a 165% increase in saleable tonnes. In particular, our diesel costs increased by 223%, primarily due to increased market prices for diesel fuel and larger truck fleets at the acquired C&A mines due to longer hauls. In addition, electricity costs increased by 317% due to increased market prices and the use of electric draglines at the C&A mines. This contributed to an increase in per tonne raw materials and consumables used from A$18 to A$21 over the same period.

Employee benefits expenses

Our employee benefits expenses increased by 149% from A$102 million in the six months ended 30 June 2017 to A$254 million in the six months ended 30 June 2018, primarily due to the increase in overall headcount as a result of the C&A Acquisition and the Moolarben expansion. Employee benefits expenses as a percentage of revenue decreased from 12.3% to 10.8% over the same period, primarily due to the additional sales primarily being attributable to our Tier 1 mines (Moolarben, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW). Per tonne employee benefits expenses were in line at A$16 over both periods.

Depreciation and amortisation

Our depreciation and amortisation expenses increased by 205% from A$80 million in the six months ended 30 June 2017 to A$244 million in the six months ended 2018, primarily due to an increase in mining tenements and plant and equipment of A$2,456 million and A$1,326 million, respectively, primarily from the C&A Acquisition, together with expansionary capital incurred at Moolarben. Per tonne depreciation and amortisation costs increased from A$12 to A$15 over the same period.

Transportation

Our transportation costs increased by 125% from A$122 million in the six months ended 30 June 2017 to A$274 million in the six months ended 30 June 2018, primarily due to increased sales volume of coal requiring additional payments for rail and freight services. However, transportation costs as a percentage of our total revenue decreased from 14.7% to 11.7% in those periods, respectively, primarily due to an increase in revenue and a lower rail cost per tonne on the C&A acquired mines due to their relative proximity to port and less exposure to take-or-pay commitments. This contributed to a decrease in per tonne transportation costs from A$20 to A$17 over the same period, with a A$4 per tonne decrease attributable to a lower average rail cost.

Contractual services and plant hire

Our contractual services and plant hire expenses increased by 129% from A$90 million in the six months ended 30 June 2017 to A$206 million in the six months ended 30 June 2018, primarily due to the C&A Acquisition, as C&A mines utilise a significant number of contractors and hire equipment, as well as professional service fees and other costs incurred in connection with the C&A Acquisition and the Listing. This contributed to an increase in per tonne contractual services and plant hire from A$11 to A$12 over the same period.

Government royalties

Our government royalties expenses increased by 204% from A$53 million in the six months ended 30 June 2017 to A$161 million in the six months ended 30 June 2018, primarily due to increased royalties levied on our increased sales revenue, which were driven by both higher prices and production volumes.

Coal purchases

Our coal purchases increased by 23% from A$148 million in the six months ended 30 June 2017 to A$182 million in the six months ended 30 June 2018, primarily due to an increase in coal blending activity driven by the increase in ex-mine coal production as a result of the C&A Acquisition and the Moolarben expansion. Coal purchases as a percentage of our total revenue decreased from 17.8% to 7.7% over the same period, primarily due to a relatively lower amount of coal blending being undertaken on the C&A sales while we evaluate and adjust to C&A's customer relationships and their coal quality needs, as well as the impact of the new management arrangements at HVO.

Other operating expenses

Our other operating expenses increased by 124% from A$76 million in the six months ended 30 June 2017 to A$170 million in the six months ended 30 June 2018, primarily due to stamp duty incurred in connection with the Warkworth Transaction and A$50 million related to partial impairment of our investment in GILTs and the full impairment of our investment in WIPs as a result of the WICET senior debt refinancing.

Finance costs

Our finance costs increased by 45% from A$105 million in the six months ended 30 June 2017 to A$152 million in the six months ended 30 June 2018, primarily due to an increase in US LIBOR and a weaker Australian dollar. Finance costs as a percentage of revenue decreased from 12.6% to 6.5% over the same period, primarily due to the increase in revenue, including from the equity-funded C&A Acquisition, and the matters noted above.

Loss/profit before tax and loss/profit before tax margin

As a result of the aforementioned reasons, we had a loss before income tax of A$18 million in the six months ended 30 June 2017 and a profit before income tax of A$539 million in the six months ended 30 June 2018. Our loss/profit before income tax margin was (2.2)% and 23.0% in those periods, respectively.

Income tax expense/benefit

We had an income tax benefit of A$4 million in the six months ended 30 June 2017 and an income tax expense of A$178 million in the six months ended 30 June 2018. Our effective income tax benefit/expense rate was 22.2% and 33.0% in the same periods, respectively. Our tax benefit in the six months ended 30 June 2017 was partially offset by a non-deductible share of equity-accounted profit of A$10 million, while our tax expense in the six months ended 30 June 2018 was impacted by non-deductible accounting expenses, including the A$50 million impairment on GILTs and WIPs in connection with the WICET senior debt refinancing.

Loss/profit after tax and loss/profit after tax margin

As a result of the aforementioned reasons, we had a loss after income tax of A$14 million in the six months ended 30 June 2017 and a profit after income tax of A$361 million in the six months ended 30 June 2018. Our loss/profit after income tax margin was (1.7)% and 15.4% in the same periods, respectively.

Year Ended 31 December 2017 Compared to Year Ended 31 December 2016

The below year-on-year comparison of our financial results in 2017 with 2016 is materially impacted by changes in our portfolio of assets, most significantly:

- The C&A Acquisition from 1 September 2017;
- The deconsolidation of Watagan from 31 March 2016; and
- The expansion of the Moolarben mine from 11.8 Mt ROM in 2016 to 13.0 Mt ROM in 2017 (on a 100% basis).

Revenue

Our total revenue increased by 110.1% from A$1,238 million in 2016 to A$2,601 million in 2017, primarily due to a 118.8% increase in coal sales (which is revenue from external customers excluding revenue from sea freight services of A$12 million in 2017 in accordance with IFRS 15) from A$1,199 million in 2016 to A$2,623 million in 2017, partially offset by an increase in fair value losses recycled from the hedge reserve from A$133 million in 2016 to A$229 million in 2017. With respect to coal sales, the key factors were:

(i) an increase in our overall average selling price of coal from A$80 per tonne in 2016 to A$114 per tonne in 2017, mainly as a result of the increase in global coal market prices during this period, including thermal coal market prices increasing by approximately US$20 per tonne and metallurgical coal market prices increasing by approximately US$50 per tonne. Our average selling price of thermal coal increased from A$71 per tonne to A$102 per tonne, while our average selling price of metallurgical coal increased from A$106 per tonne to A$165 per tonne; and

(ii) an increase in our sales volume of coal from 12.1 Mt in 2016 to 19.3 Mt in 2017, mainly as a result of increased production volume from mines in New South Wales due to (a) the C&A Acquisition, for which all of C&A's mines in production are located therein and (b) the expansion of Moolarben from 7.4 Mt in 2016 to 10.2 Mt in 2017.

The increase in production volume in New South Wales, together with the increase in average selling price of coal, resulted in our segment revenue for New South Wales increasing from A$873 million in 2016 to A$2,163 million in 2017, while the increase in segment revenue for Queensland from A$326 million in 2016 to A$460 million in 2017 was more price-driven.

We achieved an increase in revenue from external customers across each of our key geographic markets. In particular, we experienced substantial increases in revenue from 2016 to 2017 from (i) A$179 million to A$654 million in the PRC, (ii) A$143 million to A$489 million in Japan and (iii) A$69 million to A$322 million in Australia. The increase in the PRC was primarily due to our efforts to increase sales of our higher ash products to end users in the PRC following the implementation of import restrictions by the Chinese government prior to 2015. The increase in Japan was primarily attributable to the C&A Acquisition, with the quality of coal from the HVO and MTW mines being suitable for the Japanese market. The increase in sales within Australia was also driven by the C&A Acquisition, and included sales made to other Australian coal companies.

See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Price and Sales Volume of Coal*" for further details.

Other income

Our other income significantly increased from A$15 million in 2016 to A$325 million in 2017, primarily due to (i) a gain on acquisition of A$177 million in connection with mine assets acquired from C&A benefiting from improved valuation assumptions on the completion date compared to the date of determining the acquisition price, (ii) a reversal of impairment of mining tenements of A$100 million in connection with the Moolarben mine and (iii) a fair value gain on refinancing our secured bank loan at a lower margin of A$31 million on the adoption of IFRS 9.

Raw materials and consumables used

Our raw materials and consumables increased by 86.6% from A$187 million in 2016 to A$349 million in 2017, primarily due to the impact of the C&A Acquisition and the Moolarben expansion that contributed to a 59.9% increase in saleable tonnes. In particular, our diesel costs increased by 116.2%, primarily due to increased market prices for diesel fuel and larger truck fleets at the acquired C&A mines due to longer hauls. This contributed to an increase in per tonne raw materials and consumables used from A$15 to A$18 over the same period.

Employee benefits expenses

Our employee benefits expenses increased by 60.6% from A$188 million in 2016 to A$302 million in 2017, primarily due to the increase in overall headcount as a result of the C&A Acquisition and the Moolarben expansion. Employee benefits expenses as a percentage of revenue decreased from 15.2% to 11.6% over the same period, primarily due to the additional sales primarily being attributable to our Tier 1 mines (Moolarben, HVO and MTW). Per tonne employee benefits expenses decreased slightly from A$16 to A$15 over the same period.

Depreciation and amortisation

Our depreciation and amortisation expenses increased by 92.5% from A$133 million in 2016 to A$256 million in 2017, primarily due to an increase in mining tenements and plant and equipment of A$2,456 million and A$1,326 million, respectively, from the C&A Acquisition, together with expansionary capital incurred at Moolarben. Per tonne depreciation and amortisation costs increased slightly from A$11 to A$14 over the same period.

Transportation

Our transportation costs increased by 16.9% from A$267 million in 2016 to A$312 million in 2017, primarily due to increased sales volume of coal requiring additional payments for rail and freight services. However, transportation costs as a percentage of our total revenue decreased from 21.6% to 12.0% in the same years, respectively, primarily due to an increase in revenue and a lower rail cost per tonne on the C&A acquired mines due to their relative proximity to port and less exposure to take-or-pay commitments. This contributed to a decrease in per tonne transportation costs from A$22 to A$16 over the same period, with a A$4 per tonne decrease attributable to lower average rail cost and A$2 per tonne decrease attributable to spreading our port take-or-pay exposure across a larger transport volume.

Contractual services and plant hire

Our contractual services and plant hire expenses increased by 121.0% from A$124 million in 2016 to A$274 million in 2017, primarily due to the C&A Acquisition, as C&A mines utilise a significant number of contractors and hire equipment, as well as professional service fees and other costs incurred in connection with the C&A Acquisition. This contributed to an increase in per tonne contractual services and plant hire from A$10 to A$13 over the same period.

Government royalties

Our government royalties expenses increased by 143.7% from A$71 million in 2016 to A$173 million in 2017, primarily due to increased royalties levied on our increased sales revenue, which were driven by both higher prices and production volumes.

Coal purchases

Our coal purchases increased by 61.1% from A$211 million in 2016 to A$340 million in 2017, primarily due to an increase in coal blending activity driven by the increase in ex-mine coal production as a result of the C&A Acquisition and the Moolarben expansion. Coal purchases as a percentage of our total revenue decreased from 17.0% to 13.1% over the same period, primarily due to a relatively lower amount of coal blending being undertaken on the C&A sales while we evaluate and adjust to C&A's customer relationships and their coal quality needs.

Other operating expenses

Our other operating expenses increased by 102.5% from A$163 million in 2016 to A$330 million in 2017, primarily due to stamp duty incurred in connection with the acquisition of C&A.

Finance costs

Our finance costs increased by 40.7% from A$209 million in 2016 to A$294 million in 2017, primarily due to (i) an unwinding of discounts on provisions for a below market sales contract, rehabilitation costs and take-or-pay exposure including those acquired with C&A, of A$50 million, (ii) deferred consideration of A$13 million in connection with the C&A Acquisition and (iii) the modification of loans of A$7 million in accordance with IFRS 9. Finance costs as a percentage of revenue decreased from 16.9% to 11.3% over the same period, primarily due to the increase in revenue, including from the equity-funded C&A Acquisition, and the matters noted above.

Loss/profit before tax and loss/profit before tax margin

As a result of the aforementioned reasons, we had a loss before income tax of A$312 million in 2016 and a profit before income tax of A$335 million in 2017. Our loss/profit before income tax margin was 25.2% and 12.9% in those years, respectively.

Income tax expense/benefit

We had an income tax benefit of A$85 million in 2016 and an income tax expense of A$89 million in 2017. Our effective income tax benefit/expense rate was 27.2% and 26.6% in the same years, respectively. Our tax benefits in 2016 were partially offset by non-deductible debt of A$19 million, while our tax expenses in 2017 were partially offset by share of profit of non-deductible equity-accounted investees of A$10 million.

Loss/profit after tax and loss/profit after tax margin

As a result of the aforementioned reasons, we had a loss after income tax of A$227 million in 2016 and a profit after income tax of A$246 million in 2017. Our loss/profit after income tax margin was 18.3% and 9.5% in the same years, respectively.

Year Ended 31 December 2016 Compared to Year Ended 31 December 2015

The below year-on-year comparison of our financial results in 2016 and 2015 is materially impacted by changes in our portfolio of assets, most significantly:

- The deconsolidation of Watagan from 31 March 2016, and
- The expansion of the Moolarben mine from 9.0 Mt ROM in 2015 to 11.8 Mt ROM in 2016 (on a 100% basis).

Revenue

Our total revenue decreased by 6.1% from A$1,319 million in 2015 to A$1,238 million in 2016, primarily due to a 6.9% decrease in coal sales from A$1,288 million in 2015 to A$1,199 million in 2016, partially compounded by an increase in fair value losses recycled from the hedge reserve of A$22 million in 2015 to A$133 million in 2016. With respect to coal sales, the key factor was a decrease in our sales volume of coal from 13.4 Mt in 2016 to 12.1 Mt in 2017, mainly as a result of decreased production volumes from mines in New South Wales as a result of deconsolidation of the Watagan mines, partially offset by the expansion of Moolarben from 5.5 Mt in 2015 to 7.4 Mt in 2016. The decrease in production volume for New South Wales was also in line with the decrease in our segment revenue for New South Wales from A$998 million in 2015 to A$873 million in 2016, while the segment revenue for Queensland slightly increased from A$290 million in 2015 to A$326 million in 2016.

Our overall average selling price of coal remained stable at A$80 per tonne in both 2015 and 2016, mainly as a result of general stagnation experienced in the global coal market during this period. Our average selling price of thermal coal slightly increased from A$68 per tonne to A$71 per tonne, while our average selling price of metallurgical coal increased slightly from A$100 per tonne to A$106 per tonne.

By geographic region, we experienced a decrease in revenue from external customers from 2015 to 2016 primarily in (i) South Korea from A$427 million to A$296 million, respectively, a decrease of 30.7%, (ii) Singapore from A$315 million to A$261 million, respectively, a decrease of 17.1% and (iii) others from A$191 million to A$158 million, respectively, a decrease of 17.3%. The decrease in South Korea was primarily due to the deconsolidation of the Watagan Mines for which South Korean steel mills were one of the major end customers. The decrease in Singapore was due to our efforts to sell more coal to end users and less to traders, who are generally domiciled in Singapore. The decrease in other jurisdictions was driven by our strategy of establishing contracts directly with end-users, therefore making fewer "spot" sales, which we frequently use in our less traditional markets. These decreases were partially offset by an increase in revenue from 2015 to 2016 in (i) the PRC from A$107 million to A$179 million, respectively, an increase of 67.3%, (ii) Australia from A$28 million to A$69 million, respectively, an increase of 146.4% and (iii) Taiwan from A$68 million to A$93 million, respectively, an increase of 36.8%. The increase in sales to the PRC was primarily due to the active marketing of some of our higher ash products and followed a decline in sales prior to 2015 as a result of import restrictions by the Chinese government. The modest increase in Australia was driven by an increased level of trade with fellow Australian coal producers. The increase in Taiwan was primarily due to the timing of a Taiwanese power utility contract commencing in 2016.

See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Price and Sales Volume of Coal*" for further details.

Other income

Our other income decreased by 55.9% from A$34 million in 2015 to A$15 million in 2016, primarily due to certain income received in 2015 which we did not receive in 2016, including a gain on acquisition of an additional 1% interest in Moolarben, the release of research and development provisions and sundry income.

Raw materials and consumables used

Our raw materials and consumables decreased by 12.2% from A$213 million in 2015 to A$187 million in 2016, primarily due to a 9.1% decrease in saleable tonnes due to the Watagan deconsolidation, partially offset by the Moolarben expansion. Electricity costs and consumables decreased by 38.9% and 27.5%, respectively, as the Watagan underground mines consume relatively large quantities of each. This contributed to a slight decrease in per tonne raw materials and consumables used from A$16 in 2015 to A$15 in 2016.

Employee benefits expenses

Our employee benefits expenses decreased by 17.9% from A$229 million in 2015 to A$188 million in 2016, primarily due to the decrease in headcount costs in line with the decrease in saleable tonnes, as well as lower labour costs following the deconsolidation of Watagan mines, for which the underground mines are more labour intensive. Per tonne employee benefits expenses decreased slightly from A$17 to A$16 over the same period.

Depreciation and amortisation

Our depreciation and amortisation expenses decreased by 33.5% from A$200 million in 2015 to A$133 million in 2016, primarily due to decreases in depreciation of plant and equipment and mine development as a result of the deconsolidation of the capital-intensive Watagan underground mines. For the same reason, depreciation and amortisation expenses as a percentage of our total revenue decreased from 15.2% to 10.7% over the same period. This also contributed to a decrease in per tonne depreciation and amortisation costs from A$15 to A$11 over the same period.

Transportation

Our transportation costs increased by 2.3% from A$261 million in 2015 to A$267 million in 2016, primarily due to an increase in take-or-pay port commitments, partially offset by a decrease in rail charges as a result of reduced coal sale volume. Per tonne transportation costs increased from A$20 to A$22 over the same period for the same reasons.

Contractual services and plant hire

Our contractual services and plant hire expenses decreased by 43.1% from A$218 million in 2015 to A$124 million in 2016, and as a percentage of our total revenue decreased from 16.5% to 10.0% over the same period, primarily due to (i) the deconsolidation of the Watagan mines in March 2016, which used contractor crews to perform certain functions and (ii) the shift in Stratford Duralie's operations from outsourced contractual management to an insourced owner-operator model. This contributed to a decrease in per tonne contractual services and plant hire from A$16 to A$10.

Government royalties

Our government royalties expenses decreased by 7.8% from A$77 million in 2015 to A$71 million in 2016, primarily due to decreased royalties levied on our decreased sales volume of coal.

Coal purchases

Our coal purchases increased by 33.5% from A$158 million in 2015 to A$211 million in 2016, primarily due to the continued increase in coal blending opportunities that we undertook. Coal purchases as a percentage of our total revenue increased from 12.0% to 17.0% over the same period.

Other operating expenses

Our other operating expenses increased by 10.9% from A$147 million in 2015 to A$163 million in 2016, primarily due to additional stamp duty incurred in connection with the 2012 acquisition of the Donaldson mine and a fair value adjustment of the 4% royalties receivable from Middlemount. See "– *Description of Major Line Items in Our Consolidated Statements of Financial Position – Royalty Receivable*" for further details.

Finance costs

Our finance costs increased by 29.0% from A$162 million in 2015 to A$209 million in 2016, primarily due to an increase in interest expenses in connection with an overall increase in our interest-bearing liabilities and a slight increase in interest rates on our secured bank loans. Finance costs as a percentage of our total revenue increased from 12.3% to 16.9% over the same period, primarily due to the compounding impact of decreasing revenue and increasing finance costs.

Loss before tax and loss before tax margin

As a result of the aforementioned reasons, our loss before income tax decreased by 11.9% from A$354 million in 2015 to A$312 million in 2016. Our loss before income tax margin was 26.8% and 25.2% in the same years, respectively.

Income tax benefit

Our income tax benefit increased by 34.9% from A$63 million in 2015 to A$85 million in 2016, while our effective income tax benefit rate was 17.8% and 27.2% in the same years, respectively. Our tax benefits in 2015 were partially offset by reversals of over-provisions for taxes in prior years of A$19 million, while our tax benefits in 2016 were positively impacted by reversals of under-provisions for taxes in prior years of A$12 million. Our tax benefits in 2015 and 2016 were also partially offset by non-deductible debt of A$16 million and A$19 million, respectively.

Loss after tax and loss after tax margin

As a result of the aforementioned reasons, our loss after income tax decreased by 22.0% from A$291 million in 2015 to A$227 million in 2016. Our loss after income tax margin was 22.1% and 18.3% in the same years, respectively.

Non-IFRS Financial Measures

Operating EBITDA and operating EBIT are key metrics that our management uses to assess the performance of our individual segments and make decisions on the allocation of resources. Neither operating EBITDA nor operating EBIT is a standard measure under IFRS. As presented by our management, operating EBITDA represents profit or loss before income tax for the year as adjusted for net interest expense, depreciation and amortisation and any significant non-operating items, while operating EBIT represents profit or loss before income tax as adjusted for net interest expense and any significant non-operating items.

While operating EBITDA and operating EBIT provide additional financial measures for investors to assess our operating performance, the use of operating EBITDA and operating EBIT has certain limitations because they do not reflect all items of income and expense that affect our operations. In addition, operating EBITDA and operating EBIT do not reflect changes in working capital, capital expenditure or other investing and financing activities and therefore should not be considered a measure of our liquidity.

As a measure of our operating performance, we believe that the most directly comparable IFRS measure to operating EBITDA and operating EBIT is profit before income tax. The table below sets forth, for the periods indicated, a reconciliation of operating EBITDA and operating EBIT with profit before income tax under IFRS:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Profit before income tax	(354)	(312)	335	(18)	539
Adjustments for:					
Finance costs	162	209	294	105	152
Bank fees and other charges	116	113	109	49	62
Interest income	(50)	(125)	(114)	(57)	(58)
Stamp duty	–	12	167	3	16
Fair value losses recycled from hedge reserve	22	133	229	101	45
Gain on acquisition	(6)	–	(177)	–	–
Gain on disposal	–	–	–	–	(78)
Impairment reversal of mining tenements for Moolarben	–	–	(100)	–	–
GILTs and WIPs remeasurement and impairment	–	–	–	–	50
Gain on refinance	–	–	(31)	–	–
Transaction costs	–	3	33	21	10
JV receipt	–	–	(5)	(5)	–
Royalty remeasurement	(2)	6	(8)	(2)	(2)
Operating EBIT	(112)	39	732	197	736
Adjustment for depreciation and amortisation	200	133	256	80	244
Operating EBITDA	88	172	988	277	980

In 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our operating EBIT margin (calculated as operating EBIT divided by revenue and multiplied by 100%) was (8.5)%, 3.2%, 28.1%, 23.7% and 31.4%, respectively, while our operating EBITDA margin (calculated as operating EBITDA divided by revenue and multiplied by 100%) was 6.7%, 13.9%, 38.0%, 33.3% and 41.8%, respectively.

Operating EBITDA and operating EBIT should not be considered in isolation or construed as a substitute for analysis of IFRS financial measures. In addition, because operating EBITDA and operating EBIT may not be calculated in the same manner by all companies, our operating EBITDA and operating EBIT may not be comparable to the same or similarly titled measures presented by other companies.

DESCRIPTION OF MAJOR LINE ITEMS IN OUR CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

Property, Plant and Equipment

Our property, plant and equipment primarily includes (i) plant and equipment, (ii) assets under construction, (iii) freehold land and buildings and (iv) mine development assets, which represents all mining related development expenditure that is not included under land, buildings and plant and equipment. Our balance of property, plant and equipment was A$1,250 million, A$1,526 million, A$2,832 million and A$2,938 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. The substantial increase as at 30 June 2018 and 31 December 2017 was primarily due to our consolidation of property, plant and equipment of C&A following the acquisition. See "– *Critical Accounting Policies and Estimates – Property, plant and equipment*" and note 22 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Mining Tenements

Our mining tenements represent the value that we have attributed to our mining leases as part of the opening balance sheet fair value accounting adopted on the acquisition of a mine. Generally, the value represents the premium paid for the mine excluding the separately identifiable tangible assets and liabilities, including exploration assets. The value is initially supported with reference to the estimated coal reserves included in the acquisition life of mine model. Such estimates may change as additional information becomes available over the course of developing or operating a mine, which would result in adjustments or amortisation of our reserves and resources, and in turn our mining tenements. Our balance of mining tenements was A$2,085 million, A$2,128 million, A$4,296 million and A$4,308 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. The substantial increase as at 30 June 2018 and 31 December 2017 was primarily due to our recognition of additional mining tenements as a consequence of the C&A Acquisition. See "– *Critical Accounting Policies and Estimates – Mining tenements*" and note 19 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Exploration and Evaluation Assets

Exploration and evaluation assets represent our exploration leases and rights for mines and potential mines in the exploratory and development stages such as prospecting licenses and exploration licenses. Exploration and evaluation assets are recognised on the acquisition of a mine in respect of coal resources not included in the acquisition life-of-mine model and are subsequently transferred to mining tenements as the associated mine or mine area enters production. Our balance of exploration and evaluation assets decreased by 15.7% from A$591 million as at 31 December 2015 to A$498 million as at 31 December 2016, primarily due to a transfer of A$101 million to mining tenements in connection with the expansion of the Moolarben open cut mine, then increased by 13.5% to A$565 million as at 31 December 2017, primarily due to the consolidation of such assets from C&A following the acquisition and further increased by 2.1% to A$577 million as at 30 June 2018, primarily due to the Warkworth Transaction. See "– *Critical Accounting Policies and Estimates – Exploration and evaluation assets*" and note 20 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Inventories

Our inventories consist of coal stocks and auxiliary materials, spare parts, small tools and fuel expected to be used in production. The table below sets forth, for the years indicated, a breakdown of our inventories:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Coal	49	47	87	123
Others	27	28	63	82
Total inventories	76	75	150	205

The increase in our balance of total inventories as at 31 December 2017 was primarily due to our consolidation of C&A's inventories following the C&A Acquisition. The further increase as at 30 June 2018 was primarily due to the timing of sales.

We state coal stocks at the lower of cost and net realisable value. Costs are assigned on a weighted average basis and include direct materials, direct labour and certain overheads. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. We write down coal stocks from cost to net realisable value when we determine that such write down is appropriate in the course of assessing our stocks for obsolescence. Coal stock write downs amounted to A$12 million, A$1 million, A$1 million and A$1 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively.

The table below sets forth, for the periods indicated, our average finished goods inventory turnover days:

	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
Average finished goods inventory turnover days[(1)]	25	24	21	21

Note:

(1) Calculated as the average monthly balance of finished goods inventory for the relevant period divided by FOB cash costs (excluding royalties) for the same month and multiplied by the number of days in the month. We believe that this presents the best approximation of average inventory turnover days in our operations. If calculated as the average annual balance of total inventories for the relevant period (which is the sum of the total balance as at the beginning and end of the period divided by two) divided by revenue from external customers for the relevant year and multiplied by 365 days (for the full-year periods) or 183 days (for the six months ended 30 June 2018), our average inventory turnover days would have been 26, 22, 16, 14 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively.

Our average finished goods inventory turnover days were largely stable over the Track Record Period.

As at 31 August 2018, A$121 million, or 99%, of our coal inventories as at 30 June 2018 had been sold or consumed.

Trade and Other Receivables

Our trade receivables are ordinary course, non-interest-bearing receivables due from our coal customers. Our trade receivables amounted to A$157 million, A$278 million, A$540 million and A$424 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively, none of which were past due or impaired. The substantial increase as at 30 June 2018 and 31 December 2017 was primarily attributable to the consolidation of C&A's receivables in connection with the C&A Acquisition. The table below sets forth our average trade receivable turnover days for the periods indicated:

	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
Average trade receivable turnover days[(1)]	22	22	23	23

Note:

(1) Calculated as the average monthly balance of trade receivables for the relevant period divided by revenue for the same month and multiplied by the number of days in the month. We believe that this presents the best approximation of average trade receivable turnover days in our operations. If calculated as the average annual balance of trade receivables for the relevant period (which is the sum of the total balance as at the beginning and end of the period divided by two) divided by revenue from external customers for the relevant period and multiplied by 365 days (for the full-year periods) or 183 days (for the six months ended 30 June 2018), our average trade receivable turnover days would have been 53, 64, 57 and 38 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively.

We typically provide customers with credit periods ranging from 5 to 21 days from invoice date and receipt of all required shipping documentation. Our average trade receivable turnover days remained stable at 22, 22, 23 and 23 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, which was in line with the credit periods we provide when taking into account the delay in issuing the invoice.

As at 31 August 2018, A$405 million, or 96%, of our trade receivables outstanding as at 30 June 2018 had been settled.

Our other receivables include, among other things, loans to related parties and investments in securities. The table below sets forth a breakdown of our other receivables as at the dates indicated:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Receivables from joint venture	331	347	332	274
Receivables from other entities	47	60	61	14
Long service leave receivables	–	–	80	62
Restricted cash	4	32	1	–
Promissory note receivable	21	21	36	38
Advances to controlled entities	2	3	–	–
Other receivables	42	101	81	97
Total other receivables	447	564	591	485

Receivables from other entities represent our investment in securities issued by WICET, including WIPs and GILTs. The WIPs are entitled to an annual dividend of 15%, which can be deferred for up to 7 years. Deferred dividends attract an annual finance charge of 15.75%. There is no scheduled maturity date but there are certain "remarketing dates" whereby the WIPs can be refinanced, the earliest of which is 2023. The GILTs have an effective interest rate of BBSY plus 6% with a maturity date of 30 September 2020. The decrease as at 30 June 2018 was attributable to the partial impairment of the GILTs and the full impairment of the WIPs.

Long service leave receivables represent amounts receivable from the Coal Mining Industry (Long Service Leave) Corporation, an industry fund established to accumulate employer contributions towards eligible employees' long service leave entitlements.

Other receivables primarily include advances to related parties, insurance and fuel rebates and dividends.

Royalty Receivable

Our royalty receivable represents the right to receive a royalty of 4% of FOB trimmed sales from the Middlemount mine as part of our acquisition of Gloucester Coal Limited. The royalty is payable by the Middlemount Joint Venture on 100% of the Middlemount sales. See "*History and Corporate Structure*" for further details. The balance of the royalty receivable was A$205 million, A$199 million, A$199 million and A$198 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively, with A$20 million, A$31 million, A$24 million and A$28 million being due within one year as at each date, respectively. We measure the value of the royalty receivable on a fair value basis by reference to the finite life of the Middlemount mine.

Interest-Bearing Loan to Associate

Our interest-bearing loan to associate arises from the transfer of our interest in the Austar, Ashton and Donaldson mines to Watagan in March 2016 for a purchase price of A$1,363 million (equal to the book value of the three mines at the time). Watagan fully funded the purchase with a A$1,363 million loan from us bearing interest at the bank bill swap bid rate plus 7.06% with a maturity date of 1 April 2025. Watagan can make prepayments of the outstanding loan balance at any time, and any amounts prepaid may be redrawn by Watagan in the future. The balance of the loan was A$775 million, A$712 million and A$730 million as at 31 December 2016 and 2017 and 30 June 2018. The loan is subject to impairment testing under our accounting standards. The outstanding interest and principal of this loan is guaranteed by Yankuang. See "– *Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*" for further details.

Asset Classified as Held for Sale

Our assets classified as held for sale as at 30 June 2018 primarily consisted of parcels of non-mining land acquired as part of the C&A Acquisition.

Our assets classified as held for sale as at 31 December 2017 primarily consisted of our 16.6% interest in HVO that we expected to sell to Glencore in the course of establishing a 51:49 unincorporated joint venture with Glencore in relation to HVO, plus a share of certain contingent and non-contingent royalties and adjustments in relation to the C&A Acquisition. See "*Business – Joint Venture Agreements – HVO*" for further details. Our assets held for sale as at 31 December 2017 also included parcels of non-mining land acquired as part of the C&A Acquisition and a portion of our indirect interest in PWCS.

We did not have assets classified as held for sale as at 31 December 2016.

Our assets classified as held for sale as at 31 December 2015 consisted of the Austar, Ashton and Donaldson mines, for which we transferred our interest to Watagan in March 2016. As Watagan was to be deconsolidated from the Group, such mines were classified as held for sale.

Deferred Tax Assets

Our deferred tax assets consist of unused tax losses and tax credits which we carry forward to the extent that our management believes it is probable that taxable profits will be available against which such unused tax losses and credits can be utilised. Our deferred tax assets amounted to A$1,166 million, A$1,339 million, A$1,219 million and A$1,086 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. There is no expiry date on our ability to utilise such tax losses, although they are subject to the continuous satisfaction of certain tax rules.

Cash and Cash Equivalents

Our cash and cash equivalents primarily consist of cash on hand. As at 31 December 2015, we also had deposits at call for which the effective interest rate range was up to 2.10%.

Trade and Other Payables

Our trade payables are ordinary course, non-interest-bearing payables owed to our trade suppliers, including rail and port operators, utilities suppliers, equipment suppliers and coal suppliers. The table below sets forth, as at the dates indicated, an ageing analysis of our trade payables, based on the invoice date:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Due within:				
Less than 90 days	200	257	495	370
More than 90 days	–	–	1	1
Total trade payables	200	257	496	371

The substantial increase as at 30 June 2018 and 31 December 2017 was primarily due to the consolidation of C&A's payables in connection with the C&A Acquisition.

The table below sets forth our average trade payable turnover days for the periods indicated:

	Year ended 31 December			As at 30 June
	2015	2016	2017	2018
Average trade payable turnover days[(1)]	27	30	35	37

Note:

(1) Calculated as the average monthly balance of trade payables for the relevant period divided by FOB cash costs (excluding royalties) for the same month and multiplied by the number of days in the month. We believe that this presents the best approximation of average trade payable turnover days in our operations. If calculated as the average annual balance of trade payables for the relevant period (which is the sum of the total balance as at the beginning and end of the period divided by two) divided by revenue from external customers for the relevant period and multiplied by 365 days (for full-year periods) or 183 days (for the six months ended 30 June 2018), our average trade payable turnover days would have been 53, 67, 53 and 34 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively.

We typically receive credit periods ranging from 7 to 30 days from our suppliers. Our average trade payable turnover days were 27, 30, 35 and 37 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively. Trade payable turnover days increased over the Track Record Period primarily due to an increasing amount of capital creditors with the expansion of Moolarben, together with some delays experienced as part of the change of ownership of C&A. As at 31 August 2018, all of our trade payables outstanding as at 30 June 2018 had been settled.

Our other payables primarily consist of employee costs, interest and bank guarantee fees and Watagan tax payable. The table below sets forth, as at the dates indicated, a breakdown of our other payables and accrued expenses:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Employee benefits	36	53	112	85
Interest	28	44	72	100
Bank guarantee fees	28	52	27	74
Watagan tax	–	45	44	70
Other	–	18	7	82
Total other payables	92	212	262	411

Employee benefit payables increased from A$36 million at 31 December 2015 to A$85 million at 30 June 2018 due to our workforce headcount more than doubling during the Track Record Period. Interest and bank guarantee fees payable are primarily impacted by the timing of year end payments. Our level of overall debt has generally remained consistent across the Track Record Period. Watagan tax payable relates to tax losses incurred by Watagan that are transferred up to the parent entity under the Group's tax sharing arrangements. See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Taxation*" for further details.

Interest-Bearing Liabilities

See "– *Indebtedness*".

Deferred Tax Liabilities

Our deferred tax liabilities arise from temporary differences between accounting and tax reporting. Most our deferred tax losses arise on the treatment of mining tenements where an accounting value is ascertained with the balance reduced over time through amortisation to the profit and loss but no corresponding income tax value is attributed. This is typically due to the asset being eligible for a capital gains tax base rather than an income tax base, or the mining tenement being deemed a first use exploration asset for tax purposes and where we received a 100% deduction in the year of first use. Our deferred tax liabilities amounted to A$692 million, A$762 million, A$1,037 million and A$990 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively.

Provisions

Provisions represent cash outflow obligations for which the amount can be reliably estimated. Our provisions, including both current and non-current provisions, amounted to A$143 million, A$127 million, A$547 million and A$502 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. Our provisions as at 31 December 2015 and 2016 primarily related to mine rehabilitation costs and take or pay rail and port contracts. Our provisions significantly increased as at 31 December 2017, primarily due to increases in the aforementioned costs as well as provisions for a below market sales

contract and employee benefits, which arose in connection with the C&A Acquisition. Our provisions then decreased as at 30 June 2018, primarily due to the utilisation of provisions during the period and the Glencore Transaction. See note 28 to the Accountants' Report of the Group in Appendix IA to this prospectus.

IMPAIRMENT ASSESSMENT

As described in note 19 to the Accountants' Report of the Group in Appendix IA to this prospectus, an impairment assessment of the carrying value of certain assets is undertaken each reporting period. Goodwill of A$60 million for all periods in the Track Record Period is included in the Yarrabee CGU and is tested through this process. The detailed assumptions are included in note 19 to the Accountants' Report of the Group in Appendix IA to this prospectus. In assessing whether these assets are impaired management utilises external experts and considers these to be reasonable as they are supportable evidence for the assumptions.

In undertaking the impairment assessment the sensitivities are determined as being those that have the greatest impact and are most likely to change in future periods. From the analysis performed the key assumptions are US dollar coal prices, the Australian dollar exchange rate and discount rates. The results of the impairment testing and the key sensitivities considered possible by us are detailed in the table below:

	Year ended 31 December									Six months ended		
	2015			2016			2017			30 June 2018		
	NSW	Yarrabee	Middlemount	NSW	Yarrabee	Middlemount	NSW	Yarrabee	Middlemount	NSW	Yarrabee	Middlemount
	A$'m	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*
Book Value	2,418	449	339	2,556	418	310	6,086	434	383	5,844	396	382
Recoverable Amount	3,681	452	472	4,231	783	678	12,294	846	627	12,412	588	723
Head Room	1,263	3	133	1,675	365	368	6,208	412	244	6,568	192	341
US$ Coal Price (1)												
+10%	900	252	190	870	296	193	2,649	423	181	2,564	315	167
-10%	(903)	(270)	(236)	(871)	(300)	(211)	(2,650)	(427)	(199)	(2,570)	(341)	(182)
Exchange Rate (2)												
+5 cents	(485)	(128)	(106)	(474)	(154)	(101)	(1,270)	(210)	(80)	(1,210)	(144)	(71)
-5 cents	557	144	105	543	176	106	1,451	240	83	1,380	159	72
Discount Rate (3)												
+50 bps	(184)	(23)	(16)	(156)	(17)	(12)	(525)	(34)	(11)	(509)	(15)	(11)
-50 bps	197	24	16	165	18	12	565	37	11	548	16	11

Notes:

(1) This represents the change in recoverable amount due to a +/-10% change to our coal price assumptions as detailed in note 19 to to the Accountants' Report of the Group in Appendix IA to this prospectus.

(2) This represents the change in recoverable amount due to a +/-5 cents change to the long-term US$:A$ foreign exchange rate adopted by us as detailed in note 19 to Accountants' Report of the Group in Appendix IA to this prospectus.

(3) This represents the change in recoverable amount due to a +/-50 bps change to the discount rate adopted by us as detailed in note 19 to Accountants' Report of the Group in Appendix IA to this prospectus.

The change in the key sensitivities outlined above are considered reasonably possible changes based on the historical volatility of the long term pricing for foreign exchange and coal prices. We have only adjusted the discount rate by 0.5% in prior periods and this is considered to be a reasonable basis to assess this sensitivity.

LIQUIDITY AND CAPITAL RESOURCES

Our primary sources of liquidity have consisted of operating cash flows, interest-bearing liabilities, including shareholder loans, and new equity. We expect that our cash needs in the near future will primarily relate to organic and inorganic growth opportunities, debt repayments and dividends. We may also continue to seek external debt financing as a supplemental source for our cash needs, in particular to the extent we seek to acquire companies, make strategic investments, materially expand our mine assets or undertake other activities which require substantial capital expenditure, subject to pricing and other market conditions that we consider satisfactory. In addition, the expected proceeds of the Global Offering [**REDACTED**] will contribute positively to our liquidity position.

During the Track Record Period and as at the Latest Practicable Date, we are and have been in compliance with all material covenants in our financings, and we did not have any material default in payment of payables for trade payables, interest-bearing liabilities or other financing obligations.

Net Current Assets

The table below sets forth, for the dates indicated, a breakdown of our current assets and current liabilities:

	As at 31 December			As at 30 June	As at 31 October
	2015	2016	2017	2018	2018
			A$ million		(unaudited)
Current assets					
Cash and cash equivalents	154	190	207	485	545
Trade and other receivables	225	435	658	561	418
Inventories	76	75	150	205	208
Royalties receivable	20	31	24	28	24
Non-contingent royalty receivable	–	–	–	18	7
Assets classified as held for sale	1,637	–	613	57	57
Other current assets	12	7	37	16	15
Total current assets	2,124	738	1,689	1,370	1,274

	As at 31 December			As at 30 June	As at 31 October
	2015	2016	2017	2018	2018
			A$ million		(unaudited)
Current liabilities					
Trade and other payables	292	469	758	783	653
Interest-bearing liabilities	11	20	17	17	14
Derivative financial instruments	1	–	–	–	–
Provisions	12	10	59	42	34
Non-contingent royalties payable	–	–	112	64	25
Liabilities directly associated with assets classified as held for sale	322	–	67	–	–
Total current liabilities	638	499	1,013	906	726
Net current assets	1,486	239	676	464	548

We had net current assets of A$1,486 million, A$239 million, A$676 million and A$464 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. As at 31 October 2018, being the latest practicable date for the purposes of this statement, our unaudited net current assets were A$548 million.

Cash Flows

The table below sets forth our cash flows for the periods indicated:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Net cash (used in)/ generated from operating activities	(108)	(24)	408	282	712
Net cash (used in)/ generated from investing activities	(314)	(466)	(3,449)	(133)	228
Net cash generated from/(used in) financing activities	366	525	3,062	(14)	(698)
Net (decrease)/ increase in cash and cash equivalents	(56)	35	21	135	242

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Cash and cash equivalents at the beginning of the year	204	159	190	190	207
Effects of exchange rate changes on cash and cash equivalents	11	(4)	(4)	(8)	36
Transfer to assets held for sale	(5)	–	–	–	–
Cash and cash equivalents at the end of the year	154	190	207	317	485

Net cash (used in)/generated from operating activities

In the six months ended 30 June 2018, we had net cash generated from operating activities of A$712 million, including receipts from customers less payments to suppliers and employees of A$818 million, representing a strong operating performance. Net interest payments were A$74 million. Our profit after income tax of A$361 million included the following significant non-cash adjustments: (i) depreciation and amortisation of non-current assets of A$244 million, (ii) fair value losses recycled from hedge reserve of A$45 million, (iii) impairment expense of A$50 million on investments in WICET and (iv) income tax expense of A$178 million.

In 2017, we had net cash generated from operating activities of A$408 million, including receipts from customers less payments to suppliers and employees of A$683 million, representing a strong operating performance. Net interest payments were A$110 million and stamp duty paid on C&A amounted to A$148 million. Our profit after income tax of A$246 million included the following significant non-cash adjustments: (i) depreciation and amortisation of non-current assets of A$256 million, (ii) fair value losses recycled from hedge reserve of A$229 million, (iii) gain on acquisition of A$177 million, (iv) a reversal of impairment of mining tenements of A$100 million, (v) provision releases of A$87 million and (vi) income tax expense of A$89 million.

In 2016, we had net cash used in operating activities of A$24 million, including receipts from customers less payments to suppliers and employees of A$78 million representing a positive operating performance. Net interest payments were A$95 million. Our loss after income tax of A$227 million included the following significant non-cash adjustments: (i) depreciation and amortisation of non-current assets of A$133 million, (ii) fair value losses recycled from hedge reserve of A$133 million and (iii) income tax benefit of A$85 million.

In 2015, we had net cash used in operating activities of A$108 million including receipts from customers less payments to suppliers and employees of A$29 million representing a positive operating performance. Net interest payments were A$119 million. Our loss after income tax of A$291 million included non-cash adjustments for (i) depreciation and amortisation of non-current assets of A$200 million and (ii) income tax benefit of A$63 million.

Net cash used in investing activities

In the six months ended 30 June 2018, we had net cash used in investing activities of A$228 million, primarily due to proceeds from the Glencore Transaction of A$524 million, partially offset by consideration paid on the Warkworth Transaction of A$276 million and payments of property, plant and equipment of A$71 million, which were mainly in connection with Moolarben and MTW.

In 2017, we had net cash used in investing activities of A$3,449 million, primarily due to (i) payments for the acquisition of C&A of A$3,247 million (net of cash acquired) and (ii) payments for property, plant and equipment of A$299 million.

In 2016, we had net cash used in investing activities of A$466 million, primarily due to payments of property, plant and equipment of A$353 million, including the Moolarben expansion.

In 2015, we had net cash used in investing activities of A$314 million, primarily due to payments for property, plant and equipment of A$290 million, including the Moolarben expansion.

Net cash generated from financing activities

In the six months ended 30 June 2018, we had net cash outflow from financing activities of A$698 million, primarily due to repayment of interest-bearing liabilities of US$500 million of our secured bank loan.

In 2017, we had net cash generated from financing activities of A$3,062 million, primarily due to (i) proceeds from the issues of shares and other equity securities of A$3,125 million, which were raised to finance the acquisition of C&A and (ii) proceeds from interest-bearing liabilities of related entities of A$188 million relating to our draw down of credit facilities provided by Yanzhou, partially offset by (i) repayment of interest-bearing liabilities of A$196 million paying down US$150 million of our secured bank loan and (ii) a net repayment of borrowings from associate of A$63 million being the net repayment received from Watagan repaying a portion of the loan used to purchase interests in the Austar, Ashton and Donaldson mines from us.

In 2016, we had net cash generated from financing activities of A$525 million, primarily due to (i) repayment of borrowings from associate of A$623 million, which related to Watagan repaying a portion of the loan used to purchase interests in the Austar, Ashton and Donaldson mines from us and (ii) proceeds from interest-bearing liabilities of related entities of A$251 million, which related to our draw down of credit facilities provided by Yanzhou, partially offset by (i) repayment of interest-bearing liabilities of A$198 million and (ii) payment of subordinated capital notes distribution of A$100 million, which consisted of coupon payments on SCNs issued by our wholly-owned subsidiary, Yancoal SCN in 2014, for which we were the guarantor on a subordinated basis.

In 2015, we had net cash generated from financing activities of A$366 million, primarily due to proceeds from interest-bearing liabilities of related entities of A$402 million, which related to our draw down of credit facilities provided by Yanzhou.

Working Capital Sufficiency

After taking into consideration the financial resources available to us, including operating cash flows, revolving credit facilities and the estimated net proceeds of the Global Offering, in the absence of unforeseeable circumstances, the Directors confirm that we have sufficient working capital to satisfy 125% of our present liquidity and capital resource needs (including general, administrative and operating costs, property holding costs and the cost of any proposed exploration and/or development, as well as any interest and loan repayment costs in connection therewith) over the next 12 months from the date of this prospectus.

Our liquidity and capital resource needs over the next 12 months primarily include organic and inorganic growth opportunities, debt repayments and dividends. We expect to be able to finance these capital requirements with operating cash flows, interest-bearing liabilities and the expected proceeds from the Global Offering. Our ability to obtain additional funding beyond our anticipated cash needs for the next 12 months following the date of this prospectus, however, is subject to a variety of uncertainties, including our future results of operations, our future business plans, financial condition and cash flows and economic, political and other conditions in the markets where we and our customers and lenders operate.

INDEBTEDNESS

During the Track Record Period, we had indebtedness primarily in the form of interest-bearing loans from banks and related parties. The table below sets forth a breakdown of our overall indebtedness as at the dates indicated:

	As at 31 December			As at 30 June	As at 31 October
	2015	2016	2017	2018	2018
			A$ million		(unaudited)
Current indebtedness					
Secured bank loans	7	–	–	–	–
Secured lease liabilities	4	20	17	17	14
Non-current indebtedness					
Secured bank loans	3,751	3,593	3,117	2,622	2,562
Secured lease liabilities	27	47	38	34	31
Unsecured loans from related parties	943	1,290	1,527	1,611	1,504
Total indebtedness	4,732	4,950	4,699	4,284	4,111

The above table includes an amount of A$24 million, A$16 million and A$14 million as at 31 December 2017, 30 June 2018 and 31 October 2018, respectively, with respect to the fair value gain on the refinancing of secured bank loans recognised during 2017 on the adoption of IFRS 9. This amount will continue to unwind to the statement of profit and loss up to the date of maturity, at which time the full face value of the secured bank loans will be recognised. The adoption of IFRS 9 has not had, and is not expected to have, a significant impact on our financial position or performance.

The table below sets forth a maturity profile of our overall indebtedness as at the dates indicated, excluding the impact of the fair value gain noted above:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Indebtedness repayable within:				
Less than one year	11	20	17	17
One to two years	80	12	12	415
Two to five years	1,329	2,439	3,316	2,414
Five or more years	3,312	2,479	1,378	1,454
Total indebtedness	4,732	4,950	4,723	4,300

Secured Bank Loans

Syndicated Facility

Secured bank loans primarily represent a syndicated loan facility with a maximum credit limit of US$2,900 million that we executed in 2009 ("**Syndicated Facility**") with Bank of China Limited, Sydney Branch, China Development Bank Limited, Hong Kong Branch, and China Construction Bank Limited, Hong Kong Branch. The Syndicated Facility was fully drawn at inception. US$100 million was fully repaid to China Development Bank in 2012, US$100 million in 2013 and US$99 million in 2014. As at each of 31 December 2015 and 2016, the Syndicated Facility was drawn to US$2,600 million. Our balance as at 31 December 2017 included a repayment of US$150 million which reduced the facility balance to US$2,450 million. We made further repayments of US$450 million in May 2018 and US$50 million in June 2018, resulting in an outstanding balance of US$1,950 million as at 30 June 2018. We subsequently repaid another US$300 million in August 2018 using loans drawn down from a US$300 million term debt facility from certain banks which are party to the A$1,000 million bank guarantee facility from a syndicate of seven domestic and international banks. This resulted in an outstanding balance of US$1,650 million on the Syndicated Facility. We further repaid an additional US$75 million on 17 September 2018 and US$50 million on 17 October 2018 using excess cash flows generated from operations. Other fluctuations in the balance of the Syndicated Facility over the Track Record Period were primarily attributable to the strengthening of the Australian dollar against the US dollar over this period. The Syndicated Facility matures in installments, with approximately 45% due in 2020, 29% in 2021, and 26% due in 2022.

The Syndicated Facility is fully secured by a corporate guarantee provided by Yanzhou. Key financial covenants of the Syndicated Facility include:

(i) an interest coverage ratio of not less than 1.40 (which was adjusted from 1.15 following the C&A Acquisition);

(ii) a gearing ratio of not more than 0.75 (adjusted from 0.80 following the C&A Acquisition); and

(iii) consolidated net worth of the Group of not less than A$3 billion (adjusted from A$1.6 billion following the C&A Acquisition).

In addition, the Syndicated Facility requires us to maintain the following minimum deposit balance requirements with the syndicate lending banks:

(i) an aggregate daily average balance of not less than A$25 million, tested at the end of each month; and

(ii) an aggregate end of month balance of not less than A$50 million.

We did not have any breach of the financial covenants of the Syndicated Facility during the Track Record Period.

The effective interest rate on our loans drawn under the Syndicated Facility (all-in including a guarantee fee to Yanzhou and an extension fee) in 2015, 2016 and 2017 and the six months ended 30 June 2018 was 6.45%, 7.29%, 7.93% and 8.42%, respectively.

Other secured loans

Our secured bank loans during the Track Record Period also included:

(i) a bilateral loan facility of US$140 million with Bank of China Limited, Sydney Branch, which was fully drawn down as at 16 December 2015 and, on 31 December 2016, was fully repaid and restructured to a bank guarantee facility with the same limit. The effective interest rate (inclusive of a guarantee fee to Yanzhou and an extension fee to Bank of China) for 2015 and 2016 was 6.45% and 7.29%, respectively;

(ii) a working capital facility of A$50 million with Industrial and Commercial Bank of China Limited, Sydney Branch taken out in 2015 for working capital and capital expenditure purposes, which was matured and cancelled in March 2016. The facility was priced at base rate (LIBOR or BBSY) plus loan margin of 3.00% or 2.70% for US$ or A$ drawings, respectively, and an undrawn fee of 0.5%. No outstanding was drawn under the facility as at 31 December 2015 and 2016. The effective interest rate was 7.61% in 2015 and 7.27% in 2016, in each case including a guarantee fee to Yanzhou;

(iii) a bank guarantee facility of A$100 million with Industrial and Commercial Bank of China Limited, Sydney Branch taken out in 2014, which was cancelled in June 2017. The facility was fully drawn as at 31 December 2015 and 2016. In each of 2015 and 2016, there was an annual guarantee fee to Yanzhou and an issuance fee to Industrial and Commercial Bank of China; and

(iv) a chattel mortgage facility of US$21.7 million with Australia and New Zealand Banking Corporation Limited, of which A$5.6 million was drawn down as at 31 December 2015 and was fully repaid and cancelled as at 31 December 2016. The effective interest rate for 2015 and 2016 was 5.89% and 5.89%, respectively.

Secured Lease Liabilities

Our secured lease liabilities represent loans obtained under finance lease facilities entered with Komatsu, one of our mining equipment suppliers. These facilities enable us to purchase mining equipment from Komatsu with security over the equipment purchased. As at 31 December 2015, 2016 and 2017 and 30 June 2018, our finance lease facilities had an aggregate limit of A$50 million, A$100 million, A$100 million, A$100 million, respectively, of which we had drawn down A$31 million, A$67 million, A$55 million and A$51 million as at the same dates, respectively, at an effective interest rate of 5.22%, 5.13%, 5.10% and 5.00%.

Unsecured Loans from Related Parties

During the Track Record Period, we had two long-term unsecured loan facilities in place from Yanzhou, as follows:

(i) A facility with a credit limit of A$1,400 million used to fund working capital and capital expenditure needs, maturing in December 2024. As at 31 December 2015, 2016 and 2017 and 30 June 2018, our balance of amounts drawn down under this facility was A$684 million, A$942 million, A$1,066 million and A$1,125 million, respectively.

(ii) A facility with a credit limit of US$807 million used to finance coupon payments on SCNs issued by Yancoal SCN, in December 2014 for which we were the guarantor on a subordinated basis. This facility matures in December 2024. As at 31 December 2015, 2016 and 2017, our balance of amounts drawn down under this facility was A$100 million, A$188 million and A$312 million, respectively. On 31 January 2018, at the request of certain eligible holders of the SCNs, a portion of the SCNs were converted into equity of the Company while the outstanding SCNs were redeemed in full by Yancoal SCN on 31 January 2018. From this date, the facility limit was reduced to US$243 million, which remains the drawn down amount as at 30 June 2018.

Both credit facilities from Yanzhou are unsecured subordinated loans with a term of ten years (maturing in December 2024, at which time the principal is repayable), and have no covenants. The effective interest rate was 7.00% for each of 2015, 2016 and 2017 and the six months ended 30 June 2018.

In addition, we also have a US$550 million unsecured credit facility from Yancoal International Resources Development Co., Ltd. ("**Yancoal International**"), which is wholly owned by Yanzhou. The facility was fully drawn down in 2012 to fund the acquisition of Gloucester Coal Limited. See "*History and Corporate Structure* "for further details. We repaid US$434 million in December 2014, leaving a balance of US$116 million which was outstanding as at each of 31 December 2015, 2016 and 2017 and 30 June 2018, and is repayable in May 2022. The effective interest rate was 7.70% for each of 2015, 2016 and 2017 and the six months ended 30 June 2018.

Furthermore, we have received letters of support from Yanzhou under which Yanzhou, among other things, acknowledged the major acquisitions and other transactions that we have undertaken, including the C&A Acquisition, Glencore Transaction and Warkworth Transaction (and the financing needed in connection with certain transactions), and confirmed that it would provide ongoing financial support to us if needed to enable us to pay our debts as and when they fall due. Yanzhou may revoke such support by giving 24 months' notice to us. We have completed post-closing working

capital adjustments for the C&A Acquisition, Glencore Transaction and Warkworth Transaction, and expect to be able to settle the remaining consideration payable for the C&A Acquisition, which is attributable to non-contingent royalties' liabilities, with our cash on hand and without credit support from Yanzhou.

Subordinated Capital Notes

On 31 December 2014, Yancoal SCN, our wholly-owned subsidiary, issued 18,005,102 SCNs at US$100 each, raising a total of A$2.3 billion, which we used primarily to repay loans from Yanzhou and its subsidiaries and improve our capital structure. The SCNs were perpetual, subordinated (with respect to our secured bank loans and related party loans from Yancoal International of US$116 million), unsecured capital notes, guaranteed by the Company on a subordinated basis and each convertible into 1,000 ordinary shares of the Company and listed on the ASX. SCN holders were entitled to receive 7% per annum fixed rate distribution payments payable semi-annually in arrears. Distributions amounted to A$186 million, A$171 million and A$79 million in 2015, 2016 and 2017, respectively. On 31 August 2017, Yanzhou, which held the substantial majority of the SCNs, converted all its SCN holdings, resulting in us issuing 18,000,031,000 new ordinary shares to Yanzhou. A further 150,943 new ordinary shares were issued on conversion of 80 SCNs, and 3,015,976 new ordinary shares were issued in January 2018 on the conversion of 1,606 SCNs by other eligible holders. We subsequently redeemed all outstanding SCNs in February 2018 at the face value plus a final distribution. Yancoal SCN was then delisted from the ASX.

Bank Guarantee Facilities

We have obtained a number of bank guarantee facilities to provide guarantees in favour of certain counterparties, including port, rail, government departments and other operational functions, in respect of their activities involving us, Yanzhou, other related parties, and joint ventures. As at 31 December 2015, 2016 and 2017 and 30 June 2018, we had total bank guarantee facilities of A$522 million, A$486 million, A$1,000 million and A$1,000 million (plus an additional US$95 million as at both 31 December 2017 and 30 June 2018), respectively, of which A$458 million, A$441 million, A$1,041 million and A$894 million were utilised as at the same dates. These facilities consisted of the following:

- as at 31 December 2015, our bank guarantee facilities included (i) A$350 million from a syndicate of Australian banks, of which A$299 million was utilised, secured by the Yarrabee, Ashton and Moolarben mines, (ii) A$125 million from the Industrial and Commercial Bank of China, of which A$122 million was utilised, secured by a corporate guarantee of A$100 million from Yanzhou and A$2.5 million of cash collateral and (iii) A$47 million from the Bank of China, of which A$37 million was utilised, secured by a letter of comfort from Yanzhou;

- as at 31 December 2016, our bank guarantee facilities included (i) A$93 million from a syndicate of Australian banks, (ii) A$268 million from the Bank of China, of which A$228 million was utilised, secured by cash collateral of A$28 million, a corporate guarantee of US$140 million from Yanzhou and a letter of comfort for A$47 million from Yanzhou and (iii) A$125 million from the Industrial and Commercial Bank of China, of which A$121 million was utilised, secured primarily by a corporate guarantee of A$100 million from Yanzhou and A$2.5 million of cash collateral;

- as at 31 December 2017, our bank guarantee facilities included (i) A$1,000 million from a syndicate of seven domestic and international banks, of which A$935 million was utilised, secured by Yarrabee and Moolarben mine assets and C&A assets and (ii) US$95 million from the Bank of China, of which A$106 million was utilised, secured by corporate guarantees of A$100 million from Yanzhou and A$2.5 million of cash collateral; and

- as at 30 June 2018, our bank guarantee facilities included (i) A$1,000 million from a syndicate of seven domestic and international banks, of which A$793 million was utilised, secured by Yarrabee and Moolarben mine assets and C&A assets and (ii) US$95 million from the Bank of China, of which A$101 million was utilised, secured by corporate guarantees of US$95 million from Yanzhou and A$2.5 million of cash collateral. On 20 August 2018, we obtained a US$300 million term debt facility from certain of these banks, which we fully drew down on 23 August 2018 to repay a portion of the Syndicated Facility.

The syndicate bank guarantee facility as at 30 June 2018 includes the following key financial covenants that we are required to maintain, tested semi-annually:

(i) an interest coverage ratio of more than 5.0 times;

(ii) a finance debt to EBITDA ratio of less than 3.0 times; and

(iii) net tangible assets of more than A$1,500 million (adjusted from A$600 million following the C&A Acquisition).

We did not have any breach of the above covenants during the Track Record Period. The bank guarantee facilities from the Bank of China and ICBC did not have any financial covenants.

Indebtedness Statement

As at 31 October 2018, being the latest practicable date for the purpose of the indebtedness statement:

- the total balance of our interest-bearing liabilities on demand or due within one year was A$14 million;

- the total balance of our interest-bearing liabilities due after one year was A$4,097 million;

- we had nil unutilised credit facilities and unutilised bank guarantee facilities of approximately A$269 million, which were committed and without uncommon restriction on utilisation; and

- other than as disclosed in *"– Indebtedness"* and *"– Contingent Liabilities"*, and with respect to certain financing arrangements in relation to Watagan and WICET (see "*Risk Factors-We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations*" and "*Risk Factors – Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders*", respectively, for further details) we had no other debt securities, borrowings, debts, mortgages, contingent liabilities or guarantees.

Since 30 June 2018, other than as disclosed above, there has been no material adverse change to our indebtedness.

RELATED PARTY TRANSACTIONS

During the Track Record Period, we had certain transactions with related parties, including the following:

- sales of goods and services to related parties (including primarily Noble Group (in 2015, 2016 and 2017), Watagan and Yancoal International) amounting to A$274 million, A$281 million, A$285 million and A$23 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively;

- purchases of goods and services from related parties (including primarily Watagan and Syntech Resources) amounting to A$9 million, A$79 million, A$200 million and A$61 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively (the increase was largely attributable to coal purchased from Watagan as produced at the Austar, Ashton and Donaldson mines);

- advances and loans, net of repayments, to related parties of less than A$1 million in 2015 and A$810 million in 2016 (primarily consisting of a loan to Watagan in connection with the transfer of interest in the Austar, Ashton and Donaldson mines) and repayments from related parties (net of advances and loans to related parties) of A$98 million in 2017 and A$47 million in the six months ended 30 June 2018;

- loans from related parties (including primarily Yanzhou and Yancoal International) of A$501 million, A$352 million, A$330 million and nil in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively;

- finance costs attributable to related parties of A$44 million, A$76 million, A$91 million and A$47 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, primarily consisting of interest accrued or paid on loans from Yanzhou and Yancoal International;

- finance income attributable to related parties of A$19 million, A$94 million, A$95 million and A$43 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, primarily consisting of interest income on loans to Watagan and Middlemount;

- other costs attributable to related parties of A$171 million, A$173 million, A$212 million and A$113 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, primarily consisting of corporate guarantee fees accrued or paid to Yanzhou and port charges paid to NCIG; and

- other income attributable to related parties of A$20 million, A$63 million, A$83 million and A$44 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, primarily consisting of mining management and service fees from Watagan and royalty income from Middlemount.

See note 37 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

CAPITAL EXPENDITURE

The table below sets forth, for the periods indicated, a breakdown of our capital expenditure during the Track Record Period, including transfers from assets under construction:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Plant and equipment	5	3	12	–
Mine development	47	14	21	10
Assets under construction	281	316	303	69
Leased plant and equipment	–	50	9	5
Total capital expenditure	333	383	345	84

Assets under construction generally relate to ongoing construction projects, such as the Moolarben expansion, whereby the capital expenditure is classified as assets under construction until the assets are "in use". At this time the spend is transferred out of assets under construction to the appropriate category. These reclassifications are shown in the table below.

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Plant and equipment	110	126	240	(102)
Mine development	186	92	308	138
Freehold land and buildings	8	1	27	5
Assets under construction	(304)	(219)	(575)	(41)
Net	–	–	–	–

We have financed our capital expenditure primarily through operating cash flows, increases in interest-bearing liabilities and repayments of the loan due from Watagan and may in the future use these sources as well as the proceeds from the Global Offering as we pursue acquisition opportunities.

COMMITMENTS

The table below sets forth, as at the dates indicated, our future minimum payments under non-cancellable commitments:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Not later than 1 year				
Property, plant and equipment	15	139	33	36
Non-cancellable operating leases	5	25	38	26
Finance leases	11	24	19	19
Later than 1 year but not later than 5 years				
Non-cancellable operating leases	1	67	149	73
Finance leases	26	53	42	37
Later than 5 years	–	–	–	78
Total commitments	58	308	281	269

Our operating lease commitments include mining equipment, office space, and office equipment. Such leases typically run for periods of one month to five years with an option to renew at the expiry of the lease period.

Our finance lease commitments generally include mining equipment and other machinery. Such leases typically run for periods of approximately five years.

CONTINGENT LIABILITIES

As at the Latest Practicable Date, we had the following contingent liabilities:

(i) bank guarantees in favour of certain of counterparties, including port, rail, government departments and other operational functions, in respect of their activities involving us, Yanzhou, other related parties, and joint ventures. See "– *Indebtedness – Bank guarantee facilities*" for further details;

(ii) a letter of support to Middlemount, our incorporated joint venture, under which we agree to (a) not demand repayment of any loan from Middlemount except under certain conditions and (b) provide financial support to Middlemount in the form of shareholder loans in proportion to our share of the net assets of Middlemount in order for Middlemount to meet its debt obligations. See "*Business – Marketing and Sales Arrangements – Middlemount*" for further details;

(iii) various claims relating to personal injury and contractual obligations which we become party to in the ordinary course of business. See "*Business – Health, Safety and Environmental Matters*" for further details. Our insurance policies have largely covered the personal injury claims, and we do not expect the claims against us in any event to have a material impact on our financial position; and

(iv) certain disputes involving us and members of the Noble Group, for which the relevant proceedings are at an early stage. See "*Business – Legal Proceedings and Non-Compliance*" for further details.

KEY FINANCIAL RATIOS

The table below sets forth, as at the dates and for the periods indicated, certain of our key financial ratios:

	As at or for the year ended 31 December			As at or for the six months ended 30 June
	2015	2016	2017	2018
Return on assets[(1)]	(3.8)%	(2.9)%	2.5%	6.0%[(4)]
Return on equity[(2)]	(13.9)%	(14.9)%	7.7%	14.0%[(4)]
Gearing ratio[(3)]	2.80x	3.66x	0.93x	0.81x

Notes:

(1) Return on assets is calculated by dividing profit after income tax by average total assets and multiplying the resulting value by 100%. Average total assets equal total assets at the beginning of the period plus total assets as at the end of the period, divided by two.

(2) Return on equity is calculated by dividing profit after income tax by average total equity and multiplying the resulting value by 100%. Average total equity equals total equity at the beginning of the period plus total equity as at the end of the period, divided by two.

(3) Gearing ratio is calculated as gross debt divided by total equity at the end of the period. Gross debt consists of the total balance of interest-bearing liabilities as at the end of the period.

(4) On an annualised basis.

Return on Assets

Our return on assets ratio increased from (3.8)% in 2015 to (2.9)% in 2016, primarily due to a decrease in loss after income tax over this period, and further increased to 2.5% in 2017, primarily due to becoming profit-making over this period. Our return on assets ratio subsequently increased to 6.0% in the six months ended 30 June 2018 (on an annualised basis), primarily due to our increased profitability.

Return on Equity

Our return on equity ratio decreased from (13.9)% in 2015 to (14.9)% in 2016, primarily due to a decrease in average total equity over this period, partially offset by a decrease in loss after income tax. Our return on equity ratio then increased to 7.7% in 2017, primarily due to becoming profit-making over this period, partially offset by a significant increase in total average equity largely due to the C&A Acquisition. Our return on equity ratio subsequently increased to 14.0% in the six months ended 30 June 2018 (on an annualised basis), primarily due to our increased profitability.

Gearing Ratio

Our gearing ratio increased from 2.80x as at 31 December 2015 to 3.66x as at 31 December 2016, primarily due to a decrease in total equity. Our gearing ratio then decreased to 0.93x as at 31 December 2017, primarily due to a significant increase in total equity largely due to the C&A Acquisition. Our gearing ratio subsequently decreased to 0.81x as at 30 June 2018.

RECENT DEVELOPMENTS OF OUR BUSINESS SUBSEQUENT TO THE TRACK RECORD PERIOD

Since 30 June 2018, the following material changes have occurred:

(i) we have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, for the Moolarben Acquisition. We intend to finance the Moolarben Acquisition with a portion of the expected proceeds from the Global Offering. See "*Future Plans and Use of Proceeds*" for further details; and

(ii) on 20 August 2018, we obtained a US$300 million term debt facility from certain banks which are party to our A$1,000 million bank guarantee facility from a syndicate of seven domestic and international banks. On 23 August 2018, we fully drew down the US$300 million under this facility. We used this amount to repay a portion of the Syndicated Facility, resulting in an outstanding balance on the Syndicated Facility of US$1,650 million. On 17 September 2018 and 17 October 2018, respectively, we further repaid US$150 million of our debt (US$75 million on the Syndicated Facility and US$75 million on our unsecured loans from related parties) and US$100 million of our debt (US$50 million on the Syndicated Facility and US$50 million on our unsecured loans from related parties) using excess cash flows generated from operations.

As far as the Directors are aware, other than as disclosed above, there have not been any material changes in our operations, nor in the general economic and market conditions in the regions or the industries in which we operate that materially and adversely affected our business operations or financial condition since 30 June 2018 and up to the date of this prospectus, and no material changes have occurred since the effective date of the Competent Person's Report.

QUALITATIVE AND QUANTITATIVE DISCLOSURES ON MARKET RISK

We are exposed to financial risks arising from our operations and the use of financial instruments. The key financial risks include credit risk, currency risk, interest rate risk and liquidity risk. The Board reviews and agrees policies and procedures for management of these risks.

Credit Risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to us. As at 31 December 2015, 2016 and 2017 and 30 June 2018, our maximum exposure to credit risk which will cause a financial loss to us due to failure to discharge an obligation by the counterparties and financial guarantees provided by us is arising from the carrying amount of the respective recognised financial assets as stated in the consolidated statement of financial position and the amount of contingent liabilities in relation to financial guarantee issued by us.

In order to minimise the credit risk, our management has delegated a team responsible for determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, we review the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate impairment losses are made for irrecoverable amounts. In this regard, our Directors consider that our credit risk is significantly reduced. We maintain our cash and cash equivalents with reputable banks. Therefore, Directors consider that the credit risk for such is minimal.

We generally grant customers with long-relationships credit terms not exceeding 90 days, depending on the situations of the individual customers. For small to medium sized new customers, we generally require them to pay for the products before delivery.

See note 34(b) to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on our counterparties.

Currency Risk

Our sales and finance costs are denominated mainly in United States dollars, while operating costs are mainly denominated in the group's functional currency, the Australian dollar. Accordingly, there is a significant exposure to transactional foreign currency risk.

See note 34(b) to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on our foreign currency exposure and a sensitivity analysis of the impact of hypothetical increases and decreases in the Australian dollar against relevant foreign currencies.

Interest Rate Risk

We are exposed to cash flow interest rate risk in relation to variable-rate bank balances, term deposits, restricted cash and variable rate borrowings. Our cash flow interest rate risk is mainly concentrated on the fluctuation of the interest rate arising from our A$ borrowings and the LIBOR arising from our US$ borrowings.

See note 34(b) to the Accountants' Report of the Group in Appendix IA to this prospectus for a sensitivity analysis of the impact of hypothetical increases and decreases in interest rates.

Liquidity Risk

In the management of the liquidity risk, we monitor and maintain a level of cash and cash equivalents deemed adequate by the management to finance our operations and mitigate the effects of fluctuations in cash flows. Our management monitors the utilisation of bank borrowings and ensures compliance with loan covenants.

See note 34(b) to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on the remaining contractual maturity for our financial liabilities.

DIVIDENDS AND DIVIDEND POLICY

We did not declare or pay any dividends during the Track Record Period. On 15 August 2018, we declared a dividend of approximately A$130 million on our ordinary shares, which was paid on 21 September 2018. Subject in each case to applicable laws, the ongoing cash needs of the business, the statutory and common law duties of the Directors and shareholders' approval, the Directors may pay interim and/or final dividends, and in accordance with our Constitution must:

(i) subject to (ii) below, pay as interim and/or final dividends not less than 40% of net profit after tax (pre-abnormal items) in each financial year; and

(ii) if the Directors determine that it is necessary in order to prudently manage our financial position, pay as interim and/or final dividends not less than 25% of net profit after tax (pre-abnormal items) in any given financial year.

Our Australian legal advisers have advised that under Australian law, a company is able to pay dividends out of current year profits even though it has accumulated losses, and there is no restriction in our Constitution that would prevent current year profits from being paid out as dividends in this way. Accordingly, the Company's accumulated losses do not prevent it from being able to pay dividends, provided that current year profits are not used to offset prior period losses and the Company is otherwise able to satisfy the other legal requirements of paying a dividend under Australian law. As a result, the amount of any dividends to be declared or paid will depend on, among other things, our results of operations, cash flows, financial condition, operating and capital requirements and applicable laws and regulations.

DISTRIBUTABLE RESERVES

As at 30 June 2018, we did not have any distributable reserves as we did not have positive retained earnings as at such date.

LISTING EXPENSES

Total expenses (including estimated underwriting commissions) expected to be incurred in relation to the Listing are A$[**REDACTED**] million (HK$[**REDACTED**] million), of which approximately A$[**REDACTED**] million (HK$[**REDACTED**] million) is expected to be charged to the consolidated statement of profit or loss of the Group and approximately A$[**REDACTED**] million (HK$[**REDACTED**] million) is expected to be capitalised.

OFF-BALANCE SHEET ARRANGEMENTS

During the Track Record Period and as at the Latest Practicable Date, other than as disclosed in "– *Indebtedness*", we had no material off-balance sheet arrangements.

PRO FORMA FINANCIAL INFORMATION OF THE ENLARGED GROUP

The table below sets forth selected unaudited pro forma combined income statement data for the year ended 31 December 2017 and the six months ended 30 June 2018 as if the Pro Forma Transactions had been completed on 1 January 2017. Such pro forma financial information has been prepared using the procedures and adjustments as described in more detail in Appendix IIB to this prospectus, and should be read in conjunction with the related notes thereto.

		Pro forma adjustments[1] for		
	The audited Group for the six months ended 30 June 2018[2]	Acquisition of additional 28.9% interest in Warkworth	Disposal of 16.6% interest in HVO	Unaudited pro forma consolidated statement of profit or loss of the Group for the six months ended 30 June 2018
		A$ million		
Revenue	2,347	48	(89)	2,306
Other income	115	–	(78)	37
Changes in inventories of finished goods and work in progress	24	1	–	25
Raw materials and consumables used	(337)	(9)	18	(328)
Employee benefits	(254)	(5)	10	(249)
Depreciation and amortisation	(244)	(4)	–	(248)
Transportation	(274)	(3)	7	(270)
Contractual services and plant hire	(206)	(5)	11	(200)
Government royalties	(161)	(4)	7	(158)
Coal purchases	(182)	–	–	(182)
Other operating expenses	(170)	–	3	(167)
Finance costs	(152)	–	(1)	(153)
Share of profit of equity-accounted investees, net of tax	33	–	–	33
Profit before income tax	539	19	(112)	446
Income tax expenses	(178)	(6)	34	(150)
Profit for the period	361	13	(78)	296

	The audited Group for the year ended 31 December 2017	Audited C&A for the eight months ended 31 August 2017	Pro forma adjustments[1] for: Adjustment for acquisition accounting on C&A Acquisition, including 55.6% interest in Warkworth & 67.6% interest in HVO	Pro forma adjustments[1] for: Acquisition of additional 28.9% interest in Warkworth	Pro forma adjustments[1] for: Disposal of 16.6% interest in HVO	Unaudited pro forma consolidated statement of profit or loss of the Enlarged Group for the year ended 31 December 2017
			A$ million			
Revenue	2,601	1,424	46	261	(288)	4,044
Other income	325	26	–	–	78	429
Changes in inventories of finished goods and work in progress	7	(11)	–	3	(2)	(3)
Raw materials and consumables used	(349)	(274)	–	(50)	56	(617)
Employee benefits	(302)	(140)	–	(33)	27	(448)
Depreciation and amortisation	(256)	(78)	(97)	(27)	–	(458)
Transportation	(312)	(110)	26	(19)	20	(395)
Contractual services and plant hire	(274)	(169)	–	(26)	39	(430)
Government royalties	(173)	(111)	–	(21)	23	(282)
Coal purchases	(340)	–	–	–	–	(340)
Other operating expenses	(330)	(26)	–	(19)	7	(368)
Finance costs	(294)	(3)	(10)	–	1	(306)
Share of profit of equity-accounted investees, net of tax	32	(16)	–	–	–	16
Profit/(Loss) before income tax	335	512	(35)	69	(39)	842
Income tax expense/(benefit)	(89)	169	(320)	(20)	12	(248)
Profit/(Loss) for the year	246	681	(355)	49	(27)	594

Notes:

(1) See the Unaudited Pro Forma Consolidated Financial Information of the Enlarged Group in Appendix IIB to this prospectus for further details on the adjustments for the Pro Forma Transactions.

(2) Includes the financial results of C&A for the six months ended 30 June 2018.

Our pro forma combined income statement is not necessarily representative of our results of operations and changes in liquidity and capital resources as they would have appeared in our financial statements had the Pro Forma Transactions occurred during the year ended 31 December 2017 or the six months ended 30 June 2018.

Revenue

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual revenue in the six months ended 30 June 2018, our pro forma revenue in the six months ended 30 June 2018 would have slightly decreased by 1.7% to A$2,306 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual revenue in 2017, our pro forma revenue in 2017 would have increased by 55.5% to A$4,044 million, primarily due to the substantial revenue generated by C&A.

Other Income

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, our pro forma other income in the six months ended 30 June 2018 would have decreased by 67.8% to A$37 million compared to our actual other income in the six months ended 30 June 2018, primarily due to the derecognition of the A$78 million gain on disposal with respect to the Glencore Transaction included in the 2017 pro forma income statement.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual other income in 2017, our pro forma other income in 2017 would have increased by 32% to A$429 million, primarily due to a A$78 million gain on disposal with respect to the Glencore Transaction and A$26 million of other income recognised by C&A. The gain is subject to finalisation of the purchase price for the Glencore Transaction.

Raw Materials and Consumables Used

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual raw materials and consumables used in the six months ended 30 June 2018, our pro forma raw materials and consumables used in the six months ended 30 June 2018 would have decreased by 2.7% to A$328 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual raw materials and consumables used in 2017, our pro forma raw materials and consumables used in 2017 would have increased by 76.8% to A$617 million, primarily due to the significant scale of C&A's production operations.

Employee Benefits

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual employee benefits expenses in the six months ended 30 June 2018, our pro forma employee benefits expenses in the six months ended 30 June 2018 would have decreased by 2.0% to A$249 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual employee benefits expenses in 2017, our pro forma employee benefits expenses in 2017 would have increased by 48.3% to A$448 million, primarily due to the addition of C&A's headcount.

Depreciation and Amortisation

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual depreciation and amortisation expenses in the six months ended 30 June 2018, our pro forma depreciation and amortisation expenses would have increased by 1.6% to A$248 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual depreciation and amortisation expenses in 2017, our pro forma depreciation and amortisation expenses would have increased by 78.9% to A$458 million, primarily due to the addition of the depreciation of C&A's plant, property and equipment and the amortisation of mining tenements recognised by the Company as part of the C&A Acquisition.

Transportation

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual transportation expenses in the six months ended 30 June 2018, our pro forma transportation expenses in the six months ended 30 June 2018 would have slightly decreased by 1.5% to A$270 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual transportation expenses in 2017, our pro forma transportation expenses in 2017 would have increased by 26.6% to A$395 million, primarily due to C&A's substantial transportation needs in connection with its operations.

Contractual Services and Plant Hire

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual contractual services and plant hire in the six months ended 30 June 2018, our pro forma contractual services and plant hire expenses in the six months ended 30 June 2018 would have decreased by 2.9% to A$200 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual contractual services and plant hire in 2017, our pro forma contractual services and plant hire expenses in 2017 would have increased by 56.9% to A$430 million, primarily due to the addition of C&A's contractor headcount.

Government Royalties

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual government royalties in the six months ended 30 June 2018, our pro forma government royalties would have slightly decreased by 1.9% to A$158 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual government royalties in 2017, our pro forma government royalties expenses in 2017 would have increased by 63.0% to A$282 million, primarily due to the addition of royalties imposed on C&A's coal output.

Coal Purchases

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual coal purchases in 2017 and the six months ended 30 June 2018, our pro forma coal purchase costs in 2017 and the six months ended 30 June 2018 would not have changed as none of the entities acquired or disposed of under the Pro Forma Transactions purchased coal in 2017 or the six months ended 30 June 2018.

Other Operating Expenses

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual other operating expenses in the six months ended 30 June 2018, our pro forma other operating expenses in the six months ended 30 June 2018 would have slightly decreased by 1.8% to A$167 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual other operating expenses in 2017, our pro forma other operating expenses in 2017 would have increased by 11.5% to A$368 million, primarily due to the addition of C&A's other operating expenses and stamp duty incurred or expected to be incurred on the Warkworth and Moolarben acquisitions.

Finance Costs

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual finance costs in the six months ended 30 June 2018, our pro forma finance costs in the six months ended 30 June 2018 would have slightly increased by 0.7% to A$153 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual finance costs in 2017, our pro forma finance costs in 2017 would have increased by 4% to A$306 million, primarily due to the addition of C&A's finance costs.

Profit Before Income Tax

As a result of the aforementioned reasons, assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual profit before income tax in the six months ended 30 June 2018, our pro forma profit before income tax in the six months ended 30 June 2018 would have decreased by 17.3% to A$446 million.

As a result of the aforementioned reasons, assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual profit before income tax in 2017, our pro forma profit before income tax in 2017 would have increased by 151.3% to A$842 million.

Income Tax Expense

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual income tax expenses in the six months ended 30 June 2018, our pro forma income tax expense in the six months ended 30 June 2018 would have decreased by 15.7% to A$150 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual income tax expenses in 2017, our pro forma income tax expense in 2017 would have increased by 178.7% to A$248 million, primarily due to the addition of C&A's income tax expenses.

Profit After Income Tax

As a result of the aforementioned reasons, assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual profit after income tax in the six months ended 30 June 2018, our pro forma profit after income tax in the six months ended 30 June 2018 would have decreased by 18.0% to A$296 million.

As a result of the aforementioned reasons, assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual profit after income tax in 2017, our pro forma profit after income tax would have increased by 141.5% to A$594 million.

NO ADDITIONAL DISCLOSURE REQUIRED UNDER THE LISTING RULES

We confirm that, as at the Latest Practicable Date, we were not aware of any circumstances that would give rise to a disclosure requirement under Rules 13.13 to Rules 13.19 of the Listing Rules.

DIRECTORS' CONFIRMATION OF NO MATERIAL ADVERSE CHANGE

The Directors confirm that, having performed reasonable due diligence on the Group, there has been no material adverse change in our financial or trading position or prospects since 30 June 2018 and up to the date of this prospectus.

C&A is a subsidiary of the Company, and was acquired by the Company on and with effect from 1 September 2017. You should read the following discussion and analysis in conjunction with the discussion and analysis of the Company's consolidated financial statements in "Financial Information of the Group" and "Appendix IA – Accountants' Report of the Group", as well as the audited consolidated financial statements of C&A as at and for the years ended 31 December 2015 and 2016, the eight months ended 31 August 2017 and the four months ended 31 December 2017 set out in Appendix IB – Accountants' Report of C&A", as presented in accordance with section 4.05A of the Listing Rules. The audited consolidated financial statements of C&A have been prepared in accordance with IFRS, which may differ in material aspects from generally accepted accounting principles in other jurisdictions. Historical results are not indicative of future performance. You should note that the format and presentation of the historical financial statements of C&A differ in some respects from those of the Company; accordingly, comparability between the two is limited. The pro forma effects of the C&A Acquisition are set out in "Appendix IIB – Unaudited Pro Forma Financial Information of the Enlarged Group".

The following discussion contains forward-looking statements that involve risks, uncertainties and assumptions. We caution you that the business and financial performance of C&A is subject to substantial risks and uncertainties. The actual results could differ materially from those projected in the forward-looking statements. In evaluating the business of C&A, you should carefully consider the information provided in "Risk Factors", "Financial Information of the Group" and "Responsibility Statement and Forward-looking Statements".

OVERVIEW

C&A was one of the major coal mining companies in Australia, with a long history of coal mining operations across Australia dating back to its formation in 1960 as a merger between the Australian coal companies J & A Brown and Caledonian Collieries Limited. C&A was acquired by Rio Tinto in 1989. At the time of its acquisition by us, C&A held majority joint venture interests in three large-scale, high-quality coal mine operations, as described below.

On 1 September 2017, we completed the C&A Acquisition, for which the consideration was US$2.69 billion, comprising US$2.45 billion cash payable on completion, US$240 million in future non-contingent royalty payments over five years following completion, and a coal price-linked contingent royalty. On completion, we acquired:

(i) interests in two of Australia's leading tier-one large-scale, long-life and low-cost coal mines located in the Hunter Valley region of New South Wales, including:

  (a) a 67.6% interest in the HVO mine; and

  (b) an 80.0% interest in the Mt Thorley mine and a 55.6% interest in the Warkworth mine, which are located adjacent to each other and are operationally integrated as the MTW mine; and

(ii) a 36.5% interest in PWCS, which provides the export infrastructure for the acquired mines.

In addition, prior to its acquisition by the Company, C&A disposed of certain material operations. The disposals that occurred during the Track Record Period included the following:

(i) in February 2016, the sale of 32.4% of C&A's assets and liabilities associated with HVO to Mitsubishi Development in exchange for buying back Mitsubishi Development's interest in C&A;

(ii) in March 2016, the sale of C&A's 40% interest in Bengalla, a joint venture of C&A, to New Hope; and

(iii) in August 2016, the sale of C&A's Mount Pleasant thermal coal development project to MACH Energy.

The financial statements of C&A as set forth in this "*Financial Information of C&A*" section are presented with carve-out adjustments to reflect such disposals as if they had taken place on 1 January 2015. See note 36 to the Accountants' Report of C&A in Appendix IB to this prospectus for further details on the carve-out adjustments applied. Save for the contents of this note 36 on carve-out adjustments, the rest of Appendix IB presents the consolidated financial statements of C&A without the carve-out adjustments applied.

BASIS OF PREPARATION

For the purpose of preparing and presenting the consolidated financial information of C&A for the Track Record Period, C&A has consistently adopted all of the new and revised IFRS issued by the IASB which are effective for the financial year beginning 1 January 2018.

SIGNIFICANT FACTORS AFFECTING OUR RESULTS OF OPERATIONS AND FINANCIAL CONDITION

C&A is primarily engaged in coal production and sales, which is substantially similar to the Company's coal operations. Accordingly, the results of operations and financial condition of C&A are primarily affected by the same significant factors as those which affect us. See "*Financial Information of the Group – Significant Factors Affecting Our Results of Operations and Financial Condition*".

DESCRIPTION OF MAJOR LINE ITEMS IN CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND REVIEW OF HISTORICAL RESULTS OF OPERATIONS

The table below sets forth our consolidated statements of profit or loss for the periods indicated:

	Predecessor						Successor			
	Year ended 31 December				Eight months ended 31 August		Four months ended 31 December		Year ended 31 December	
	2015		2016		2017		2017		2017	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*
Revenue	1,497	100.0	1,599	100.0	1,424	100.0	732	100.0	2,156	100.0
Other income	24	1.6	42	2.6	26	1.8	(5)	(0.7)	21	1.0
Changes in inventories of finished goods and work in progress	(18)	(1.2)	(11)	(0.7)	(11)	(0.7)	26	3.6	15	0.7
Raw material and consumables used	(379)	(25.3)	(341)	(21.3)	(274)	(19.2)	(141)	(19.3)	(415)	(19.2)
Employee benefits expense	(253)	(16.9)	(245)	(15.3)	(140)	(9.8)	(77)	(10.5)	(217)	(10.0)
External services	(186)	(12.4)	(181)	(11.3)	(169)	(11.9)	(80)	(10.9)	(249)	(11.5)
Selling and distribution	(305)	(20.4)	(289)	(18.1)	(221)	(15.6)	(98)	(13.3)	(319)	(14.9)
Administration	(82)	(5.5)	(84)	(5.3)	(25)	(1.6)	(35)	(4.8)	(60)	(2.8)
Net (loss)/gain on disposal of property, plant and equipment	(2)	(0.1)	10	0.6	–	–	–	–	–	–
Depreciation and amortisation expense	(131)	(8.7)	(122)	(7.6)	(78)	(5.4)	(39)	(5.3)	(117)	(5.4)
Coal purchases	(29)	(1.9)	(26)	(1.6)	–	–	(34)	(4.6)	(34)	(1.6)
Net foreign exchange gains	8	0.5	(2)	(0.1)	(1)	(0.1)	4	0.5	3	0.1
Finance costs	(14)	(0.9)	(6)	(0.4)	(3)	(0.2)	(1)	(0.1)	(4)	(0.2)
Share of profits of associates	7	0.5	2	0.1	(16)	(1.1)	(6)	(0.8)	(22)	(1.0)
Profit before income tax	137	9.2	346	21.6	512	37.5	246	33.6	758	35.1
Income tax (expense)/benefit	(45)	(2.9)	(100)	(6.3)	169	11.9	(79)	(10.8)	90	(4.2)
Profit for the year	92	6.3	246	15.4	681	47.8	167	22.8	848	39.3

Revenue

C&A presents revenue in its consolidated statements of profit or loss as revenue from continuing operations, which primarily includes revenue generated from sales of coal directly produced by C&A, and to a significantly lesser extent, from sales of coal purchased by C&A and sea freight revenue.

Revenue by geographic region

C&A had a geographically diverse customer base, with sales throughout the Asia-Pacific region and elsewhere. The table below sets forth, for 2017, a breakdown of C&A's sales revenue by jurisdiction, as determined based on the jurisdiction in which the customer is located[(1)]:

	Predecessor		Successor			
	Eight months ended 31 August		Four months ended 31 December		Year ended 31 December	
	2017		2017		2017	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*
Japan	554	39.3	282	39.0	836	39.2
South Korea	212	15.0	66	9.1	278	13.0
Taiwan	130	9.2	70	9.7	200	9.3
Thailand	130	9.2	85	11.7	215	10.1
Australia	128	9.1	58	8.0	186	8.7
Singapore	121	8.6	55	7.6	176	8.2
China	18	1.2	72	9.9	90	4.2
Others[(2)]	118	8.4	36	5.0	154	7.2
Total sales revenue	1,411	100.0	724	100.0	2,135	100.0
Interest income	5		1		6	
Others	8		7		15	
Total revenue	1,424		732		2,156	

Notes:

(1) See note 6(c) to the Accountants' Report of C&A in Appendix IB to this prospectus for a breakdown of C&A's revenue by geography during the Track Record Period as shown on a non-carve out basis.

(2) Includes Switzerland and the US.

During 2017, comprising 8 months of C&A ownership and 4 months of the Company's ownership, C&A's largest jurisdictions by revenue were Japan, South Korea, Taiwan, Australia and Thailand. Sales to all jurisdictions except China remained largely consistent over 2017. Sales to China increased in the four-month period, which was driven by a temporary increase in high ash content coal suitable for the Chinese market.

Segment revenue

C&A categorised its operating segments primarily by each individual operating mine. The table below sets forth, for the periods indicated, a breakdown of C&A's segment revenue:

	Predecessor			Successor
	Year ended 31 December		Eight months ended 31 August	Four months ended 31 December
	2015	2016	2017	2017
	A$ million			
Segment:				
Hunter Valley Operations	784	856	792	383
Mount Thorley Warkworth	692	728	623	321
Other	21	15	8	28
Total revenue	1,497	1,599	1,424	732

The segment revenue split during the Track Record Period was broadly consistent, with HVO contributing between 52% and 56%, and MTW between 43% and 47%, of C&A's total revenue. Other segment revenue included (i) interest income, (ii) management fee income in connection with management services provided to both HVO and MTW and (iii) coal handling services income.

Other Income

C&A's other income during the Track Record Period primarily included gains on the disposal of land and other non-operating assets.

Raw Materials and Consumables Used

C&A's raw materials and consumables used primarily includes diesel, consumables, maintenance, explosives, tyres, electricity and other general consumables. Raw materials and consumables used decreased by 10.0% from A$379 million in 2015 to A$341 million in 2016, primarily due to lower diesel prices. C&A's raw materials and consumables used in 2017 increased by 21.7% to A$415 million, primarily due to higher diesel prices and maintenance costs.

Employee Benefits Expense

C&A's employee benefits expenses primarily represent employee salaries and other benefits. Employee benefits expenses decreased by 3.2% from A$253 million in 2015 to A$245 million in 2016, primarily due to labour productivity initiatives implemented which had the effect of reducing employee headcount at C&A's mines. C&A's employee benefits expenses in 2017 decreased by a further 11.4% to A$217 million, primarily due to vacancies being filled by contractors with minimal overall headcount change.

External Services

C&A's external services expenses represent the cost of external labour contractors, business and operations consultants, certain plant hires and other external service providers. External services expenses decreased by 2.7% from A$186 million in 2015 to A$181 million in 2016, primarily due to a reduced need for labour contractors at C&A's mines. C&A's external services expenses then increased by 37.6% in 2017 to A$249 million, primarily due to the reclassification of certain hire costs from administration expenses, the hiring of additional trucks at HVO and the decision to fill vacancies with contractors.

Selling and Distribution

C&A's selling and distribution expenses represent rail and port charges, royalties and other costs incurred in connection with the sale and distribution of coal. Selling and distribution expenses decreased by 5.2% from A$305 million in 2015 to A$289 million in 2016, primarily due to reduced port rates at PWCS. C&A's selling and distribution expenses then increased by 10.4% in 2017 to A$319 million, primarily due to the impact of increased royalties driven by higher coal prices and sales volumes.

Administration

C&A's administration expenses represent costs incurred in connection with administrative functions at mine sites, such as rehabilitation costs, as well as corporate functions such as management salaries and benefits and information technology. Administration expenses increased by 2.4% from A$82 million in 2015 to A$84 million in 2016, primarily due to an increase in certain administrative charges at HVO. C&A's administration expenses then decreased by 28.6% in 2017 to A$60 million, primarily due to the reclassification of certain hire costs to external services.

Depreciation and Amortisation

C&A's depreciation and amortisation expenses relate to property, plant and equipment and operational mining properties. Depreciation and amortisation expenses decreased by 6.9% from A$131 million in 2015 to A$122 million in 2016, primarily due to an upward revision of HVO coal reserves. C&A's depreciation and amortisation expenses further decreased by 4.1% in 2017 to A$117 million, primarily due to the impact of reduced capital expenditure by C&A prior to the acquisition.

Profit Before Tax

As a result of the aforementioned reasons, C&A's profit before income tax increased by 152.6% from A$137 million in 2015 to A$346 million in 2016, then further increased by 119.1% to A$758 million in 2017.

Income Tax Expense

C&A's income tax expense increased by 122.2% from A$45 million in 2015 to A$100 million in 2016, while the effective tax rate decreased from 32.8% to 28.9%, which was largely in line with the Australian statutory tax rate of 30%. C&A then recognised an income tax benefit of A$90 million in 2017 with the effective tax rate decreasing to 11.9%, primarily due to the recognition of a significant deferred tax asset resulting from the push down of our acquisition tax balances. See "– *Description of Major Line Items in Our Consolidated Statements of Financial Position – Deferred Tax Assets*" for further details.

Profit for the Year

As a result of the aforementioned reasons, C&A's profit for the year increased by 167.4% from A$92 million in 2015 to A$246 million in 2016. C&A's profit for the year further increased by 244.7% in 2017 to A$848 million.

Non-IFRS Financial Measures

EBITDA was a key measure used by C&A to assess the performance of its individual segments and make decisions on the allocation of resources. EBITDA is not a standard measure under IFRS. As presented by C&A, EBITDA represents profit before income tax as adjusted for depreciation and amortisation, interest income and finance costs.

While EBITDA provides an additional financial measure for investors to assess our operating performance, the use of EBITDA has certain limitations because they do not reflect all items of income and expense that affect C&A's operations. In addition, EBITDA not reflect changes in working capital, capital expenditure or other investing and financing activities and therefore should not be considered a measure of liquidity.

As a measure of C&A's operating performance, we believe that the most directly comparable IFRS measure to EBITDA is profit before income tax. The table below sets forth, for the periods indicated, a reconciliation of EBITDA for C&A with profit before income tax under IFRS:

	Year ended 31 December		Eight months ended 31 August	Four months ended 31 December	Year ended 31 December
	2015	2016	2017	2017	2017
			A$ million		
Profit before income tax	137	346	512	246	758
Adjustments for:					
Depreciation and amortisation	131	122	78	39	117
Interest income	(6)	(17)	(5)	(1)	(6)
Finance costs	14	6	3	1	4
EBITDA	276	457	588	285	873

In 2015, 2016 and 2017, C&A's EBITDA margin (calculated as EBITDA divided by revenue and multiplied by 100%) was 18.4%, 28.6% and 40.5%, respectively.

EBITDA should not be considered in isolation or construed as a substitute for analysis of IFRS financial measures. In addition, because EBITDA may not be calculated in the same manner by all companies, C&A's EBITDA may not be comparable to the same or similarly titled measures presented by other companies.

DESCRIPTION OF MAJOR LINE ITEMS IN OUR CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

Property, Plant and Equipment

C&A's property, plant and equipment primarily includes plant and equipment, freehold land and buildings and operational mining properties. The balance of C&A's property, plant and equipment was A$849 million, A$762 million and A$627 million as at 31 December 2015, 2016 and 2017, respectively. The decrease across the Track Record Period was primarily due to a reduced level of capital expenditure by C&A relative to the depreciation charge. See note 16 to the Accountants' Report of C&A in Appendix IB to this prospectus for further details.

Inventories

C&A's inventories primarily consist of (i) stores, which are mainly production supplies and spare parts used in C&A's operations, (ii) finished goods, which are mainly coal stocks stored or in transit for delivery and (iii) work in progress, which are mainly run-of-mine coal awaiting processing. The balance of C&A's inventories was A$69 million, A$61 million and A$71 million as at 31 December 2015, 2016 and 2017 respectively. The decrease as at 31 December 2016 compared to 31 December 2015 was primarily due to an initiative to transition stores to consignment rather than direct ownership by C&A. The increase as at 31 December 2017 compared to 31 December 2016 was primarily due to the timing of year-end sales.

Trade and Other Receivables

C&A's trade receivables primarily relate to the sale of coal, and are generally due within 30 days. Other receivables primarily consist of fuel tax rebates, goods and services tax receivables and other miscellaneous receivables. C&A's receivables also included amounts due from related parties, which were receivables attributable to C&A's joint venture partners. The table below sets forth a breakdown of C&A's trade and other receivables as at the dates indicated:

	Predecessor		Successor
	As at 31 December		As at 31 December
	2015	2016	2017
		A$ million	
Trade receivables	54	177	112
Amount due from related parties	18	54	328
Other receivables	31	43	111
Prepayments	3	2	3
Total trade and other receivables	105	276	554

C&A's trade receivables substantially increased from A$54 million as at 31 December 2015 to A$177 million as at 31 December 2016 and then decreased to A$112 million as at 31 December 2017, primarily due to the impact of changing prices and timing of receipts. The significant increase in amount due from related parties from 31 December 2016 to 31 December 2017 resulted from cash being paid up from C&A to the Company via intercompany accounts. The increase in other receivables for the same period included an increase in goods and services tax receivable.

Investments Accounted for Using Equity Method

C&A's investments accounted for using equity method primarily represent investments in associates, namely PWCS, in which C&A held a 36.5% interest during the Track Record Period at a carrying amount of A$216 million, A$206 million and A$145 million as at 31 December 2015, 2016 and 2017, respectively. The decrease at 31 December 2017 resulted from recognition of an impairment charge by PWCS with respect to its Terminal 4 expansion asset.

Intangible Assets

C&A's intangible assets primarily represent mining reserves, net of amortisation, impairment and disposals. C&A's balance of intangible assets amounted to A$163 million, A$154 million and A$145 million as at 31 December 2015, 2016 and 2017, respectively.

Deferred Tax Assets

C&A's deferred tax assets primarily consist of temporary differences between commercial and tax reporting attributable to rehabilitation and closure provision and employee benefits. As at 31 December 2016, C&A's deferred tax assets were also attributable to property, plant and equipment and intangible assets. C&A's deferred tax assets amounted to A$132 million, A$155 million and A$454 million, respectively. The significant increase as at 31 December 2017 was due to the C&A Acquisition creating an uplifted tax base. The uplifted tax base was pushed down to the entity level as a legal matter, but the accounting uplift remains at the consolidated Group level, and thus there is no overall impact at the Group level.

Trade and Other Payables

C&A's trade payables primarily relate to operating supplies and services used in production processes, and are generally settled within 45 days. C&A's other payables primarily consist of royalty payables, payroll tax payables, accruals and payable clearings. C&A's payables also included amounts due to related parties, which were payables attributable to C&A's joint venture partners. The table below sets forth, as at the dates indicated, a breakdown of C&A's trade and other payables:

	Predecessor		Successor
	As at 31 December		As at 31 December
	2015	2016	2017
		A$ million	
Trade payables	186	290	257
Amount due to related parties	13	17	6
Intercompany payable in respect of income tax	–	13	75
Other payables	11	26	46
Total trade and other payables	210	346	384

C&A's trade payables increased by 64.8% from A$210 million as at 31 December 2015 to A$346 million as at 31 December 2016, primarily due to working capital initiatives to extend credit periods on our trade payables and remained at a similar level as at 31 December 2017. The increase in intercompany payables in respect of income tax as at 31 December 2017 was due to tax sharing arrangements whereby C&A did not pay tax on its profits due to the Group's carried forward tax losses. This has no overall impact at the Group level.

Provisions

C&A's provisions represent obligations for which a reliable estimate of the amount of such obligation can be made. During the Track Record Period, the largest components of C&A's provisions were those for rehabilitation costs and mine closures. C&A's balance of provisions amounted to A$181 million, A$251 million and A$191 million as at 31 December 2015, 2016 and 2017, respectively.

LIQUIDITY AND CAPITAL RESOURCES

Net Current Assets

The table below sets forth, for the dates indicated, a breakdown of C&A's current assets and current liabilities:

	Predecessor		Successor	
	As at 31 December		As at 31 December	As at 30 April
	2015	2016	2017	2018
	A$ million			(unaudited)
Current assets				
Cash and cash equivalents	209	312	33	125
Trade and other receivables	105	276	554	616
Inventories	69	61	71	99
Assets classified as held for sale	–	–	132	130
Total current assets	383	649	790	970
Current liabilities				
Trade and other payables	210	346	384	546
Bank overdraft	1	–	–	–
Provisions	45	118	15	11
Current tax liabilities	–	4	–	–
Liabilities classified as held for sale	–	–	53	32
Total current liabilities	256	468	452	589
Net current assets	127	181	338	381

C&A had net current assets of A$127 million, A$181 million and A$338 million as at 31 December 2015, 2016 and 2017, respectively. As at 30 April 2018, C&A had net current assets of A$381 million.

Cash Flows

The table below sets forth C&A's cash flows for the periods indicated:

	Year ended 31 December		Eight months ended 31 August	Four months ended 31 December
	2015	2016	2017	2017
	A$ million			
Net cash generated from operating activities	412	517	427	171
Net cash used in investing activities	(41)	(31)	(6)	(289)
Net cash used in financing activities	(394)	(381)	(582)	–
Net (decrease)/ increase in cash and cash equivalents	(23)	104	(161)	(118)
Cash and cash equivalents at the beginning of the year	231	208	312	152
Cash and cash equivalents at the end of the year	208	312	152	33

Net cash generated from operating activities

In the four months ended 31 December 2017, C&A had a net operating cash inflow of A$171 million, primarily due to receipts from customers of A$653 million for sales of thermal and metallurgical coal, partially offset by payments to suppliers and employees of A$486 million for supplies and services used in the coal mining production processes.

In the eight months ended 31 August 2017, C&A had a net operating cash inflow of A$427 million, primarily due to receipts from customers of A$1,335 million for sales of thermal and metallurgical coal, partially offset by payments to suppliers and employees of A$680 million for supplies and services used in the coal mining production processes and an income tax payment of A$232 million.

In 2016, C&A had a net operating cash inflow of A$517 million, primarily due to receipts from customers of A$1,459 million for sales of thermal and metallurgical coal, partially offset by payments to suppliers and employees of A$890 million for supplies and services used in the coal mining production processes and an income tax payment of A$83 million.

In 2015, C&A had a net operating cash inflow of A$412 million, primarily due to receipts from customers of A$1,540 million for sales of thermal and metallurgical coal, partially offset by payments to suppliers and employees of A$1,076 million for supplies and services used in the coal mining production processes and an income tax payment of A$61 million.

Net cash used in investing activities

In the four months ended 31 December 2017, C&A's net cash used in investing activities was A$289 million, primarily due to purchases of property, plant and equipment of A$26 million and A$272 million of advances to related parties representing cash paid up to the Group parent entity.

In the eight months ended 31 August 2017, C&A's net cash used in investing activities was A$6 million, primarily due to purchases of property, plant and equipment of A$33 million, partially offset by proceeds from the sale of property, plant and equipment of A$20 million.

In 2016, C&A's net cash used in investing activities was A$31 million, primarily due to purchases of property, plant and equipment of A$40 million, partially offset by proceeds from the sale of property, plant and equipment of A$9 million.

In 2015, C&A's net cash used in investing activities was A$41 million, primarily due to purchases of property, plant and equipment of A$43 million, partially offset by proceeds from the sale of property, plant and equipment of A$2 million.

Net cash used in financing activities

In the four months ended 31 December 2017, C&A did not have any cash flow from financing activities.

In the eight months ended 31 August 2017, C&A's net cash used in financing activities was A$582 million due to a dividend payment to C&A shareholders prior to the disposal.

In 2016, C&A's net cash used in financing activities was A$381 million, primarily due to a capital return to shareholders of A$380 million.

In 2015, C&A's net cash used in financing activities was A$394 million, primarily due to repayment of shareholder loans of A$293 million and dividend payments to shareholders of A$101 million.

INDEBTEDNESS

As at 31 December 2015 and 2016, 31 August 2017, 31 December 2017 and 30 April 2018, C&A did not have any bank or other borrowings when presenting its financial statements on a carve-out basis.

C&A had obtained a number of bank guarantees in favour of certain counterparties, including government departments and rail and port operators, in respect of C&A's operations. As at 31 December 2015, 2016 and 2017, the balance of C&A's bank guarantees amounted to A$365 million, A$319 million and A$332 million, respectively.

RELATED PARTY TRANSACTIONS

During the Track Record Period, C&A had certain transactions with related parties, including the following:

- Amounts due from related parties of A$18 million, A$54 million and A$328 million as at 31 December 2015, 2016 and 2017, respectively, which were attributable to C&A's joint venture partners, non-interesting bearing and settled on 30-day terms;

- Amounts due to related parties of A$13 million, A$17 million and A$6 million as at 31 December 2015, 2016 and 2017, respectively, which were attributable to C&A's joint venture partners, non-interesting bearing and settled on 30-day terms; and

- Cash deposits with Rio Tinto Finance Limited.

CAPITAL EXPENDITURE

C&A incurred capital expenditure of A$43 million, A$41 million and A$59 million in 2015, 2016 and 2017, respectively. The capital expenditure was classified as assets under construction in the year incurred before subsequently being reclassified primarily to plant and equipment.

OFF-BALANCE SHEET ARRANGEMENTS

During the Track Record Period, C&A had no material off-balance sheet arrangements.

SHARE CAPITAL

Under the Australia Corporations Act, Australian registered companies do not have an authorised capital, and there is no concept of a "par value" in respect of issued shares. The following is a description of the issued share capital of the Company as at the date of this prospectus and immediately following the completion of the Global Offering:

	Number of Shares
Issued and to be issued, fully paid or credited as fully paid	
Shares in issue as at the date of this prospectus	1,256,071,756
Shares to be issued pursuant to the Global Offering (assuming the Over-allotment Option is not exercised)	[**REDACTED**]
Total	[**REDACTED**]

[**REDACTED**]

ASSUMPTIONS

The above table assumes that the Global Offering becomes unconditional.

RANKING

The Offer Shares are ordinary shares in the share capital of the Company and will rank equally in all respects with all the Shares in issue or to be issued as set out in the above table, and will qualify for all dividends and other distributions declared, made or paid by the Company following the completion of the Global Offering.

THE GLOBAL OFFERING [**REDACTED**]

The Global Offering

The Global Offering will comprise an offering of initially [**REDACTED**] Offer Shares as follows:

(a) the Hong Kong Public Offering of initially [**REDACTED**] Offer Shares (subject to reallocation) in Hong Kong; and

(b) the International Offering of initially [**REDACTED**] Offer Shares (subject to reallocation and the Over-allotment Option) to QIBs in the United States as well as institutional and professional investors and other investors in Hong Kong and other jurisdictions outside the United States.

For further details of the structure of the Global Offering, see *"Structure of the Global Offering"*.

[**REDACTED**]

The Shares to be issued pursuant to any exercise of the Over-Allotment Option will be issued by the Company pursuant to its general power under the ASX Listing Rules to issue Shares up to [**REDACTED**]% of its issued share capital, and will constitute up to [**REDACTED**]% of the Company's issued share capital as at the Latest Practicable Date.

[**REDACTED**]

[**REDACTED**]

In connection with [**REDACTED**], the Company has sought and ASIC has granted a modification of the Australia Corporations Act to permit existing Shareholders of the Company (other than the Major Shareholders) with a registered address in Australia or New Zealand to pay for Shares offered under the retail tranche of [**REDACTED**] in either Australian Dollars or US Dollars.

The Shares to be issued pursuant to any exercise of the Over-Allotment Option will be issued by the Company pursuant to its general power under the ASX Listing Rules to issue shares up to [**REDACTED**]% of its issued share capital, and will constitute up to [**REDACTED**]% of the Company's issued share capital at the date of this prospectus.

EQUITY INCENTIVE PLAN

The Company has approved the Equity Incentive Plan. Under the Equity Incentive Plan, the Company has granted awards of Shares to certain persons prior to the Listing Date. The principal terms of the Equity Incentive Plan are summarised in *"Appendix VII – Statutory and General Information".*

SUBSTANTIAL SHAREHOLDERS

So far as is known to any Director or chief executive of the Company as at the Latest Practicable Date, immediately following the completion of the Global Offering (assuming the Over-allotment Option is not exercised and without taking into account any Shares which may be taken up by existing Shareholders of the Company under [**REDACTED**]), the following persons (other than a Director or chief executive of the Company) will have an interest and/or short position (as applicable) in the Shares or underlying Shares which would fall to be disclosed to the Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, once the Shares are listed on the Stock Exchange:

INTERESTS AND LONG POSITIONS IN SHARES

Name of Shareholder	Capacity	Number of Shares Held or Interested	Approximate Percentage (%)
Yanzhou	Beneficial interest	[**REDACTED**]	[**REDACTED**]
Yankuang[(1)]	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
Cinda International HGB Investment (UK) Limited[(2)]	Beneficial interest	[**REDACTED**]	[**REDACTED**]
China Agriculture Investment Limited	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
International High Grade Fund B, L.P.	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
Cinda International GP Management Limited	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
China Cinda (HK) Asset Management Co., Ltd	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
Cinda Strategic (BVI) Limited	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
Cinda International Holdings Limited	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
China Cinda (HK) Holdings Company Limited	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
China Cinda Asset Management Co., Ltd.[(2)]	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
Glencore Coal Pty Ltd	Beneficial interest	[**REDACTED**]	[**REDACTED**]
Glencore Holdings Pty Limited[(3)]	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
Glencore plc[(3)]	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]
CSIL[(4)]	Beneficial interest	[**REDACTED**]	[**REDACTED**]
Shandong Lucion Investment Holdings Group Co., Ltd[(4)]	Interest in controlled entity	[**REDACTED**]	[**REDACTED**]

Notes:

(1) Yankuang is deemed to be interested in the [**REDACTED**] Shares which Yanzhou is interested in as beneficial owner as it is entitled to exercise or control the exercise of more than one-third of the voting power at general meetings of Yanzhou.

(2) Cinda International HGB Investment (UK) Limited, an indirect wholly owned subsidiary of China Cinda Asset Management Co., Ltd., is interested in [**REDACTED**] Shares which are held by J P Morgan Nominees Australia Limited as nominee. China Cinda Asset Management Co, Ltd., China Cinda (HK) Holdings Company Limited, Cinda International Holdings Limited, Cinda Strategic (BVI) Limited, China Cinda (HK) Asset Management Co., Ltd, Cinda International GP Management Limited, International High Grade Fund B, L.P. and China Agriculture Investment Limited are each deemed to be interested in the [**REDACTED**] Shares which Cinda International HGB Investment (UK) Limited is interested in as beneficial owner.

(3) Glencore plc and Glencore Holdings Pty Limited are deemed to be interested in the [**REDACTED**] Shares which Glencore Coal Pty Ltd is interested in as beneficial owner. Glencore plc wholly owns Glencore Holdings Pty Limited which in turn wholly owns Glencore Coal Pty Ltd.

(4) CSIL, a wholly owned subsidiary of Shandong Lucion Investment Holdings Group Co., Ltd, is interested in [**REDACTED**] Shares which are held by HSBC Custody Nominees (Australia) Limited – A/C 2 as nominee.

OVERVIEW

As at the Latest Practicable Date, Yankuang was, directly and indirectly, interested in approximately 51.81% of the shares in Yanzhou and Yanzhou was interested in approximately 65.45% of the Shares in the Company. Immediately following the completion of the Global Offering, (i) Yanzhou will be interested in approximately [**REDACTED**]% of the Shares in issue (assuming the Over-allotment Option is not exercised), (ii) the Company will remain as a non-wholly owned subsidiary of Yankuang and Yanzhou and (iii) Yankuang and Yanzhou will be the controlling shareholders of the Company. Please refer to "*History and Corporate Structure*" for the simplified corporate structure of the Group.

BACKGROUND OF THE CONTROLLING SHAREHOLDERS

The Yankuang Group

Yankuang was established in the PRC in 1996 and is the controlling shareholder of Yanzhou. It is principally engaged in the production and sale of coal, coal chemicals and aluminium, power generation, machinery manufacturing and financial investments.

The Yanzhou Group

Yanzhou was established in the PRC in 1997 and is the controlling shareholder of the Company. It is principally engaged in the production of coal and coal chemicals, manufacturing of mechanical and electrical equipment and power and heat generation. Yanzhou has been listed on the Shanghai Stock Exchange and the Stock Exchange since 1998.

INDEPENDENCE OF THE GROUP FROM THE CONTROLLING SHAREHOLDERS

The Directors are of the view that the Group is able to carry on its business independently from the Controlling Shareholders following the completion of the Global Offering for the following reasons.

(a) Clear Delineation of Business

Geographical location of assets

The Group

All mines in which the Group has interests and operates are located in New South Wales and Queensland in Australia. In particular, the flagship mines of the Group, being HVO (which is operated as an unincorporated joint venture with Glencore), MTW and Moolarben, which in aggregate accounted for approximately 88.7% of total coal sales (on an attributable basis) in 2017 by the Group from the mines in which the Group has interests and operates, on a pro-forma basis (as if the C&A Acquisition, the Warkworth Transaction and the Glencore Transaction had been completed on 1 January 2017), are located in New South Wales.

The Yankuang Group

All mining assets of the Yankuang Group are located in the Shaanxi and Guizhou Provinces and Xinjiang Autonomous Region in the PRC. The Yankuang Group does not have any interests in mines in Australia other than through its interests in the Yanzhou Group and the Group. There is no overlap in the geographical location of the mining assets of the Yankuang Group and the Group.

The Yanzhou Group

The substantial majority of Yanzhou's mining assets are located in the Shandong and Shanxi Provinces and the Inner Mongolia Autonomous Region in the PRC.

The mining assets of Yanzhou located outside of the PRC, other than through its interest in the Group, are managed and operated by the Company. These mining assets of Yanzhou comprise (i) the Cameby Downs mine located in Queensland, Australia, which includes exploration projects not currently in production and (ii) the Premier mine located in Western Australia (the "**Managed Mines**"). Pursuant to a long term management services agreement, the Company is responsible for, among others, HR, treasury and the operations, exploration and development of the Managed Mines. See "*Business – Our Mining Operations – Managed Mines*" and "*Connected Transactions – 3. Provision of Management Services by the Company*".

Based on the foregoing and in particular, taking into consideration the management arrangement in respect of the Managed Mines, the geographical locations of mine assets of the Group are clearly delineated from the Yankuang Group and/or the Yanzhou Group.

Geographical location of markets of sales

The Group

The customers of the Group are located throughout the Asia-Pacific region, with China, South Korea, Singapore and Japan comprising the largest jurisdictions by revenue during the Track Record Period. The major customers of the Group are power utilities and steel mills. With respect to the PRC market, customers of the Company are mainly located in coastal regions, including Guangdong Province, Guangxi Province, Zhejiang Province and Jiangsu Province, as the cost of sourcing coal from domestic markets by customers with plants located in coastal regions is greater than that from seaborne market.

The Yankuang Group

Primarily due to market demand, logistic constraints and transportation costs, all coal produced by Yankuang's mines in the PRC are sold to customers located in the PRC, including customers in local provinces and Yankuang Group's chemical products production plants.

The Yanzhou Group

All coal produced by Yanzhou's mines in the PRC are sold to customers located in the PRC, which are primarily power plants, metallurgy and chemical plants, primarily located in inland areas of the PRC due to market demand, logistic constraints and

transportation costs. As the Managed Mines are managed and operated by the Company, sales of coal produced by the Managed Mines are arranged by the Company's marketing and logistics personnel. As at the Latest Practicable Date, other than coal produced by the Managed Mines, Yanzhou was not engaged in coal export business.

Based on the foregoing, the geographical locations of markets of sales of the Group are clearly delineated with that of the Yankuang Group and/or the Yanzhou Group.

Business size

In 2015, 2016 and 2017 and the six months ended 30 June 2018, the revenue from the sale of coal produced by Yanzhou's mines located in the PRC was approximately RMB13,252 million, RMB17,216 million, RMB25,593 million and RMB14,076 million, representing approximately 64.5%, 72.4%, 66.6% and 55.7% of its total revenue from the sale of self-produced coal, respectively.

In 2015, 2016 and 2017 and the six months ended 30 June 2018, the revenue from the sale of coal produced by the Managed Mines was RMB1,836 million, RMB1,745 million, RMB2,395 million and RMB1,129 million, representing an insignificant percentage in terms of the total revenue from the sales of self-produced coal of Yanzhou, being approximately 8.9%, 7.3%, 6.2% and 4.5%, respectively.

In 2015, 2016 and 2017 and the six months ended 30 June 2018, the revenue from the sales of coal produced by the Group's mines, all of which are located in Australia, was approximately A$1,074 million, A$967 million, A$2,204 million and A$2,075 million, respectively.

Based on the above, the coal production and sale business of the Managed Mines represent a relatively small proportion of Yanzhou's coal production and sales business, and is relatively small in comparison to the Group's coal production and sales business.

For the reasons set out above, the Directors are therefore of the view that there is clear delineation of business of the Group from the businesses of the Controlling Shareholders.

(b) Operational Independence

The Group holds all the relevant licenses, qualifications and permits required for conducting the Group's business independently of the Controlling Shareholders. The Group has its own organisational structure comprising various departments that function and make decisions independently from the Controlling Shareholders. The Group maintains a set of internal control procedures and has adopted corporate governance practices that satisfy the applicable legal and regulatory requirements. The Group is able to formulate and execute operational decisions independently.

The Group from time to time may sell coal to the Yanzhou Group. Such transactions were and will be conducted in the ordinary and usual course of business of the Group, on an arm's length basis and on normal commercial terms or better to the Group. The reason for the purchase of the coal by the Yanzhou Group is for their own trading purposes but may sometimes enter into purchase transactions for back-to-back on sale to end customers. For the years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, the revenue generated from the sales of coal to the Yanzhou Group was approximately US$12.6 million, US$30.6 million, US$5.1 million and US$104.5 million, respectively, representing approximately only 1.3%, 3.4%, 0.3% and 3.3% of the total revenue of the Group, respectively. See "*Connected Transactions*".

The Directors are of the view that the connected transaction entered into with the Yanzhou Group as described above will not have any material impact on the Group's ability to operate independently and the Group's operations are independent from the Controlling Shareholders.

(c) Financial Independence

As at 30 June 2018, except for the guarantee provided by Yankuang in respect of the obligations of Watagan (a wholly owned subsidiary of the Company) under a loan facility agreement between the Company and Watagan, of which, A$730 million remained drawn-down, there are no loans or guarantees which are provided by the Yankuang Group to or for the benefit of the Group. See "*Connected Transaction – Exempt Continuing Connected Transactions*" for further details.

As at 30 June 2018, the Yanzhou Group had also provided to the Group (a) loan facilities with an aggregate drawn-down principal amount of A$1,611 million and (b) guarantees in respect of loans provided by several financial institutions with an aggregate outstanding principal amount of US$1,950 million. See "*Connected Transactions – A. Exempt Continuing Connected Transactions*" for further details of these loan facilities and guarantees. All such loan facilities and guarantees are on arm's length and normal commercial terms and no security over the Group's assets has been given by the Group to the Yanzhou Group for the provision of such loan facilities and guarantees to the Group. On completion of the Global Offering, assuming an Offer Price of HK$[**REDACTED**] (being the mid-point of the Offer Price Range) and before any exercise of the Over-allotment Option, approximately [**REDACTED**] of the outstanding principal amount of (i) the loans in respect of which guarantees have been provided by the Yanzhou Group or (ii) unsecured loans from related parties will be repaid using the net proceeds of the Global Offering.

Since 30 June 2018, the Company has not drawn down or utilised any of the loan facilities or guarantees mentioned above and has no intention to further draw down on such loan facilities or guarantees before the Listing.

The Group has obtained financing from third party sources on a standalone basis without any credit support from the Yanzhou Group or the Yankuang Group or any of their respective associates. In 2017, the Company obtained a bank guarantee facility from several financial institutions in the amount of A$1 billion. In addition, in June 2018, the Company obtained an offer letter from a financial institution to provide a loan facility in the aggregate amount of US$3 billion and a bank guarantee facility of A$1 billion on arm's length and normal commercial terms. Furthermore, the Company has obtained an offer letter in September 2018 from a financial institution to provide an incremental term loan facility for the amount of US$700 million on arm's length and normal commercial terms. The facilities under the offer letters obtained in June 2018 and September 2018 have not been utilised by the Company as at the Latest Practicable Date. Each of the above facilities and offer letters were obtained without any credit support from the Yanzhou Group or the Yankuang Group or any of their respective associates.

The Directors are therefore of the view that the Group is able to operate financially independently from the Controlling Shareholders.

(d) Independence of Directors and Management

The Board of Directors consists of 11 Directors, comprising one Executive Director, six Non-executive Directors and four Independent Non-executive Directors. Of the 11 Directors, five Non-executive Directors currently hold positions in the Controlling Shareholders, details of which are set out below:

Name of Director	Material positions with the Controlling Shareholders as at the Latest Practicable Date
Baocai ZHANG	director, member of Party's standing committee and general counsel of Yankuang
Cunliang LAI	deputy general manager of Yankuang
Xiangqian WU	director and general manager of Yanzhou
Fuqi WANG	chief engineer of Yanzhou
Qingchun ZHAO	chief financial officer and director of Yanzhou

The Directors are of the view that the Board and the senior management of the Group are able to function independently of the Controlling Shareholders for the following reasons:

(i) more than half of the members of the Board (comprising the Executive Director (being Mr. Fucun WANG), one Non-executive Director (being Mr. Xing FENG) and all of the Independent Non-executive Directors are independent of, and do not have any directorships and/or other roles with, the Controlling Shareholders and/or their respective close associates;

(ii) none of the members of the senior management of the Group, who are responsible for the day-to-day management of the Group's business, holds any directorship and/or other roles with the Controlling Shareholders; and

(iii) any Director with an interest in the relevant matters (including matters relating to the transactions between the Group and the Controlling Shareholders) will abstain from voting in respect of those matters. Only Directors who do not have any ongoing roles with the Controlling Shareholders and/or their respective close associates (as the case may be) will vote and decide on relevant matters relating to the transactions between the Group and the Controlling Shareholders and an independent board committee, comprising Independent Non-executive Directors only, will be established as and when required to consider and approve any connected transactions of the Group in accordance with the Company's internal corporate governance policies and/or the Listing Rules.

(e) Independence of Administrative Capability

All essential administrative functions (such as finance and accounting, administration and operations, information technology, human resources and compliance functions) are carried out by the Group without the support of the Controlling Shareholders. Accordingly, the Directors are of the view that the Group is administratively independent from the Controlling Shareholders.

DIRECTORS' INTEREST IN COMPETING BUSINESS

Except for (i) Mr. Baocai ZHANG, who is a Non-executive Director and also a director of Yankuang and (ii) Mr. Xiangqian WU and Mr. Qingchun ZHAO, who are Non-executive Directors and also the directors of Yanzhou, none of the Directors is interested in any business apart from the Group's business which competes with or is likely to compete, either directly or indirectly, with the Group's business.

OVERVIEW

Prior to the Listing, the Group has entered into certain transactions with parties who will, upon the Listing, become connected persons of the Company. Details of the continuing connected transactions of the Company following the Listing are set out below.

A. Exempt Continuing Connected Transactions

Following the Listing, the following transactions will be regarded as continuing connected transactions exempt from the reporting, announcement, annual review and independent shareholders' approval requirements under Chapter 14A of the Listing Rules.

1. Loans from Yanzhou and/or Its Subsidiaries

(a) Description of the Transaction

The Company (as borrower) entered into a coupon payment loan agreement with Yanzhou (as lender) on 22 December 2014 in relation to a US$807 million (subject to adjustment) unsecured and subordinated loan for the purposes of payment of the coupon on the subordinated capital notes issued by the Company for the first 5 years post their issuance. As all outstanding subordinated capital notes have been redeemed and/or converted as of January 2018, this loan cannot be further drawn down. As at the Latest Practicable Date, approximately US$234 million principal amount of the loan remained drawn-down.

The Company (as borrower) entered into a debt support loan agreement (as amended and restated) with Yanzhou and four subsidiaries of Yanzhou (as lenders) on 31 December 2014 in relation to an A$1.4 billion unsecured and subordinated loan, of which, A$1,125 million remained drawn-down as at the Latest Practicable Date.

The above loans were obtained in the ordinary and usual course of business and on normal commercial terms or better to the Group and for which security over the assets of the Group is not provided by the Company as the borrower.

(b) Listing Rules Implications

The loans described above constitute financial assistance provided by connected persons for the benefit of the Group on normal commercial terms (or better to the Group) where no security over the assets of the Group is granted and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.90 of the Listing Rules.

2. Guarantees Provided by Yankuang and Yanzhou in respect of the Loan Obligation of the Group

(a) Description of the Transaction

The Company (as borrower) entered into a syndicated facility agreement (as amended and restated) with Bank of China Limited, Sydney Branch (as the "**Agent**") and a syndicate of banks led by the Agent on 19 October 2009 in relation to the Syndicated Facility, of which, US$1,525 million provided by Bank of China Limited Sydney Branch and China Construction Bank Corporation Sydney branch remained drawn-down as at the Latest Practicable Date. Yanzhou has guaranteed the Company's obligations under such loan agreement. See "*Financial information of the Group – Secured Bank Loans – Syndicated Facility*".

As part of the transfer of interest in the Ashton, Austar and Donaldson mines to Watagan on 31 March 2016, Watagan, an unconsolidated wholly-owned subsidiary of the Company (as the borrower) and the Company (as the lender) entered into a loan facility agreement on 17 February 2016 in relation to an A$1.36 billion loan facility bearing interest at the bank bill swap bid rate plus 7.06% with a maturity date of 1 April 2025, of which A$798 million remained drawn-down as at the Latest Practicable Date. Yankuang has guaranteed Watagan's obligations under such loan facility agreement.

The above guarantees in respect of the Group's loan obligations are in the ordinary and usual course of business and on normal commercial terms or better to the Group and for which security over the assets of the Group has not been provided by the Company and/or Watagan as the borrower.

(b) Listing Rules Implications

The guarantees described above constitute financial assistance provided by connected persons for the benefit of the Group, are on normal commercial terms (or better to the Group) where no security over the assets of the Group has been granted and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.90 of the Listing Rules.

3. Marketing services received from Yancoal International Trading

(a) Description of the Transaction

The Company entered into a seller's helper agreement (the "**Seller's Helper Agreement**") with Yancoal International Trading Co., Limited ("**Yancoal International Trading**"), a wholly-owned subsidiary of Yanzhou, in November 2017, pursuant to which Yancoal International Trading has agreed to assist the Company with all activities deemed necessary or desirable by the Company for the marketing and sale of coal to customers and will receive a commission from the Company for any sales of coal completed as a direct result of facilitation by Yancoal International Trading. The Seller's Helper Agreement is for a term of three years unless terminated by either party in accordance with the term of such agreement.

(b) Listing Rules Implications

The transaction described above is entered into in the ordinary and usual course of business the Company, on normal commercial terms where each of the applicable percentage ratios in respect of such transaction will, as the Company currently expects, be less than 0.1% on an annual basis, and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.76 of the Listing Rules.

4. Management Services in relation to the HVO JV

(a) Description of the Transaction

As part of the Glencore Transaction, details of which are set out in "*Business – Acquisitions and Disposals – Glencore Transaction*", Coal & Allied Operations Pty Ltd ("**CNAO**"), a wholly-owned subsidiary of the Company, Anotero Pty Ltd ("**Anotero**"), a wholly-owned subsidiary of Glencore, and HV Operations Pty Ltd ("**HV Ops**"), which is 51% owned by CNAO and 49% owned by Anotero, entered into a management agreement in relation to the HVO on 4 May 2018 (the "**HVO Management Agreement**"), pursuant to which HV Ops has agreed to conduct and manage the HVO JV and the HVO JV activities in accordance with the terms of the HVO Management Agreement and the joint venture agreement in relation to the HVO (the "**HVO Joint Venture Agreement**"). The HVO JV is an unincorporated joint venture constituted by CNAO and Anotero, with CNAO and Anotero having 51% and 49% of the participating interest of the HVO JV, respectively.

As Anotero holds more than 10% of the interest in HV Ops and has more than 10% participating interest in the HVO JV, both are subsidiaries of the Company under the Listing Rules, Anotero will be a connected person of the Company immediately upon Listing by virtue of being a substantial shareholder of the subsidiaries of the Company.

Pursuant to the HVO Management Agreement, HV Ops is not entitled to and will not charge the HVO JV or CNAO or Anotero any management fee or similar fee in respect of the roles and duties it performs under the HVO Management Agreement, but will perform its obligation on a full cost recovery basis and will be paid by CNAO and Anotero in proportion to their respective participating interests in the HVO JV.

(b) Listing Rules Implications

The transaction described above is between the Group and a connected person at the subsidiary level on normal commercial terms where each of the applicable percentage ratios in respect of such transaction will, as the Company currently expects, be less than 1% on an annual basis, and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.76 of the Listing Rules.

5. Provision of Services by Glencore Coal in relation to the HVO JV

(a) Description of the Existing Hunter Valley Operations Services Agreement

As part of the Glencore Transaction, the participants of the HVO JV have agreed that, to best achieve efficiencies, the day-to-day performance of certain support obligations of HV Ops under the HVO Management Agreement should be delegated partially or wholly to Glencore Coal Assets Australia Pty Ltd ("**Glencore Coal**"), through the provision by Glencore Coal of a range of support services utilising their existing capacity and experience. Accordingly, HV Ops and HVO Coal Sales Pty Ltd (the "**SalesCo**"), both 51%-owned subsidiaries of the Company, entered into a service agreement with Glencore Coal, as Service Provider, on 4 May 2018 (the "**HVO Services Agreement**"). Glencore Coal is a wholly-owned subsidiary of Glencore. Pursuant to the HVO Services Agreement, Glencore Coal has agreed to provide (i) support services, which include, among others, providing services to enable the HVO JV partners to perform their respective obligations and maintaining the HVO in good standing, procurement, treasury services, IT services and legal services and (ii) coal sale services, which include, among others, sales documentation and revenue collection, management of transportation activities. Glencore Coal will perform its obligations under the HVO Services Agreement on a full cost recovery basis.

In addition to the HVO Services Agreement and as part of the Glencore Transaction, Glencore International AG ("**Glencore International**"), a wholly-owned subsidiary of Glencore PLC, also agreed to provide to the SalesCo (i) marketing services pursuant to a marketing agency agreement dated 4 May 2018 between Glencore International and the SalesCo and (ii) contract management services pursuant to a HVO legacy customer contracts – administration and coal supply agreement dated 4 May 2018 among Glencore International, the SalesCo and other subsidiaries of the Company. Glencore International did not charge any fees for the services provided under the two agreements described above.

(b) Listing Rules Implications

The transaction under the HVO Services Agreement is between the Group and a connected person at the subsidiary level on normal commercial terms where each of the applicable percentage ratios in respect of such transaction will, as the Company currently expects, be less than 1% on an annual basis, and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.76 of the Listing Rules.

6. Management and Marketing Services in relation to the Moolarben JV

(a) Description of the Transaction

As part of the joint venture arrangement in relation to Moolarben, details of which are set out in "*Business – Joint Venture Agreements – Moolarben*", a joint venture management agreement (the "**Moolarben Management Agreement**") was entered into among Moolarben Coal Mines Pty Ltd ("**MCM**", a wholly owned subsidiary of the Company), Sojitz Moolarben Resources Pty Limited ("**Sojitz**") and Moolarben Coal Operations Pty Ltd ("**MCO**", a wholly owned subsidiary of the Company) on 21 September 2007, pursuant to which, MCO was appointed as the manager to carry out all operations as the sole and exclusive agent for and on behalf of and for the account of the participants of the Moolarben JV. In addition, on 20 February 2008, a coal marketing agreement (the "**Moolarben Marketing Agreement**") was entered into among MCM, Sojitz, Moolarben Coal Sales Pty Ltd ("**MCS**", a wholly owned subsidiary of the Company) and other participants of the Moolarben JV, pursuant to which, MCS was appointed as the marketing manager, as agent for the joint venture participants, to be responsible for the promotion, marketing, sale and distribution of all coal for the account of the participants of the Moolarben JV.

As Sojitz is interested in 10% participating interest in the Moolarben JV, which is a subsidiary of the Company under the Listing Rules, Moolarben will be a connected person of the Company immediately upon Listing by virtue of being a substantial shareholder of the subsidiary of the Company.

Pursuant to the Moolarben Management Agreement, MCO may charge reasonable head office costs to the participants of the Moolarben JV, recover all its actual costs or expenses incurred for performing its duties and receive a management fee of 2% of the value of all coal sold. Pursuant to the Moolarben Marketing Agreement, MCS will perform its obligation on a full cost recovery basis. The relevant fees and expenses will be paid by the participants of the Moolarben JV, including Sojitz, in proportion to their respective participating interests in the Moolarben JV.

(b) Listing Rules Implications

The transaction described above is between the Group and a connected person at the subsidiary level on normal commercial terms where each of the applicable percentage ratios in respect of such transaction will, as the Company currently expects, be less than 1% on an annual basis, and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.76 of the Listing Rules.

B. Non-Exempt Continuing Connected Transactions

1. Sale of Coal by the Group

(a) Description of the Transaction

From time to time, Yanzhou and/or its subsidiaries (excluding the Group) may purchase coal from the Group primarily for their own trading purposes.

The Company entered into a framework coal sales agreement with Yanzhou (the "**Yanzhou Framework Coal Sales Agreement**") on 8 October 2018 to govern all existing and future sale of coal by the Group to Yanzhou and/or its subsidiaries (excluding the Group). The Yanzhou Framework Coal Sales Agreement provides that all transactions in relation to the sale of coal by the Group to Yanzhou and/or its subsidiaries (excluding the Group) must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to market indices, adjusted for coal characteristics and an optional analysis to ensure the price is negotiated on an arm's length basis and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws.

The Yanzhou Framework Coal Sales Agreement expires on 31 December 2020 and is automatically renewable for successive periods of three years thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Yanzhou Framework Coal Sales Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount received by the Group from Yanzhou and/or its subsidiaries (excluding the Group) for the sale of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$12.6 million, US$30.6 million, US$5.1 million and US$104.5 million, respectively.

The variation in the historical transaction amounts over the last three years is a result of the ad-hoc nature of contracts, price movements, spot volume variations and quality limitations imposed on imports into PRC. In 2017, the Company only entered into one transaction with Yanzhou in the second half of 2017 due to the competitiveness in the market. However, as part of a strategy to increase sales into China, in January 2018, the Company entered into an annual coal sales agreement with a subsidiary of Yanzhou for a contracted 2.0 million tonnes per annum supply and it is expected that this business will be carried out on a continuing basis.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be received by the Group from Yanzhou and/or its subsidiaries (excluding the Group) for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$250.0 million, US$250.0 million and US$250.0 million, respectively.

These caps were calculated by reference to (i) the actual transaction amount for the six months ended 30 June 2018 which was US$104.5 million and the contracted 2.0 million tonnes per annum. Considering the business requirement of Yanzhou, the Company expects to maintain such sales volume in future years, (ii) the expected additional spot demand for coal from Yanzhou and/or its subsidiaries (excluding the Group) over the next three years and (iii) the estimated sale price for the coal the Company typically charges.

(d) Listing Rules Implications

As the highest applicable percentage ratio in respect of each of the caps is, on an annual basis, more than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement, independent shareholders' approval and annual review requirements under Chapter 14A of the Listing Rules.

2. Purchase of Coal by the Group

(a) Description of the Transaction

The Group has purchased and may, from time to time, purchase coal from Yanzhou and/or its subsidiaries, in particular Australian based subsidiaries of Yanzhou holding mines which are managed by the Group, for back-to-back on sale to end customers in order to fulfil customer requirements and maintain customer relationships.

The Company entered into a framework coal purchase agreement with Yanzhou (the "**Framework Coal Purchase Agreement**") on 8 October 2018 to govern all existing and future purchases of coal by the Group from Yanzhou and/or its subsidiaries (excluding the Group). The Framework Coal Purchase Agreement provides that all transactions in relation to the purchase of coal by the Group from Yanzhou and/or its subsidiaries (excluding the Group) must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to industry index prices and coal quality characteristics under the respective contracts and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws.

The Framework Coal Purchase Agreement expires on 31 December 2020 and is automatically renewable for successive periods of three years thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Framework Coal Purchase Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount paid by the Group to Yanzhou and/or its subsidiaries (excluding the Group) for the purchase of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$5.0 million, US$22.6 million, US$29.7 million and US$21.1 million, respectively.

The increase in 2017 was due to the success in securing new markets for Yanzhou via the Company's sales channel. The transaction volume for the first half of 2018 represents an increase of 1% as compared to that for the corresponding period of 2017. It is expected to further expand the sales in 2018 and maintain these in the future years.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be paid by the Group to Yanzhou and/or its subsidiaries (excluding the Group) for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$65.0 million, US$65.0 million and US$65.0 million, respectively.

These caps were calculated by reference to (i) the current transaction amounts in 2018, (ii) the expected increase in demand for coal by the Group from the Yanzhou Group over the next three years as a result of, among other things, the success in securing new markets for Yanzhou, which was evidenced by the substantial increase in transaction amount for the first half of 2018, (iii) the estimated purchase volume of 0.5 million tonnes for the second half of 2018 as at the Latest Practicable Date based on contracted sales and spot opportunities that may exist. Considering the strengthened relationship with customers, the Company expects to further increase the volume of back-to-back sales in future years through leveraging the sales channel of the Company and (iv) the estimated purchase price of coal.

(d) Listing Rules Implications

As the highest applicable percentage ratio in respect of each of the caps is, on an annual basis, more than 0.1% but less than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement and annual review requirements, but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

3. Provision of Management Services by the Company

(a) Description of the Existing Management and Transitional Services Agreement

As one of the conditions imposed by the Foreign Investment Review Board of the Australian Government in relation to the merger of the Company with Gloucester in 2012, a management and transitional services agreement (the "**Management and Transitional Services Agreement**") was entered into between the Company and the following entities (the "**Existing Recipients**"), comprising (i) Yanzhou, (ii) Yancoal Technology Development Holdings Pty Ltd, (iii) Premier Coal Holdings Pty Ltd, (iv) Athena Holdings Pty Ltd, (v) Tonford Holdings Pty Ltd, (vi) Wilpeena Holdings Pty Ltd and (vii) Yancoal Energy Pty Limited, in 2012, pursuant to which the Company has agreed to provide to the Existing Recipients each Services (as described below) in respect of certain assets owned by the Existing Recipients.

On 7 December 2016, a deed of variation, accession and termination agreement of the Management and Transitional Services Agreement was entered into among the Existing Recipients, Yankuang Resources Pty Ltd ("**Yankuang Resources**"), Yankuang (Australia) Metal Mining Pty Ltd. ("**Yankuang (Australia) Metal Mining**", together with Yankuang Resources and the Existing Recipients, the "**Recipients**") and the Company, pursuant to which Yankuang Resources and Yankuang (Australia) Metal Mining will become parties to the Management and Transitional Services Agreement and be entitled to all rights and benefits of an Existing Recipient under the Management and Transitional Services Agreement. Yankuang Resources and Yankuang (Australia) Metal Mining are both wholly-owned subsidiaries of Yankuang.

See "*Business – Our Mining Operations – Managed Mines*" for further details. Details of the terms of the Management and Transitional Services Agreement are set out below.

(I) Services

The Services provided to each Recipient and each of their respective subsidiaries (excluding the Group and Yanzhou) include (i) General Corporate services, which comprise HR services, treasury services, financial accounting/reporting services, compliance services, marketing and logistic services, corporate communications services, government and industry relations services, business development services and other general corporate services, (ii) Operations Services, which comprise carrying out exploration programs, preparing business plans, monitoring and reporting on environmental issues, using all reasonable endeavours to meet business KPIs, preparing plans of operations as may be required by laws and other operational services and (iii) IT Services, which comprise the granting of the permission to use the Company's hardware or software and the provision of IT support services.

During the term, each party may request that the Company provide an additional service or the Company may change or modify the provision of an existing service by notifying the parties in writing. Following receipt of the notice, representatives of each party must promptly meet to discuss in good faith the proposed new services or modified services.

(II) Services Fees

The services charges for provisions of the Services will be at cost plus a 5% margin, except for any third party charges attributable to the provision of the relevant services which will be charged at cost.

The cost base upon which 5% margin is to be applied are to be determined on the basis of management's reasonable estimate of such costs at the commencement of each calendar year having regard to certain principles, including (i) in respect of coal-mining operations, the total budgeted corporate administration costs of the Company and the budgeted proportion of overall product tonnes of the relevant mining operation, (ii) in respect of non-coal mining businesses, the estimated management hours and the hourly rate for such work and (iii) in respect of disbursement, full recovery of any hard disbursements incurred by the Company.

At the end of each financial year (or such other times as the parties may agree), the parties will undertake a reconciliation of the fees charged during that financial year against the actual cost and services provided. The Company will refund the excess charges or the Recipients will pay the shortfall charges to the Company, in each case, within 14 days of determination of the fee adjustment required.

(III) Payment of the Services Fees

The Company will invoice the Recipients quarterly in arrears for services provided and the Recipients must pay to the Company within 30 days after the receipt of the invoice.

(IV) Termination of the Services

The Company must provide to the Recipients the Services until the Services are terminated in accordance with the term of the Management and Transitional Services Agreement. The Services can be terminated in the following circumstances:

(i) A Recipient may terminate any Services it receives without cause by giving not less than 30 days' notice to the Company. The Company may terminate any Services it provides without cause by giving not less than 12 months' notice to the Recipients (provided that any such notice must not be given before 31 December 2016).

(ii) If any asset in respect of which the Services are provided ceases to be controlled by Yanzhou and/or its subsidiaries, any Recipient or the Company may terminate the Services in relation to such asset by giving no less than 30 days' notice to the other parties.

(iii) In respect of one Recipient, the Company or the Recipient may terminate the Management and Transitional Services Agreement, if the other party materially breaches any of its terms and such breach is incapable of remedy or such breach is capable of remedy but that party fails to remedy that breach within 30 days of written notice to do so.

(iv) In addition, if an insolvency event occurs, in relation to the Company, each Recipient may elect by notice in writing to terminate the Management and Transitional Services Agreement as it relates to that Recipient, or in relation to a Recipient, the Company may elect by notice in writing to terminate the Management and Transitional Services Agreement as it relates to that Recipient.

Considering (i) the reason for entering into the Management and Transitional Services Agreement, which was a condition imposed by the Foreign Investment Review Board of the Australian Government in relation to the merger with Gloucester by the Company for purpose of ensuring the continued support to operations owned by Yanzhou (in particular the Premier mine and Cameby Downs mine) (ii) the types of services to be provided and (iii) the nature of such transactions, which are to be carried out on a continuing basis, it was commercially agreed that the Management and Transitional Services Agreement, which provides detailed pricing policies and events for termination, be entered into for an unspecified term so as to ensure continuous and uninterrupted support.

The Joint Sponsors are of the view that, based on the due diligence they have conducted and taking into consideration (i) the reasons for entering into the Management and Transitional Services Agreement as set out above, (ii) the nature and types of the Services provided and (iii) the termination rights each party has under the Management and Transitional Services Agreement, it is reasonable for the Management and Transitional Services Agreement to be for a duration of more than three years and it is normal business practice for agreements of this type to be of such duration.

(b) Historical Transaction Amounts

The aggregate services fees charged by the Group from the Recipients for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately A$10.6 million, A$9.7 million, A$8.1 million and A$4.0 million, respectively.

(c) Caps on Future Transaction Amounts

Notwithstanding that the term of the Management and Transitional Services Agreement may exceed three years, the Company has set the annual caps for the transactions under the Management and Transitional Services Agreement for a term of three years and will re-comply with the applicable requirements of the Listing Rules after the expiry of the initial three years.

The maximum annual transaction amount to be charged by the Group from the Recipients for the three years ending 31 December 2018, 2019 and 2020 will not exceed A$15 million, A$15 million and A$15 million, respectively.

These caps were calculated by reference to (i) the historical transaction amount, (ii) the expected increase in the administration costs and hourly rates which are consistent with the expected increase in market rates and (iii) the expected demand for services by the Recipients over the next three years, including an increased level of exploration drilling.

(d) Listing Rules Implications

As the highest applicable percentage ratio in respect of each of the caps is, on an annual basis, more than 0.1% but less than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement and annual review requirements, but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

4. Loan Facility Provided by the Company

(a) Description of the Transaction

Premier Coal Holdings Pty Ltd, an indirect wholly-owned subsidiary of Yanzhou ("**Premier Coal**") (as the borrower), entered into a loan agreement with the Company (as lender) on 15 June 2016 in relation to an A$50 million uncommitted revolving loan with a fixed interest rate of 7% per annum (the "**Premier Coal Loan Agreement**"). Pursuant to the Premier Coal Loan Agreement, the Company may terminate or cancel the facility at any time and draws already advanced to Premier Coal prior to the termination or cancellation are required to be repaid immediately. The termination date will be the date 12 months after the date of the Premier Coal Loan Agreement, subject to automatic extension on a rolling 12 months basis, or any earlier date on which the facility is terminated or cancelled in full or on which all the money owing becomes due and payable.

As at the Latest Practicable Date, no amount remained drawn down under the Premier Coal Loan Agreement.

(b) Reasons and benefits

The Company has the headroom to provide the proposed facility under the Premier Coal Loan Agreement. If the relevant funds are not utilised for a loan facility proposed, the funds would remain in deposit accounts which have interest rate only between 0.3% to 1%. It is therefore most cost effective for the funds to be loaned to Premier Coal and to be earning interest at a fixed interest rate of 7%. The 7% yield on a short term fund placement to Premier Coal on the terms of the Premier Coal Loan Agreement is better than other third party loans or financing structures available to the Company.

In addition, the Premier Coal Loan Agreement has been drafted to give maximum flexibility to the Company. As the facility is uncommitted loan facility, the Company can decline a request for funds if it does not believe that it has the capacity at the time to provide the funds. Further, as the Company can demand repayment of drawn down funds at any time, the Company maintains the flexibility to use the funds at any time if the Company determines that it requires the loan funds for its own purposes.

Having considered the reasons and benefits as set out above, the Company considers the entering into of the Premier Coal Loan Agreement is in the interests of the Company and the Shareholders as a whole.

(c) Historical Transaction Amounts

The maximum daily drawn-down principal of the loan under the Premier Coal Loan Agreement (including the interest accrued thereon) for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately nil, A$46.6 million, A$45.8 million and A$29.3 million, respectively.

(d) Caps on Future Transaction Amounts

The maximum daily drawn-down principal of the loan under the Premier Coal Loan Agreement (including the interest accrued thereon) for the three years ending 31 December 2018, 2019 and 2020 will not exceed A$53.5 million, A$53.5 million and A$53.5 million, respectively.

The annual caps represent the facility limit under the Premier Coal Loan Agreement and the maximum interest to be received.

(e) Listing Rules Implications

As the highest applicable percentage ratio for the continuing connected transaction under the Premier Coal Loan Agreement is, on an annual basis, more than 0.1% but less than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement and annual review requirements, but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

5. Bank Guarantees Provided in favour of Yanzhou's Subsidiaries

(a) Description of the Transaction

In addition to the Syndicated Facility, details of which are set out in "*Financial information of the Group – Secured Bank Loans – Syndicated Facility*", Yancoal Resources Limited ("**Yancoal Resources**"), a wholly-owned subsidiary of the Company, entered into a syndicated facility agreement (as most recently amended on 31 August 2017) (the "**Local Banks Secured Syndicated Facility Agreement**") with financiers who are independent third party commercial banks, on 11 October 2005, pursuant to which the financiers have agreed to grant to the borrowers, being Yancoal Resources and any new borrowers as agreed by the financiers, a dollar contingent liability facility (which may also be drawn in US$), under which, the financiers will issue credit support documents, including bank guarantee and letter of credit, in the name of the borrowers. Subject to amendment and restatement from time to time, the Local Banks Secured Syndicated Facility Agreement is for a term of three years.

As set out in "*Business – Our Mining Operations – Managed Mines*", the Company manages certain mines on behalf of Yanzhou. In the ordinary and usual course of business, the subsidiaries of Yanzhou holding the managed mines may require credit support documents issued by commercial banks for their respective business operations. Given the relevant commercial banks can issue credit support documents pursuant to existing facility agreements generally within 5 business days after receiving a request, which is a much shorter period of time and simpler process as compared to those required by other commercial banks to issue credit support documents without an existing facility agreement and the relationship between the Company and the managed mines, as an integral part of the management services rendered by the Company in support of the operation of the managed mines, the subsidiaries of Yanzhou holding the managed mines will use the overall bank guarantee facilities, including the Syndicated Facility and the facility under the Local Banks Secured Syndicated Facility Agreement, and pay the Company bank guarantee fees, which are equal to the fees to be paid by the Company to the commercial banks.

Having considered the reasons set out above and that the Company also receives management fees from those subsidiaries of Yanzhou in relation to the managed mines, the Company considers that the using of the overall bank guarantee facilities by the subsidiaries of Yanzhou holding managed mines is in the interest of the Company and the Shareholders as a whole.

(b) Historical Transaction Amounts

The aggregate maximum daily outstanding principal amount and the bank guarantee fees received under the credit support documents issued by commercial banks in favour of the subsidiaries of Yanzhou (excluding the Group) for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately A$121 million, A$117 million, A$114 million and A$114 million, respectively.

(c) Caps on Future Transaction Amounts

The aggregate maximum daily outstanding principal and the bank guarantee fees to be received under the credit support documents issued by commercial banks in favour of the subsidiaries of Yanzhou (excluding the Group) for the three years ending 31 December 2018, 2019 and 2020 will not exceed A$123.4 million, A$128.6 million and A$133.7 million, respectively.

These caps were calculated by reference to the historical transaction amounts as well as the future demand for bank support documents by the subsidiaries of Yanzhou holding the managed mines.

(d) Listing Rules Implications

As the highest applicable percentage ratio in respect of each of the caps under the arrangement described above, on an annual basis, is more than 0.1% but less than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement and annual review requirements, but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

6. Purchase of Coal by Glencore

(a) Description of the Transaction

From time to time, Glencore and/or its associates may purchase coal from the Group for on sale to end customers, in order to maintain customer relationships or to meet specific customer requirements.

The Company entered into a framework coal sales agreement with Glencore (the "**Glencore Framework Coal Sales Agreement**") on 29 June 2018 to govern all existing and future sales of coal by the Group to Glencore and/or its subsidiaries and/or related entities. The Glencore Framework Coal Sales Agreement provides that all transactions in relation to the sale of coal by the Group to Glencore and/or its subsidiaries and/or related entities must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to the prevailing market price for the relevant type of coal and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws. The Company will take into account relevant industry benchmarks and indices when determining the market price.

The Glencore Framework Coal Sales Agreement expires on 31 December 2020 and is automatically renewable for successive periods of three years thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Glencore Framework Coal Sales Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount received by the Group from Glencore and/or its associates for the sale of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately nil, nil, A$143 million and A$140.7 million, respectively.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be received by the Group from Glencore and/or its subsidiaries and/or its related entities for the three years ending 31 December 2020 will not exceed US$350 million, US$350 million and US$350 million, respectively.

These caps were calculated by reference to (i) the historical transaction amounts, in particular, sales revenue of A$140.7 million for the six months ended 30 June 2018. There was no sale of coal made to Glencore during the first half of 2017, (ii) the expected demand for coal from Glencore and/or its subsidiaries and/or its related entities. Based on further spot opportunities that may exist, the Company expects that Glencore and/or its subsidiaries and/or its related entities may purchase an estimated 0.4 million tonnes of coal for the second half of 2018 and (iii) the estimated sale price of coal.

(d) Listing Rules Implications

As the continuing connected transaction under the Glencore Framework Coal Sales Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

7. Purchase of Coal by Sojitz

(a) Description of the Transaction

From time to time, Sojitz Moolarben Resources Pty Ltd ("**Sojitz**") and/or its subsidiaries may purchase coal from the Group primarily for their own trading purposes and for sale to end customers, typically into Japan. Specifically, Moolarben Coal Sales Pty Ltd has entered into a coal supply contract for a term of three years with Sojitz Corporation in March 2016 for onward supply of coal to a major industrial user in Japan. This contract is likely to be renewed and it is expected that this business will be ongoing. Sojitz is a substantial shareholder of the Moolarben joint venture, a subsidiary of the Company under the Listing Rules.

The coal sales agreement between the Company and Sojitz (the "**Sojitz Coal Sales Agreement**") dated 6 August 2018 governs all existing and future sales of coal by the Group to Sojitz and/or its subsidiaries. The Sojitz Coal Sales Agreement provides that all transactions in relation to the sale of coal by the Group to Sojitz and/or its subsidiaries must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to market indices, coal quality and an optional analysis to ensure the price is negotiated on an arm's length basis and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws.

The Sojitz Coal Sales Agreement expires on 31 December 2020 and is automatically renewable for successive periods of one year thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Sojitz Coal Sales Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount received by the Group from Sojitz and/or its subsidiaries for the sale of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$20.1 million, US$29.1 million, US$21.0 million and US$27.0 million, respectively.

The transaction volume for the first half of 2018 represents an increase of 122% as compared to that for the corresponding period of 2017.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be received by the Group from Sojitz and/or its subsidiaries for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$100 million, US$100 million and US$100 million, respectively.

These caps were calculated by reference to (i) the current known 2018 transaction amounts, including Sojitz's recent success in selling to new industrial customers in Japan, (ii) the expected demand for coal from Sojitz and/or its subsidiaries over the next three years, taking into consideration the substantial increase in transaction amount for the first half of 2018, (iii) the estimated sale price for the coal the Company typically charges and (iv) the estimated sales volume of 0.5 million tonnes for the second half of 2018 as at the Latest Practicable Date based on the delivery of contracted sales and spot opportunities that may exist. Considering the strengthened relationship with customers, the Company expects to maintain or further expand the sales in future years.

(d) Listing Rules Implications

As the continuing connected transaction under the Sojitz Coal Sales Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

8. Sales of Coal by the Group to POSCO and/or its Associates

(a) Description of the Transaction

From time to time, POSCO Australia Pty Ltd (previously known as Pohang Steel Australia Pty Ltd) ("**POSCO**") and/or its associates may purchase coal from the Group for their own utilisation in the manufacturing of steel or generation of electricity. POSCO is a substantial shareholder of the subsidiaries of the Company under the Listing Rules.

The Group has entered into five coal sales agreements with POSCO group companies that govern the sale of coal by the Group to POSCO and/or its associates on 21 December 2017 (the "**POSCO Coal Sales Agreements**"). The POSCO Coal Sales Agreements provide that all transactions in relation to the sale of coal by the Group to POSCO and/or its associates must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being negotiated between the parties on an arm's length market related basis relative to market benchmarks and reflecting coal quality, and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws. The Group has been supplying POSCO and/or its associates for several years under annual contracts which are renewed annually, but where volume and price is re-negotiated annually.

(b) Historical Transaction Amounts

The aggregate annual transaction amount received by the Group from POSCO and/or its associates for the sales of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$213 million, US$156 million, US$260 million and US$168.9 million, respectively.

The transaction volume for the first half of 2018 represents an increase of 45% as compared to that for the corresponding period of 2017.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be received by the Group from POSCO and/or its associates for the year ending 31 December 2018 will not exceed US$780 million. As the POSCO Coal Sales Agreements are renewed annually, the Company has set the annual cap for the transactions under the POSCO Coal Sales Agreements for a term of one year and will re-comply with the applicable requirements of the Listing Rules when the relevant agreements are renewed.

This cap was calculated by reference to (i) the currently known 2018 transaction amounts, (ii) the expected demand for coal from POSCO and/or its associates for the year ending 31 December 2018, (iii) the estimated sale price for the coal the Company typically charges and (iv) in particular, the estimated sales volume of 1.5 million tonnes for the second half of 2018 as at the Latest Practicable Date based on the delivery of contracted sales and spot opportunities that may exist.

(d) Listing Rules Implications

As the continuing connected transactions under the POSCO Coal Sales Agreements are between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transactions and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in section D below, the continuing connected transactions are only subject to reporting, announcement and annual review requirements, but are exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

9 Purchase of Coal from Glencore

(a) Description of the Transaction

From time to time, the Group may purchase coal from Glencore and/or its associates for on sale to end customers, in order to maintain customer relationships or to meet specific customer requirements.

The Company entered into a framework coal purchase agreement with Glencore (the "**Glencore Framework Coal Purchase Agreement**") on 6 August 2018 to govern all existing and future purchase of coal by the Group from Glencore and/or its subsidiaries. The Glencore Framework Coal Purchase Agreement provides that all transactions in relation to the purchase of coal by the Group from Glencore and/or its associates must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to the prevailing market price for the relevant type of coal and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws. The Company will take into account relevant industry benchmarks and indices when determining the market price.

The Glencore Framework Coal Purchase Agreement expires on 31 December 2020 and is automatically renewable for successive periods of three years thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Glencore Framework Coal Purchase Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount paid by the Group to Glencore and/or its subsidiaries for the purchase of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$1.0 million, nil, US$6.8 million, and US$16.8 million, respectively.

The transaction volume for the first half of 2018 represents an increase of 366% as compared to that for the corresponding period of 2017.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be paid by the Group to Glencore and/or its subsidiaries for the three years ending 31 December 2020 will not exceed US$350 million, US$350 million and US$350 million, respectively.

These caps were calculated by reference to (i) the historical transaction amounts, (ii) the expected demand for coal from the Group, (iii) the estimated sale price of coal by reference to the average selling price of the coal of the Company and (iv) the estimated 2 million tonnes for the second half of 2018 based on the delivery of contracted purchases and spot opportunities that may exist. Considering the strengthened relationship with customers, the Company expects to maintain such purchase volume in future years.

(d) Listing Rules Implications

As the continuing connected transaction under the Glencore Framework Coal Purchase Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

10. Purchase of Coal from Anotero

(a) Description of the Existing Sales Contract – Hunter Valley Operations Joint Venture

As part of the Glencore Transaction, CNAO, a wholly-owned subsidiary of the Company, the SalesCo and Anotero entered into a sales contract – Hunter Valley Operations Joint Venture on 4 May 2018 (the "**HVO Sales Agreement**"). The relevant mining and exploration licences of HVO are held directly by CNAO and Anotero as tenants in common in proportion to their respective participating interest in the HVO JV. Pursuant to the HVO Sales Agreement.

(i) each of CNAO and Anotero agrees to sell all of its entitled portion of finished coal product in saleable form that is produced by the tenements held by the HVO JV to the SalesCo only and the SalesCo agrees to purchase each of CNAO's and Anotero's entitled portion of coal product;

(ii) the amount payable to each of CNAO and Anotero by the SalesCo shall be the total amount received by the SalesCo for that portion of product under each sales contract entered into between the SalesCo and its customers; and

(iii) payment by the SalesCo to CNAO and Anotero shall be no later than 3 business days after receipt by the SalesCo of payment from its customers.

The HVO Sales Agreement shall commence on the date of the HVO Sales Agreement and terminate upon the termination of the joint venture agreement in relation to the HVO JV in accordance with its terms.

The Joint Sponsors are of the view that, based on the due diligence they have conducted and taking into consideration (i) the reason for entering into the HVO Sales Agreement and the business objective of the SalesCo, which is to facilitate the sale of coal produced by the HVO JV given the HVO JV, which is an unincorporated joint venture, does not have the legal capacity to enter into sales agreements itself, (ii) the substance of the transaction under the HVO Sales Agreement, which is an arrangement of making the coal attributable to the relevant participants available to the SalesCo for its on-sale, (iii) the fact that the SalesCo is not operated for profit as it does not retain any sales revenue received by it and does not receive any fees from the participants for the sales function carried out by it and (iv) the fact that the HVO Sales Agreement was negotiated on an arms-length basis before Glencore and Anotero became connected persons of the Company, it is reasonable for the HVO Sales Agreement to be for a duration of more than three years and it is normal business practice for agreements of this type to be of such duration.

(b) Historical Transaction Amounts

As the HVO Sales Agreement was entered into on 4 May 2018, there was no historical transaction amount for the three years ended 31 December 2015, 2016 and 2017. The amount of revenue distributed by the SalesCo to Anotero during the period from 4 May 2018 to 30 June 2018 amounted to approximately US$134.4 million.

(c) Estimated Maximum Annual Transaction Amounts

Notwithstanding that the term of the HVO Sales Agreement may exceed three years, the Company has set the estimated maximum annual transaction amounts for the transactions under the HVO Sales Agreement for a term of three years and will re-comply with the applicable requirements of the Listing Rules after the expiry of the initial three years.

The maximum annual transaction amount to be distributed by the SalesCo to Anotero for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$750 million, US$750 million and US$750 million, respectively.

The estimated maximum annual transaction amounts are determined mainly based on the expected amount and price of coal to be sold.

(d) Listing Rules Implications

As disclosed in "*– 4. Management Services in relation to the HVO JV*" and "*– 5. Provision of Services by Glencore Coal in relation to the HVO*" of this section, the SalesCo is a subsidiary of the Company under the Listing Rules and Anotero is a connected person of the Company immediately following the Listing. Accordingly, the transaction between the SalesCo and Anotero constitutes a continuing connected transaction of the Company under the Listing Rules.

As the continuing connected transaction under the HVO Sales Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in Section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

11. Purchase of Coal from POSCO

(a) Description of the Existing Sales Contract – Mount Thorley Joint Venture

The participants of the unincorporated joint venture in relation to Mt Thorley (the "**MT JV**") namely POSCO and Mount Thorley Operations Pty Ltd (previously known as R. W. Miller & Co. Pty Limited) ("**MT Operations**"), a wholly-owned subsidiary of the Company holding the relevant mining and

exploration licences of Mount Thorley on behalf of the MT JV, entered into a sales contract with Miller Pohang Coal Co. Pty Limited (the "**MT SalesCo**") on 10 November 1981 (the "**MT Sales Agreement**"), respectively.

MT SalesCo is a company jointly controlled by MT Operations and POSCO with MT Operations and POSCO holding 80% and 20% of its interest, respectively. Both the MT SalesCo and the MT JV are subsidiaries of the Company under the Listing Rules. As POSCO holds more than 10% of the interest in the MT SalesCo and has more than 10% participating interest in the MT JV, POSCO will be a connected person of the Company immediately following the Listing by being a substantial shareholder of the subsidiaries of the Company. Accordingly, the transaction between the MT SalesCo and POSCO constitutes a continuing connected transaction of the Company under the Listing Rules.

Pursuant to the MT Sales Agreement:

(i) each of POSCO and MT Operations agrees to sell all of its entitled portion of finished coal product in saleable form that is produced by the tenements held by the MT JV to the MT SalesCo only and the MT SalesCo agrees to purchase each of POSCO's and MT Operations' entitled portion of coal product;

(ii) the amount payable to each of POSCO and MT Operations shall be the total amount received by the MT SalesCo for that portion of product under each sales contract entered into between the MT SalesCo and its customers; and

(iii) payment by the MT SalesCo to POSCO and MT Operations shall be no later than 7 days after receipt by the MT SalesCo of payment from its customers.

The MT Sales Agreement was entered into on 10 November 1981 and will last during the economic life of the Mount Thorley coal mine.

The Joint Sponsors are of the view that, based on the due diligence they have conducted and taking into consideration (i) the reason for entering into the MT Sales Agreement and the business objective of the MT SalesCo, which is to facilitate the sale of coal produced by the MT JV given the MT JV, which is an unincorporated joint venture, does not have the legal capacity to enter into sales agreements itself, (ii) the substance of the transaction under the MT Sales Agreement, which is an arrangement of making the coal attributable to the relevant participants available to the MT SalesCo for its on-sale, (iii) the fact that the MT SalesCo is not operated for profit as it does not retain any sales revenue received by it and does not receive any fees from the participants for the sales function carried out by it and (iv) the fact that the MT Sales Agreement was negotiated on an arms-length basis before POSCO became a connected person of the Company, it is reasonable for the MT Sales Agreement to be for a duration of more than three years and it is normal business practice for agreements of this type to be of such duration.

(b) Historical Transaction Amounts

The interest in the Mount Thorley was acquired by the Company as part of the C&A Acquisition. See "*Business – Acquisitions and Disposals – C&A Acquisition*". Accordingly, the transactions prior to the completion of the acquisition are not connected transactions of the Group. For reference, the aggregate annual transaction amount distributed by the MT SalesCo to POSCO for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$61.1 million, US$64.0 million, US$85.4 million and US$44.8 million, respectively.

(c) Estimated Maximum Annual Transaction Amounts

Notwithstanding that the term of the MT Sales Agreement may exceed three years, the Company has set the estimated maximum annual transaction amounts for the transactions under the MT Sales Agreement for a term of three years and will re-comply with the applicable requirements of the Listing Rules after the expiry of the initial three years.

The maximum annual transaction amount to be distributed by the MT SalesCo to POSCO for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$90 million, US$90 million and US$90 million, respectively.

The estimated maximum annual transaction amounts are determined mainly based on the expected amount and price of the coal to be sold.

(d) Listing Rules Implications

As the continuing connected transaction under the MT Sales Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in Section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

C. Waiver Application For Non-Exempt Continuing Connected Transactions

As the non-exempt continuing connected transactions described in this section will be carried out on a continuing basis and will extend over a period of time, the Directors consider that strict compliance with the reporting, announcement and/or independent shareholders' approval requirements under the Listing Rules would be impracticable and unduly burdensome and would impose unnecessary administrative costs upon the Company. Accordingly, the Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the reporting, announcement and/or independent shareholders' approval requirements in relation to the non-exempt continuing connected transactions described in this section.

The Company will, however, comply at all times with the other applicable provisions under Chapter 14A of the Listing Rules in respect of these non-exempt continuing connected transactions.

D. Confirmation From The Directors And The Joint Sponsors

The Directors (including the independent non-executive Directors) are of the view that the non-exempt continuing connected transactions described in this section have been and will be entered into in the ordinary and usual course of business of the Group (other than the financial assistance in relation to the loan facility provided by the Company and the bank guarantee arrangement as described in paragraphs 4 and 5 of "– *B. Non-Exempt Continuing Connected Transactions*" above), on normal commercial terms or better, that are fair and reasonable and in the interests of the Group and the Shareholders as a whole, and that the proposed annual caps for the non-exempt continuing connected transactions described in this section are fair and reasonable, and in the interests of the Group and the Shareholders as a whole.

The Joint Sponsors have reviewed the relevant information and historical figures prepared and provided by the Company relating to the non-exempt continuing connected transactions described in this section, and have obtained confirmations from the Company. Based on the Joint Sponsors' due diligence, the Joint Sponsors are of the view that the non-exempt continuing connected transactions described in this section have been and will be entered into in the ordinary and usual course of business of the Group (other than the financial assistance in relation to the loan facility provided by the Company and the bank guarantee arrangement as described in paragraphs 4 and 5 of "– *B. Non-Exempt Continuing Connected Transactions*" above), on normal commercial terms or better, that are fair and reasonable and in the interests of the Group and the Shareholders as a whole, and that the proposed annual caps for the non-exempt continuing connected transactions described in this section are fair and reasonable, and in the interests of the Group and the Shareholders as a whole.

BOARD OF DIRECTORS

The Board of Directors consists of 11 Directors, comprising one Executive Director, six Non-executive Directors and four Independent Non-executive Directors. Brief information of the Directors is set out below:

Name	Age	Position	Date of Appointment	Date of Joining the Group	Principal Responsibilities
Baocai ZHANG (張寶才)	51	Chair of the Board, Non-executive Director	8 June 2018	26 June 2012	Responsible for the high level oversight of the Board, the management and operations of the Group
Fucun WANG (王福存)	55	Co-Vice Chair, Executive Director and Chair of the Executive Committee	8 June 2018	8 June 2018	Responsible for the formulation of the strategic direction of the Group and the day-to-day management of the Group
Cunliang LAI (來存良)	58	Non-executive Director	20 January 2014	18 November 2004	Responsible for the high level oversight of the management and operations of the Group
Xiangqian WU (吳向前)	52	Non-executive Director	28 April 2017	28 April 2017	Responsible for the high level oversight of the management and operations of the Group
Fuqi WANG (王富奇)	54	Non-executive Director	23 April 2015	23 April 2015	Responsible for the high level oversight of the management and operations of the Group
Qingchun ZHAO (趙青春)	50	Non-executive Director	28 April 2017	28 April 2017	Responsible for the high level oversight of the management and operations of the Group

Name	Age	Position	Date of Appointment	Date of Joining the Group	Principal Responsibilities
Xing FENG (馮星)	44	Non-executive Director	15 December 2017	15 December 2017	Responsible for the high level oversight of the management and operations of the Group
Gregory James FLETCHER	61	Co-Vice Chair and Independent Non-executive Director	26 June 2012	26 June 2012	Giving strategic advice and guidance on the business and operations of the Group and ensuring the interests of all Shareholders, in particular minority Shareholders, are considered
Geoffrey William RABY	65	Independent Non-executive Director	26 June 2012	26 June 2012	Giving strategic advice and guidance on the business and operations of the Group and ensuring the interests of all Shareholders, in particular minority Shareholders, are considered
David James MOULT	61	Independent Non-executive Director	30 January 2018	30 January 2018	Giving strategic advice and guidance on the business and operations of the Group and ensuring the interests of all Shareholders, in particular minority Shareholders, are considered

Name	Age	Position	Date of Appointment	Date of Joining the Group	Principal Responsibilities
Helen Jane GILLIES	54	Independent Non-executive Director	30 January 2018	30 January 2018	Giving strategic advice and guidance on the business and operations of the Group and ensuring the interests of all Shareholders, in particular minority Shareholders, are considered

Chair of the Board and Non-executive Director

Baocai ZHANG (張寶才), aged 51, was appointed as a Non-executive Director of the Company and Chair of the Board on 8 June 2018. Mr. Zhang also acted as a Non-executive Director of the Company from June 2012 to January 2014, Executive Director and Co-Vice Chair of the Board from January 2014 to June 2018 and the Chair of the Executive Committee of the Company from January 2014 to June 2018.

Mr. Zhang joined the predecessor of Yanzhou in July 1989 as an accountant and served as the director of the planning and finance department of Yanzhou from June 2002 to September 2006, a director of Yanzhou from September 2006 to June 2016 and the board secretary of Yanzhou from September 2006 to March 2016, and the deputy general manager of Yanzhou from March 2011 to March 2016, respectively. Mr. Zhang has also been a director and a member of Party's standing committee of Yankuang since October 2015 and the general counsel of Yankuang since February 2018.

Mr. Zhang graduated with an Executive Master of Business Administration degree from Nankai University (南開大學) in China in June 2006. He has been a senior accountant recognised by Shandong Province Bureau of Personnel since December 2000.

In his roles as the Chair of the Board and Chair of the Strategy and Development Committee (the "**SDC**"), Mr. Zhang's responsibilities include (i) leading the Board and ensuring the efficient organisation and conduct of the Board's functions, (ii) reviewing key issues and performance trends of the Group's operations together with the Chief Executive Officer and the Chair of the Executive Committee, (iii) representing the Group in the wider community in which the Group operates, (iv) participating in the capital management and business development of the Company, (v) overseeing the annual performance assessment of the four standing committees of the Board; and (vi) leading and overseeing the SDC and the Board in the oversight and review of the Group's strategy initiatives. In these roles, Mr. Zhang is involved in and oversees key decisions and strategies of the Company as would any non-executive chairman.

Executive Director

Fucun WANG (王福存), aged 55, was appointed as an Executive Director and Co-Vice Chair of the Board on 8 June 2018. Mr. Wang has also been the Chair of the executive committee, a committee delegated by the Board for the day to day management of the Company's affairs (the "**Executive Committee**"), since 8 June 2018.

Mr. Wang started his career in July 1983 when he joined a subsidiary mining company of Yankuang and joined the headquarters of Yankuang in May 1986. Mr. Wang successively served as the deputy director of planning department, the deputy director and director of the department of planning and development of Yankuang from June 2002 to January 2016. He acted as the deputy chief economist and the head of the investment and development department of Yankuang from January 2016 to May 2018 and the director of the strategic planning and decision centre from February 2017 to May 2018.

Mr. Wang completed his post-graduate degree in Economic Management from Shandong Provincial Communist Party Collage (中共山東省委黨校) in China in June 2009, and an Executive Master of Business Administration degree from Hebei Industrial University (河北工業大學) in China in June 2014, respectively. He has been a senior statistician recognised by Human Resources and Social Security Bureau of Shandong Province since May 2014.

Non-executive Directors

Cunliang LAI (來存良), aged 58, was appointed as a Non-executive Director of the Company on 20 January 2014.

Mr. Lai joined the predecessor of Yanzhou in 1980 as a technician and served as the head of Xinglongzhuang Coal Mine of Yanzhou from 2000 to 2005. He acted as the deputy general manager of Yanzhou from 2005 to 2014 and has been the deputy general manager of Yankuang since October 2010. He was an executive Director of the Company from November 2004 to January 2014 and was appointed as the Co-Vice Chair of the Board from January 2014 to June 2018 and the Chair of the Executive Committee of the Company from June 2012 to January 2014.

Mr. Lai graduated with an Executive Master of Business Administration degree from Nankai University (南開大學) in China in June 2006, and a doctorate degree in engineering from Coal Science Research Institute in China in July 2008, respectively. He has been a senior mining engineer and an engineering applications researcher recognised by the Engineering Technology Review Committee of Shandong Province since December 2011 and January 2012, respectively.

Xiangqian WU (吳向前), aged 52, was appointed as a Non-executive Director of the Company on 28 April 2017.

Mr. Wu joined the predecessor of Yanzhou in July 1988 as an assistant engineer and served as the the deputy head of Jining No. 3 Coal Mine of Yanzhou from July 2003 to May 2004, the chief engineer of Jining No. 3 Coal Mine of Yanzhou from May 2004 to March 2006, the deputy head of Jining No. 3 Coal Mine of Yanzhou from May 2004 to August 2006, the head of Jining No. 3 Coal Mine of Yanzhou from August 2006 to April 2014, respectively. He was the chairman and general manager of Yanzhou Ordos Neng Hua Co., Ltd. and chairman of Inner Mongolia Haosheng Coal Mining Co., Ltd. from April 2014 to January 2016. Mr. Wu has been a director and the general manager of Yanzhou since May 2014 and January 2016, respectively.

Mr. Wu graduated with a Bachelor of Engineering degree in mine construction from Shandong College of Mining (山東礦業學院) in China in July 1988, a Master degree in mining engineering from Shandong University of Science and Technology (山東科技大學) in China in December 2002, and a doctorate degree in mining engineering from China University of Mining and Technology (中國礦業大學) in China in June 2012, respectively. He has been an engineering technology application researcher recognised by the Engineering and Technology senior Committee of Shandong Province since August 2009.

Fuqi WANG (王富奇), aged 54, was appointed as a Non-executive Director of the Company on 23 April 2015.

Mr. Wang joined the predecessor of Yanzhou in July 1985 as an assistant engineer and served as the the chief engineer of production and technology division of Yankuang Group from January 2000 to June 2002, the director of the production and technique department of Yanzhou from June 2002 to July 2003, and the deputy chief engineer and director of production and technique department of Yanzhou from July 2003 to March 2014, respectively. He has been the chief engineer of Yanzhou since March 2014.

Mr. Wang graduated with a Master degree in engineering from Northeastern University (東北大學) in China in September 2003, and an Executive Master of Business Administration degree from Nankai University (南開大學) in China in June 2006, respectively. He has been an engineering technology application researcher recognised by the Engineering and Technology Review Committee of Shandong Province since February 2006.

Qingchun ZHAO (趙青春), aged 50, was appointed as a Non-executive Director of the Company on 28 April 2017.

Mr. Zhao joined the predecessor of Yanzhou in July 1989 as an accountant and held various positions in Yanzhou, including the director of the planning and finance department, the vice chief financial officer and the director of the finance department, from 2006 to 2014, respectively. He served as the general manager assistant and the director of the finance management department of Yanzhou from March 2014 to January 2016 and has been the chief financial officer and a director of Yanzhou since January 2016 and June 2016, respectively.

Mr. Zhao has been a director of Shanghai Interim Futures Co., Ltd. (NEEQ:871467) and Qilu Bank Co., Ltd. (NEEQ:832666) since August 2016 and February 2016, respectively.

Mr. Zhao graduated with an Executive Master of Business Administration degree from Nankai University (南開大學) in China in June 2006. He has been a senior accountant recognised by the Department of Finance and Department of Human Resources and Social Security of Shandong Province since January 2018.

Xing FENG (馮星), aged 44, was appointed as a Non-executive Director of the Company on 15 December 2017.

Mr. Feng has been the assistant general manager of China Cinda Asset Management Co., Ltd. (中國信達資產管理有限公司) (stock code: 1359.HK) since March 2017, where he is responsible for implementing the department's development strategy plan, involvement in business review and leading the implementation of the investment plan. He has also been the managing director of Cinda Capital Management Company Limited since January 2018.

Mr. Feng graduated with a Bachelor of Engineering degree in Electric Engineering and Automation from Tsinghua University (清華大學) in China in July 1997.

Independent Non-executive Directors

Gregory James FLETCHER, aged 61, was appointed as the Co-Vice Chair on 1 March 2018 and an Independent Non-executive Director of the Company on 26 June 2012.

Mr. Fletcher has been a director and the chairman of the audit and risk committee of Saunders International Limited (ASX:SND) since July 2015 and a director of SMEG Australia Pty Ltd since August 2011. Prior to joining the Group, Mr. Fletcher served as a director of Gloucester (which merged with the Company in June 2012) from June 2009 to June 2012, and a director of WDS Limited (ASX:WDS) from July 2010 to November 2015. Mr. Fletcher has been Chair and/or a member of the audit and risk committee of a number of NSW public sector entities since 2009, and was a member of the audit and risk committee of the Audit Office of New South Wales, a statutory authority in Australia, for the 2010 to 2017 financial years. Mr. Fletcher was a partner of Deloitte Australia from July 1993 to May 2009, during which he undertook external audits and provided internal audit and risk management services to a number of public companies.

Mr. Fletcher was a director of Yancoal SCN from November 2014 to August 2018, during which he assumed an independent role on the board of Yancoal SCN. His roles and responsibilities as a director of Yancoal SCN were non-executive in nature and similar to those of his role as an Independent Non-executive Director of the Company.

Mr. Fletcher graduated with a Bachelor of Commerce degree in accounting, finance and systems from the University of New South Wales in Australia in April 1979. He has been a member of the Institute of Chartered Accountants in Australia since August 1985.

Geoffrey William RABY, aged 65, was appointed as an Independent Non-executive Director of the Company on 26 June 2012.

Dr. Raby was formerly Australia's Ambassador to the People's Republic of China from February 2007 to August 2011. Prior to then he was a Deputy Secretary in the Department of Foreign Affairs and Trade (DFAT) from November 2002 to November 2006.

Dr. Raby has extensive experience in international affairs and trade and has held a number of independent non-executive director positions with ASX listed companies, including Oceana Gold Corporation Limited (ASX: OGC) and iSentia Group Limited (ASX: ISD) since August 2011 and May 2014, respectively. Dr. Raby was appointed Chairman of Wiseway Group Limited (ASX: WWG) on 30 August 2018, which listed on the ASX on 30 October 2018. Dr. Raby served as a director of Fortescue Metals Group Limited (ASX: FMG) from August 2011 to December 2016, a director of SmartTrans Holdings Limited (ASX: SMA) from August 2011 to April 2016 and a director of YPB Group Limited (ASX: YPB) from July 2014 to May 2017, respectively.

Dr. Raby graduated from La Trobe University in Australia with a Bachelor of Economics degree in May 1978, a Masters of Economics degree in May 1981 and a Doctor of Philosophy in Economics in May 1991.

David James MOULT, aged 61, was appointed as an Independent Non-executive Director of the Company on 30 January 2018.

Prior to joining the Group, Mr. Moult served as the managing director and chief executive officer of Centennial Coal Company Limited (ASX:CEY) from July 2011 to April 2017, then a non-executive director of Centennial Coal from May 2017 until January 2018. He previously held the position of chief operating officer with Centennial Coal from January 1998 until June 2011. He was a global marketing manager, vice president and general manager of Joy Mining Machinery in the United States from January 1996 to July 1997 and Australia from July 1997 to December 1997.

Mr. Moult is currently a director of Coal Services Pty Limited, Coal Mines Insurance Pty Ltd and Mines Rescue Pty Ltd, respectively since January 2015. He was previously a director of the Australian Coal Association Low Emissions Technologies Limited Board (ACALET) from June 2011 to January 2018, a director of The Minerals Council of Australia from October 2015 to April 2017 and a director of the NSW Minerals Council from April 2012 to November 2017.

Mr. Moult graduated with a Higher National Diploma in Mining through completing an approved Sandwich course in Mining at Trent Polytechnic (now Nottingham Trent University) in the United Kingdom in November 1978, and a Master of Business Administration degree from the Nottingham Business School of the Nottingham Trent University in the United Kingdom in November 1993, respectively. He has been a Chartered Mining Engineer in the United Kingdom since May 1979, a fellow of Australasian Institute of Mining and Metallurgy since May 1998, a fellow of Institute of Materials, Minerals and Mining since January 1991, an European Engineer of European Federation of National Engineering Associations since July 1992 and a member of the Australia Institute of Company Directors since April 2008.

Helen Jane GILLIES, aged 54, was appointed as an Independent Non-executive Director of the Company on 30 January 2018.

Ms. Gillies has been a non-executive director of Bankstown Airport Limited and Camden Airport Limited since September 2017, a non-executive director of Monadelphous Group Limited (ASX: MND) since September 2016, and a non-executive director of Red Flag Group (Holdings) Limited since 2016. Previously, she served as a director of Sinclair Knight Merz Management Pty Limited from October 2002 to September 2008 and Sinclair Knight Merz Management Pty Limited from September 2010 to December 2013, the general manager (risk) and general counsel of Sinclair Knight Merz from 1995 to 2013, and a non-executive director of Civil Aviation Safety Authority in Australia from 2009 to 2014.

Ms. Gillies graduated with a Bachelor of Commerce degree and a Bachelor of Law degree (with Honours) from the University of Queensland in Australia in August 1985 and May 1987, respectively. She also received a Master of Business Administration degree from the University of Sydney in Australia in May 1998 and a Master of Construction Law degree from the University of Melbourne in Australia in August 2004. Ms. Gillies also completed the Advanced Management Programme held at INSEAD, France in July 2011 and was awarded a Certificate in Corporate Governance by INSEAD in September 2014. Ms. Gillies has been a fellow of the Australian Institute of Company Directors since January 2017, a solicitor of the Supreme Court of Queensland since January 1989 and a solicitor of the Supreme Court of New South Wales since February 1995.

Save as disclosed above in "– *Board of Directors"* above and *"Appendix VII – Statutory and General Information*", each Director had not held any other directorships in listed companies during the three years immediately prior to the Latest Practicable Date and there is no other information in respect of the Directors to be disclosed pursuant to Rule 13.51(2) of the Listing Rules and there is no other matter that needs to be brought to the attention of the Shareholders.

SENIOR MANAGEMENT OF THE GROUP

The Executive Director (also being the Chair of the Executive Committee) the Chair of the Board (also being a Non-executive Director), and members of the senior management of the Group are responsible for the day-to-day management of our business. Certain information relating to the Executive Director and the Chair of the Board is set out in "– *Board of Directors"* above.

In addition to the Executive Director (also being the Chair of the Executive Committee) and the Chair of the Board (also being a Non-executive Director), the members of the senior management of the Group include the following:

Name	Age	Position in the Group	Roles and Responsibilities	Date of Appointment as Senior Management	Date of Joining the Group
Reinhold SCHMIDT	52	Chief Executive Officer	Responsible for the overall and day-to-day management and development of the Group	26 August 2013	26 August 2013
Lei ZHANG (張磊)	46	Chief Financial Officer	Responsible for the financial operation, financing and investment activities of the Group	31 March 2014	31 March 2014

Reinhold SCHMIDT, aged 52, was appointed as the Chief Executive Officer of the Company on 26 August 2013.

Mr. Schmidt has over 20 years' experience in the mining industry. Prior to joining the Group, he served as the executive general manager of Wandoan Project for Xstrata Coal Pty Ltd from February 2008 to February 2009 and the chief operating officer there from March 2009 to June 2013. He was also formerly the chief operating officer of the Colombian coal assets of Glencore International.

Mr. Schmidt graduated with a Bachelor degree in Engineering (Mining) (cum laude) from the University of Pretoria in South Africa in March 1989, a Master of Engineering (Mining Engineering) degree and Master of Science in Engineering (Mineral Economics) degree from the University of Witwatersrand, Johannesburg, South Africa in June 1991 and December 1991, respectively.

Dr. Lei ZHANG (張磊), aged 46, was appointed as the Chief Financial Officer of the Company on 31 March 2014.

Prior to joining the Group, Dr. Zhang served as the senior vice president and managing director of SK Great China private equity fund & principal investment from February 2013 to March 2014, general manager of mergers and acquisitions and commercial finance at Shell Far East from July 2012 to March 2013, executive director and chief financial officer of Chinalco Mining Corp. International from September 2010 to June 2012, vice president from September 2010 and chief financial officer of Chinalco Overseas Holdings from September 2010 to June 2012, and was with Siemens from April 1997 to September 2010 including serving as vice president of Siemens Ltd. China and cluster chief financial officer of Siemens Real Estate North East Asia from September 2008 to September 2010.

Dr. Zhang graduated with a Doctor of Economics from Graduate School of Chinese Academy of Social Sciences in Beijing, China in June 2010, and a Master of Business Administration degree from Peking University in China in June 2005, respectively. Dr. Zhang is a qualified Public Accountant and China Inter-bank Market Dealer and also holds a China Bond Custody Qualifying Certificate.

The business address of the members of the senior management is Level 18, Darling Park 2, 201 Sussex Street, Sydney, NSW 2000, Australia.

COMPANY SECRETARY

Laura Ling ZHANG (張凌), aged 41, was appointed as the Company Secretary of the Company on 6 September 2005.

Ms. Zhang is one of the founding executives of the Company and has been the Company Secretary and Executive General Manager, Legal and Compliance of the Company since September 2005 and July 2014 respectively. She oversees the Company's corporate governance, group legal issues, corporate compliance and shareholder communications.

Ms. Zhang graduated with a Bachelor of Arts degree in English education from Qufu Normal University in China in July 1999 and a Master of Arts degree in English language and literature from China University of Mining and Technology in China in July 2004. Ms. Zhang was until recently a Fellow of the Governance Institute of Australia (formerly known as Chartered Secretaries Australia) and since June 2018, is a fellow member of the Hong Kong Institute of Chartered Secretaries. Ms. Zhang is a member of the Australian Institute of Company Directors and is currently studying the EMBA at The University of New South Wales.

BOARD COMMITTEES

The Board has established the audit and risk management committee, the nomination and remuneration committee, the health, safety and environment committee and the strategy and development committee.

Audit and Risk Management Committee

The Company has established the audit and risk management committee in compliance with Rule 3.21 of the Listing Rules and the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The primary duties of the audit and risk management committee are to oversee the financial reporting, internal control structure, risk management systems and the internal and external audit functions of the Company, review the financial information of the Company and consider issues relating to the external auditors and their appointment.

The audit and risk management committee consists of four Directors. The chair of the audit and risk management committee is Mr. Gregory James FLETCHER, an Independent Non-Executive Director, who holds the appropriate professional qualifications as required under Rules 3.10(2) and 3.21 of the Listing Rules. The members of the audit and risk management committee are:

Gregory James FLETCHER (*Chair*)
Qingchun ZHAO
David James MOULT
Helen Jane GILLIES

Nomination and Remuneration Committee

The Company has established the nomination and remuneration committee of the Board in compliance with Rule 3.25 of the Listing Rules and the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The primary duties of the nomination and remuneration committee are to review the size and composition of the Board, assess the independence of the Independent Non-executive Directors, make recommendations to the Board on the appointment and re-appointment of Directors, succession planning for Directors, make recommendations to the Board on the Company's policy and structure for all remuneration of Directors and senior management and on the establishment of a formal and transparent procedure for developing policy on such remuneration.

The nomination and remuneration committee consists of five Directors. The members of the nomination and remuneration committee are:

Helen Jane GILLIES (*Chair*)
Baocai ZHANG
Xiangqian WU
Gregory James FLETCHER
David James MOULT

Health, Safety and Environment Committee

The Company has established the health, safety and environment committee of the Board. The primary duties of the health, safety and environment committee are to monitor the Company's compliance with the approved health, safety and environment ("**HSE**") policies and applicable HSE legislation, consider and adopt HSE policies, review the HSE policies and recommend changes to such policies and assessing whether the Company has any material exposure to environmental and social sustainability risks.

The health, safety and environment committee consists of four Directors. The members of the health, safety and environment committee are:

David James MOULT (*Chair*)
Fucun WANG
Fuqi WANG
Geoffrey William RABY

Strategy and Development Committee

The Company has established the Strategy and Development Committee of the Board. The primary duties of the Strategy and Development Committee are to assist the Board in its oversight and review of the Group's strategy initiatives, including merger and acquisition proposals, major capital markets transactions, significant investment opportunity and the disposal of significant assets.

The Strategy and Development consists of five Directors. The members of the Strategy and Development Committee are:

Baocai ZHANG (*Chair*)
Qingchun ZHAO
Fuqi WANG
Xing FENG
Geoffrey William RABY

DIRECTORS' REMUNERATION AND REMUNERATION OF FIVE HIGHEST PAID INDIVIDUALS

For 2015, 2016, 2017 and the six months ended 30 June 2018, the aggregate amount of the fees, salaries, housing allowances, other allowances, benefits in kind (including contributions to pension schemes) and bonuses paid by the Group to the Directors were approximately A$1.7 million, A$1.5 million, A$3.2 million and A$0.7 million, respectively.

Under the current arrangements, the aggregate remuneration and benefits in kind payable to the Directors for 2018 are estimated to be approximately A$1.9 million.

For 2015, 2016, 2017 and the six months ended 30 June 2018, one of the five highest paid individuals was a Director. The aggregate amount of the fees, salaries, housing allowances, other allowances, benefits in kind (including contributions to pension schemes) and bonuses paid by the Group to the four remaining highest paid individuals were approximately A$6.2 million, A$6.5 million, A$10.8 million and A$1.9 million, respectively.

Save for A$21,954 which was paid to Mr. Fucun Wang, an Executive Director, as a signing bonus in July 2018, during the Track Record Period, no remuneration was paid to the Directors or the five highest paid individuals as an inducement to join or upon joining the Group. No compensation was paid to, or receivable by, the Directors or past directors of the Company or the five highest paid individuals for the loss of office as director of any member of the Group or of any other office in connection with the management of the affairs of any member of the Group. Save for the Non-executive Directors who did not receive any fees and Mr. Baocai Zhang (who was an Executive Director during the Track Record Period until his re-designation as a Non-executive Director on 8 June 2018) who waived his long term incentive plan entitlements, none of the Directors had waived any remuneration and/or emoluments during the Track Record Period.

Information on the letters of appointment entered into between the Company and the Directors is set out in "*Appendix VII – Statutory and General Information*".

COMPLIANCE ADVISER

The Company has appointed Somerley Capital Limited as its compliance adviser pursuant to Rule 3A.19 of the Listing Rules to provide advisory services to the Company. In compliance with Rule 3A.23 of the Listing Rules, the Company must consult with, and if necessary, seek advice from, the compliance adviser on a timely basis in the following circumstances:

(a) before the publication of any regulatory announcement, circular or financial report;

(b) where a transaction, which might be a notifiable or connected transaction, is contemplated;

(c) where the Company proposes to use the proceeds of the Global Offering in a manner different from that detailed in this prospectus or where the Group's business activities, developments or results of operation deviate from any forecast, estimate or other information in this prospectus; and

(d) where the Stock Exchange makes an inquiry regarding unusual movements in the price or trading volume of the Shares, the possible development of a false market in the Shares or any other matters.

The term of the appointment of the compliance adviser will commence on the Listing Date and will end on the date on which the Company distributes its annual report in respect of its financial results for the first full financial year commencing after the Listing Date.

FUTURE PLANS

See "*Business – Our Business Strategies*" for a detailed description of our future plans and strategies.

USE OF PROCEEDS

The net proceeds from the Global Offering which the Company will receive, after deducting the underwriting commissions and the estimated expenses in relation to the Global Offering and assuming the Over-allotment Option is not exercised, will be:

- approximately HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the Minimum Offer Price);
- approximately HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the mid-point of the Offer Price Range); or
- approximately HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the Maximum Offer Price).

The Company intends to use the net proceeds of HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the mid-point of the Offer Price Range), from the Global Offering as follows:

- approximately HK$[**REDACTED**] million (or approximately [**REDACTED**]% of the net proceeds) will be used to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties. The Syndicated Facility has an interest rate of LIBOR plus 2.8% to 3.1% plus Yanzhou guarantee fees and the unsecured loans from the related parties have an interest rate of 7%. The Syndicated Facility matures in instalments and the unsecured loans from the related parties are due between 2022 and 2024. In each case, the loans have been utilised primarily to finance our capital expenditure and working capital requirements. (See "*Financial Information of the Group – Indebtedness*" for further details);
- approximately HK$[**REDACTED**] million (or approximately [**REDACTED**]% of the net proceeds) will be used to finance potential acquisitions (as at the Latest Practicable Date, the Company has not identified any targets to be acquired). In deciding whether to invest in or acquire a particular asset or business, we consider multiple key factors, including, among others (i) strategic value-accretion, (ii) the return on investment and (iii) future growth potential and the level of synergies created by the investment;
- approximately HK$[**REDACTED**] million (or approximately [**REDACTED**]% of the net proceeds) will be used to finance the acquisition of an additional 4% interest in the unincorporated Moolarben joint venture (see "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Moolarben Acquisition*" for further details); and
- approximately HK$[**REDACTED**] million (or approximately [**REDACTED**]% of the net proceeds) will be used for working capital and general corporate purposes.

In the event that the Offer Price is fixed at a higher or lower level compared to the mid-point of the Offer Price Range, the net proceeds from the Global Offering will be allocated to the above purposes on a *pro rata* basis, except that if the proceeds to be allocated to the Moolarben Acquisition exceed the purchase price, the difference will be reallocated to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties.

If the Over-allotment Option is exercised in full, the additional net proceeds which the Company will receive, after deducting the underwriting commissions and the estimated expenses in relation to the Global Offering, will be:

- approximately HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the Minimum Offer Price);
- approximately HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the mid-point of the Offer Price Range); or
- approximately HK$[**REDACTED**] million, assuming an Offer Price of HK$[**REDACTED**] (being the Maximum Offer Price).

In each case, such net proceeds from the Global Offering (with or without the exercise of the Over-allotment Option) will be allocated to the purposes described above on a *pro rata* basis, except that if the proceeds to be allocated to the Moolarben Acquisition exceed the purchase price, the difference will be reallocated to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties.

Pending the deployment of the net proceeds from the Global Offering as described above, the Company intends to deposit such net proceeds into short-term interest bearing deposits and/or money market instruments.

[REDACTED]

[REDACTED]

[REDACTED]

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM STRICT COMPLIANCE WITH THE COMPANIES (WUMP) ORDINANCE

In preparation of the Global Offering, the Company has sought the following waivers from strict compliance with the relevant provisions of the Listing Rules and/or the Companies (WUMP) Ordinance:

	Relevant Rules	Subject Matter
1.	2.07C(4)(a)	Submission of announcements to the Stock Exchange and disclosure of inside information
2.	4.03	Qualifications of reporting accountants
3.	4.29	Pro forma financial information
4.	Paragraph 32 of the Third Schedule to C(WUMP)O	Financial Information of Moolarben
		[**REDACTED**]
6.	8.12	Management presence
		[**REDACTED**]
10.	Chapter 14A	Non-exempt continuing connected transactions
11.	19.10(6)	Requirement to make relevant statutes or regulations available for inspection
12.	Appendix 3	Certain Articles in the Company's Constitution

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM STRICT COMPLIANCE WITH THE COMPANIES (WUMP) ORDINANCE

1. WAIVER IN RELATION TO SUBMISSION OF ANNOUNCEMENTS TO THE STOCK EXCHANGE AND DISCLOSURE OF INSIDE INFORMATION

Rule 2.07C(4)(a) of the Listing Rules provides that announcements and notices must not be published on the Stock Exchange's website between 8:30 a.m. and 12:00 noon and between 12:30 p.m. and 4:30 p.m. on a normal business day in Hong Kong. The Company is listed on the ASX. Under the ASX Listing Rules, once an ASX-listed issuer is or becomes aware of any information concerning it that a reasonable person would expect to have a material effect on the price or value of the issuer's securities (the "**ASX Price Sensitive Information**"), the issuer must immediately (i.e. promptly and without delay) announce that information on the ASX. The ASX Price Sensitive Information will, in general, also be inside information under the Listing Rules. Announcements on the ASX can be submitted at any time, and are processed and released between 7:30 a.m. and 7:30 p.m. (8:30 p.m. during daylight saving time in the summer) (Sydney time) on each ASX trading day, with announcements submitted outside of such periods queued for release on the morning of the following trading day beginning at 7:30 a.m.. As the Company is required under the ASX Listing Rules to announce ASX Price Sensitive Information immediately, compliance with the ASX Listing Rules could require an announcement of inside information to be made by the Company outside the permitted periods for submitting announcements to the Stock Exchange under Rule 2.07C(4)(a) of the Listing Rules.

Accordingly, the Company has applied for, and the Stock Exchange has granted, a waiver of strict compliance with the requirements under Rule 2.07C(4)(a) of the Listing Rules such that the Company is allowed to submit to the Stock Exchange any announcement which is required to be made under the ASX Listing Rules between 8:30 a.m. and 4:30 p.m. on a normal business day in Hong Kong simultaneously with the submission to the ASX of the same announcement pursuant to the ASX Listing Rules, without any suspension of dealings or trading halt in the Company's securities.

The waiver has been granted subject to the following conditions:

(a) The Company discloses in the prospectus the grant of the waiver setting out relevant details including a clear indication of the impact of the waiver on the Hong Kong investing public following any announcement made under the waiver, i.e. that one effect of the waiver for investors in Hong Kong is that trading in the Shares will continue even if the Company releases an announcement containing inside information during normal trading hours in Hong Kong, and as a result, investors in Hong Kong should consider whether any inside information has been released during trading hours in Hong Kong prior to making an investment decision regarding the Shares;

(b) The Company informs the Stock Exchange in the first instance in the event of any material change being made to the ASX Listing Rules on disclosure of ASX Price Sensitive Information as such information may be of material relevance to an assessment of the ongoing appropriateness of the waiver. The Stock Exchange will evaluate the impact of any of these changes and indicate to the Company whether or not we intend to amend or revoke the waiver;

(c) The Company will comply with the relevant provisions in the event of changes to the Hong Kong regulatory regime and the rules in relation to disclosure of inside information and electronic disclosure unless the Stock Exchange agrees to amend the waiver or grant a new waiver in the circumstances prevailing;

(d) The Company notifies, and at the same time, submits electronic copies of the English and Chinese version of announcements to the Stock Exchange at least 10 minutes in advance of the expected time of release; and

(e) The waiver will not apply to announcements published in discharge of the disclosure obligations under the Listing Rules for notifiable and/or connected transactions.

2. WAIVER IN RELATION TO THE QUALIFICATIONS OF REPORTING ACCOUNTANTS

Rule 4.03 of the Listing Rules provides that all accountants' reports must normally be prepared by certified public accountants who are qualified under the Professional Accountants Ordinance ("**PAO**") for appointment as auditors of a company and who are independent both of the issuer and of any other company concerned to the same extent as that required of an auditor under the Companies Ordinance and in accordance with the requirements on independence issued by the Hong Kong Institute of Certified Public Accountants. Rule 4.05A of the Listing Rules provides that where a new applicant acquires any material subsidiary during the Track Record Period and such an acquisition if made by a listed issuer would have been classified at the date of application as a very substantial acquisition, it must disclose pre-acquisition financial information on that material subsidiary from the commencement of the Track Record Period to the date of acquisition. Pre-acquisition financial information on the material subsidiary must normally be drawn up in conformity with accounting policies adopted by the new applicant and be disclosed in the form of a note to the accountants' report or in a separate accountants' report.

The Company acquired C&A on 1 September 2017. The C&A Acquisition, if made by a listed issuer, would have constituted a very substantial acquisition (as defined by the Listing Rules). The C&A Acquisition constituted a very substantial acquisition of Yanzhou, a Controlling Shareholder of the Company. A circular to the shareholders of Yanzhou was issued on 2 June 2017 (the "**Yanzhou Circular**"). C&A was incorporated in Australia under the Australian Corporations Act. The accounting records of the C&A Group are maintained under the Australian equivalent of the International Financial Reporting Standards of the Australian Accounting Standards Board.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with Rule 4.03 of the Listing Rules to permit the Company to appoint ShineWing Australia as the reporting accountants for the purpose of issuing the accountants' report of the C&A Group included in the prospectus on the following grounds and conditions:

(a) ShineWing Australia was appointed as the reporting accountants for the purpose of issuing the accountants' report of the C&A Group included in the Yanzhou Circular, which included the historical financial information of the C&A Group for the three years ended 31 December 2016. In view of the foregoing, it would be more cost and time effective to engage ShineWing Australia to issue the accountants' report of the C&A Group in accordance with IFRS which will cover the three years ended 31 December 2017;

(b) ShineWing Australia is a member firm of ShineWing International, an accounting practice with an international name and reputation;

(c) ShineWing Australia is registered under the applicable laws of Australia and is a member of the Chartered Accountants Australia and New Zealand, which is a member of the International Federation of Accountants ("**IFAC**"), a global organisation for the accountancy profession. ShineWing Australia is subject to the independent oversight of the Australian Securities and Investment Commission, a regulatory body of Australia which is a signatory to the IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information;

(d) ShineWing Australia is independent from the Group and the C&A Group under the statements on independence issued by the IFAC; and

(e) ShineWing Australia will be named as an expert in the prospectus and will be liable under Companies (WUMP) Ordinance in the same way as reporting accountants qualified under the PAO.

3. WAIVER IN RELATION TO PRO FORMA FINANCIAL INFORMATION

Rule 4.29(1) of the Listing Rules provides that, where an issuer includes pro forma financial information in any document, the pro forma financial information must provide investors with information about the impact of the transaction which is the subject of the document. Rule 4.29(6)(b) of the Listing Rules provides that any adjustments made in relation to any pro forma statement must be directly attributable to the transaction concerned and not relating to future events or decisions.

Given the significance of the C&A Acquisition, Warkworth Transaction and Glencore Transaction (together, the "**Pro Forma Transactions**") to the Group, the prospectus includes a pro forma income statement for the financial year ended 31 December 2017 showing the pro forma results of operations of the Group had the Pro Forma Transactions been completed on 1 January 2017 and a pro forma income statement for the six months ended 30 June 2018 showing the effects of the Warkworth Transaction and the Glencore Transaction. However, the Pro Forma Transactions are not the subject of this prospectus.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with Rule 4.29(1) of the Listing Rules to permit the inclusion of the C&A Pro Forma in the prospectus on the following grounds and conditions:

(a) the Pro Forma Transactions are not the subject of the prospectus and the adjustments for the effects of Pro Forma Transactions made to the financial information set out in *"Appendix IIB – Unaudited Pro Forma Financial Information of the Enlarged Group"* are not directly attributable to the transaction concerned (i.e. the Global Offering), but for the reasons set out above, inclusion of the pro forma income statement showing the effect of Pro Forma Transactions in the prospectus would assist investors in analysing the future prospects of the Company; and

(b) the reporting accountants will report on the Pro Forma Transactions in accordance with Rule 4.29(7) of the Listing Rules.

4. FINANCIAL INFORMATION MOOLARBEN

Paragraph 32 of the Third Schedule to the Companies (WUMP) Ordinance provides that, if the proceeds of the issue of shares are applied in the purchase of any business, a separate accountants' report in relation to the business in respect of each of the three financial years immediately preceding the issue of the prospectus is required.

The Company has entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for a total consideration of A$84 million, which the Company intends to fund using a portion of the expected proceeds from the Global Offering.

The Company has applied for a certificate of exemption pursuant to section 342A(1)(b) of the Companies (WUMP) Ordinance from strict compliance with the requirements of paragraph 32 of the Third schedule to the Companies (WUMP) Ordinance, in respect of the requirement to include a separate accountants report on the Moolarben JV on the following grounds:

(a) the Company has consolidated 81% of the financial results of the Moolarben JV for each of the years ended 31 December 2015, 2016 and 2017 in its financial statements based on its current interest in the Moolarben JV. Therefore, the financial results of the Moolarben JV, insofar as the Company's 81% interest, have already been substantially disclosed in, among other sections, the "*Appendix IA – Accountants' Report of the Group*";

(b) (i) the profit and loss information of the Moolarben JV in respect of the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 and (ii) the assets and liabilities information of the Moolarben JV as at the last date to which the financial statements of the business were prepared are disclosed in note 45 to "*Appendix IA – Accountants' Report of the Group*";

(c) (i) the 81% of the financial results of the Moolarben JV pursuant to the Company's existing interest in the Moolarben JV and (ii) the income statement and balance sheet of the Moolarben JV will, when taken together, provide the investors with sufficient disclosure on the financial information of the Moolarben JV;

(d) strict compliance with paragraph 32 of the Third Schedule to C(WUMP)O would be unduly burdensome given the time and cost involved in preparing a separate accountants' report. The Reporting Accountants has estimated and that it would take approximately one month for such accountants' report to be prepared. In addition, the Company is not otherwise required under the applicable accounting standards, the listing rules of the ASX (on which it has been listed since 2012) or the applicable laws of Australia (in which it was incorporated) to prepare a separate accountants' report on Moolarben; and

(e) (i) financial information in relation to the Company's 81% interest in the Moolarben JV and (ii) the income statement and balance sheet of the Moolarben JV have already been disclosed in the "*Appendix IA – Accountants' Report of the Group*". Accordingly, the Directors consider that the exemption from the requirement to include a separate accountants' report on the Moolarben JV would not prejudice the interests of the investing public.

The SFC has granted a certificate of exemption from strict compliance with paragraph 32 of the Third Schedule to C(WUMP)O on the conditions that (a) the particulars of the exemption be set forth in this prospectus and (b) this prospectus be issued on or before [**REDACTED**].

[**REDACTED**]

6. WAIVER IN RELATION TO MANAGEMENT PRESENCE IN HONG KONG

Pursuant to Rule 8.12 of the Listing Rules, the Company must have sufficient management presence in Hong Kong. This normally means that at least two of the Executive Directors must be ordinarily resident in Hong Kong.

The Group is an Australian-based coal producer which currently operates and manages mines in New South Wales, Queensland and Western Australia. The Group is registered in, headquartered in, and has its principal place of business in Australia. The Executive Director and the senior management team who are responsible for the management of the Group's operations are based in Australia or the PRC. Accordingly, the Company does not have, and for the foreseeable future will not have, sufficient management presence in Hong Kong for the purpose of satisfying the management presence requirement under Rule 8.12 of the Listing Rules.

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM STRICT COMPLIANCE WITH THE COMPANIES (WUMP) ORDINANCE

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirement for management presence in Hong Kong under Rule 8.12 of the Listing Rules, subject to the Company adopting the following arrangements to maintain regular communications with the Stock Exchange:

(a) the Company has appointed Mr. Baocai ZHANG and Ms. Laura Ling ZHANG as its authorised representatives for the purpose of Rule 3.05 of the Listing Rules, who will act as the Company's principal channel of communication with the Stock Exchange. As and when the Stock Exchange wishes to contact the Directors on any matters, each of these authorised representatives will have the means to contact all of the Directors promptly at all times;

(b) the Company has provided the Stock Exchange with the contact details of each Director (including their respective mobile phone number, office phone number, fax number and e-mail address) to facilitate communication with the Stock Exchange;

(c) each Director who is not ordinarily resident in Hong Kong possesses or is able to apply for valid travel documents to visit Hong Kong and is able to meet with the Stock Exchange within a reasonable period; and

(d) the Company has appointed Somerley Capital Limited as its compliance adviser in compliance with Rule 3A.19 of the Listing Rules, who will act as an additional channel of communication with the Stock Exchange.

[**REDACTED**]

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM STRICT COMPLIANCE WITH THE COMPANIES (WUMP) ORDINANCE

[**REDACTED**]

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM STRICT COMPLIANCE WITH THE COMPANIES (WUMP) ORDINANCE

[**REDACTED**]

[**REDACTED**]

10. WAIVER IN RELATION TO NON-EXEMPT CONTINUING CONNECTED TRANSACTIONS

Certain members of the Group have entered into certain transactions which will constitute non-exempt continuing connected transactions of the Company under the Listing Rules following the Listing. The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the announcement and independent shareholders' approval requirements in relation to the non-exempt

continuing connected transactions under Chapter 14A of the Listing Rules. See "*Connected Transactions – Waiver Application for Non-exempt Continuing Connected Transactions*".

11. WAIVER IN RELATION TO THE REQUIREMENT TO MAKE RELEVANT STATUTES OR REGULATIONS AVAILABLE FOR INSPECTION

Rule 19.10(6) of the Listing Rules provides that an overseas issuer must offer for inspection a copy of any statutes or regulations which are relevant to the summary of the regulatory provisions of the jurisdiction in which the overseas issuer is incorporated. In the case of the Company, these include the Australia Corporations Act, ASX Listing Rules, ASX Settlement Operating Rules and the Australia Foreign Acquisitions and Takeovers Act. These copies of legislation are lengthy and it would be difficult to deliver copies to Hong Kong in physical format. In addition, these copies of legislation can be readily accessed via the internet. For further details about how to access these copies of legislation via the internet, please see "*Appendix VIII – Documents Delivered to the Registrar of Companies and Available for Inspection*". The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with Rule 19.10(6) of the Listing Rules.

12. WAIVERS IN RELATION TO CERTAIN ARTICLES IN THE COMPANY'S CONSTITUTION

The Company has applied for, and the Stock Exchange has granted, waivers from strict compliance of the Constitution with certain paragraphs of Appendix 3 of the Listing Rules (see *"Appendix V – Summary of the Constitution of the Company and the Australia Corporations Act"* for further details), on the basis that:

(i) the Company would be subject to the Australian laws and other relevant applicable rules and regulations;

(ii) the differences from the requirements of Appendix 3 to the Listing Rules are not considered material from the perspective of shareholders protection; and

(iii) relevant Australian laws and regulations and the Constitution are disclosed in this prospectus.

[**REDACTED**]

[**REDACTED**]

HONG KONG UNDERWRITERS

[**REDACTED**]

UNDERWRITING

This prospectus is published solely in connection with the Hong Kong Public Offering. The Hong Kong Public Offering is fully underwritten by the Hong Kong Underwriters on a conditional basis. The International Offering is expected to be fully underwritten by the International Underwriters. If, for any reason, the Offer Price is not agreed between the Joint Global Coordinators (on behalf of the Underwriters) and the Company the Global Offering will not proceed and will lapse.

[**REDACTED**]

UNDERWRITING ARRANGEMENTS AND EXPENSES

Hong Kong Public Offering

Hong Kong Underwriting Agreement

[**REDACTED**]

Grounds for Termination

[**REDACTED**]

[**REDACTED**]

[**REDACTED**]

[**REDACTED**]

[**REDACTED**]

Undertakings to the Stock Exchange pursuant to the Listing Rules

[**REDACTED**]

[**REDACTED**]

Undertakings by the Company Pursuant to the Hong Kong Underwriting Agreement

[**REDACTED**]

[**REDACTED**]

Hong Kong Underwriters' Interests in the Company

[**REDACTED**]

International Offering

International Underwriting Agreement

[**REDACTED**]

Over-allotment Option

[**REDACTED**]

Commissions and Expenses

[**REDACTED**]

Indemnity

[**REDACTED**]

ACTIVITIES BY SYNDICATE MEMBERS

[**REDACTED**]

[**REDACTED**]

[**REDACTED**]

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Competent Person Report

Yancoal Australia Ltd

Job Number: ADV-BR-11019

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IMPORTANT INFORMATION ABOUT THIS DOCUMENT

~~This report is still in draft form and has been prepared for the purposes of review. Aspects of this report may be subject to change and/or may be incomplete or require further input from RPM or the Client. Accordingly, none of this report's content or findings can be regarded as final or conclusive and may be subject to substantial amendment and/or change as a result of that review. This draft report should not be relied upon in any way or for any purpose or represented as final or disclosed to any third party without RPM's prior approval.~~

1. Client

This report has been produced by or on behalf of RPM Advisory Services Pty Ltd ("RPM") solely for Yancoal Australia Ltd (the "Client").

2. Client Use

The Client's use and disclosure of this report is subject to the terms and conditions under which RPM prepared the report, which permit the Client to file the Report with The Stock Exchange of Hong Kong Limited in accordance with the requirements of Chapter 18 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong (the "Listing Rules") and prepared pursuant to the Listing Rules.

3. Notice to Third Parties

RPM prepared this report for the Client only. If you are not the Client:

- RPM 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.
- RPM does not make and expressly disclaims from making any representation or warranty to you – express or implied – regarding this report or the conclusions or opinions set out in this report (including without limitation any representation or warranty regarding the standard of care used in preparing this report, or that any forward-looking statements, forecasts, opinions or projections contained in the report will be achieved, will prove to be correct or are based on reasonable assumptions).
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- RPM 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

RPM 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, RPM has not independently verified that data and information. RPM 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 RPM used in preparing the report) may have occurred since that date which may impact on those conclusions and opinions and make them unreliable. RPM 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 RPM's control and that RPM cannot anticipate. These factors include, however 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.

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Executive Summary

Yancoal Australia Ltd
Level 18, Tower 2, 201 Sussex Street
Sydney NSW 2000
Phone: +61 2 8583 5300

RE: Competent Person Report

To Whom it May Concern,

RPM Advisory Services Limited ("RPM") has been engaged by Yancoal Australia Ltd. (ASX:YAL) referred to as ("Yancoal", the "Client" or the "Company") to undertake an Independent Technical Review ("ITR") and compile a Competent Person Report ("CPR" or the "Report") (as defined by Chapter 18 of the Rules Governing the Listing Rules of the Stock Exchange of Hong Kong (the "Listing Rules") on Multiple Coal Assets (the "Assets"). The Assets are located within the Hunter and Central Western Region of New South Wales (NSW) and Central Highlands Region of Queensland, Australia.

The Assets in NSW include Hunter Valley Operations ("HVO"), Mount Thorley Operation and Warkworth Mine (combined "MTW"), Moolarben, Ashton, Austar, Donaldson and Stratford and Duralie Operations, whilst the Queensland assets include Yarrabee and Middlemount Operations in Queensland. Collectively these assets are regarded as the "Projects" or the "Operations". The Ashton, Austar and Donaldson mines are managed by YAL on behalf of Watagan, YAL's unconsolidated, wholly-owned subsidiary. The remaining operations are owned (at various interests) and operated/managed by Yancoal with the exception of Middlemount which is a Joint Venture with Peabody and HVO with the recent formation of a Joint Venture with Glencore.

As at March, 2016 Yancoal lost accounting control of the Watagan Assets (Ashton, Austar and Donaldson), with all material decisions made by the Watagan Board, not Yancoal or its Directors. RPM understands Yancoal is the manager and operator of the mines, pursuant to mining and management services agreements and have day-to-day operational jurisdiction over the operations, however all mine plans for each year and annual capital expenditure and operational expenditure budgets are approved by the Watagan Board. The information contained within this report is based on data provided by the Company and the approved mine plans.

The process and conclusions of the ITR are presented in this Report and will be included in the HKEx prospectus prepared as part of the Initial Public Offering.

The statements of Coal Resources and Coal Reserves (as defined in ***Appendix B***) have been reported to be in accordance with the recommendations of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves JORC Code (2012 Edition) and the Australian Guidelines for the Estimation and Classification of Coal Resources (2014)

RPM's technical team ("the Team") consisted of International Competent Person's, International Senior Consultants, Executive Mining Engineers and Consultant Geologists as well as environmental/social specialists with significant coal mining experience. RPM's Hong Kong Competent Person was responsible for compiling or supervising the compilation of the Report and the JORC reported Statements of Coal Resources and Coal Reserves, stated within. The Team's qualifications and experience is detailed in ***Appendix A*** for reference.

A site visit was conducted by members of the Team to the Assets' operations to familiarise themselves with the Assets characteristics. The site visit to HVO/MTW was undertaken on the 16th February, 2017 by Ms. Trisha, Wilson Mr. Peter Ellis and Mr. Jolyon Peart while all other assets were visited during the weeks of the 23rd and 30th April, 2018. During the site visits the Team inspected the mining operations, the Coal processing plant, the tailings storage facility, the water supply system, the power distribution system and conducted general inspections of the Assets area. The visit was also used to gain a better understanding of the Assets status. The Team had open

discussions with the Company's personnel on technical aspects relating to the relevant issues. The Company's personnel were cooperative and open in facilitating RPM's work.

In addition to work undertaken to generate independent JORC Coal Resources and Coal Reserves estimates, the CPR relies largely on information provided by the Company, either directly from the sites and other offices, or from reports by other organizations whose work is the property of the Company or its subsidiaries. The data relied upon for the JORC Coal Resources and Coal Reserves estimates independently completed by RPM have been compiled primarily by the Client and the Company and subsequently reviewed and verified as well as reasonably possible by RPM. The CPR is based on information made available to RPM as at . The Company has not advised RPM of any material change, or event likely to cause material change, to the underlying data, designs or forecasts since the date of Assets inspections.

Asset Summary

- The business consists of multiple open pit and underground operating mines which exploit and process market ready coal products for international demand (***Table 1***). In addition to eight operating mines, the Assets include a re-start project (Donaldson) which is currently on care and maintenance pending re-start at the Company's discretion and the potential MTW underground project. Of importance the Assets include the large world class, low risk open cut operations, HVO, MTW and Moolarben which collectively contribute 80% of all future coal products planned to be sold over the Life of Mine ("LOM") planning period.
- The eight operating mines are located in three areas, the Hunter and Central Western Regions of NSW and Central Highland region of Queensland. Both areas contain a number of medium to large scale coal deposits which are well known geologically and have been in operation for several decades in some instances.
- Run of Mine ("ROM") coal and overburden is mined via conventional truck, shovel/excavator and/or dragline at the open cut operations and via longwall mining methods at the underground operations. The majority of ROM coal is washed at coal handling processing plants ("CHPP") and loaded on trains via dedicated train loading points. All products are transported via rail links to the deep water Ports of Newcastle in NSW and one of three ports in Queensland. A variety of product coals are produced across the group including thermal coal products and metallurgical coal products including semi soft to semi hard coking coal products and pulverised coal injection ("PCI") product. These products can be customised and quantities can be varied based on market and customer demands within each operation and between all operations where rail and port synergies exist to optimise revenue based on short term market trends.
- In addition to the mining and the surface processing plants and office infrastructure, significant regional and local infrastructure provide support to the operations and the forecast production requirements. A review by RPM of the regional and local infrastructure indicates that the area has suitable transport logistics connecting the operating assets to local and international markets for both supply of consumables and transport of product to market. The Projects are located close to well established highways, water sources with power provided via a long-term agreement with electric utility company serving the regions.
- The Assets are operated directly by Yancoal or via various joint venture arrangements with ownership proportions differing between the operations (***Table 1***). Of particular note, a Joint Venture was recently formed between Yancoal and Glencore for HVO and an Operational Integration Agreement ("OIA") allows MTW to be managed as a single integrated operation by the Company. Under the terms of the OIA, export coal can be produced from either area and is allocated between the two joint ventures based on a tonnage commitment ratio. The Middlemount mine is managed by Middlemount Coal Pty Ltd which is an incorporated joint venture between Peabody and Yancoal. Further to this the Ashton, Austar and Donaldson assets are owned by Watagan (wholly owned subsidiary of Yancoal), controlled by Independent Directors however are managed directly by Yancoal pursuant to management agreements systems, plans and the operation of equipment.

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Table 1 Ownership Control of Assets.

Asset	Yancoal Ownership[3]	Operational Control	Type
Hunter Valley Operations ("HVO") - OC	51%	Joint Venture	Met/Thermal
Mount Thorley[1] - OC	80.0%	Yancoal	Met/Thermal
Warkworth[1] - OC	84.47%		Met/Thermal
Moolarben - OC & UG	81%	Yancoal	Thermal
Ashton[2] - OC & UG	100%	Yancoal	Met/Thermal
Yarrabee - OC	100%	Yancoal	PCI/Thermal
Stratford and Duralie - OC	100%	Yancoal	Met/Thermal
Austar[2] - UG	100%	Yancoal	Met
Donaldson[2] - UG	100%	Yancoal	Met/Thermal
Middlemount - OC	50%	Joint Venture	PCI/Met

Note: Supplied by the Company
[1] Mount Thorley and Warkworth mines are referred to in the Report as one operation know as "MTW"
OC = Open Cut, UG = Underground
2 Assets owned by Watagan (wholly owned subsiduary of Yancoal) and managed directly by Yancaol.
3 Based on the ownership at Latest Applicable Date

RPM highlights that the statements contained within this Report all Coal Resources and Coal Reserves within the Assets on a 100% equity basis unless otherwise stated.

Mineral Resource and Ore Reserves Estimates

- The review undertaken by RPM of the drilling and sampling procedures indicates that in general, good practices were used with no material issues noted. RPM also notes the majority of the data used for the Resource estimations were derived from drilling which has followed the Companies procedures and protocols typically considered to be industry standard, however this varies between operations. As such, RPM considers the data which supports the resource estimations to have no material sample bias and is representative of the samples taken. Further details of the data verification and types is provided in ***Section 6***.
- Results of the independent Coal Resources estimates for the Assets as at 30th June, 2018 are tabulated in the Statement of Coal Resources in ***Table 2*** below, which were developed in line with the 2014 Coal Guidelines and reported in line with the requirements of the 2012 JORC and the reporting standards of Chapter 18 of the HKEx Listing Rules. The Statement of Coal Resources is therefore suitable for public reporting. The Statement of Coal Resources shown in ***Table 2*** and graphically in ***Figure 1*** are inclusive and not additional to the Coal Reserves reported in ***Table 3***.
- In addition to the Coal Resources for the operating assets, 16.8Mt of Indicated and 80Mt of Inferred for a total of 96.8Mt of Coal Resources is contained with the Monash Deposit located 25km south of Singleton. The Monash deposit is considered an underground coal target with limited potential for open cut mining.
- The Assets are mature open cut/underground mining operations that have approvals and license to operate for an extended period of time. As part of the Coal Resource reporting, RPM has made a number of general assumptions to define the reasonable prospects for economic extraction, these assumptions are detailed in ***Section 7.6*** for each asset.

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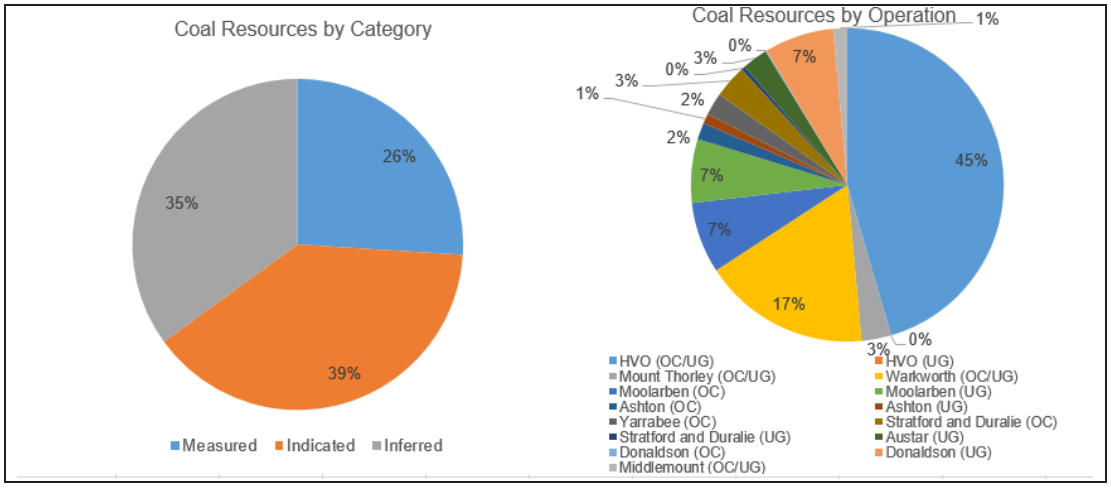
Table 2 Statement of Coal Resources by Operation as at 30th June, 2018.

Operation	Classification				
	Measured (Mt)	Indicated (Mt)	M + I (Mt)	Inferred (Mt)	Total (Mt)
HVO (OC/UG)	704	1,430	2,134	1,654	3,788
Mount Thorley (OC/UG)	27	75	102	153	255
Warkworth (OC/UG)	197	713	910	527	1,437
Moolarben (OC)	438	105	543	69	612
Moolarben (UG)	287	131	418	129	547
Ashton (OC)	25	49	74	70	144
Ashton (UG)	52	18	70	15	85
Yarrabee (OC)	94	80	174	20	194
Stratford and Duralie (OC)	11	196	207	76	283
Stratford and Duralie (UG)	-	1	1	35	36
Austar (UG)	70	80	150	69	219
Donaldson (OC)	10	-	10	-	10
Donaldson (UG)	178	326	503	95	598
Middlemount (OC/UG)	73	47	120	1	121
Total (100% Basis)	**2,165**	**3249**	**5,414**	**2,913**	**8,327**
Yancoal Attributable Share[6]	**1,610**	**2,355**	**3,964**	**1,952**	**5,916**

Notes for Table 2:

1. *The Statement of JORC Coal Resources for HVO, Mount Thorley and and Warkworth have been compiled under the supervision of Mr. Peter Ellis who is a full-time employee of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Ellis has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
2. *The Statement of JORC Coal Resources for Yarrabee and Middlemount have been compiled under the supervision of Mr. Michael Johnson who is a sub-consultant to RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Johnson has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
3. *The Statement of JORC Coal Resources for all others deposits have been compiled under the supervision of Mr. Brendan Stats who is a full-time employee of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Stats has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
4. *All Coal Resources figures reported in the table above represent estimates at 30th June, 2018. Coal Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.*
5. *Coal Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Coal Reserves Committee Code – JORC 2012 Edition).*
6. *Based on the ownership at the latest applicable date*

Figure 1 Graphical Representation Coal Resources (100% Basis)



- The Independent Statement of Ore Reserves for the Project is estimated as at the 30th June, 2018 by RPM and reported in accordance with the JORC Code. RPM has confirmed suitable Modifying Factors to apply in the Ore Reserve estimation process following review of site data and technical information contained with studies of at least a pre-feasibility level of confidence. Further information taken into consideration included the proposed life of mine plans, mining method, forecast processing plant recoveries, environmental management and license to operate in addition to the historical performance of each operations. Further details ae provided in ***Section 8, 9 and 10*** for each Asset.
- The Proved and Probable Coal Reserves estimate for each Asset is summarised in ***Table 3*** and shown graphically in ***Figure 2***. The Coal Reserves estimates reported below are included in the Measured and Indicated Coal Resources quantities reported in ***Table 2*** and are not additional to. RPM highlights that approximately 80% of the Coal Reserves are contained within the large world class Tier 1 assets of HVO, MTW and Moolarben.

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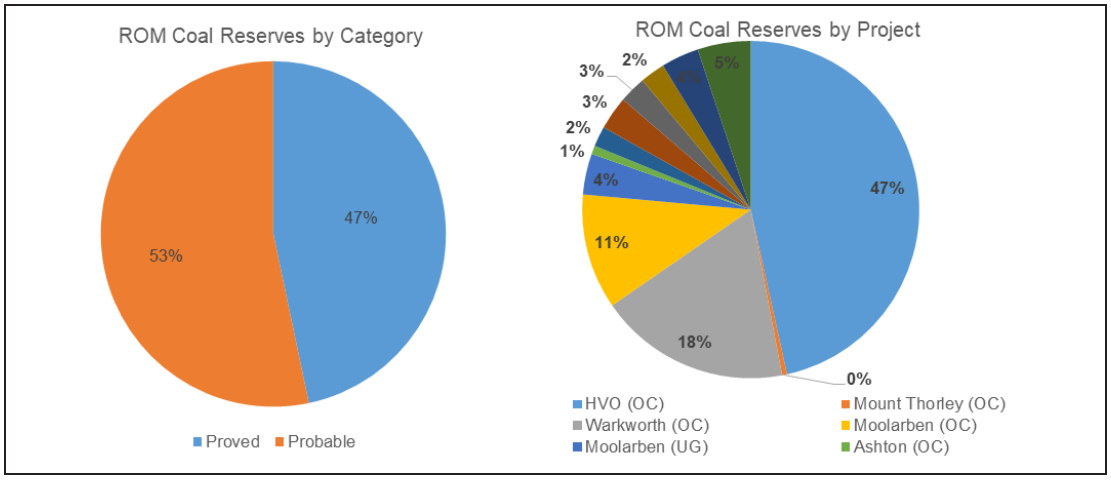
Table 3 Statement of JORC Coal Reserves Estimate within the Final Designs as at 30th June, 2018

Operation	Coal Reserves			Marketable Reserves		
	Proved (Mt)	Probable (Mt)	Total (Mt)	Proved (Mt)	Probable (Mt)	Total (Mt)
HVO (OC)	333	463	796	229	325	554
Mount Thorley (OC)	0	8	8	0	5	5
Warkworth (OC)	125	189	314	87	133	220
Moolarben (OC)	178	12	189	136	12	148
Moolarben (UG)	54	13	67	54	13	67
Ashton (OC)	0	14	14	0	7.8	7.8
Ashton (UG)	23	10	33	13	6	18
Yarrabee (OC)	36	19	55	28	14	42
Stratford and Duralie (OC)	0	44	44	0	26	26
Austar (UG)	0	41	41	0	31	31
Donaldson (UG)	0	62	62	0	32	32
Middlemount (OC)	50	37	87	40	27	67
Total (100% basis)	**799**	**912**	**1,710**	**587**	**632**	**1,218**
Yancoal Attributable Share[5]	**547**	**631**	**1,178**	**406**	**432**	**837**

Notes:

1) *The Statement of JORC Open Cut Coal Reserves has been compiled under the supervision of Mr. Doug Sillar who is a full time Senior Mining Engineer employed by RPM and is a Member of the Australian Institute of Mining and Metallurgy. Mr. Sillar has sufficient experience which is relevant to the style of Coal and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
2) *The Statement of JORC Underground Coal Reserves has been compiled under the supervision of Mr. Graeme Rigg who is a full time Senior Mining Engineer employed by RPM and is a Member of the Australian Institute of Mining and Metallurgy. Mr. Rigg has sufficient experience which is relevant to the style of Coal and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
3) *Tonnages are metric tonnes*
4) *Figures reported are rounded which may result in small tabulation errors. Coal Reserves have been estimated under the 2012 Edition of the JORC Code.*
5) *Based on ownership at the latest applicbale date.*

Figure 2 Graphical Representation JORC Coal Reserves Estimate within the Final Designs



- To determine the economic viability of the Coal Reserves, RPM undertook a variety of analyse including review of Company margin ranking/pit optimisation and independent break even strip ratio analysis to confirm appropriate pit designs as well as underground mine design reviews. Following confirmation of the design, the quantities and Life of Mine schedules were reviewed and/or updated and discounted cashflow models were constructed to confirm economic viability for each asset. RPM highlights that each asset was considered a separate standalone operation for the cashflow analysis with no blending or cross cost sharing assumed which typically occur on a short term basis. While RPM is aware blending may occur between operations, this was not included as it is difficult to quantify over the long mine lives and would present an upside case versus the assumed base case which should be utilised for the estimation of Coal Reserves.

Exploration Potential

- Exploration has been undertaken over numerous generations over the last decades with the main focus on the areas for which Coal Resources have been estimated. Although these areas have a long history of exploration, RPM considers there to be reasonable potential to define extensions to the coal seams within the Project areas both near planned mining infrastructure and within the broader exploration concession. In addition RPM considers the large concession holding of the Company within particular projects contains numerous targets which present opportunities to increase the resource base and potentially add feed sources to the plant in turn increasing the mine life. ***Section 7.5*** outlines the potential for each asset.

Mining and Production

- All mining operations at the assets are mined via conventional truck, shovel and/or dragline open cut or via underground Longwall mining methods. The majority of ROM coal is washed at coal handling processing plants ("CHPP") and loaded on trains via dedicated train loading points. All products are transported via rail links to the deep water Ports of Newcastle or one of three ports in Queensland.
- The Life of Mine schedules were developed by RPM in conjunction with the Company targeting a variety of ROM Coal production rates dependent on the operation. These vary between 2 Million Tonnes per Annum (Mtpa) at Stratford and Duralie up to 20.6Mtpa at HVO as outlined in ***Table 5***. Each open pit operation consists of numerous open pits which are mined at various times throughout the mine life, while the underground operations typically target specific seams which are mined in spatial areas (known as longwall panels) within the same seam.

- The majority of the assets are at stable production with no significant expansions required to achieve the LOM production quantities planned. As such the groups ROM and Product coal annual production is relatively stable over the next 10 years ranging between 70 and 75Mt ROM before decreasing production with assets nearing the end of their current planned mine life, such as Ashton, Austar and Middlemount. RPM has estimated the total LOM Schedule (including inferred) to achieve a variety of mine life's which range from 11 up to 43 years (***Table 4*** and ***5***). RPM notes that the key low cost assets of HVO, MTW and Moolarben each have mine life's of at least 20 years (43 for HVO) with the highest production rates in the group ranging between 17 and 20.6Mtpa.

Table 4 Operations Mine Life's as at 30th June, 2018

Operation	Mine life (Years)
HVO	43
MTW	23
Moolarben	20
Yarrabee	38
Austar	17
Ashton	13
Stratford and Duralie	35
Donaldson	11
Middlemount	20

- The CHPP facilities are well-established and capable of processing the forecast ROM Coal, with the exception of Ashton and Yarrabee. The operations require upgrades to achieve planned rates for which CAPEX is included in the forecast. While the infrastructure is comparatively old in some operations, it appears to be reasonably well maintained which is required and forecast to continue. All operations utilised CHPP's which are owned and located onsite with the exception of Donaldson which is planned to utilise a third party CHPP located 3km from site. The LOM Coal yields vary between operations based on coal qualities for each seam, however the groups LOM forecast based on the expected bypass and throughputs varies between 71% and 76% with a LOM total average of 75%.

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Table 5 LOM Consolidated Schedule

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Operation	Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	ROM Coal	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Coal Processed	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Plant Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	68.2	69.1	67.5	68.9	69.2	69.6
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	7.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8	14.6	14.6	14.5	14.2	14.3	14.2	13.9	13.8	10.7	567.4
	Effective Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	68.2	69.1	67.5	68.8	69.6	69.6
MTW	ROM Coal	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Coal Processed	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Plant Yield	%	68.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	68.1	68.4	68.8	70.6			69.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
	Coal Product	Mt	5.9	11.5	11.8	11.9	11.8	11.9	11.8	11.8	11.7	11.6	11.6	11.4	11.6	11.6	10.4			256.5
	Effective Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	68.1	68.4	68.8	70.4			69.7
Moolarben	ROM Coal	Mt	8.9	18.9	20.0	20.0	20.0	18.8	18.7	18.6	17.6	15.5	12.0	11.9	11.3	11.4	7.3			270.6
	Coal Processed	Mt	6.1	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	7.3			212.7
	Plant Yield	%	71.8	71.1	74.6	72.8	75.4	75.4	76.4	77.7	78.4	78.5	78.4	78.4	78.4	77.8	74.1			76.9
	Coal Bypassed	Mt	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5								57.9
	Coal Product	Mt	8.1	15.9	16.7	16.5	16.8	15.6	15.9	15.9	15.1	13.0	9.4	9.3	8.8	8.9	5.9			222.3
	Effective Yield	%	90.8	84.2	83.5	82.3	84.0	83.0	84.9	85.6	85.3	83.4	78.4	78.4	78.4	77.8	70.2			82.1
Yarabee	ROM Coal	Mt	2.1	4.0	4.3	4.8	4.6	5.2	5.1	4.9	5.2	4.2	4.2	4.2	4.0	4.2	4.0	4.0	3.5	147.6
	Coal Processed	Mt	1.1	2.3	3.2	3.6	3.4	3.6	4.1	4.1	4.1	3.5	3.4	3.5	3.4	3.5	3.4	3.4	2.7	120.6
	Plant Yield	%	78.8	86.5	75.9	78.6	76.5	77.4	77.0	74.7	80.4	75.8	75.5	74.1	74.1	73.8	73.4	74.1	75.8	76.1
	Coal Bypassed	Mt	0.9	1.7	1.1	1.2	1.2	1.6	1.0	0.8	1.1	0.7	0.8	0.7	0.6	0.7	0.6	0.5	0.8	26.9
	Coal Product	Mt	1.8	3.7	3.5	4.0	3.8	4.4	4.0	3.9	4.4	3.4	3.4	3.5	3.1	3.3	3.1	3.1	2.9	117.5
	Effective Yield	%	88.2	91.5	82.0	83.8	82.9	84.4	84.2	78.7	84.4	79.9	76.9	76.2	77.9	77.9	77.1	77.5	82.0	79.6
Austar	ROM Coal	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Coal Processed	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Plant Yield	%	0.0	86.0	79.0	74.0	70.0	73.0	68.0	70.0	73.0	67.0	73.0	71.0	77.0	73.1				72.9
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	0.0	1.4	1.7	2.1	1.9	2.0	2.1	2.0	2.4	1.7	2.0	2.2	1.9	1.9				31.0
	Effective Yield	%	0.0	86.0	79.0	74.0	70.0	73.0	68.0	70.0	73.0	67.0	73.0	71.0	77.0	73.1				72.9
Ashton	ROM Coal	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	3.1	5.7	6.2	5.7	5.9	4.8	0.6				47.6
	Coal Processed	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6					96.7
	Plant Yield	%	49.1	52.6	54.9	53.5	52.7	58.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					57.0
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0
	Coal Product	Mt	0.7	1.8	1.6	1.4	1.3	1.7	1.8	3.1	3.6	3.3	3.5	2.9	0.3					27.0
	Effective Yield	%	49.1	52.6	54.9	53.5	52.7	58.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
Stratford Duralie	ROM Coal	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	68.2
	Coal Processed	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	68.2
	Plant Yield	%	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	58.4
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	0.2	0.6	1.0	1.1	1.0	0.8	1.1	1.3	1.2	1.2	1.2	1.2	1.4	1.2	1.1	1.1	0.7	38.2
	Effective Yield	%	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	58.0
Middlemount	ROM Coal	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Coal Processed	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Plant Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	2.1	4.1	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0	3.8	4.0	4.1	4.1				76.0
	Effective Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
Total	ROM Coal	Mt	34.6	71.9	74.1	75.1	74.4	73.8	74.6	77.0	77.1	72.7	69.6	68.6	63.3	62.9	42.6	25.7	20.9	1,889.9
	Coal Product	Mt	26.2	53.4	55.1	55.6	56.3	56.2	56.7	56.8	56.9	52.8	49.4	48.5	45.6	45.3	29.3	18.0	14.3	1,377.7

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Operation	Year	Units	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	ROM Coal	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Coal Processed	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Plant Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.9	69.2	69.6
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	7.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8	14.6	14.6	14.6	14.5	14.2	14.2	13.9	13.8	10.7	567.4
	Effective Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.8	69.6	69.6
MTW	ROM Coal	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			388.1
	Coal Processed	Mt	8.5	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			388.1
	Plant Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.6			69.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
	Coal Product	Mt	5.9	11.5	11.8	11.9	11.8	11.9	11.8	11.8	11.7	11.6	11.6	11.4	11.6	11.6	10.4			266.5
	Effective Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.4			69.7
Moolarben	ROM Coal	Mt	8.9	18.9	20.0	20.0	20.0	18.8	18.7	18.6	17.6	15.5	12.0	11.9	11.3	11.4	1.3			270.6
	Coal Processed	Mt	6.1	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	1.3			212.7
	Plant Yield	%	71.8	77.1	74.6	72.8	75.4	76.4	77.7	78.4	78.5	78.4	78.4	78.4	78.4	77.8	74.1			76.9
	Coal Bypassed	Mt	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5								97.9
	Coal Product	Mt	8.1	15.9	16.7	16.5	16.8	15.6	15.9	15.9	15.1	13.0	9.4	9.3	8.8	8.9	0.9			222.3
	Effective Yield	%	90.8	84.2	83.6	82.3	84.0	83.0	84.9	85.6	86.3	83.4	78.4	78.4	78.4	77.8	70.2			82.1
Yarabee	ROM Coal	Mt	2.1	4.0	4.3	4.8	4.6	5.2	5.1	4.9	5.2	4.2	4.2	4.2	4.0	4.2	4.0	4.0	3.5	147.6
	Coal Processed	Mt	1.1	2.3	3.2	3.6	3.4	3.6	4.1	4.1	4.1	3.5	3.4	3.5	3.4	3.5	3.4	3.4	2.7	120.6
	Plant Yield	%	78.8	85.5	75.9	78.6	76.5	77.4	74.0	74.7	80.4	75.8	75.5	74.1	74.1	73.8	73.4	74.1	75.8	76.1
	Coal Bypassed	Mt	0.9	1.7	1.1	1.2	1.2	1.6	1.0	0.8	1.1	0.7	0.8	0.7	0.6	0.7	0.6	0.5	0.8	26.9
	Coal Product	Mt	1.8	3.7	3.5	4.0	3.8	4.4	4.0	3.9	4.4	3.4	3.4	3.3	3.1	3.3	3.1	3.1	2.9	137.5
	Effective Yield	%	88.2	91.5	82.0	83.8	82.9	84.4	79.2	78.7	84.4	79.9	79.9	78.2	77.9	77.9	77.1	77.5	82.0	79.6
Ashton	ROM Coal	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.9	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Coal Processed	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Plant Yield	%	0.0	88.4	86.1	84.1	84.1	84.2	84.2	84.0	84.0	84.0	84.0	84.0	84.0	84.0				84.3
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	0.0	1.5	1.9	2.4	2.3	2.3	2.6	2.4	2.7	2.1	2.4	2.6	2.1	2.2				35.9
	Effective Yield	%	0.0	88.4	86.1	84.1	84.1	84.2	84.2	84.0	84.0	84.0	84.0	84.0	84.0	84.0				84.3
Austar	ROM Coal	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	3.1	6.2	5.7	5.9	4.8	0.6					47.6
	Coal Processed	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	3.1	6.2	5.7	5.9	4.8	0.6					47.6
	Plant Yield	%	49.1	52.6	54.9	53.5	52.7	53.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0
	Coal Product	Mt	0.7	1.8	1.6	1.4	1.3	1.7	1.8	1.7	3.6	3.3	3.5	2.9	0.3					27.0
	Effective Yield	%	49.1	52.6	54.9	53.5	52.7	53.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
Stratford Duralie	ROM Coal	Mt	0.5	1.4	1.7	1.5	1.5	1.5	1.5	1.6	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	67.1
	Coal Processed	Mt	0.5	1.4	1.7	1.5	1.5	1.5	1.5	1.6	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	67.1
	Plant Yield	%	51.2	57.1	59.6	59.0	59.0	59.9	58.4	58.0	60.9	60.5	61.1	61.0	62.0	57.6	54.9	53.9	54.3	59.5
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	0.3	0.8	1.0	0.9	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	38.2
	Effective Yield	%	51.2	57.1	59.6	59.0	59.0	59.9	58.4	58.0	60.9	60.5	61.1	61.0	62.0	57.6	54.9	53.9	54.3	59.5
Middlemount	ROM Coal	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Coal Processed	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Plant Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	2.1	4.1	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0	3.8	4.0	4.1	4.1				76.0
	Effective Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
Total	ROM Coal	Mt	34.7	72.2	74.2	74.7	74.1	74.0	74.5	76.6	76.9	72.7	69.6	68.6	63.0	62.9	42.6	25.7	20.9	1,858.8
	Coal Product	Mt	26.3	53.6	55.3	55.7	55.5	55.6	56.1	57.0	57.1	53.2	49.7	48.9	45.5	45.5	29.3	18.0	14.6	1,389.1

- An average of 228 Million AUD (ranging between 258 Million AUD in 2021 to 535 Million AUD in 2020 over the next 10 years) is required per year for Growth and Sustaining CAPEX. The majority of the CAPEX is required at HVO, MTW and Moolarben while Yarrabee, due to it mine life, also requires significant sustaining CAPEX. As outlined in ***Section 9***, the operations require continued replacement and sustained maintenance for both mobile and fixed plant to ensure the required production performance and processing yield. New and replacement production fleet (draglines, trucks, excavators) capital encompasses the majority of the sustaining capital for operations (approximately 60%). The remainder of the capital includes replacement and maintenance of the CHPP's and site infrastructure construction. RPM considers the forecast reasonable to support the LOM schedule.
- Forecast operating costs for the LOM Schedule (including inferred) vary between the operations as outlined in ***Table 6*** for Free of Rail (FOR) and Free on Board (FOB)**.** Further breakdowns inclusive of annualised costs are provided in ***Section 14*** as well as ***Appendix G*** for reference. Review of the forecasts clearly highlights the differentiation between the HVO, MTW and Moolarben low cost operations versus the remainder. RPM considers the forecasts reasonable and achievable

Table 6 LOM Average Operating Costs

Operation	Centre	Unit	LOM Average Cost
HVO	**FOR**	**AUD/t prod**	45.8
	FOB	**AUD/t prod**	67.2
MTW	**FOR**	**AUD/t prod**	49.3
	FOB	**AUD/t prod**	67.1
Moolarben	**FOR**	**AUD/t prod**	25.9
	FOB	**AUD/t prod**	50.4
Yarrabee	**FOR**	**AUD/t prod**	85.2
	FOB	**AUD/t prod**	124.8
Ashton	**FOR**	**AUD/t prod**	67.1
	FOB	**AUD/t prod**	91.3
Austar	**FOR**	**AUD/t prod**	70.5
	FOB	**AUD/t prod**	95.6
Stratford and Duralie	**FOR**	**AUD/t prod**	80.4
	FOB	**AUD/t prod**	107.1
Donaldson	**FOR**	**AUD/t prod**	34.1
	FOB	**AUD/t prod**	93.8
Middlemount	**FOR**	**AUD/t prod**	87.5
	FOB	**AUD/t prod**	133.1

Source: Unit Costs were provided by the Company however were adjusted to reflect RPM independent Coal Reserve schedule. LOM Unit costs vary to the Company's due to unit costs changes and production schedule variations.

Environmental, Health, Social and Safety

- The Assets have exhibited a high degree of environmental compliance over recent years. Several independent audits have been completed over the past 3 years on the assets with no material issues noted. The Company have a developed Health, Safety and Environment (HSE) Management System with corresponding resources in terms of staffing and processes in place. One area in which regulatory compliance has been lagging has been the management of water on-site at HVO, including in respect to water pollution incidents. These however, are not expected to pose an ongoing regulatory risk with improved management systems implemented onsite and as such are not considered a risk to the forecast operation.
- Recent reviews of risks and exposure associated with Native Title and Aboriginal Land Claims was conducted in June 2016, the results of which are contained in the Hunter Valley Native Title and Aboriginal Land Claim Risk Register. The review states that while Native Title has not been extinguished for some areas (including land, water ways and access roads)., the majority of the Assets holdings are not subject

to native title claims and that any outstanding areas and claims do not impact the current life of mine plan as presented in this Report.

- The MTW, Stratford and Moolarben mines have been the subject of a medium to high community complaint frequency, largely as a result of noise and dust emissions. As a result the Company has put in place several management strategies and increasingly efficient noise attenuation systems and noise and dust early warning monitoring systems. These trigger the temporary shut-down of mobile plant as noise levels in nearby communities approach regulatory limits. This implementation has resulted in a marked reduction in complaints in recent times and RPM highlights these shut downs are incorporated into the forecast utilisation. In addition, the Company has established a community management system to manage these issues as per good industry practice. Management measures in place support the assumption that the forecast plans will be ultimately accepted by communities. This includes the on-track progress in obtaining approval for the upcoming closing of a community road, which RPM is aware is nearing completion.
- In line with all operating coal mines in the regions, the Assets have accumulated heavy-metal contaminated waste rock in the disposal/storage facilities and these potential contamination factors have not been thoroughly quantified and assessed, however based on the prevailing geo-chemistry of tailings materials in the region, the risk of highly mobile and bio-available contamination is considered unlikely.
- Continuous and phased rehabilitation of mined out areas has been taking place, with an acceptable level of success measured against established criteria for the areas having had the longest regeneration time. Mine closure costs are budgeted beyond the operational expenditures associated with the continuous rehabilitation.
- Several Coal Bursts have occurred within the Austar mine which have resulted in loss of production and forced shutdowns. RPM is aware the company has introduced a number of measures to manage the issue. The longwall operation at Austar is currently not operating as the Company is seeking approval to recommence following development of revised management systems, plans and the operation of equipment.

The Key Opportunities Identified during the ITR include.

While various opportunities exist to increase the value of the Projects, including the exploration potential and the inferred material within the schedules, given the very long mine life, RPM for reference presents below what are considered to be the opportunities which could have a material effect on both the mine life presented in this report and/or the value of the Project.

- **HVO/MTW Underground** – As further outlined in ***Section 16*** this would include multiple working areas and could be undertaken in conjunction with the current open pit operations. If undertaken this would increase ROM production by up to 5 to 7Mtpa and have the added advantage of augmenting take or pay commitments of the groups operation in the short term which are included in the forecast OPEX. Further studies are required to confirm the optimised project ahead of corporate investment decision.
- **HVO Boundary Coal Pillar** – The current Coal Reserves and LOM plans excludes significant coal within the boundary pillar of the tenement holdings due to the inability of mining across the tenement boundary on the neighbouring tenement (***Figure 9-3***) without agreements in place. A high level study indicates that an additional ROM coal tonnage of between 100 and 120Mt could be exploited with extensions of the West, Carrington East, Riverview and Cheshunt Deep pits. Integrated mine planning is required to realise potential upside in LOM plans and Reserves for the site.
- **Blending** – The current LOM plan presented in this Report and the supporting cashflow analysis, assumes no blending occurs either within the operations or between the operations. The products generated by the operations are generally high value coal types and blending based on product qualities can realise additional value rather than selling single products from the operations. In addition, as the Company further incorporates HVO/MTW into its operations this blending strategy could be used to further optimise mining operations in both short and medium term planning through careful and meticulous mine plans focusing on:
  - Maximising the exploitation of the in situ resources by potentially increasing pit limits using improved revenue streams and
  - Incorporating the ability to react quickly to market condition by changing the short term mine plan to target seams with specific coal qualities.
- **Moolarben Expansion** –The expansion of the open cut involves optimisations of the approved Stage 1 and Stage 2 operations to increase site ROM coal production to 24Mtpa from the current circa 18Mtpa.

The Modification also involves a minor extension to the OC2 pit limit, minor extensions and reductions of the OC3 pit limits, rehabilitation, water management and relocated/additional surface infrastructure. The successful implementation of the Stage 2 expansion at Moolarben demonstrates the Company's ability to achieve organic growth targeting low cost/high margin coal.

The Key Risks Identified during the ITR include.

While various risks have been identified, given the very long mine life's, the risks RPM presents below are considered to be the risks that could potentially affect the Company's ability to achieve the mine life as presented in the Report and/or the value of the Project's current LOM schedule and do not include any risks associated with the upside. Further low risks as well as upside risk for the potential underground are presented in ***Section 17***.

- **Community Relations (MTW, Stratford and Moolarben):** Communities have voiced grievances against some mine operations, in particular regarding noise and dust emissions, leading to equipment downtime and subsequent investment in noise attenuation equipment for mobile and fixed plant.
- **Coal Bursts – Austar**: Several Coal Bursts have occurred within the Austar mine which have resulted in loss of production and forced shutdowns. RPM is aware the company has introduced a number of measures to manage the issue. The longwall operation at Austar is currently not operating as the Company is seeking approval to recommence following development of revised longwall management systems, plans and the operation of equipment systems, plans and the operation of equipment.
- **Austar Restart** - RPM is aware that the Austar permit for the operation of the longwall has recently been suspended following coal bursts in 2018 and now has approval for limited longwall activities under controlled conditions. Limited operations at Austar recommenced on 14 August 2018 subject to certain conditions which the mine can comply with however full scale operations are as yet to recommence.

Limitations and Exclusions

RPM's review was based on various reports, plans and tabulations provided by the Client or the Company either directly from the mine site and other offices, or from reports by other organizations whose work is the property of the Client or the Company. Neither Client nor the Company has not advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of Assets inspections.

The work undertaken for this Report is that required for a technical review of the information, coupled with such inspections as the Team considered appropriate to prepare this Report.

It specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.

RPM has specifically excluded making any comments on the competitive position of the Relevant Assets compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of both the competitive position of the Relevant Assets in the market and the fundamentals of the seaborne export coal at large.

Limited Liability

This Report has been prepared by RPM for the purposes of Client for inclusion in its Prospectus in respect of the proposed Listing of the Assets in accordance with the Listing Rules and is not to be used or relied upon for any other purpose. RPM will not be liable for any loss or damage suffered by a third party relying on this report or any references or extracts therefrom contrary to the purpose (regardless of the cause of action, whether breach of contract, tort (including negligence) or otherwise) unless and to the extent that RPM has consented to such reliance or use.

Responsibility and Context of this Report

The contents of this Report have been based upon and created using data and information provided by or on behalf of Client or the Company. RPM accepts no liability for the accuracy or completeness of data and information provided to it by, or obtained by it from Client, the Company or any third parties, even if that data and information has been incorporated into or relied upon in creating this report. The report has been produced by RPM in good faith using information that was available to RPM as at the date stated on the cover page and is to be read in conjunction with the Prospectus which has been prepared and forms part of the referenced transaction.

This report contains forecasts, estimates and findings that may materially change in the event that any of the information supplied to RPM is inaccurate or is materially changed. RPM is under no obligation to update the information contained in the report.

Notwithstanding the above, in RPM's opinion, the data and information provided by or on behalf of Client or the Company was reasonable and nothing discovered during the preparation of this Report suggests that there was a significant error or misrepresentation of such data or information.

Indemnification

Client has indemnified and holds harmless RPM and its subcontractors, consultants, agents, officers, directors and employees from and against any and all claims, liabilities, damages, losses and expenses (including lawyers' fees and other costs of litigation, arbitration or mediation) arising out of or in any way related to:

- RPM's reliance on any information provided by Client and the Company; or
- RPM's services or materials; or
- Any use of or reliance on these services or material,

save and except in cases of death or personnel injury, property damage, claims by third parties for breach of intellectual property rights, gross negligence, wilful misconduct, fraud, fraudulent misrepresentation or the tort of deceit, or any other matter which be so limited or excluded as a matter of applicable law (including as a Competent Person under the Listing Rules) and regardless of any breach of contract or strict liability by RPM.

Mining Unknown Factors

The findings and opinions presented herein are not warranted in any manner, expressed or implied. The ability of the operator, or any other related business unit, to achieve forward looking production and economic targets is dependent upon numerous factors that are beyond RPM's control and which cannot be fully anticipated by RPM. These factors include site specific mining and geological conditions, the capabilities of management and employees, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, etc. Unforeseen changes in legislation and new industry developments could substantially alter the performance of any mining operation.

Capability and Independence

RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering and mine valuation services to the resources and financial services industries.

RPM has independently assessed the Assets by reviewing pertinent data, including resources, reserves, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this Report are those of RPM and its specialist advisors.

Drafts of this Report were provided to Client, however only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this Report.

RPM has been paid and has agreed to be paid, professional fees based on a fixed fee estimate for its preparation of this Report. Its remuneration is not dependent upon the findings of this Report or on the outcome of the transaction.

None of RPM or its directors, staff or specialists who contributed to this Report have any economic or beneficial interest (present or contingent), in:

- the Assets, securities of the companies associated with the Assets or that of Client; or
- the right or options in the Relevant Assets; or
- the outcome of the proposed transaction.

This CPR was compiled on behalf of RPM by the signatories to this CPR, details of whose qualifications and experience are set out in ***Appendix A*** of this CPR. The specialists who contributed to the findings within this CPR have each consented to the matters based on their information in the form and context in which it appears.

RPM Qualifications and Experience

RPM's advisory division operates as independent technical consultants providing services across the entire mining life cycle including exploration and Assets feasibility, resource and reserve evaluation, mining engineering and mine valuation services to both the mining and financial services industries.

RPM is the market leader in the innovation of advisory and technology solutions that optimize the economic value of mining Assets and operations. RPM has serviced the industry with a full suite of advisory services for over 50 years and is the largest publicly traded independent group of mining technical experts in the world having completed over 14,000 studies across all major commodities and mining methods and worked in over 118 countries globally. This report was prepared on behalf of RPM by technical specialists, details of whose qualifications and experience are set out in **Appendix A**.

RPM has been paid and has agreed to be paid, professional fees for its preparation of this report; however, none of RPM or its directors, staff or sub-consultants who contributed to this report has any interest or entitlement, direct or indirect in:

- the Company, securities of the Company or companies associated with the Company; or
- The right or options in the relevant Assets.
- The work undertaken is an ITR of the information provided by or on behalf of the Company, as well as information collected during site inspections completed by RPM as part of the ITR process. It specifically excludes all aspects of legal issues, marketing, commercial and financing matters, insurance, land titles and usage agreements and any other agreements/contracts that Company may have entered into.

RPM does not warrant the completeness or accuracy of information provided by the Company which has been used in the preparation of this report.

The title of this report does not pass to the Client until all consideration has been paid in full.

Drafts of this report were provided to the Client, however only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in the report.

Generally, the data available was sufficient for RPM to complete the scope of work. The quality and quantity of data available and the cooperative assistance, in RPM's view, clearly demonstrated the Company's assistance in the ITR process. All opinions, findings and conclusions expressed in the report are those of RPM and its specialist advisors.

Yours faithfully,

Doug Sillar
Senior Mining Engineer (Competent Person – Hong Kong Chapter 18)
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1. Introduction

RPM Advisory Services Pty Ltd ("RPM") has been engaged by Yancoal Australia Ltd. (ASX:YAL) referred to as ("Yancoal", the "Client" or the "Company") to undertake an Independent Technical Review ("ITR") and compile a Competent Person Report ("CPR" or the "Report") (as defined by Chapter 18 of the Rules Governing the Listing Rules of the Stock Exchange of Hong Kong (the "Listing Rules") on Multiple Coal Assets (the "Assets"). The Assets are located within the Hunter and Central Western regions of New South Wales and Central Highlands Region of Queensland, Australia (***Figure 1-1***).

The Assets include Hunter Valley Operations ("HVO"), Mount Thorley Warkworth ("MTW"), Moolarben, Ashton, Austar, Donaldson and Stratford and Duralie Operations in NSW and Yarrabee and Middlemount operations in Queensland. All operations are owned (at various interests) and operated/managed by Yancoal with the exception of Middlemount which is a Joint Venture with Peabody and HVO with the recent formation of a Joint Venture with Glencore.

As at March, 2016 Yancoal lost accounting control of the Watagan Assets (Ashton, Austar and Donaldson), with all material decisions made by the Watagan Board, not Yancoal or its Directors. RPM understands Yancoal is the manager and operator of the mines, pursuant to mining and management services agreements and have day-to-day operational jurisdiction over the operations, however all mine plans for each year and annual capital expenditure and operational expenditure budgets are approved by the Watagan Board. The information contained within this report is based on data provided by the Company and the approved mine plans.

1.1 RPM Scope of Work

RPM's scope of work included:

- Gathering of relevant information on the Assets including resources and reserves information, Life if Mine ("LOM") production schedules and operating and capital cost information;
- Reviewing of the Company's resources and reserves, including quantity and quality of drilling, reliability of data and adequacy of resource and reserve estimation methods;
- Estimation of independent Coal Resources and Coal Reserves (as defined in ***Appendix B***) reported in compliance with the recommended guidelines of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"), prepared by the Joint Ore Reserves Committee ("JORC") and the Australian Guidelines for the Estimation and Classification of Coal Resources (2014);
- Reviewing and commenting on the exploration prospect of the Assets;
- Reviewing and commenting on forecast operating and capital expenditures in the relevant technical studies;
- Reviewing the Assets short term and long term development plans;
- High level review of the environmental, health and safety risks and management plans for the Assets; and
- Compilation of a CPR as defined under Chapter 18 of the Hong Kong Listing Rules.

1.2 Relevant Assets

The Assets are located in NSW and QLD Australia and include both open cut and underground operations with associated onsite coal processing and handling infrastructure. Coal products include a range of thermal coal products as well as semi soft coking coal products, semi hard coking products and Pulverised Coal Injection (PCI) coal products. All NSW products are currently exported through the Port of Newcastle which allows direct access to international markets via the Pacific Ocean (***Figure 1-1***), while the QLD products are exported through three ports in Queensland.

The relevant assets included in this Report are outlined in ***Table 1-1*** below.

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RPM highlights that the statements contained within this Report all Coal Resources and Coal Reserves within the Assets on a 100% equity basis unless otherwise stated.

Table 1-1 Operating Asset List

Asset	Yancoal Ownership[4]	Operational Control	Type
Hunter Valley Operations ("HVO") - OC	51%	Joint Venture	Met/Thermal
Mount Thorley[1] - OC	80%	~~Yancoal~~ Yancoal	Met/Thermal
Warkworth[1] - OC	84.47%	Yancoal	Met/Thermal
Moolarben - OC & UG	81%	Yancoal	Thermal
Ashton[2] - OC & UG	100%	Yancoal[2]	Met/Thermal
Yarrabee - OC	100%	Yancoal	PCI/Thermal
Stratford and Duralie[3] - OC	100%	Yancoal	Met/Thermal
Austar[2] - UG	100%	Yancoal[2]	Met
Donaldson[2] - UG	100%	Yancoal[2]	Thermal
Middlemount - OC	49.99%	Joint Venture	PCI/Met

Note: Supplied by the Company
[1] Mount Thorley and Warkworth mines are referred to in the Report as one operation known as "MTW"
OC = Open Cut, UG = Underground
2 Assets owned by Watagan (wholly owned subsidiary of Yancoal) and managed directly by Yancoal.
3 Stratford and Duralie are separate mine with a common CHPP and Management
4 Based on owenership at the latest applicable date

In addition to the operating assets listed above, an exploration asset ~~named~~ Monash is located 16km south west of MTW. This asset has Coal Resources declared and is considered a greenfield project.

1.3 Review Methodology

RPM's ITR methodology was as follows:

- Review existing reports and data;
- Conduct a Competent Person's site visit;
- Discussions with Assets personnel of the Company prior to and following the site visit;
- Independent Estimation and Reporting of Coal Resources and Coal Reserves in accordance with the JORC Code (2012) and Australian Coal Guidelines (2014); and
- Preparation of a CPR and provision of drafts of the CPR to Client's personnel to ensure factual accuracy and reasonableness of assumptions.

The comments and forecasts in this CPR are based on information compiled by enquiry and verbal comment from the Client and Assets personnel from the Company. Where possible, this information has been checked with hard copy data or by comment from more than one source. Where there was conflicting information on issues, RPM used its professional judgment to assess the issues.

1.4 Site Visits and Inspections

RPM visited HVO/MTW operations on the date of 16th February, 2017 and the remainder between the dates of April 16th and April 28th 2018 to perform technical due diligence on the Assets. RPM's site visit team consisted of:

- Trisha Wilson, Senior Mining Engineer visited HVO/MTW in 2017 and Stratford and Duralie in 2018;
- Peter Ellis, Principal Geologist, visited MTW and HVO in 2017;
- Chris Turvey, Associate Geologist, reviewed and completed the site visit for Stratford and Duralie;
- Greg Eisenmenger, Executive Consultant, Mining; visited Yarrabee and Middlemount;

- Michael ~~Johnston~~Johnson, Associate Geologist visited Middlemount and Yarrabee;
- Graeme Rigg, Principal Mining Engineer visited Ashton, Austar, Donaldson;
- David McMillian, Principal Mining Engineer, visited Moolarben and
- Brendan Stats, Senior Geologist, visited Moolarben.

RPM notes that Hong Kong Competent Person (Mr. Doug Sillar) has not visited all sites, however the JORC Competent Persons (Peter Ellis, Michael Johnson and Brendan Stats) for Coal Resource have. As part of the Hong Kong Competent Person responsibilities Mr. Sillar has relied on the relevant experts who completed the site visit as part of his confirmation of the works completed.


DARWIN
CORAL SEA
NORTHERN TERRITORY
Bowen
Mackay
MIDDLEMOUNT
QUEENSLAND
YARRABEE
Gladstone
BRISBANE
SOUTH AUSTRALIA
STRATFORD / DURALIE
NEW SOUTH WALES
ASHTON
MOOLARBEN
DONALDSON
HVO
Newcastle
MTW
AUSTAR
ADELAIDE
SYDNEY
SOUTHERN OCEAN
CANBERRA A.C.T.
TASMAN SEA
VICTORIA
MELBOURNE
Bass Strait
TASMANIA
HOBART
RPMGLOBAL
Operating Mine
Care and Maintenance
Port
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DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
兖煤澳大利亚有限公司
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
GENERAL LOCATION PLAN
FIGURE No.
1-1
PROJECT No.
ADV-BR-11019
Date
November 2018

1.5 Information Sources

Several geology studies, feasibility studies, design reports, life of mine budgets and schedules were provided for the Assets as well as recent operational data. This information was either supplied via an online data room or in a bulk information download for large packages of data.

1.6 Competent Person and Responsibilities

The Statements of Coal Resources and Coal Reserves have been reported in accordance with the recommended guidelines of the JORC Code and are suitable for inclusion in a CPR as defined by Chapter 18 of the Listing Rules.

HKEx Competent Person

Mr. Doug Sillar meets the requirements of a Competent Person, as defined by Chapter 18 of the Listing Rules. These requirements include:

- Greater than five years' experience relevant to the type of deposit;
- Member of the Australian Institute of Mines and Metallurgy ("AUSIMM"), which is a Recognised Professional Organisation as per the HKEx and JORC Code;
- Does not have economic or beneficial interest (present or contingent) in any of the reported Relevant Assets;
- Has not received a fee dependent on the findings outlined in the Competent Person's Report;
- Is not an officer, employee or proposed officer for the Client or any group, holding or associated company of the issuer; and
- Assumes overall responsibility for the Competent Person's Report.

Doug Sillar (Hong Kong Competent Person) (MAUSIMM)

Team Responsibility

Additional members of the team who have worked to compile this report include the following:

- Ms. Amanda Antcliff - Amanda was responsibility for the review of the environmental and social aspects of the Assets.
- Mr. Jeremy Clark - Jeremy was responsible for internal peer review of the Report.
- Mr. Philippe Baudry- Philippe was responsible for the final internal peer review and approval of the Report.

JORC Competent Persons

The Competent Persons for JORC Coal Resources were responsible for review of the borehole database and estimation of the Coal Resources stated within this Report. The Competent Person for JORC Reserves was responsible for review of the mining parameters, mine scheduling and estimation of the Open Cut Coal Reserves stated within this Report. The persons responsible for each Asset is listed in ***Table 1-2.***

Table 1-2 JORC Competent Person Responsibility

Asset	Coal Resources	Coal Reserves – Open Cut	Coal Reserves – Underground
HVO	Mr Peter Ellis	Mr Doug Sillar	-
MTW	Mr Peter Ellis	Mr Doug Sillar	-
Moolarben	Mr Brendan Stats	Mr Doug Sillar	Mr Graeme Rigg
Ashton	Mr Brendan Stats	Mr Doug Sillar	Mr Graeme Rigg
Yarrabee	Mr Michael Johnson	Mr Doug Sillar	-
Stratford and Duralie	Mr Brendan Stats	Mr Doug Sillar	-
Austar	Mr Brendan Stats	-	Mr Graeme Rigg
Donaldson	Mr Brendan Stats	-	Mr Graeme Rigg
Middlemount	Mr Michael Johnson	Mr Doug Sillar	-
Monash	Mr Brendan Stats	-	-

Coal Resources

The information in this report that relates to the Coal Resources of the Relevant Assets listed in ***Table 1-2*** is based on information compiled and reviewed by **Mr. Peter Ellis**, who is a member of the Australasian Institute of Mining and Metallurgy and is a full time employee of RPM.

Mr Ellis has sufficient experience that is relevant to the style of mineralisation 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 2012 Edition of the JORC Code). He has more than fifteen years of experience in the mining industry and has visited the mine sites.

Mr Ellis has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Resource Statement. RPM will receive a professional fee for the preparation of this statement.

Peter Ellis BSc (Geology) (Hons) MAusIMM

The information in this report that relates to the Coal Resources of the relevant Assets listed in ***Table 1-2*** is based on information compiled and reviewed by **Mr. Brendan Stats**, who is a member of the Australasian Institute of Mining and Metallurgy and is a full time employee of RPM.

Mr Stats has sufficient experience that is relevant to the style of mineralisation 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 2012 Edition of the JORC Code). He has more than thirteen years of experience in the mining industry and has visited the mine sites or worked closely with the person who conducted the site visit.

Mr Stats has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Resource Statement. RPM will receive a professional fee for the preparation of this statement.

Brendan Stats BSc (Geology) (Hons) MAusIMM

The information in this report that relates to the Coal Resources of the Relevant Assets listed in ***Table 1-2*** is based on information compiled and reviewed by **Mr. Michael Johnson**, who is a member of the Australasian Institute of Mining and Metallurgy and a member of the Australian Institute of Geoscientists and is an associatea sub-consultant of RPM.

Mr Johnson has sufficient experience that is relevant to the style of mineralisation 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 2012 Edition of the JORC Code). He has more than ~~thirteen~~nineteen years of experience in the mining industry and has visited the mine sites or worked closely with the person who conducted the site visit.

Mr Johnson has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Resource Statement. RPM will receive a professional fee for the preparation of this statement.

Michael Johnson BAppSci (Geology) MAusIMM, Member AIG

Open Cut Coal Reserves

The information in this report that relates to the Coal Reserves of the relevant Assets listed in ***Table 1-2*** is based on information compiled and reviewed by **Mr. Doug Sillar,** who is a member of the Australasian Institute of Mining and Metallurgy and is a full time employee of RPM.

Mr Sillar has sufficient experience that is relevant to the style of mineralisation 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 2012 Edition of the JORC Code). He has more than fifteen years of experience in the mining industry.

Mr Sillar has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Reserve Statement. RPM will receive a professional fee for the preparation of this statement.

Doug Sillar BE (Min)(Hons) MAusIMM

Underground Coal Reserves

The information in this report that relates to the Coal Reserves of the relevant Assets listed in **Table 1.2** is based on information compiled and reviewed by **Mr. Graeme Rigg**, who is a member of the Australasian Institute of Mining and Metallurgy and is a full time employee of RPM.

Mr Rigg has sufficient experience that is relevant to the style of mineralisation 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 2012 Edition of the JORC Code). He has more than twenty years of experience in the mining industry.

Mr Rigg has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Reserve Statement. RPM will receive a professional fee for the preparation of this statement.

Graeme Rigg BE (Min)(Hons) MAusIMM

1.7 Limitations and Exclusions

RPM's review was based on various reports, plans and tabulations provided by Client or the Company either directly from the mine site and other offices, or from reports by other organizations whose work is the property of the Client or the Company. Neither Client nor the Company has advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of Assets inspections.

The work undertaken for this Report is that required for a technical review of the information, coupled with such inspections as the Team considered appropriate to prepare this Report.

It specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.

RPM has specifically excluded making any comments on the competitive position of the relevant Assets compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of both the competitive position of the relevant Assets in the market and the fundamentals of the coal markets at large.

Limited Liability

This Report has been prepared by RPM for the purposes of Client for inclusion in its Prospectus in respect of the proposed Listing of the Assets in accordance with the Listing Rules and is not to be used or relied upon for any other purpose. RPM will not be liable for any loss or damage suffered by a third party relying on this report or any references or extracts therefrom contrary to the purpose (regardless of the cause of action, whether breach of contract, tort (including negligence) or otherwise) unless and to the extent that RPM has consented to such reliance or use.

Responsibility and Context of this Report

The contents of this Report have been based upon and created using data and information provided by or on behalf of Client or the Company. RPM accepts no liability for the accuracy or completeness of data and information provided to it by, or obtained by it from Client, the Company or any third parties, even if that data and information has been incorporated into or relied upon in creating this report. The report has been produced by RPM in good faith using information that was available to RPM as at the date stated on the cover page and is to be read in conjunction with the Prospectus which has been prepared and forms part of the referenced transaction.

This report contains forecasts, estimates and findings that may materially change in the event that any of the information supplied to RPM is inaccurate or is materially changed. RPM is under no obligation to update the information contained in the report.

Notwithstanding the above, in RPM's opinion, the data and information provided by or on behalf of Client or the Company was reasonable and nothing discovered during the preparation of this Report suggests that there was a significant error or misrepresentation of such data or information.

Indemnification

The Client has indemnified and held harmless RPM and its subcontractors, consultants, agents, officers, directors and employees from and against any and all claims, liabilities, damages, losses and expenses (including lawyers' fees and other costs of litigation, arbitration or mediation) arising out of or in any way related to:

- RPM's reliance on any information provided by Client and the Company; or
- RPM's services or materials; or
- Any use of or reliance on these services or material,

save and except in cases of death or personnel injury, property damage, claims by third parties for breach of intellectual property rights, gross negligence, wilful misconduct, fraud, fraudulent misrepresentation or the tort of deceit, or any other matter which be so limited or excluded as a matter of applicable law (including as a Competent Person under the Listing Rules) and regardless of any breach of contract or strict liability by RPM.

Mining Unknown Factors

The findings and opinions presented herein are not warranted in any manner, expressed or implied. The ability of the operator, or any other related business unit, to achieve forward looking production and economic targets is dependent upon numerous factors that are beyond RPM's control and which cannot be fully anticipated by RPM. These factors include site specific mining and geological conditions, the

capabilities of management and employees, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, etc. Unforeseen changes in legislation and new industry developments could substantially alter the performance of any mining operation.

Capability and Independence

RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering and mine valuation services to the resources and financial services industries.

RPM has independently assessed the Relevant Assets of the Assets by reviewing pertinent data, including resources, reserves, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this Report are those of RPM and its specialist advisors.

Drafts of this Report were provided to Client, however only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this Report.

RPM has been paid and has agreed to be paid, professional fees based on a fixed fee estimate for its preparation of this Report. Its remuneration is not dependent upon the findings of this Report or on the outcome of the transaction.

None of RPM or its directors, staff or specialists who contributed to this Report have any economic or beneficial interest (present or contingent), in:

- the Assets, securities of the companies associated with the Assets or that of Client; or
- the right or options in the Relevant Assets; or
- the outcome of the proposed transaction.

This CPR was compiled on behalf of RPM by the signatories to this CPR, details of whose qualifications and experience are set out in ***Appendix A*** of this CPR. The specialists who contributed to the findings within this CPR have each consented to the matters based on their information in the form and context in which it appears.

2. Project Overview

The Assets are contained within a number of exploration and mining tenements that are located in three areas, the Hunter and Central Western regions of NSW and the Central Highland region of Queensland (***Figure 1-1***). These three areas contain a number of medium to large scale coal deposits which are geologically well known and have been in operation for several decades in some instances.

The business consists of multiple open pit and underground operating mines which process and manufacture market ready coal products to meet international demand (***Table 2-1***). In addition to the eight operating mines, the assets include a re-start project (Donaldson) which is currently on care and maintenance pending re-start at the Company's discretion and the potential MTW underground project. The Assets include the large world class, low risk open cut operations, HVO, MTW and Moolarben open cut and underground complex which collectively contribute 80% of all future coal products of the life of mine (LOM) schedules presented in this report.

Table 2-1 Overview of Projects

Area	Operation	Curent Mining Methods		LOM Mining Methods		Product type	Minelife (year)	Comments
		Open Cut	Underground	Open Cut	Underground			
NSW	HVO	✓		✓		SSCC/Thermal	43	
	MTW	✓		✓		SSCC/Thermal	23	
	Moolarben	✓	✓	✓	✓	Thermal	20	UG completed in 2026
	Austar		✓		✓	SHCC/Thermal	16	
	Ashton		✓	✓	✓	SSCC	13	OC commences in 2024
	Stratford and Duralie	✓		✓		SHCC/Thermal	35	
	Donaldson		✓		✓	Thermal	11	Not in operation
QLD	Yarrabee	✓		✓		PCI/Thermal	38	
	Middlemount	✓		✓		PCI/Coking	19	

Note Donaldson has Coal Reserves and as such can recommence production at the Company's discretion. See Section 9.1 for further details.*

Run of Mine ("ROM") coal and overburden is mined via conventional truck, excavator or shovel and/or dragline at the open cuts or via underground Longwall mining methods. The majority of ROM coal is washed at coal handling processing plants ("CHPP") and loaded on trains via dedicated train loading points. All products are transported via rail links to the deep water Port of Newcastle or one of three ports that are located in Queensland. A variety of product coals are produced across the Assets including thermal, semi soft/hard coking coal products, as well as a pulverized coal injection ("PCI") product. These products can be customised and quantities can be varied based on market and customer demands not just within each operation, however importantly between all operations that have port and product synergies to optimise revenue based on short term market trends. Further information is provided in ***Section 11.1***. All operations follow a similar work flow as described above, with an example flowsheet shown in in ***Figure 2-1***.

2.1 Assets Location and Access

The Assets are all located in regions which are readily accessible via a series of National Highways and regional excellent quality paved roads from capital cities of Sydney and Brisbane and locally from Newcastle, Gladstone and Mackay. Both the regional and capital cities connect further abroad to most eastern seaboard cities and internationally. Good quality paved highways connect the cities in the various regions to the Assets as well as providing access to further regional centres for workers and support services. Good quality gravel roads allow access throughout and across each of the mines where required.

New South Wales Group

The Assets within NSW are all located in the Hunter or Central Western region between 30 to 120km to the west of regional city of Newcastle and 160 to 200km North West of Sydney (***Figure 2-1***). All NSW operations are adjacent to (and utilise) the extensive world class Hunter Valley / NSW railway network. This network transports all coal to three deep water coal terminals located in the Port of Newcastle (***Figure 2-1***). Further information on the rail network can be found in ***Section 12***.

RPMGLOBAL

HVO/MTW

The HVO/MTW operations are located in adjacent landholdings in the Hunter Valley region of NSW, Australia (***Figure 2-2*** and ***Figure C-1*** and ***Figure C-2***), approximately 150 km north of Sydney and 90 km west from Newcastle. HVO is centred 24 km northwest of the regional town of Singleton, while MTW is centred approximately 14 km south east of Singleton. Both operations can be accessed by a network of excellent quality regional roads from Singleton.

Current Operations

Mining at HVO/MTW commenced in the 1960's and has continued to the present via conventional large scale dragline and truck and shovel methods. Multiple pits are currently active enabling the operations flexibility to optimise the product blends and mining fleets to de-risk mining activities. The Company is a major regional landholder and employer. The HVO and MTW mines are considered amongst the premier high quality thermal coal providers globally.

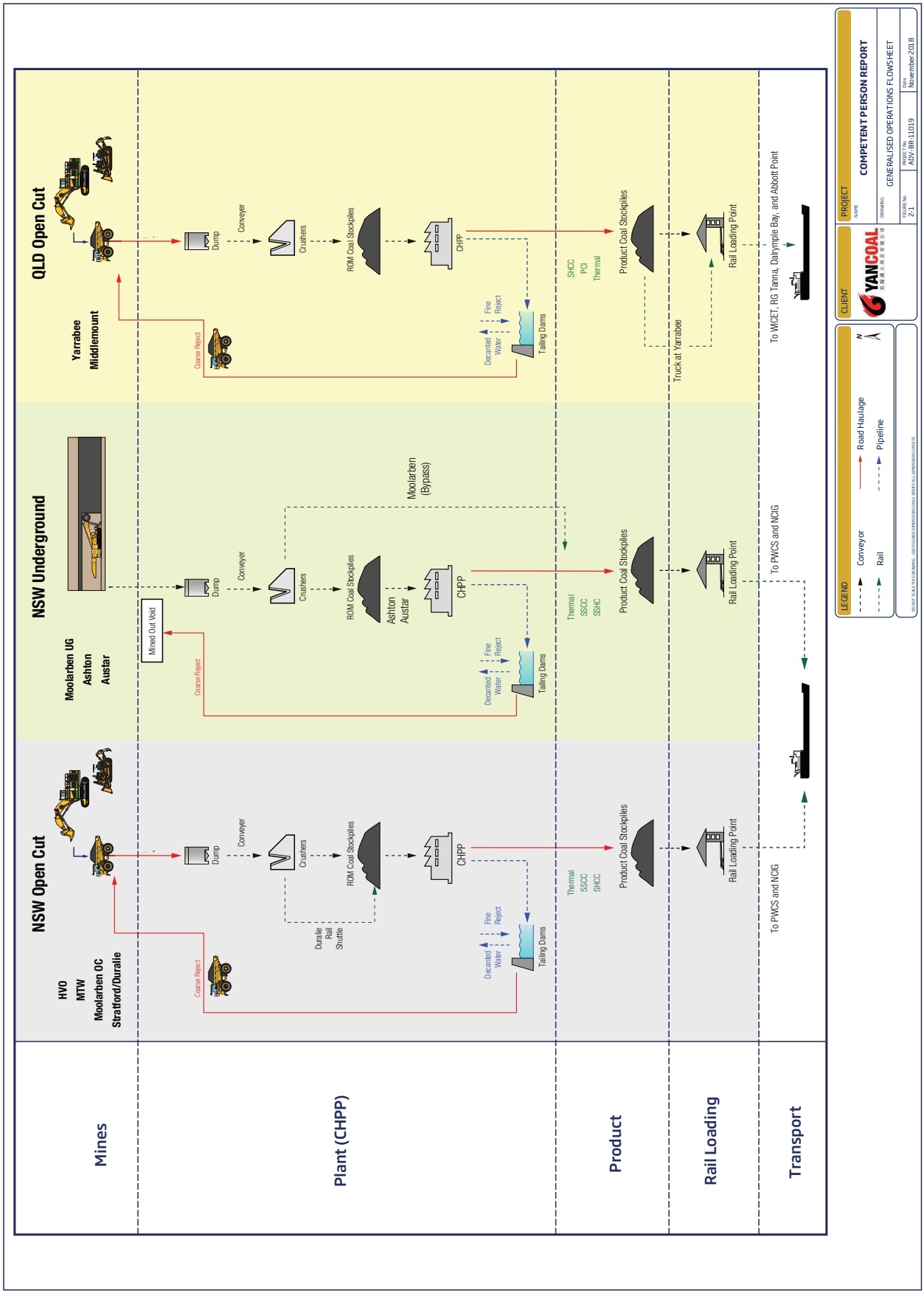
HVO currently produces thermal and semi-soft coking coal ("SSCC") from five active pits. Mining activities are geographically divided by the Hunter River into the HVO North and the HVO South areas and product coal is optimised as part of the overall blending strategy. Current mining focuses on the West and the Carrington pits in the North and the Cheshunt and Riverview pits in the South (Figure ***C-1***). ROM Coal from the pits is hauled to either of two CHPP's which have a combined nameplate throughput capacity of 20 million tonnes per annum ("Mtpa"). These include the Hunter Valley Coal Processing Plant ("HV-CHPP") at 17Mtpa and the Howick Coal Processing Plant (Howick-CHPP") at 3.2Mtpa. Currently the majority of ROM coal is hauled to the HV-CHPP, however some coal is processed at Howick-CHPP.

Product coal is transferred by haul truck from the Howick-CHPP to the Newdell Rail Loading Point and by conveyor to the Hunter Valley Rail Loading Point ("HV-Rail Loading) from the HV-CHPP. RPM notes that further blending occurs at the rail heads via conveyors to further optimise and add value to the products to meet specific customer specifications. This blending is not included the LOM Schedule or Coal Reserve estimate. Product coal is railed 99 km to the port facilities in Newcastle for export. In 2017 HVO produced approximately 19.5 million tonnes ("Mt") of ROM coal for 14.8Mt of product coal versus the planned 20.6Mt ROM Coal for 2018.

MTW produces thermal coal and SSCC from three active pits, North, West and Loders. MTW is geographically separated by the Putty Road, which separates the operation into the southern Mount Thorley and the northern Warkworth areas (***Figure C-2***). There are two coal handling and preparation plants (CHPP) at MTW which have a combined throughput capacity of 18.6Mtpa ROM Coal. The two MTW plants are the Mount Thorley CHPP ("MT-CHPP) at 8.4Mtpa and the Warkworth CHPP (WW-CHPP) at 10.2Mtpa. Thermal ROM coal is directly fed into the WW-CHPP, whilst SSCC ROM coal is trucked to the MT-CHPP as it consists of a two product washing facility enabling SSCC and thermal coal to be produced from a single seam.

Following washing the coal products are conveyed from each plant to the Mount Thorley Rail Loading Point. Blending occurs at the railhead prior to loading on rail wagons for transport 80 km to the Newcastle port. RPM notes this is the same rail line used by HVO. 11.8Mt of product coal (17.7Mt ROM Coal) was produced in 2017 versus the planned 17.0Mt ROM in 2018.

Figure 2-1 shows a generalised operational flowsheet for both the NSW and Queensland operations.


Mines
Plant (CHPP)
Product
Rail Loading
Transport
NSW Open Cut
HVO
MTW
Moolarben OC
Stratford/Duralie
NSW Underground
Moolarben UG
Ashton
Austar
QLD Open Cut
Yarrabee
Middlemount
Dump
Conveyer
Crushers
ROM Coal Stockpiles
CHPP
Coarse Reject
Fine Reject
Decanted Water
Tailing Dams
Duralie Rail Shuttle
Mined Out Void
Ashton Austar
Moolarben (Bypass)
Thermal
SSCC
SSHC
SHCC
PCI
Thermal
Product Coal Stockpiles
Rail Loading Point
Truck at Yarrabee
To PWCS and NCIG
To WICET, RG Tanna, Dalrymple Bay, and Abbott Point
LEGEND
Conveyor
Rail
Road Haulage
Pipeline
CLIENT
YANCOAL
PROJECT
MINE
COMPETENT PERSON REPORT
DRAWING
GENERALISED OPERATIONS FLOWSHEET
FIGURE No.
2-1
PROJECT No.
ADV-BR-11019
Date
November 2018

Moolarben

The Moolarben Complex is located 40 km north of the regional town of Mudgee in the Central West Region of NSW and can be accessed by regional paved roads. (***Figure 2-2*** and ***Figure C-3***) The operation is connected to the port of Newcastle by a 270 km rail line and National and regional paved roads. Mudgee, a major regional town in the Central-West of NSW located 270km North West of Sydney, is readily accessed via national highways and regional paved roads.

Current Operations

The Moolarben Operation consists of both underground longwall and open cut truck and shovel operations. The operation commenced in 2010 and produces up to four thermal coal products. Moolarben currently has three active open pits and a single longwall underground operation however it is forecast to complete four open cut pits over the mine life with the vast majority of production being from Open Cut 4 and two underground mining areas, Underground 1 and Underground 4. Additional potential underground mining area, Underground 3, which doesn't form part of the current LOM Plan is being considered by the Company for inclusion in future LOM Plans pending further technical studies.

All Open Cut ROM coal is washed in a single wash plant which produces three thermal coal products, while all Underground ROM coal is crushed and screened and sent directly to the market (bypass) as a low ash thermal coal product. During 2017 the operation produced 12.4Mt product coal from 13.8Mt processed and 1.1Mt bypass. In 2018 the Project is planned to increase ROM coal production to 17.8Mtpa with 9.8Mtpa produced in H1 2018 (open cut and underground combined). This increase is the result of further ramp of the underground operations as discussed in ***Section 10***.

Ashton

Ashton is located 14km north of the regional town of Singleton (***Figure 2-2*** and ***Figure C-5***) and is connected to the port of Newcastle (specifically PWCS) via a 94 km rail line and National and regional paved roads.

Current Operations

The current Ashton Operation consists of a single underground longwall operation producing between 1.5 to 2Mtpa SSCC from 3Mtpa ROM tonnes. The underground operation will be supplemented by an open cut truck and excavator operation in 2024 to produce up to 3.6Mtpa ROM coal with similar products but higher yields compared to the underground operation.

All ROM Cut ROM coal is washed in a single wash plant which is optimised to produce a single semi soft coking coal product. During 2017 the operation produced 1.2Mt product coal from 2.8Mt ROM Coal versus the planned 3.0Mt ROM Coal in 2018, with 963kt produced in H1 2018 which is planned to ramp up to 1.5Mt in H2 2018.

Stratford and Duralie

The Stratford and Duralie Operation is located approximately 2.5km north-east from the Stratford village in the Stratford and Duralie Basin, which is located about 110km north of Newcastle in NSW (***Figure 2-2***). The operation consists of the Stratford and Duralie open cut mines and is readily accessible via national and regional paved roads (***Figure C-6***).

Current Operations

The current mining activities at the Stratford and Duralie operations consist of a series of open pits mined via truck and excavator methods. Split between the Stratford and Duralie areas, four pits are currently active to produce 0.8mt ROM coal which will increase to 2Mt in 2020 for the remainder of the mine life. Duralie ROM coal is transported to Stratford CHPP by a Shuttle Train. All coal is washed at the Stratford CHPP to produce a high quality Semi Hard coking coal as well as a thermal coal.

Some blending of ROM coal from each of the mining areas may occur prior to washing to produce the required export coking and thermal product coal specifications. Blended coal products are transported by rail to the Port of Newcastle for direct export loading and/or blending with other Yancoal group coals at the port.

Open cut mining at the Duralie Pit is currently undertaken 5 days per week for 18.5 hours per day. The Stratford Pits operate for 6 days per week, 21 hours per day, with the exception of Roseville West which is approved to operate on day shift only.

The handling and processing of ROM coal at the CHPP is approved to operate 24 hours per day, seven days per week. The unloading of ROM coal from the Duralie Shuttle Train is currently conducted between 7 am and 10pm.

During 2017 the operation produced 0.7Mt product coal from 0.9Mt ROM Coal versus the planned 0.8Mt ROM Coal in 2018.

Austar

Austar Coal Mine (Austar) is located in the Newcastle Coalfield in the Lower Hunter Valley of New South Wales, Australia. The mine is located 8 kilometres southwest of Cessnock and approximately 65km by rail west of Newcastle. Austar is a wholly owned subsidiary of Yancoal Australia Ltd and in 2005 introduced Longwall Top Coal Caving technology to maximise extraction of coal from the Greta Seam.

Current Operations

Austar is not currently operating due to management of ongoing coal burst issues. Prior to this mining was undertaken in the domain known as "Bellbird South" which lies between Area 2 (Mined by Austar Coal Mine between 2008 and 2012) and Ellalong (Longwall Panel 9A last mined in 1996) (***Figure C-7***). Conventional longwall mining recommenced in Bellbird South in July 2016 with the Longwall Top Coal Caving method planned to be used again in the next mining domain, Area 3. The longwall performance is currently being impacted by coal burst issues which the Company is managing through the development of additional operating management systems, plans and procedures including the operation of equipment.

Austar Coal Mine was previously called Southland and before that was called Ellalong Pelton and Southland Colliery's which date back to 1916. The first longwall mining operation in the Greta Seam commenced at Ellalong Colliery in the early 1980's. All coal is washed onsite with product coal transported by ail 65km to the port of Newcastle. During 2017 the operation produced 1.9Mt product coal from 2.0Mt ROM Coal versus the planned 2.2Mt ROM Coal in 2018. As discussed in ***Section 10***, the 2018 production has been impacted by the recent limitation on longwall production due to management of the coal burst issues.

Donaldson

The Donaldson Project is located in the Newcastle Coalfield, 25km northwest of the port of Newcastle, NSW. It comprises the now closed (April 2013) and rehabilitated Donaldson open cut mine which extracted coal from Upper Donaldson, Lower Donaldson and Big Ben Seams where interburden thickness between those three seams was minimal. The Abel underground mine which was commissioned in 2008, has its portal entry coming off the Donaldson open cut final highwall and mined the Upper and Lower Donaldson Seams by bord and pillar extraction methods (***Figure C-8***). The Abel underground mine was placed on care and maintenance in June 2016.

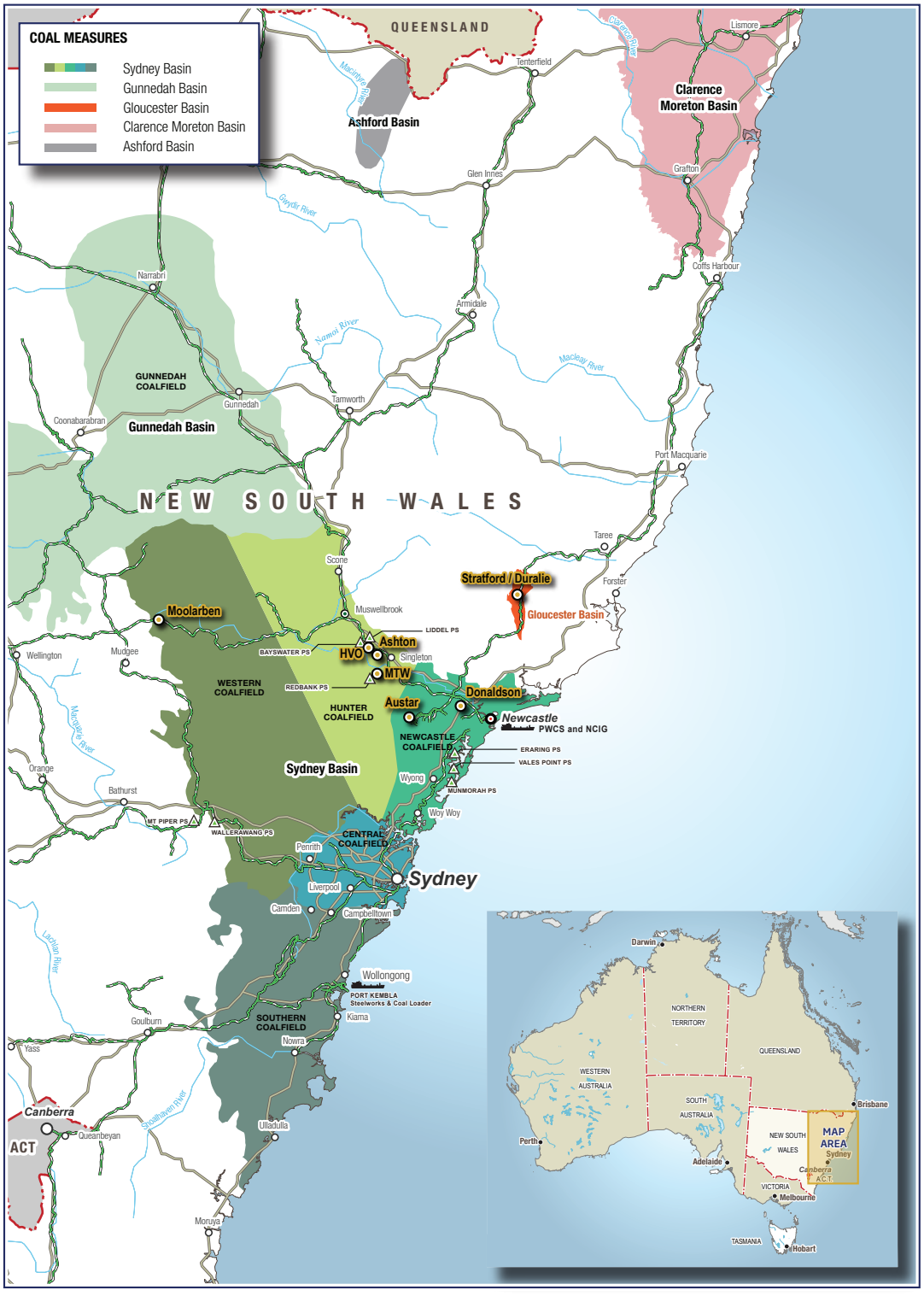
The vast majority of past mining has been completed by Stockrington No 2 mine (1952-1988), extracting the West Borehole Seam by bord and pillar method for over 35 years. Historical tracings of this mine's workings are extensive and cover an area approximately 8km by 8km.

The Abel Underground ROM coal has been washed at the third party Bloomfield CHPP located to the north of Donaldson open cut mine. ROM coal was hauled from the Abel underground mine to the CHPP by truck. Washed coal (coking and thermal) was transported by rail from the Bloomfield CHPP to the port of Newcastle for export. The operation is currently under care and maintenance with no production in 2017 pending re-start at the Company's discretion.

Monash

The Monash greenfield project is locates 17km north of Cessnock and 25km south of Singleton in the south hunter region of NSW. The project is considered a greenfield project with no mining taking place previously and only limited drilling.

The Monash site layout is shown in ***Figure C-10***.



LEGEND

Roads
Rail
Rivers / Creeks
State Boundary
Power Stations
Coal Export Terminals

N

0 50 100 200 km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY VERIFY ALL DIMENSIONS ON SITE

CLIENT

YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME
COMPETENT PERSON REPORT

DRAWING
NSW LOCATION PLAN

Figure No.	PROJECT No.	Date
2-2	ADV-BR-11019	November 2018

Queensland Group

The Queensland Group of projects consists of the operating Yarrabee and Middlemount Mines both of which are located in the Bowen Basin in Central Queensland (***Figure 2-3***). The Central region of Queensland is accessible through a series of national highways from the state capital of Brisbane as well as the local regional hubs of Blackwater and Emerald (***Figure 2-3***).

Yarrabee

The Yarrabee Coal Mine is located 40km northeast of Blackwater in the eastern Bowen Basin of Central Queensland. The mine is located 150km west of major regional town of Rockhampton and 280km northwest of the Port of Gladstone.

Current Operations

The Yarrabee resource is characterised by an overarching south easterly syncline structure that plunges to the south and has been further folded and faulted. It contains seven coal seams that contain low volatile and low to moderate ash content coal. With steep seam dips, of up to 60° and commonly containing a large number of thrust faults, the geology can be described as moderate to complex. Five pits across Yarrabee are planned to be mined during the mine life.

Since 2009 Yarrabee has been producing low volatile PCI and thermal coal products via open cut mining methods. Coal is either washed in the Yarrabee CHPP to produce PCI coal, or crushed and sold as bypass thermal coal. CHPP reject is separated into coarse and fine streams, with the coarse reject being disposed of in the open pit voids and the fine reject being stored in tailings dam facilities. Product coal is hauled 37km by road truck to the Boonal Loadout Facility which is located adjacent to the Capricorn Highway 10km east of Blackwater and then railed up to 280km to either the Wiggins Island Coal Terminal or the RG Tanna Coal Terminal at the Port of Gladstone.

During 2017 the operation produced 2.9Mt product coal (including 1.2Mt bypass) from 3.4Mt ROM Coal versus the planned 3.4Mt ROM Coal in 2018. The H1 2018 ROM coal production for Yarrabee is reported to be 1.3Mt. The Yarrabee site layout is shown in ***Figure C-4***.

Middlemount

The Middlemount mine is located 10 km southwest of the town of Middlemount and 90 km north-east of Emerald in central Queensland. Roper Creek flows west to east in the southern part of the tenement holding.

Current Operations

Full scale operations at the open-cut mine commenced in November 2011, with mining activities using conventional truck and excavator techniques with ROM coal washed at an onsite CHPP with a capacity of 5.3Mtpa. The Middlemount site layout is shown in ***Figure C-5***.

The Middlemount mine produces low volatile pulverised coal injection coal and semi hard to hard coking coal, with contracted rail and port capacity through Dalrymple Bay Coal Terminal and Abbot Point Coal Terminal in Bowen (***Figure 2-3***). Product coal is railed 306km to the port for export.

During 2017 the operation produced 3.6Mt product coal from 5.3Mt ROM Coal versus the planned 5.4Mt ROM Coal in 2018. The H1 2018 ROM coal production for Middlemount is reported to be 2.5Mt.


PAPUA NEW GUINEA
Torres Straight
Thursday Island
Cape York
Weipa
Coen
Gulf of Carpentaria
Mornington Island
Karumba
Burketown
Normanton
Croydon
Lizard Is
Cooktown
Mossman
Port Douglas
Cairns
Mareeba
Atherton
Innisfail
Tully
Hinchinbrook Is
Ingham
Townsville
Charters Towers
Home Hill
Bowen
Abbot Point Coal Terminal
Whitsunday Grosse
Proserpine
Airlie Beach
Mackay
Dalrymple Bay Coal Terminal
Hay Point Coal Terminal
Camooweal
Mount Isla
Cloncurry
Julia Creek
Richmond
Hughenden
Dajarra
Winton
Boulia
Bedourie
Windorah
Birdsville
Longreach
Barcaldine
Blackall
Clermont
Middlemount
Yarrabee
Rockhampton
Blackwater
Emerald
Springsure
Rolleston
Moura
Biloela
Gladstone
Wiggins Island Coal Terminal
RG Tanna Coal Terminal
Theodore
Taroom
Eidsvold
Gayndah
Bundaberg
Hervey Bay
Fraser Is
Maryborough
Gympie
Kingaroy
Sunshine Coast
Dalby
Miles
Roma
Wandoan
Augathella
Charleville
Quilpie
Cunnamulla
Thargomindah
St George
Goondiwindi
Warwick
Toowoomba
Moonie
Ipswich
BRISBANE
Fishermans Island Coal Terminal
Gold Coast
Stanthorpe
Texas
Tenterfield
Ballina
Coral Sea
South Pacific Ocean
NORTHERN TERRITORY
QUEENSLAND
SOUTH AUSTRALIA
NEW SOUTH WALES
Darwin
NT
WA
SA
QLD
NSW
ACT
VIC
TAS
Perth
Adelaide
Melbourne
Sydney
Canberra
Hobart
AUSTRALIA
COAL MEASURES
Bowen Basin
Calen Coal Measures
Callide Basin
Galilee Basin
Ipswich Basin
Laura Basin
Maryborough Basin
Clarence-Moreton Basin
Mulgildie Basin
Styx Basin
Surat Basin
Tarong Basin
LEGEND
Main Highways
Other Highways
Railways
Township
Coal Export Port
N
0 100 200 400 km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
兖煤澳大利亚有限公司
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
QLD LOCATION PLAN
Figure No. 2-3
PROJECT No. ADV-BR-11019
Date November 2018

2.2 Product Types

A range of product coal types are produced from the operations, these include a range of thermal products, semi soft coking coal, semi hard coking coal and PCI products. RPM presents this for information and refers the reader to the business section of the Prospectus for further information.

Thermal Coal

The Hunter Valley region has been the source of large volumes of high quality bituminous thermal coal which, for several decades, has been used as the basis for the design of power plants in the major developed economies of Japan, Korea, China and Taiwan and the developing economies in south-east Asia. The thermal coal produced and importantly planned to continue as part of the Yancoal LOM plans, is consistent with the historical high quality thermal coals and customers expected requirements. The coals are characterised by low ash, low sulphur, favourable fuel ratio, high energy and benign ash chemistry, as shown in **Table 2-2** which shows the company product specifications. The operations typically produce three thermal product coal types based on ash content, low ash, medium ash and high ash. As would be expected these three product types attract different customers and prices with specifications varying between customers. Marketing specifications are shown in the table below.

Table 2-2 Assets Average Thermal Coal Quality

Quality	Unit	MTW/HVO	Moolarben (low ash)	Moolarben (high ash)
Calorific Value	kcal/kg, gar	6,322	5,994	5,328
Ash (ad)	%	13.5	18	27
Total Moisture (ar)	%	10.0	10.5	10.5
Fixed Carbon (ad)	%	53.0	50	40.5
Sulphur (ad)	%	0.55	0.75	0.5
Volatile matter (ad)	%	31.0	29.5	30
HGI		50	47	47

Source: Provided by the Company

Semi-soft coking coal characteristics

Semi soft coking coal (SSCC) can be produced from a limited number of seams in the lower Hunter Coalfield within which the Company has a large footprint. This product coal type is highly regarded by steel mills throughout Asia, including China, for various reasons, most particularly the low ash, and impurities in the coal. Typical semi soft and semi hard coking coal specifications are shown in **Table 2-3** for reference.

The Austar and Stratford and Duralie coal products have particularly high fluidity which is a sought after property in a coking coal blend. RPM is aware the Company markets these coals as a blend for semi hard coking coal.

Table 2-3 Typical Semi Soft and Semi Hard Coking Coal Quality

Quality	Unit	MTW/HVO	Ashton	Austar	Strat/Duralie	Middlemount
Ash (ad)	%	10.0	9.5	6.5	10.5	10
Total Moisture (ar)	%	10	10	6.5	7	10
Fixed Carbon (ad)	%	55	52	49	51	69.5
Volatile Matter (ad)	%	33.5	36	42	36	19
Phosphorous (ad)	%	0.015	0.023	0.046	0.004	0.039
Free swelling index		6	7	7	7	6
Fluidity ~~(ddpm)~~	(ddpm)	150	800	60,000	15,000	20

Source: Provided by the Company

PCI Coal and Uses

Coal deposits in the Bowen Basin of central Queensland (such as the Client's Yarrabee and Middlemount mines) include extensive resources of low and medium volatile coals that are well-suited to the PCI market.

These coals give high coke replacement ratios that assist in maintaining blast furnace productivity and exhibit good grinding characteristics.

Usage

Pulverised coal injection has become a standard practice in many of the world's major steelworks, particularly Asia which is the preferred customer of the Company. Finely ground coal is injected with the hot blast directly into the raceway of the furnace to provide energy and reductant in addition to that from the coke bed, thus replacing some of the coke with cheaper non-coking or weakly coking coal. Hence the PCI process increases the economic efficiency of steel-making by using lower cost coals to reduce consumption of higher cost prime coking coals. In addition, the PCI coal is not subject to a coke-making or other process stage, other than grinding, prior to its introduction to the blast furnace. PCI rates must be such that stable blast furnace operation is maintained while the permeability of the coke bed is not affected. The typical PCI Coal specification is presented in ***Table 2-4***.

Table 2-4 Typical PCI Coal Quality

Quality	Unit	Yarrabee YP1	Yarrabee YP4	Middlemount
Ash (ad)	%	9.5	11.5	10.5
Total Moisture (ar)	%	10.5	9	10
Fixed Carbon (ad)	%	80.3	77.8	69.5
Volatile Matter (ad)	%	8.7	9.2	18.5
Phosphorous (ad)	%	0.095	0.096	0.05

Source: Provided by the Company

2.3 Market Overview

The major traditional thermal coal markets of Japan, Korea, China, Taiwan and South East Asia are the primary customers of the Company. Japanese power utilities and some customers in Taiwan and Korea seek high energy, low ash coal to enhance boiler efficiency and/or reduce ash disposal costs. RPM is aware that the Company's coking coals are sought in significant and increasing proportions by North Asian steel mills for their coking coal blends.

The Company updates long term pricing forecasts on a 6 monthly basis using research from third party analysis. RPM is not a commodity forecasting specialist and has relied on third parties for price assumptions. As per the JORC Code (2012) reporting requirements, RPM has completed independent reviews of the Company's coal price forecasts based on public and internal pricing information and considers the price assumptions used by the Company to be reasonable.

2.4 Regional Environment

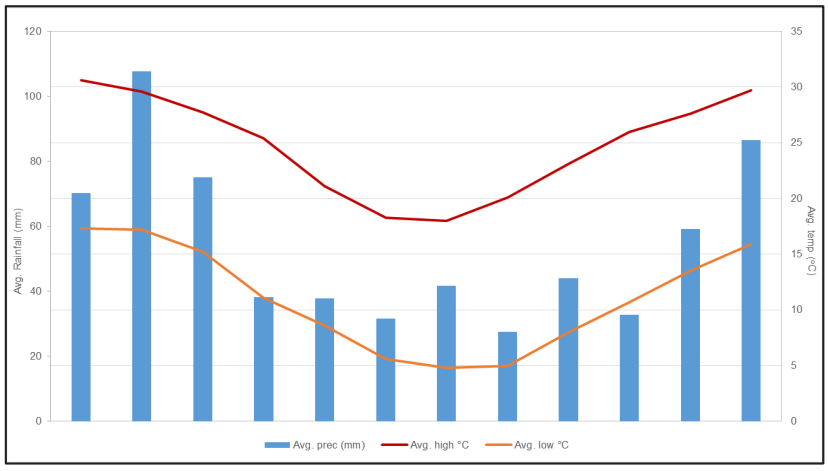
NSW Group

Geography and Climate

The Hunter region of New South Wales (***Figure 1-1***) extends approximately 120 km to 310 km north of Sydney with the land form is dominated by the major regional Hunter River and its tributaries with highland escarpments to the north and south. The Hunter Valley is one of the largest river valleys on the NSW coast and is characterised by rolling hills incised by river and creek systems.

The region has a humid sub-tropical to temperate climate with hot wet summers and cool drier winters. The rainfall observed and moderate temperature ranges result in little to no impact on mining activities and plentiful water supply. The average annual temperature is 17.6°C and has an average rainfall of 692 mm per annum with the driest month being July and the highest rainfalls occur between December and February as outlined in ***Figure 2-4***.

Figure 2-4 Hunter Valley Group Regional Average Rainfall and Temperature



Industry

Apart from mining, the other major industries in the region include Defence, tourism, light industry, vineyards, horse breeding and cattle production. The largest employment industry is coal mining, which employs 24% of the region's workforce.

Regional and Local Infrastructure

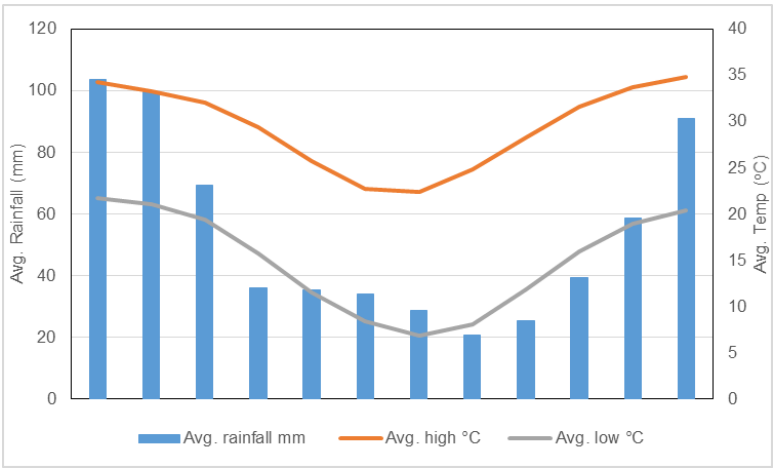
In addition to the minesite open pit mining, maintenance, surface processing plant, office infrastructure, there is significant additional offsite regional and local infrastructure that provides support to the operations and the forecast production. A review by RPM of the regional and local supporting infrastructure indicates that the area has suitable power, water and transport logistics connecting the operating Assets to international markets to support the life of mine ("LOM") production presented in this Report. The Assets are located close to well established excellent quality highways and rail infrastructure (***Figure 2-2 and Figure 2-3***), water sources and regional towns which provide accommodation and support services for the mining operation and its personnel. Further details of the supporting infrastructure are provided in ***Section 12*** and ***Section 13***.

Queensland Group

The Central Highlands region of Queensland is approximately 300km inland (west) from the coastal town of Gladstone (***Figure 1-1***), which is the location of a deep water port for export. The region hosts a large number of large scale coal mines and is the main source of employment along with farming.

The region has a humid subtropical climate with warm to hot summers and mild, dry winters. Maximum temperatures range from 34 °C in January to 22 °C in July, while minimums range from 22 °C to 7 °C with an average annual rainfall of 641.2 mm. The rainfall observed and moderate temperature ranges result in little to no impact on mining activities and plentiful water supply. ***Figure 2-5*** shows the yearly ranges of average high and low temperatures along with monthly rainfall.

Figure 2-~~5555~~ QLD Group Regional Average Rainfall and temperature



Industry

Apart from coal mining, other major industries include agricultural which includes cotton farming, as well as grapes, citrus and grain growing.

Regional and Local Infrastructure

In addition to the minesite open pit mining, maintenance, surface processing plant and office infrastructure. Significant regional and local infrastructure provides support to the operations and the forecast production. A review by RPM of the regional and local supporting infrastructure indicates that the area has suitable power, water and transport logistics connecting the operating Assets to international markets to support the Life of Mine ("LOM") production presented in this Report. The Assets are located close to well established excellent quality highways and rail infrastructure (***Figure 2-3***), water sources and regional towns which provide accommodation and support services for the mining operation and its personnel. Further details of the supporting infrastructure are provided in ***Section 12*** and ***Section 13***.

3. Licences and Permits

The Company holds numerous current mining tenements including mining and exploration licences (permits), business, environmental and safety permits. These enable the Company's operations including mining, major surface facilities and coal handling, management, electrical infrastructure, waste and tailings emplacement and exploration. Below is a summary of the key permits.

RPM provides this information for reference only and recommends that land titles and ownership rights be reviewed by legal experts.

RPM notes that the approved Yarrabee production rate is 4Mtpa, which is forecast to be exceeded in 2020 and an additional permit is required to expand the Middlemount pit to the North West. These approvals are ongoing and is in-line with typical approval processing in Queensland. RPM assumes as part of the reporting of the LOM plans and costs that this will be granted ahead of required timing, however notes that no material issues will occur if delays occur other than delaying the expanded production. Furthermore, as noted in the Business Section of the prospectus, RPM is aware the designed capacity at HVO is 20Mtpa ROM tonnes versus the forecast 20.6Mtpa, however the approved maximum production is 38Mtpa, as such no further permits are required. The increased designed capacity is to be achieved through CHPP efficiencies rather than material changes to the initial design plans.

3.1 Coal Concessions and Surface Rights

All key mining tenements are currently valid for the continued operation of the Assets to support the planned production rates forecast in this Report. All relevant mining and exploration licenses and authorisations held by the Company are listed in ***Appendix E*** and are shown graphically in ***Figure C-1*** through ***Figure C-10.***

3.2 Water Rights

Water required for the operations is sourced by various methods, including wells and surface water storage dams and the various local rivers. As such numerous water rights permits are required for the Assets. All permits are currently in good standing and support current production. Further information is provided in ***Section 15***.

3.3 Environmental and Operating Permits

The Company currently holds numerous environmental, construction and operating permits that are described in ***Section 15***. The permits include the waste and tailings dam facilities construction and operating permits, water bore drilling and extraction permits and various operating and environmental permits. RPM has completed an overview of these permits and considers them in good standing to support the continued operation of the Assets for the foreseeable future. RPM does note that as per typical Australian standards, various permits and licenses need to be periodically renewed as per any long standing and operating mining and processing operations. RPM is not aware of any reason for these permits to not be renewed pending the correct and suitable application procedure.

Further details on tenements, approvals and licenses held by the Company are provided in ***Section 15***.

4. Assets History

4.1 Exploration History

The Assets have a long history of systematic exploration which has included geological mapping, geophysical and geochemical surveys as well as a large amount of surface diamond and open hole drilling as outlined below.

HVO/MTW

Prior to the acquisition of the operations by the Company, several companies and government agencies completed exploration works which include the following:

- Exploration in MTW commenced in 1949 by the Joint Coal Board (JCB) which completed a series of shallow percussion boreholes. It was not until 1976 that development of the Warkworth Mining Limited (WML) and Mount Thorley Operations (MTO) areas was considered in earnest.
- 1960's: Clutha Bargo explored the Whybrow Seam for coking coal potential.
- 1970-1975: Department of Mines conducts fully cored hole drilling program (DM Warkworth and DM Doyles Creek series).
- 1976: Warkworth Consortium formed (later established as WML) and awarded mining bid for Warkworth area. Commenced exploration program with 12 rigs drilling fully cored, HQ-size holes and large diameter (LD) core drilling in selected seams.
- 1976: Drilling program started at the Mt Thorley site – similar to Warkworth drilling program. Main concentration of drilling was in the shallower, eastern parts of the lease.
- 1980s & 1990s: The main focus at Warkworth was open-hole drilling. Mt Thorley increased open hole drilling in advance of production and made a concerted effort at core drilling during the 1990s.

HVO is an amalgamation of three previously independent mining operations, namely: Howick, Hunter Valley and Lemington. Each mine was developed at different times and was subject to different exploration philosophies and exploration work. Some of the initial exploration work is summarised below:

- Howick open-cut (west pit) – exploration initiated in the 1940s and 1950s completed by the Joint Coal Board and the Bureau of Mineral Resources. Drilling to 200m–300m spacing for cored holes and 50m–150m spacing for open holes.
- Hunter Valley No.1 & 2 mines – exploration initiated in the 1960s and early 1970s by the New South Wales (NSW) Department of Mines. Drilling to 212m spacing for cored holes and 100m spacing for open holes.
- Lemington South open-cut and underground mines – exploration initiated in the 1970s by the Joint Coal Board. Drilling to 200m– 800m spacing for cored holes.

Moolarben

- Exploration in the area commenced in 1950 but historical mining at the Ulan Mine (immediately west of Moolarben) has occurred since 1920's. A summary of key exploration periods completed by other parties is provided below:
- The New South Wales Mines Department carried out initial exploration in 1950 with 6 core holes.
- In 1977 the Joint Coal Board drilled 21 core holes.
- In the late 1970's the Energy Recycling Corporation drilled 33 core holes inside Moolarben leases and 41 core holes in the surrounding areas.
- White Industries in early 1980's drilled 25 core holes.
- In late 1980's Ulan Coal Mine drilled 38 holes (core and non-core).
- Between 1999 and 2003 the Department of Mineral Resources drilled 47 holes (core and non-core) to define potential open cut areas.

- Intensive exploration activity over recent years at Moolarben has focused on improving the classification of Ulan Seam coal resources, defining interpreted igneous and erosive (palaeochannel) features and Ulan Seam sub- crop/limit of oxidation in advance of mine operations.
- RPM notes that an additional 32 holes were drilled after the 2017 Resource model was completed and these have not been included in the model. RPM reviewed the results to ensure any potential impact on resource classification and estimation was identified and addressed prior to the completion of this resource report.

Yarrabee

Exploration in the Yarrabee area commenced in the mid-1960s with Mines Administration (Minad) and the Bellambi Coal Company (Bellambi), both holding tenure and exploring for metallurgical coal. The significant historic tenure held in the Yarrabee area is listed below with a brief description;

- EPC 16 Mines Administration Pty Ltd. (Minad) 24/02/1966 to 21/07/1967
- EPC28 Bellambi Coal Co Ltd.6/12/1965 to 24/03/1966: results of exploration describe intersections in the Burngrove Formation (Fort Cooper Coal Measures equivalent),
- EPC 34 Mines Administration Pty Ltd. 30/11 1966 to 25/03/1969: Minad identified shallow coal in the area that later became ML 1770, the initial mining area at Yarrabee.
- EPC123 Yarrabee Coal Company (YCC) 26/08/972 to 1/05/1996: The title was originally granted to Brigalow Mines Pty Limited a jointly owned company of Mount Isa Mines Limited (MIM) and Thiess Bros. Pty Limited on 26 august 1972. MIM retained the holding in Brigalow when it acquired 100% of the company in January 1990. Assignment of the EPC from Brigalow to YCC was approved by the Department of Mines and Energy (DME) on 19 August 1993. The Company was granted MDL 160 on 1 April 1996 which covered eight of the twelve sub blocks.
- EPC 190 Yarrabee Coal Company Pty Ltd 16/09/1975 to 19/04/1996: The title was originally granted to Mines Administration Pty Limited (Minad) on 16 September 1975, at which time it covered an area of 770 sq.km. Relinquishments progressively reduced the area to 125 sub blocks in 1976, 70 sub blocks in 1977, 40 sub blocks in 1978, 13 sub blocks in 1979 and 11 sub blocks in 1982. The title was transferred to CSR subsidiary Thiess Bros Pty Limited in October 1986 and later approved for sale to Yarrabee Coal Company Pty Limited in November 1989. On 1 April 1996, The YCC was granted MDL 160, which covered four of the eleven sub blocks.
- ML 1770 Yarrabee Coal Company Pty Ltd From 25/03/1976: ML 1770 was granted on 25/03/1976 and has been held by The Company and its antecedents since that date. The subsequent nine MLs were granted during the period 1998 to 2014 within the area held as MDL 160. The initial stages of exploration commenced with aerial photographic interpretation supported by geological field mapping to delineate the location(s) of the coal measures and to interpret the structural geology of the area. Exploration drilling targeted the Rangal Coal Measures (RCM) outcrop, which resulted in the delineation of the initial mining area of the Yarrabee resource that was located in ML1770.

Ashton

Ashton and previous owners have drilled over 300 surface slim holes (open and cored) for exploration, geotechnical, hydrological and seam gas purposes since 2000. Commencing in August 2013, a number of inter-seam bores (IS-series), gas drainage (GW-series) holes and piezometer bores (YAP-series) were drilled. In addition, measured section strip logs were also undertaken during gate road and longwall face mapping.

In addition to the surface holes a number of phases of underground drilling have been undertaken to optimise the underground operations, these include:

- Prior to 2016 a number of cored (NMLC-size) inter-seam holes were drilled vertically into the floor of the underground workings. These drill holes were drilled for coal quality and geotechnical purposes however were not geophysically logged due to logistical issues associated with the underground mine environment. An additional gas hole WMLC335 was available for 2015 JORC classification onward. Interseam hole ISLL54, which cored ULLD in July 2016 facilitated reclassification of Indicated ULLD resources inside the LOM in ML1533 to Measured status in 2016.

- In late 2016 core drill hole YAC-019 was drilled to test geotechnical, coal quality and interburden thickness between Upper Liddell Seam and Upper Lower Liddell Seam to facilitate decisions on the position of the LW201 installation roadway. Non-core drill holes YAO-020 and YAO-021 were also drilled to facilitate decisions on the position of the LW201 installation roadway as the interseam between Upper Liddell Seam and Upper Lower Liddell Seam was thinning inbye. A single large diameter drill hole YAC-023 was also drilled (200mm core hole). Target seams were Lemington 12 Seam, Lemington 15 Seam, Upper Liddell Seam, Upper Lower Liddell Seam and Lower Barrett Seam for clean coal quality analysis.
- An extensive program of interseam drilling from Upper Liddell Seam northwest mains to Upper Lower Liddell Seam 200 mains, for seam level and geotechnical testing of belt chamber areas was completed in 2017. In addition interseam drilling from MG201 and TG201 will allow more confident resource classification in Lower Barrett Seam, the next underground target below the current mining operation. A series of Upper Lower Liddell Seam strip samples in MG201 and TG201 were taken for quality testing. RPM is aware this drilling will be utilised in the 2018 updated model.

Stratford and Duralie

The following provides an overview of the historical exploration at the Stratford and Duralie project including the Stratford mine are, Duralie mine area and the Grant and Chainey resource area.

- Noranda (1970s): Initial exploration drilling in the Gloucester Basin was completed by Noranda.
- BMI Mining/Noranda (1977-1981): Undertook extensive exploration drilling programs in the Gloucester Basin concentrating on drilling Stratford (Stratford Main Pit area) and Duralie.
- BMI Mining/ESSO 1981-1993): Commenced exploration drilling in Stratford North (including BRN). Completed a number of east-west and north-south 2-D seismic lines in 1982/83.
- During the 1980s extensive surface mapping was undertaken by Malcom Lenox.
- Excon: RPM is unsure if any exploration was undertaken.
- AGIP: Undertook no exploration.
- Excel Mining (1993-1995): Drilled coal quality holes. Float/sink data in the Stratford Main Deposit was later considered unreliable.
- CIM Resources (1995-2003): Mining commenced and the wash plant was upgraded. Exploration drilling was completed on target areas (such as BRN proposed pit area), but was minimal due to tight economic conditions.
- Pacific Power (1990s): Drilled nine deep stratigraphic holes to obtain data for their gas leases.
- Gloucester Coal Ltd (2003-2015): Exploration drilling increased during the time of Gloucester Coal Ltd, targeting future areas in Stratford (Roseville West, Wenham Cox Road, Stratford South, Avon North/Stratford North, Clareval seam) Duralie (Weismantel seam coal quality and Clareval seam) and Grant & Chainey. 2D seismic data from the 1980s was reprocessed over Duralie - further defining the structure of the area and leading to the discovery of the Clareval seam. During 2009-2010, intense exploration drilling was undertaken with the quality of data sometimes compromised for quantity of drilling. 2D seismic undertaken in EL6904 in 2011.
- AGL: completed 2D and 3D seismic surveys and airborne surveys (magnetic and radiometric) thought the Gloucester Basin. 2D survey undertaken in 2009 and 2012 and 3D survey over Stratford in 2010. Several deep stratigraphic drill holes were also undertaken by AGL throughout the basin.

Donaldson

Exploration at Donaldson has been carried out by various parties, commencing in 1951as outlined below:

- 1951- 1952 - 54 shallow cored holes drilled by the Bureau of Mineral Resources (BMR) targeting West Borehole Seam. A further 22 cored holes were drilled by BMR in the Buchanan area to assess open cut potential of the Donaldson, Big Ben, Tomago Thin and Rathluba Seams.
- 1952 - 10 core holes drilled by the Joint Coal Board (JCB), targeting West Borehole Seam.
- 1959-1960 - 11 core holes drilled by the JCB, on behalf of the Electricity Commission of NSW (ELCOM), to investigate thermal coal potential of Tomago Coal Measures.

- 1961-1984 - 145 core holes and 151 oxidation chip holes drilled by RW Miller (RWM) in the Ironbark area.
- 1962-1986 - 21 core holes drilled by the JCB and J&A Brown and Seaham Collieries (JABAS) in the Stockrington No 2 lease area, targeting Newcastle Coal Measures and to assess down dip potential of the Tomago Coal Measures.
- 1969 - Two core holes drilled by the JCB in the Black Hill area.
- 1980 - Five fully cored holes drilled by Gollin Wallsend Company in the Buttai area to investigate West Borehole and Sandgate Seams.
- 1996-1997 - Nine non-core holes and four core holes drilled by Donaldson Projects Pty Ltd primarily for groundwater studies. A comprehensive suite of geophysical logs run in all 13 holes.
- 1997- 2000 - 12 holes drilled in Tasman, in four phases, to improve understanding of stratigraphy, structure and coal quality. Geophysical logs run in all holes.
- 1998-1999 - 32 holes drilled by Callaghans Creek Holdings in the Surveyors Creek area to investigate open cut potential of the West Borehole Seam. Geophysical logs run in most holes.
- 2001 - 10 non-core holes and two core holes drilled by Bloomfield Collieries to evaluate open cut potential of EL5497. Geophysical logs available for 10 of the 12 holes.
- 2002 - Nine core holes drilled by Excel Coal in EL5497 down dip of Donaldson to assess open cut potential of the Donaldson and Big Ben Seams. Geophysical logs run in all holes.
- 2003 - Four non-core and 12 core holes drilled at Donaldson to improve understanding of stratigraphy, structure and coal quality in the North, Central and EW Pits.
- 2005 - 17 holes drilled at Donaldson for structural and quality control purposes.
- 2005- 2007 - 170 holes drilled to target the full Tomago Coal Measures and Newcastle Coal Measures down to the Ashtonfield Seam.
- 2014 - 18 holes drilled by Donaldson Coal targeting West Borehole, Lower Donaldson and Ashtonfield Seams.
- 2016 - ~~four~~Four 100mm diameter (C316-C318, C323) and two 200mm diameter core holes (C319, C322) had been completed. These holes targeted the Lower Donaldson Seam within the proposed mine plan. In addition five non-core holes (R324-R328) were drilled to investigate the parting thickness between B and C plies within the Lower Donaldson

Middlemount

The Roper Creek area was first explored by Central Queensland Coal Associates, a consortium of Utah Development Co. and Mitsubishi Development Pty. Ltd. (Utah) under Authority to Prospect (ATP) 6C. The results of exploration suggested that the coal in the Roper Creek area contained significant tonnages of thermal coal. Utah relinquished large tracts of ATP 6C in 1966 which included the Roper Creek area.

The Department of Mines carried out reconnaissance exploration in late 1972 and 1973 in the Roper Creek area to investigate the extent of the potential coal resources. Three stratigraphic holes were drilled within the current project area.

Further drilling was completed in the 1970's and 1980's by Capricorn Coal Pty Ltd (CapCoal; now Anglo). CapCoal determined that the Middlemount resource area contained low to mid volatile, low sulphur bituminous thermal coal and relinquished part of their tenure which included the Middlemount resource area on 22 February 1992. RPM notes that the PCI coal market did not exist at that time and it was extremely difficult to market low volatile (less than 22%) thermal coal at that time.

No further exploration was completed until 2006-2007 when Peabody (Custom Mining) drilled 54 holes. The Middlemount Coal joint venture have explored the deposit since 2008 and have added a further 705 holes to the resource area.

Drilling includes open holes, partially cored slim (HQ-3 and HMLC) and 4-inch diameter core holes (4C) and large diameter holes. ***Table 4-1*** summarises the drilling statistics for holes stored in the Middlemount database.

RPMGLOBAL

Table 4-1 Source of Borehole Data at Middlemount

Source	Period	TOTAL	Modelled	Not Used	LAS	Cored
Department of Mines	1970's	3	0	3	0	3
CapCoal (Middlemount)	1980's	238	93	145	135	238
Anglo	1970's-1980's	52	40	12	31	37
Peabody Custom Mining	2006-07	54	39	15	37	24
Middlemount Coal	2008-17	689	547	142	609	175
Middlemount Coal Water Bore	2008-10	16	3	13	2	0
Other		24	10	14	0	4
TOTAL		**1076**	**732**	**344**	**814**	**481**

NOTE: *"Modelled" refers to Quantity Data Points used in the 2018 resource model; "Not Used" refers to holes not used in the 2018 resource model; "LAS" refer to holes that have been geophysically logged and LAS data exist.*

Two 2D seismic surveys have also been completed at Middlemount. In 2008, 7.50km of data was acquired for assistance to delineate and characterise the Jellinbah Fault. An additional 2.93km of 2D seismic data was acquired in 2017 to investigate the underground extension in the south of the deposit.

Monash

A total of 23 holes have been completed within the Monash deposit, all of which were completed prior to 2014, as such all holes were completed by the previous owners.

4.2 Mining History

As outlined above mining activities are being undertaken at all but one of the operations, with recent production shown in ***Table 4-12***. RPM highlights that during 2017 58Mt ROM were produced for 44Mt product of which approximately 80% was produced from the large world class low risk open cut operations at HVO, MTW and Moolarben. Below is an outline of the mining history of each operation.

Table 4.-2 2015 through 2017 Operations Historical Coal Production by Type and Operation

Operation	Method	Centre	Unit	2015	2016	2017	H1 2018
HVO	OC	ROM Coal	Kt			19,531	9,113
		Strip Ratio	bcm:t			5.4	5.9
		CHPP	Kt			19,437	8,610
		Yield	%		na	75	74.4
		Bypass	Kt			213	-
		Total Product	Kt			14,784	6,409
		Product type	Kt		SSCC/thermal		
MTW	OC	ROM Coal	Kt			17,691	8,497
		Strip Ratio	bcm:t			5.7	5.6
		CHPP	Kt			17,646	8,314
		Yield	%		na	67	70
		Bypass	Kt			46	214
		Total Product	Kt			11,817	6,033
		Product type	Kt		SSCC/thermal		
Moolarben	OC/UG	OC ROM Coal	Kt	9,001	11,815	12,998	6,862
		Strip Ratio	bcm:t	-	3.6	3.7	3.8
		UG ROM Coal	Kt	-	422	1,712	2,952
		CHPP	Kt	9,005	12,156	13,499	7,110
		Yield	%	77	77	84	84
		Bypass	Kt	-	-	1,085	2,814
		Total Product	Kt	6,899	9,349	12,380	8,757
		Product type	-		Thermal		
Ashton	UG	ROM Coal	Kt	3,001	2,379	2,791	962
		CHPP	Kt	2,975	2,394	2,797	937
		Yield	%	46	45	42	44.5
		Bypass	Kt	-	-	-	-
		Total Product	Kt	1,375	1,074	1,164	417
		Product type	-		SSCC		
Yarrabee	OC	ROM Coal	Kt	3,360	3,625	3,394	1,341
		Strip Ratio	bcm:t	-	10.9	12.5	15.4
		CHPP	Kt	1,930	2,088	2,192	1,020
		Yield	%	78	74	75	74.2
		Bypass	Kt	1,304	1,548	1,205	373
		Total Product	Kt	2,814	3,098	2,850	1,130
		Product type	Kt		PCI/Thermal		
Stratford and Duralie	OC	ROM Coal	Kt	1,854	1,218	873	290
		Strip Ratio	bcm:t	-	5.6	3.8	4.3
		CHPP	Kt	1,904	1,223	639	312
		Yield	%	75	71	71	69.1
		Bypass	Kt	-	-	223	-
		Total Product	Kt	1,433	864	677	215.7
		Product type	-		SHCC/Thermal		

Operation	Method	Centre	Unit	2015	2016	2017	H1 2018
Austar	UG	ROM Coal	Kt	823	1,236	2,039	371
		CHPP	Kt	829	1,214	1,866	391
		Yield	%	87	94	91	95
		Bypass	Kt	-	-	177	-
		Total Product	Kt	721	1,138	1,870	371
		Product type	-	SHCC/Thermal			
Middlemount	OC	ROM Coal	kt	5,533	5,275	5,293	2,495
		Strip Ratio	bcm:t	7.5	8.5	10.6	11.0
		CHPP	kt	5,534	5,294	5,069	2,495
		Yield	%	79	77	76	82.6
		Bypass	kt	-	-	-	0
		Total Product	kt	4,367	4,089	3,857	2,061
		Product Type		SHCC/PCI			
Donaldson	UG	ROM Coal	Kt	1,808	265	-	-
		CHPP	Kt	1,742	237	-	-
		Yield	%	77	68	-	-
		Bypass	Kt	-	34	-	-
		Total Product	Kt	1,335	193	-	-
		Product type	-	Thermal		-	-

Source: Provided by the Company
Note: HVO and MTW were not part of the Groups production in 2015 and 2016. Donaldson has no production in 2017

HVO/MTW

The Assets are an amalgamation of five coal mining operations which combined have been in production for over 45 years via various large scale open pits and small bord and pillar underground operations at Lemington.

HVO comprises three separate previous mines namely Howick, Hunter Valley and Lemington Assets which included the following:

- The Lemington Mine, which began production in 1971, was acquired and merged into HVO in 2001.
- Coal production began at the Howick Coal Mine in 1968 in what is known as the West Pit at HVO. In 2000 the Howick Coal Mine became part of Rio Tinto's Hunter Valley Operations as a result of the merger with Hunter Valley Mine.
- The Hunter Valley No. 1 Mine began production in 1979.

In 2000 the Howick and Hunter Valley mines merged to create the Hunter Valley Operations. The Lemington mine was acquired and merged into Hunter Valley Operations in 2001. Yancoal acquired HVO and MTW as part of the acquisition of Coal and Allied in 2017.

MTW comprises the Mt Thorley and Warkworth Assets and includes the following:

- Mount Thorley has been in operation since 1981 and after a business restructuring of mining company R.W. Miller, Coal & Allied became managers of the mine in 1989.
- Warkworth Mining began operations in the same year as Mount Thorley in 1981 and in 2001 Coal & Allied purchased an interest in the mine. In January 2004, the two mines were integrated to improve efficiency by operating as one business.

Mining is ongoing at MTW and HVO with recent production outlined in **Table 4-2**.

Moolarben

Moolarben leases overlie an area of approximately 105 km2 and have been explored since the 1950's by several private companies, the New South Wales Mines Department and the Joint Coal Board.

Yancoal acquired Moolarben mine through the purchase of Felix Resources in December 2009.

The Moolarben Coal Project Stage 1 was assessed in the Moolarben Coal Project Environmental Assessment Report (MCM, 2006) and was approved by the NSW Minister for Planning on 6 September 2007 (Project Approval [05_0117]). The Moolarben Coal Project Stage 2 was approved by the Planning Assessment Commission (PAC) (as a delegate of the NSW Minister for Planning) on 30 January 2015 (Project Approval [08_0135]). The Stage 2 included the addition of the open cut mine OC4 and two underground mines UG 1 and UG 2 plus supporting infrastructure. The now completed and integrated Stage 1 and Stage 2 projects have approval to mine up to 21Mt per annum ROM coal.

Coal mining operations commenced on the site in 2010 and currently include both underground and open cut operations. Production ramped up to 8.3Mt ROM by 2013 as part of the Stage 1 approval and maintained this level of production until 2015. Following the Stage 2 approval the project has developed OC4 and ramped up ROM coal production to a total of 14.7Mt by 2017 which will be further ramped up to 20Mtpa by 2020. Underground development commenced in 2016 and the longwall commenced operation in 2017 in-line with forecasts.

Yarrabee

The construction of the Yarrabee Coal Mine started in 1981 and commercial production commenced in 1982 in ML 196. Ownership of Yarrabee at that time was by CSR Limited. Initial production from Yarrabee was a range of raw coal products having different ash and phosphorus content. A premium brand coal was produced by toll washing at a nearby coal handling and preparation plant (CHPP).

The Yarrabee Coal Company became the owners of the Yarrabee asset in November 1989. Production rates of PCI and thermal coal ranged from 0.35Mtpa to 1Mtpa. Felix Resources operated the Yarrabee Mine from July 2003 to December 2009 when Yancoal acquired Yarrabee mine through the purchase of Felix Resources. Production at Yarrabee during that period was 1.7Mtpa.

From December 2009 ownership of Yarrabee passed to Yancoal. The CHPP was completed and commissioned in June 2009. The mining areas at Yarrabee are shown in ***Figure C-4***. RPM notes that the term DOM refers to DOMAIN, which refers to an area that is structurally separated from other areas due to faulting and folding.

Ashton

Yancoal acquired Ashton mine through the purchase of Felix Resources in December 2009.

The only previous open cut mining operation within the Ashton leases is the North East Open Cut (NEOC) where open cut mining was conducted by Ashton from 2002-2010. The remnant NEOC void is utilised as the course reject emplacement area for the current operation.

Ashton underground operations commenced in 2005 with development entries driven from the remnant highwall of the NEOC. Extraction using longwall commenced in 2007 with an approved mine plan to extract four seams: Pikes Gully, Upper Liddell~~,~~ (ULD), Upper Lower Liddell (ULLD and Barrett. The longwall is currently operating in the ULLD seam with the Pikes Gully Seam having been fully extracted and the ULD seam having been partially extracted.

Approval for the South East Open Cut (SEOC) was gained in 2015.

Ashton ownership was transferred to Watagan in 2016. Watagan is a wholly owned unconsolidated subsidiary of YAL.

Stratford and Duralie

Open cut mining first commenced in the Stratford and Duralie basin in June 1995. In 2012, Yancoal acquired both the Stratford and Duralie mines through the merger with Gloucester Coal.

The Stratford and Duralie coal project is an open cut coal operation located approximately 100 km north of Newcastle, New South Wales in the Gloucester Basin. Stratford Coal Pty Ltd is the owner and operator of the Stratford Mine and is a wholly owned subsidiary of Yancoal.

The nearby Duralie Coal Mine is also owned by Yancoal and is located approximately 20 km south of the Stratford Mine. Stratford and Duralie mines collectively comprise ~~Yancoal's~~the Stratford and Duralie Basin operations which are jointly operated and managed.

Austar

Austar is an aggregate of the former Pelton, Ellalong, Cessnock No1 (Kalingo) and Bellbird South Collieries with the current operations dating back to 2005. Austar Coal Mine was previously called Southland and before that was called Ellalong Colliery which date back to 1916. Yancoal acquired the Southland mine (renamed Austar) in December 2004. The first longwall mining operation in the Greta Seam commenced at Ellalong Colliery in the early 1980's. RPM notes the area to the north of Austar has been mined.

Austar is currently mining the domain known as "Bellbird South" which lies between Area 2 (mined by Austar Coal Mine between 2008 and 2012) and Ellalong. Conventional longwall mining commenced in Bellbird South in July 2016. The next mining Domain is Stage 3 where operations will recommence with the Longwall Top Coal Caving mining method.

Austar has introduced the Longwall Top Coal Caving (LTCC) mining method with development by continuous miner. The longwall top coal caving technology is used to maximise recovery of the thick Greta seam. Longwall Top Coal Caving is the extractive method of which has been utilised successfully since 2006. Longwall Top Coal Caving has been included in the estimated Coal Reserves for Stage 3 mining area.

Austar ownership was transferred to Watagan in 2016. Watagan is a wholly owned unconsolidated subsidiary of YAL.

Donaldson

Mining at Donaldson began in 2001 with the Donaldson open cut mine which was closed and rehabilitated in 2013. Donaldson lodged the EIS for the Abel underground mine in 2006, with approval granted in June

2007 and development commencing in March 2008. It was planned as a bord and pillar mine for greater flexibility, particularly around creek and cliff lines. The amount of coal extracted would be varied to control subsidence to protect a range of surface features.

Yancoal acquired Donaldson mine through the merger with Gloucester coal in 2012.

Abel Mine operated as a bord and pillar mine from 2008 to 2016 (when it was placed on care and maintenance), producing up to 2.5Mtpa of ROM coal to wash thermal and SSCC products for export. Production was predominantly from the Upper Donaldson Seam. A combination of total extraction and partial extraction was incorporated across the target area, with partial extraction used below sensitive surface areas and infrastructure.

A modification to the Abel Project Approval (MOD3) was approved by the Department of Planning in December 2013 that allows for a change in mining method to longwall mining and an increase in annual ROM output of 6Mtpa.

Donaldson ownership was transferred to Watagan in 2016. Watagan is a wholly owned unconsolidated subsidiary of YAL.

Middlemount

The Middlemount Mine is managed by Middlemount Coal Pty Ltd which is an incorporated Joint Venture between Peabody and Yancoal. Yancoal acquired its interest in Middlemount Mine with the merger of Gloucester Coal in 2012.

A trial pit was completed during 2008-09 in the centre of ML70379 to extract coal from the Pisces Upper seam for bulk sample testing. Open cut mining commenced at Middlemount in 2011 and by the end of 2012, approximately 2.8Mt of coal had been mined, mostly from the Pisces Upper seam. Saleable production currently amounts to approximately 4.1Mtpa from some 5.4Mtpa of ROM output. The location of the mined out and planned open cut areas are shown in ***Figure C-9.*** The mining method at Middlemount open cut is conventional truck and excavator mining. The operating method is well proven and suitable for the deposit.

All ROM coal at Middlemount is washed to produce two product types: a semi-hard coking product at 10.5% ash with CSN of 6 and CSR of 58 to 63 and a low-volatile PCI coal at 10.0% ash. The CHPP is a 700tph single stage plant with two product coal handling systems and uses industry standard technology, operating at high availability.

Monash

No mining has occurred.

5. Geology

RPM has reviewed the geology of the operations, on both a regional and deposit scale and considers the geology to be well understood and developed through the generations of geological mapping, data acquisition from drilling, geophysical surveys, interpretation and development of three-dimensional models. Below is a summary of the key geological features of the Assets.

RPM notes that the below summary has largely been derived from information provided by the Company from various reports and sources, however it has been reviewed and edited based on RPM's opinion and site visit observations.

5.1 HVO / MTW / Ashton/ Monash

Regional Geology

The HVO/MTW and Ashton assets are located in the Hunter Coalfield, which is located in the northern part of the Sydney Basin as shown in ***Figure 1-1***. The Sydney Basin forms part of the composite Permian-Triassic age Sydney-Gunnedah-Bowen Basin (SGBB) system, which extends for approximately 1,700 km from southern NSW into central Queensland. The SGBB represents a 1,700 km long foreland basin of Early Permian to Late Triassic age. The Sydney Basin is bounded by the New England Fold Belt to the north and this boundary is marked by the structurally complex, Hunter-Mooki Thrust. To the west and south, the basin strata lap onto older rocks of the Lachlan Fold Belt and to the east, the basin's limit is marked by the edge of the continental shelf.

The Sydney Basin is one of the world's premier coal provinces containing multiple stacked sequences of thick bituminous-rank Permian age coal measures. The Permian coal measures in the Sydney Basin are only weakly to moderately folded and faulted and as such are generally amenable to high productivity surface and underground mining methods.

The SGBB system evolved during the Late Carboniferous to the Middle Triassic (approximately 310 to 230 million years ago (Ma)) as a series of contiguous basins which formed along the eastern part of the Gondwana continental margin. The SGBB has been subject to a complex, multiphase geological history including early rifting in a back-arc environment and thermal subsidence evolving into a retro-arc foreland basin.

Coal measure sedimentation in the Sydney Basin began in the early Permian and was terminated towards the end of the Permian by major uplift and basin tilting. The earliest Permian units were deposited in fluvial, coastal plain and marine environments on older ~~Paleozoic~~Palaeozoic basement rocks. This deposition was followed by rapid subsidence in the middle Permian, providing more space for sediment accumulation, with the main period of coal deposition occurring in the late Permian.

The sedimentary pile in the Sydney Basin has asymmetrical thickness distribution. The thickest accumulations are along the easterly-dipping Hunter-Mooki Thrust Fault System suggesting that subsidence was greatest along that fault. The sedimentary sequence thins to the west due to the sediments onlapping into the basement rocks in the west. The Hunter Coalfield is a district-scale north-eastern subdivision of the Sydney Basin (***Figure 2-2***). The Permian coal bearing stratigraphic section occurs within the Whittingham Coal Measures.

Regional Stratigraphy

The Late Permian Whittingham coal measures are the main focus of operations and its stratigraphy is outlined in ***Figure 5-1***. The existing operations exploit more than 100 individual seams (or seam plies) contained in more than 20 seam groups (or members) across the Vane and Jerrys Plains Subgroups of the Whittingham Coal Measures. Coal seams split and coalesce in various combinations at all stratigraphic intervals.

Whittingham Coal Measures

The Whittingham Coal measures are subdivided in to two Subgroups, namely Jerrys Plains and Vane as outlined below and shown in in ***Figure 5-1***.

The Whittingham Coal Measures were deposited in a retroact foreland basin during the Late Permian at a time when the Sydney-Bowen Basin complex was undergoing east–west compressional tectonics. The sediments were largely derived from the north (Hunter-Mooki Thrust) and the east, shedding off a contemporaneous high associated with the New England Fold Belt and the already developed Hunter-Mooki Thrust System.

Palaeocontemporaneous highs such as the Loder Dome found in the Lower Hunter area probably influential the coal seam deposition at that time by acting as a basement high resulting in thinner Permian sediment deposition. Subsequent burial, rifting and recent compressional tectonics has all influenced the structural character of the area. The coal seams generally dip to the south and west at less than 4 to 6º.

The Whittingham Coal Measures are typically 100 to 300m thick and where they crop out around the Lochinvar Anticline are 60m to 75m thick. Igneous activity occurred at various stages of geological history, particularly during the Jurassic, Late Cretaceous and Tertiary, after deposition of the coal seams and as such cross cut the coal measures and influence continuity and coal qualities in the local vicinity.

Jerrys Plains Subgroup

The Jerry's Plains Subgroup represents a complete cycle of terrestrial coal measure sedimentation that is up to 800m thick. Interseam lithologies are typically lithic sandstones, shale and conglomerate, with siltstone, carbonaceous claystone and tuff also occurring throughout the sequence. This Subgroup is the major source of coal mined in the Hunter Coalfield and due to extensive work has been subdivided in various formations and further into seam members as outlined in ***Figure 5-1***.

The Bayswater Coal Member is the lowest coal seam in the Jerry's Plains sequence and was formed in a back-barrier coal swamp environment. The Archerfield sandstone which occurs below the Bayswater seam represents a phase of prograding beach complex. Deposition of alternating interdistributary bay laminites and upwards coarsening crevasse-splay sandstones occurred in a lower delta plain environment, with the thin and banded Broonie Coal Member and Vaux Coal Member forming part of this sequence. Upper delta plain conditions then resulted in thicker and laterally continuous seams such as the Piercefield Coal Member and Mount Arthur Coal Member, after which lower delta plain conditions were re-established with the deposition of the Glen Munro through to the Whybrow Coal Member. Deposition of the Jerrys Plains Subgroup ended with a marine transgression, forming the base of the Denman Formation. Coal distribution in the Jerrys Plains Subgroup of the Whittingham Coal Measures is more variable compared to that of the Vane Subgroup stratigraphically below. Although the majority of the upper delta plain seams are laterally extensive, some of the largest variations occur in the Blakefield, Mount Arthur and Piercefield coal members. The lowest seam, the Bayswater Coal Member seam, varies in thickness from about 1 to 14 m and has a dull character with high inertinite content. The brighter coals such as the Broonie through to the Warkworth coal members are subject to extensive splitting.

Vane Subgroup

The Jerrys Plains Subgroup and the Vane Subgroup are separated by a marine incursion, which is represented by the Archerfield Sandstone. The Jerrys Plains Subgroup has been subdivided into two formations, namely the Bulga and Foybrook Formations and various seam members as outlined in ***Figure 5-1***.

The lower seams of the Vane Subgroup generally have similar thicknesses and are characteristic of the facies change from lower to upper delta plain deposits, with the Liddell Coal Member being the thickest coal-bearing unit, up to 14m in the Foybrook area. The majority of the seams are characterised by multiple splitting, thus, individual coal seams tend to be thin and of inferior quality to the upper Jerrys Plains Seams.

Figure 5-1 Generalised Stratigraphic Column for the Whittingham Coal Measures

	Subgroup	Formation	Member
Whittingham Coal Measures	Denman Formation		
	Jerrys Plains Subgroup	Mt Leonard Formation	Whybrow Seam
		Malabar Formation	Redbank Creek Seam
			Wambo Seam
			Whynot Seam
			Blakefield Seam
		Mount Ogilvie Formation	Saxonvale Member
			Glen Munro Seam
			Woodlands Hill Seam
		Milbrodale Formation	
		Mount Thorley Formation	Arrowfield Seam
			Bowfield Seam
			Warkworth Seam
		Fairford Formation	
		Burnamwood Formation	Mt Arthur Seam
			Piercefield Seam
			Vaux Seam
			Broonie Seam
			Bayswater Seam
	Archerfield Sandstone		
	Vane Subgroup	Bulga Formation	Lemington Seam
		Foybrook Formation	Pikes Gully Seam
			Arties Seam
			Liddell Seam
			Barrett Seam
			Hebden Seam
	Saltwater Creek Formation		

Coal Mineralogy and Rank

Vitrinite

Vitrinite is the dominant maceral group in coals of the Jerrys Plains Subgroup (generally greater than 50%) with the content of the coal at MTW and HVO typically ranging between 70 and 80%. Inertinite is most abundant in seams from the Bowfield Coal Member to the Bayswater Coal Member, which could indicate greater extent of oxidation during deposition of coals in that part of the Jerrys Plains Subgroup

Coal Rank

Coals in the south of the Hunter Coalfield are generally of higher rank in comparison to those in the north for the same depth, all generally increasing linearly with increasing depth. Vitrinite Reflectance (Rv max) is used as a measure of coal rank. In the south of the coalfield RV max varies within a broad range between 0.56 and 1.15%, although most are greater than 0.75%. Rv max of 1% or more occurs at depths of greater than 700m with the central regions, Rv max is about 0.72 to 1.00%, whereas in the west Rv max is between 0.65 and 0.95% Rv max in the HVO area does not show any consistent trends and any potential down dip trend of increasing Rv max is within the repeatability range of the vitrinite reflectance measurement and cannot be interpreted as a trend.

A number of seams demonstrate that CSN increases to the south east in HVO rather than down dip. The CSN at MTW appears to follow the south-easterly increasing trend with CSN values that are generally greater than those values at HVO down to the Mount Arthur Seam. The CSN for the Piercefield to Broonie

seams appear to have similar values at both MTW and HVO. The CSN values in MTW appear to increase down dip.

The MTO CHPP splits coal at plus and minus 16mm, with the minus 16mm size fraction producing SSCC from certain coal seams. Splitting the coal by size fraction is a way of concentrating vitrinite into the minus 16mm fraction, which enables the coal product to be marketed as SSCC.

RPM considers that increased CSN at MTW and HVO is related to the increased vitrinite content of the coal. Coal rank in the range Rv max 0.75 to 0.8% at MTW and HVO is not a significant driver for caking properties. Additionally RPM concludes that Rv max should not be used as an indicator for determining increased potential for semi soft coking coal down dip, however the relationship between vitrinite content and CSN should be investigated in detail to develop an understanding of how increased value can be obtained from the MTW and HVO resources.

Deposit Geology

The surface geology of the HVO, MTW and Ashton coal leases is dominated by outcrops of the Jerry's Plains and Vane Subgroups which form the Whittingham Coal Measures. The main rock types of this sub-group include sandstone, siltstone and conglomerate, which occur with subordinate coal and tuffaceous claystone

Hunter Valley Operations

HVO is located on the asymmetric southerly plunging Bayswater Syncline. The Auckland area is located on the western flank of the Camberwell Anticline and dips more steeply than the western limb of the Bayswater Syncline. The West Pit is located on the eastern flank of the Muswellbrook Anticline.

The Barrett seam outcrops in the east of the Auckland area on the Camberwell Anticline. A cross section through the HVO resource is shown as ***Figure 5-2***.

Mount Thorley and Warkworth

The Wollombi Coal Measures overlie the Whittingham Coal Measures and outcrop in the far southwestern corner of CCL753. Alluvial deposits associated with the Hunter River and Wollombi Brook cover the coal bearing strata over the northern and eastern parts of CCL753.

The strata within the MTW area dip to the west and southwest between 4 and 6° with increased dips in excess of 60 degrees in the south-eastern corner of the MTO area, known as the Mount Thorley Monocline, which is located on the western flank of the Loder Anticline.

A cross section through the MTW resource is shown as ***Figure 5-3***.

Ashton

The Ashton area is located on the Camberwell Anticline which has a north north-west to north-west orientation and plunges to the north-west. The Camberwell Anticline is asymmetric with a moderately dipping (9° to 18° degrees) eastern limb which is situated in ML1529 and a gently dipping (6° to 9°) western limb which is situated in the remainder of the area as shown in ***Figure 5-4***. The western limb at Ashton contains the seams that are equivalent to those in the Auckland area at HVO.

The Ashton area contains all coal seams from the Bayswater Seam to the Hebden seam which in stratigraphic descending order are:

- Bayswater;
- Lemington;
- Pikes Gully;
- Arties;
- Liddell;

- Barrett; and,
- Hebden.

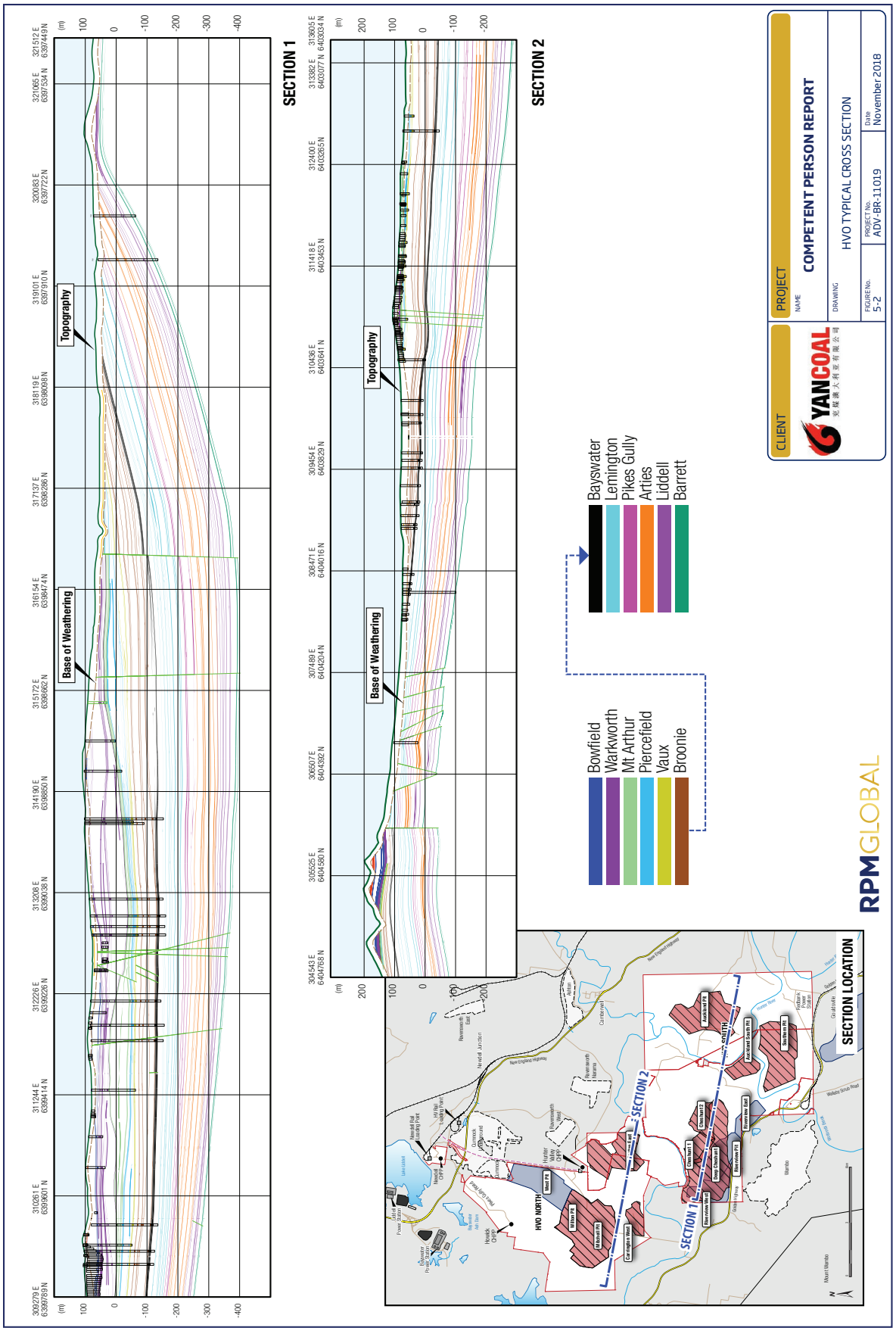
The coal seams at Ashton exhibit the same degree of seam splitting, seam thickness and have similar raw coal ash ranges to the equivalent coal seams at MTW and HVO.

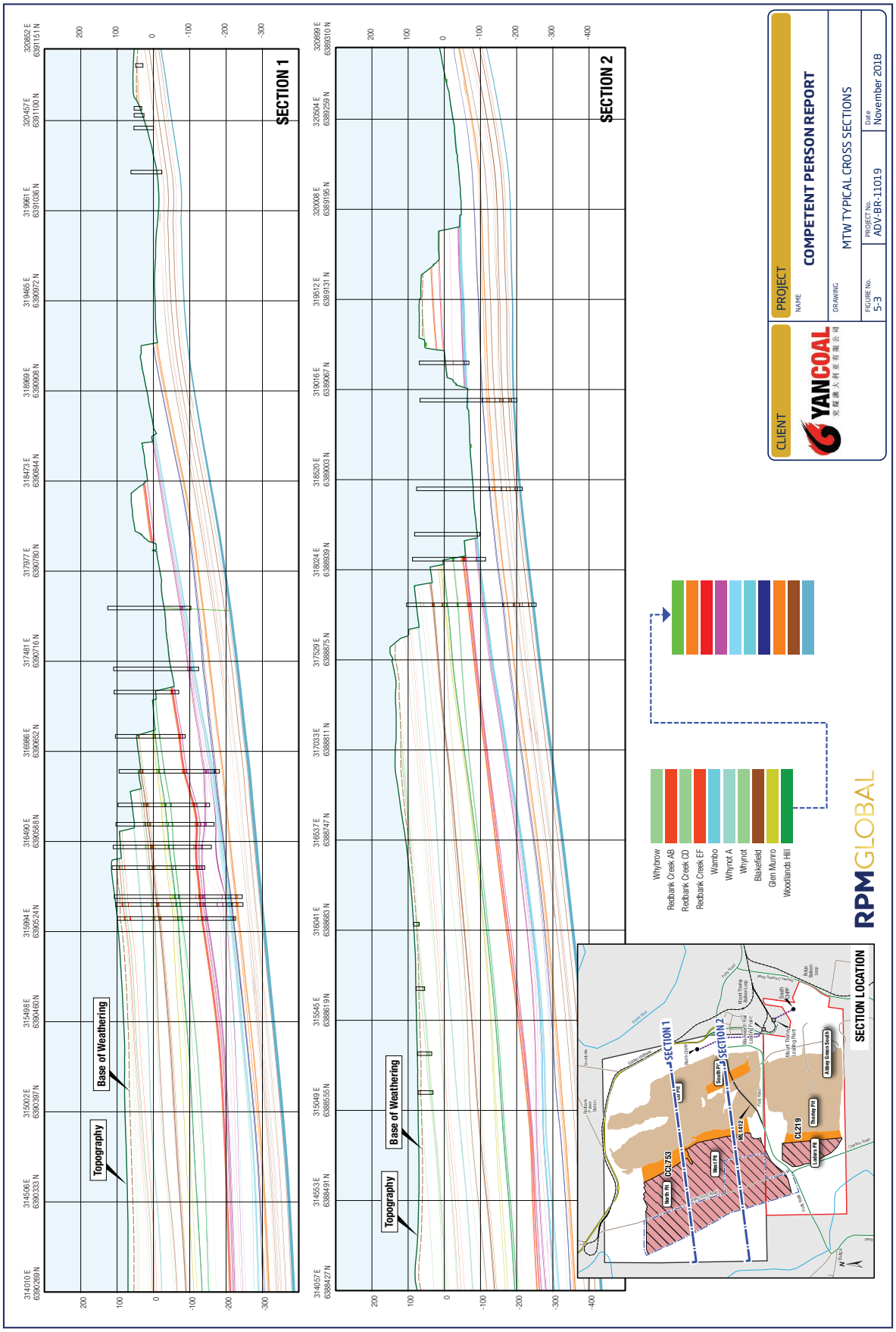
The Barrett Seam outcrops on the Camberwell Anticline south of the New England Highway and joins with the outcrop of that seam to the south in HVO. The stratigraphically higher coal seams above the Barrett Seam crop out sequentially from east to west throughout the Ashton area. The coal seams in the Ashton area are equivalent to the coal seams present in the Auckland area at HVO.

Monash

The Monash area contains stratigraphy from the Newcastle Coal Measures and Jerrys Plains Subgroup of the Whittingham Coal Measures. Regional dip of strata is shallow (<5 degrees) generally towards the southwest. Triassic Narrabeen Group sediments up to 400m thick overlie the Newcastle Coal Measures and form prominent escarpments. Coal seams in this remote portion of the Lower Hunter Valley exhibit a high degree of splitting and so thickness and ash content varies considerably throughout the deposit. The stratigraphy is similar to that outlined in ***Figure 5-1*** and the coal seams contained in the Monash resource in stratigraphic descending order include:

- Fassifern;
- Borehole;
- Whybrow;
- Whynot;
- Woodlands Hill;
- Arrowfield; and,
- Bowfield.


SECTION 1
SECTION 2
Topography
Base of Weathering
Bayswater
Lemington
Pikes Gully
Arties
Liddell
Barrett
Bowfield
Warkworth
Mt Arthur
Piercefield
Vaux
Broonie
SECTION LOCATION
HVO NORTH
HVO SOUTH
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
HVO TYPICAL CROSS SECTION
FIGURE No.
5-2
PROJECT No.
ADV-BR-11019
Date
November 2018


SECTION 1
SECTION 2
Topography
Base of Weathering
Whytrow
Redbank Creek AB
Redbank Creek CD
Redbank Creek EF
Wambo
Whynot A
Whynot
Blakefield
Glen Munro
Woodlands Hill
SECTION LOCATION
CL753
CL372
CL219
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW TYPICAL CROSS SECTIONS
FIGURE No.
5-3
PROJECT No.
ADV-BR-11019
Date
November 2018

CLIENT

YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME COMPETENT PERSON REPORT

DRAWING ASHTON - TYPICAL WEST TO EAST CROSS SECTION

Figure No. 5-4

PROJECT No. ADV-BR-11019

Date November 2018

Figure Source: MBGS Ashton Coal Mine Competent Person Report December 2017

RPMGLOBAL

5.2 Moolarben

Regional Geology

The Moolarben deposit is located on the western margin of the Western Coalfield within the Sydney Basin where sedimentary strata of Permian, Triassic and Jurassic age dip towards the northeast at 1° - 3° and overlie Carboniferous granite and folded metamorphic basement. The Permian strata comprise the coal-bearing Illawarra Coal Measures and the underlying Shoalhaven Group, which in turn uncomformably overlies the Lachlan Fold Belt basement rocks (***Figure 5-5***). Surface Quaternary alluvial deposits and remnant Tertiary basalt flows are common in the area.

The Illawarra Coal Measures are equivalent to the basal section of the Newcastle Coal Measures and the Wittingham Coal Measures in the Hunter Coalfield. Extrusive basaltic lavas and intrusive igneous activity was common during the Tertiary era (< 65 million years ago). These igneous features are usually not significant for open cut mining but for underground operations the impact of unidentified igneous intrusions can be serious from a safety as well as a cost perspective. RPM is aware the Company and its operators are well aware of this issue and continue to monitor and explore to minimise their impact.

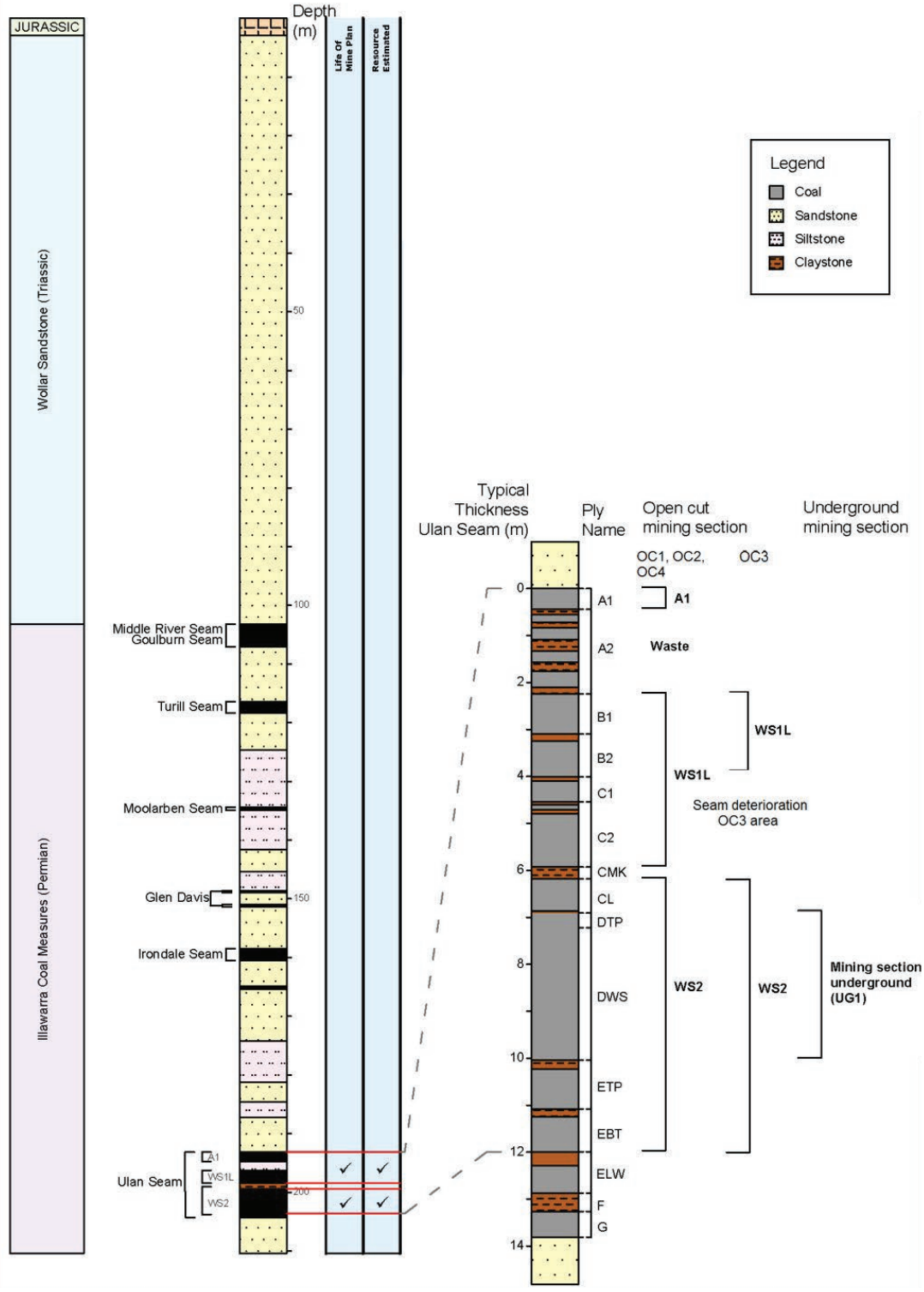
Regional Stratigraphy

The Illawarra Coal Measures are typically 80 to 100m thick within the Moolarben resource area and comprise a sequence of interbedded siltstone, sandstone, minor claystone with up to eight coal intervals, of which the Ulan Seam is the only seam mined (***Figure 5-5)***. Regionally, the Wollar Sandstone which is a 120m thick sandstone sequence within the Narrabeen Group, overlies the coal measures forming cliffs and escarpments. The Pilliga Sandstone and Purlawaugh Siltstone, both of Jurassic age, overlie the Narrabeen Group to the north and east of Moolarben, with a combined thickness of up to 120 m. The Pilliga Sandstone is an aquifer of regional significance.

The Ulan Seam includes several partings and on a regional basis is up to 12m thick. A tuffaceous parting (C Marker – CMK) approximately 0.3m thick occurs in the middle of the seam and separates the upper (WS1L) and lower (WS2) open cut working sections. East of Moolarben the CMK interval increases to 15m thick. The Lithgow Seam, which is up to 15m below the Ulan Seam is the basal seam within the Illawarra Coal Measures throughout the Western Coalfield.

The seam depth increases towards the northeast due to regional dip (***Figure 5-6***). Overburden thickness north of the railway in the north of EL6288 reaches 300m and in the south of EL6288 severe topographic relief caused by remnant Triassic escarpments, limit the extent of open cut development even though overburden thickness tends to be less than 150 m.

The Ulan Seam is typically 11m thick throughout much of tenure although in the south of EL6288 and within EL7073, deterioration of some upper coal plies in the WS1 results in a decrease in overall seam thickness to less than 6 m.



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PROJECT

NAME COMPETENT PERSON REPORT

DRAWING MOOLARBEN STRATIGRAPHIC COLUMN

Figure No.	PROJECT No.	Date
5-5	ADV-BR-11019	November 2018

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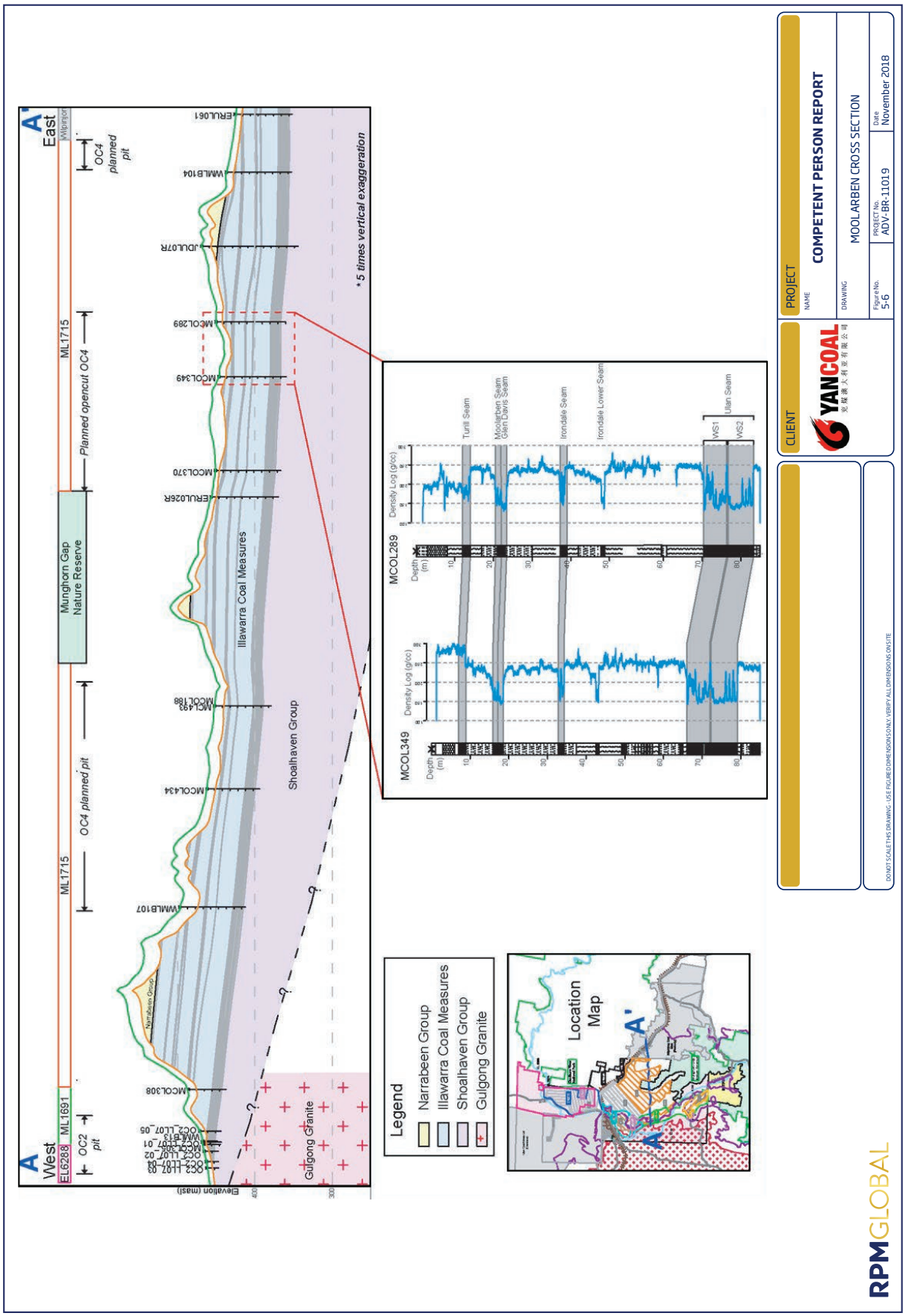
A West
A' East
EL6288
ML1691
ML1715
ML1715
OC2 pit
OC4 planned pit
Planned opencut OC4
OC4 planned
pit
Munghorn Gap Nature Reserve
Illawarra Coal Measures
Shoalhaven Group
Gulgong Granite
Narrabeen Group
* 5 times vertical exaggeration
Elevation (masl)
Legend
Narrabeen Group
Illawarra Coal Measures
Shoalhaven Group
Gulgong Granite
Location Map
MCOL289
MCOL349
Density Log (g/cc)
Depth (m)
Tuntl Seam
Moolarben Seam
Glen Davis Seam
Irondale Seam
Irondale Lower Seam
Ulan Seam
WS1
WS2
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MOOLARBEN CROSS SECTION
Figure No.
5-6
PROJECT No.
ADV-BR-11019
Date
November 2018
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5.3 Yarrabee

Regional Geology

The Yarrabee deposit is situated in the eastern portion of the Central Bowen Basin in central Queensland adjacent to the Dawson Tectonic zone. The stratigraphic sequence is made up of thin Quaternary soils, Tertiary sands and gravels, the Triassic Rewan Formation and the Upper Permian Rangal Coal Measures. The coal measures consist of interbedded siltstones and sandstones with some mudstones and shales. The Rangal Coal Measures are separated from the lower Burngrove Formation by the Yarrabee Tuff, which, when present, can be used for correlation purposes.

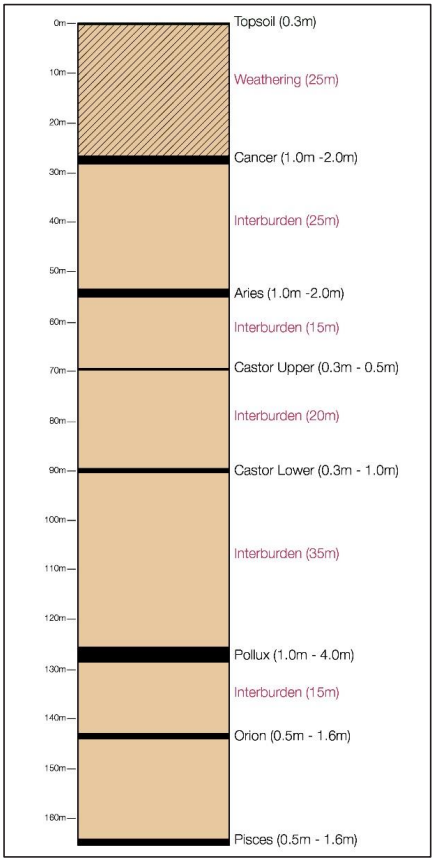
The Tertiary material is dominated by sand and gravel, the thickness of which increases with proximity to the Mackenzie River. Thicknesses of the Tertiary range from 40 meters depth in the north to zero meters in the south. The base of weathering is typically between 5 and 15 meters below the Base of Tertiary surface.

The seams at Yarrabee in stratigraphic order (as shown in ***Figure 5-7***) are: Cancer, Aries, Castor Upper, Castor Lower, Pollux, Orion and Pisces Lower) have been modelled and resourced where supported by adequate data. The lower Orion and Pisces seams are generally thin and of poor quality and thus are not resourced, with the exception of the Yarrabee East South (YES) and Domain 2 South pit areas. In these zones the seams thicken and improve in quality sufficiently to be resourced. ***Figure 5-7*** shows a schematic of the Yarrabee seams.

Deposit Geology

The Yarrabee deposit is located within a fault slice of the Rangal Coal Measures of the Blackwater Group, between the Yarrabee fault on the east and another fault on the west, both faults being thrusts and upthrown to the east, ***Figure 5-8***.

Figure 5-7 Yarrabee Resource Stratigraphic/Seam Sequence



The overarching structure of the Yarrabee area is an asymmetric ~~southeasterly~~south easterly plunging syncline, the Yarrabee Syncline, with the greatest amount of compressional deformation located on the western limb and the northern nodal part of the syncline. The Yarrabee Syncline is shown by the dark blue line in ***Figure 5-8***. The Yarrabee Mine is located between two significant fault structures (most likely faulted zones, rather than single faults) on the east and to the west. Faults strike in a NNE-SSE direction and are upthrown to the east.

The Yarrabee Syncline is itself folded and faulted by smaller fold structures and faults, shown in ***Figures 5-8***. The anticline structures are typically faulted in the more compressed parts of the Yarrabee area and coal is only present in the synclines. ***Figure 5-9*** shows two cross sections which are located in the vicinity of the Yarrabee East North (YEN) pit. Six thrust faults have been interpreted with the lowest angle faults being located in the east and subsequent faults located to the west steepening to the west. In addition fault plane angles are lowest in the north and steepen to the south, which can be observed by comparison between cross section 1 and cross section 2 in ***Figure 5-9***.

Figure 5.~~8~~ 8 Yarrabee East Mine Area and Location of Cross Sections

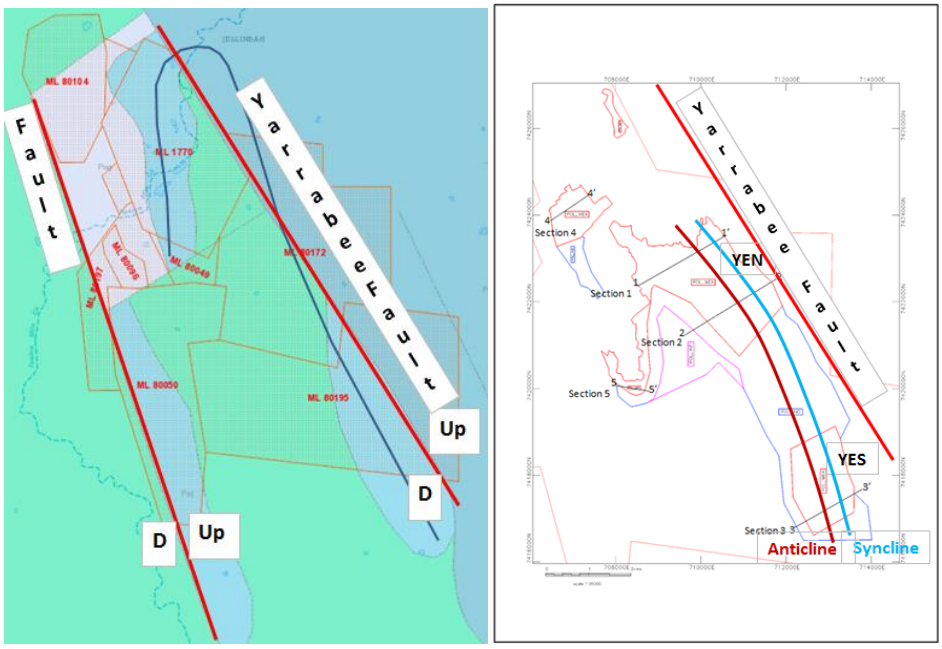
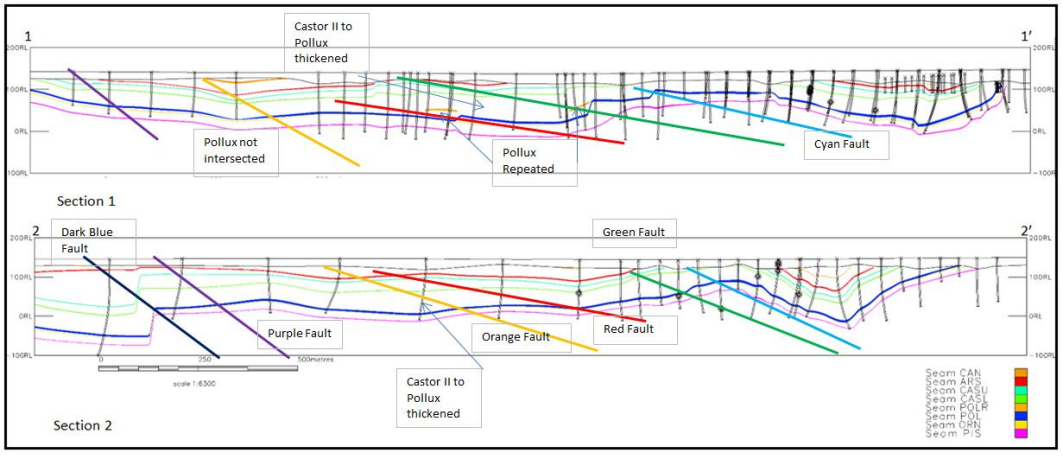


Figure 5.~~9~~ 9 Yarrabee Typical Cross Section



The Pollux seam is the only seam that is subsampled with multiple ply samples taken. The other seams are typically sampled as a single sample unless the geologist determines that the seam intersection has been structurally thickened by faulting and in those cases additional samples are taken to ensure correct representation of the seams coal quality attributes.

The Pollux seam is stratigraphically equivalent to the Leichardt or Elphinstone of the Northern Bowen Basin and the DU and D seam of the south-eastern Bowen Basin at Moura. The RPM Competent Person is familiar with the characteristics of the Pollux seam throughout the Bowen Basin.

The Pollux seam is subdivided into four coal intervals which are listed below. The upper and lower sections of the Pollux seam are subdivided at the medial stone band which is a Bowen Basin wide marker in the Leichardt / Elphinstone seam. Typical sampling for each of the four intervals is described below and shown in ***Figure 5-10***:

1) Wash Top - The Wash top ply is sampled as a single interval, because it is typically less than 30cm thick,

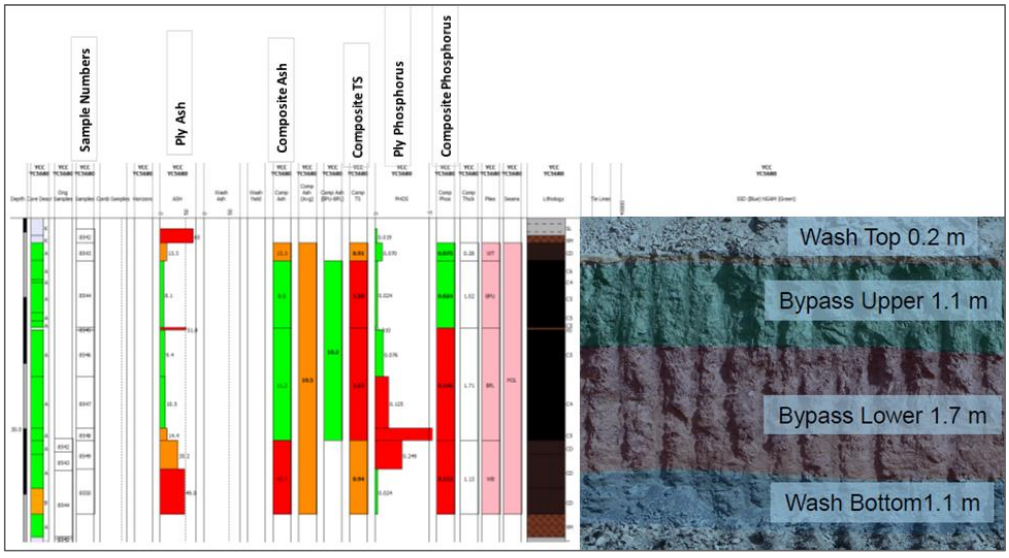
2) Bypass Upper - The Bypass Upper is typically sampled as a single interval because it has uniformly consistent coal quality,

   Medial Stone Band

3) Bypass Lower - The Bypass Lower is sampled as a number of intervals to characterise the raw coal ash and phosphorus. In general a minimum of three samples is required.

4) Wash Bottom - The wash Bottoms is also sampled as a number of intervals to characterise the raw coal ash and phosphorus and a minimum of three samples is required.

Figure 5-10 Pollux Seam Sample and Mining Sections



5.4 Stratford and Duralie

Regional Geology

The Stratford and Duralie Operations comprises the Stratford mine in the north and the Duralie Mine in the south. The Operations are located in the Gloucester Basin in NSW and is approximately 55km long and 15km at ~~its~~it's widest. The coal bearing strata package is over 1km thick and contains 10-15 significant seams. The stratigraphic sequence of the Gloucester Basin is shown in ***Figure 5-11***

The Basin primarily contains in stratigraphically descending order the Late Permian strata of the Gloucester Coal Measures and Dewrang Group. The Stratford and Duralie Basin is a relatively small Permian basin which has undergone significant east-west tectonic compression that has resulted in a tight north trending synclinal structure that is disrupted by considerable normal faulting that strikes east-west and reverse faulting that strikes north-south.

The, Roseville, Marker 3, Marker 8, Marker 1, Bowens Road, Glen View, Marker operation is located on the eastern limb of the Stroud Gloucester syncline, where the strata dip to the west, ranging from 10 to 50º, however is steeper in localised areas resulting in a relatively complex deposit compared to its regional peers in the Hunter Valley. The deposit comprises multiple seams with extensive splitting and coalescing both down dip and along strike. The coal seams that are exposed on the eastern side of the Stroud Gloucester Syncline include: Linden, Marker 7, Marker 6, Bindaboo, Deards, Cloverdale2, Avon, Triple, Weismantel, Cheerup and Clareval Seams. It is expected that all coal mined at Stratford and Duralie will be washed and if required blended with other seams to produce both coking and thermal coal products as is currently site practice.

The Gloucester Coal Measures are considered to be equivalent to the Late Permian Wittingham Coal Measures of the Hunter Coalfield, northern Sydney Basin. The coals in the Gloucester Coal Measures are generally vitrain rich and intensely cleated

Stratford Deposit Geology

The western portion of the operation strata from the Woods Road, Bucketts Way and Wenham Formations dip to the west at 10-50° and contain ten coal seam packages (Marker 7 to Bowens Road) over a stratigraphic thickness of approximately 600m. A stratigraphic column of the seam sequence at Stratford West is shown in ***Figure 5-11***.

East-west/northeast-southwest normal faulting is present with the most prominent feature a growth fault at the boundary of the BRN Pit (***Figure 5-12***), with displacement up to 40m are present in the Stratford West area and can be traced for a distance of up to 3km. A number of smaller displacement reverse faults have been interpreted from borehole data to have vertical displacements of up to several metres.

Further complexity occurs with sedimentary changes prevalent in these seams resulting in seam splitting and thinning of plies to the northern areas of the tenement holdings. Changes in interburden and ply thickness can occur over reasonably short distances making correlation of borehole data difficult. Rare igneous intrusions have been intersected in boreholes, due to the location of these intersections a possible dyke has been interpreted trending parallel to the east-west faults. Coal seams in Stratford West from Marker 7 to Marker 1 are generally reasonably coalesced in the south and start to split apart northwards.

The majority of seams in the Gloucester Coal Measures have raw ash content of 25-35% and total sulphur values average 0.5-0.8%. Washability data shows coal seams are able to produce coking and thermal coal products with low to moderate sulphur content after beneficiation.

Avon North is an area northeast of the Stratford Main Pit and the strata present are from the Avon Sub- group. Seams dip steeply toward the west at 35-50° and sub-crop to the east (***Figure 5-12***). North-south trending reverse faults have been identified from borehole intersections, two of which are steeply dipping (in the order of 70° to the west). Additional reverse faults have been identified however there is insufficient data to refine the interpretation.

The Avon seam is the main economic target in this area. It contains up to 13 coal plies, and is disrupted by 5 or 7 thrust faults. The upper part of the Avon seam has an overall product yield of 80% with coking coal yield of 65% (ash 10% and CSN 8-9) and thermal middlings yield 10-15% (ash 25-30%). Raw coal analyses show the Avon Seam contains low sulphur (generally <0.5%).

The Stratford East area is a narrow elongated resource area located east of Stratford. Strata dip steeply to the west. and contain the the Weismantel, Cheerup and Clareval Seams. These coal seams are from the stratigraphically lower Dewrang Group which is approximately 500m deeper (stratigraphically) than the Avon Seam at Avon North. The Weismantel seam is located some 150m stratigraphically above the Clareval.

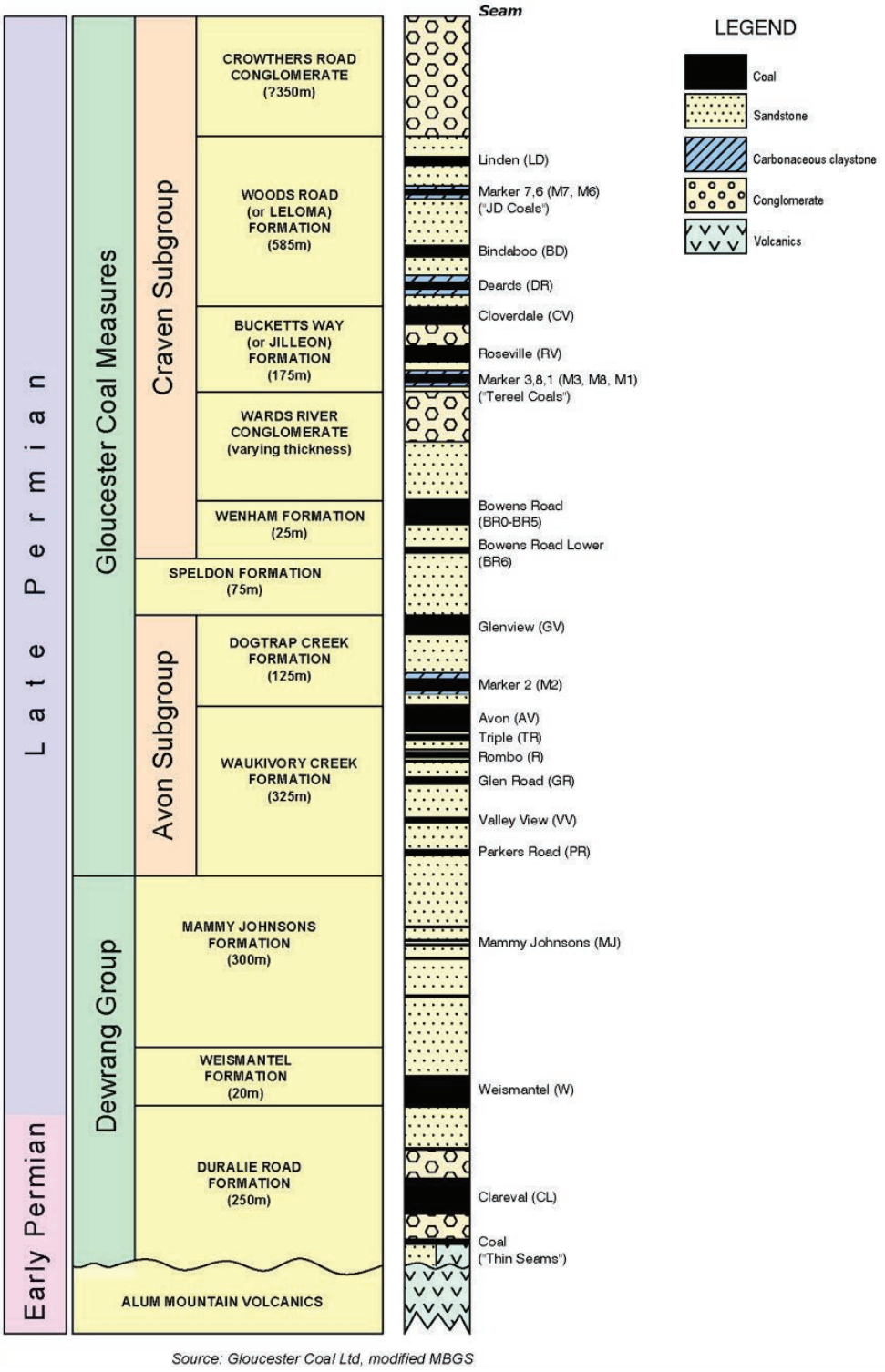
The Weismantel seam at Stratford is considerably deteriorated compared to the Weismantel Seam at Duralie (See below). There is very limited quality data for this seam however the data available indicates a high ash (40-50%), moderate sulphur (1.5-1.6%) thermal coal. Limited raw data on the Cheerup Seam indicates a variable sulphur (0.5-9%), high ash (30-45%) coal. Raw quality on the Clareval Main Seam plies indicates low to moderate sulphur (0.5-1.6%) and medium to high ash (24-45% including thin stone partings). The Clareval Seam at Stratford East would provide product coal with similar quality to the Duralie Northwest area, however with reduced overall yield due to thin stone partings within the seam.

Duralie Deposit Geology

Mining at Duralie focuses on two seams, the Weismantel and Clareval Seams. The Weismantel Seam comprises four plies (W1-W4) and has raw ash content of 20-35% (ad). Total Sulphur in the upper portion of the seam is high (4-5%) while the remainder of the seam reports 1-3% Total Sulphur. Multiple ROM coal types are beneficiated at the Stratford CHPP to produce high sulphur and moderate sulphur thermal coal and moderate sulphur coking coal.

Open cut extraction of the thick (4-20m) Clareval Seam which underlies the Weismantel Seam (by approximately 200m), commenced in the Clareval Pits. These Pits are also located on the western limb of the syncline (up to 3km north from the original Duralie Pit). The Bowl area Pit is a highly structured area with numerous reverse faults and tight folds (including the Holmes Syncline and Cheerup Anticline). This seam has been divided into Clareval Upper, Clareval Middle and Clareval Lower Seams. Raw ash content is in the order of 15-30% and Total Sulphur is similar to Weismantel Seam with high sulphur of 4-5% (ad) in the Clareval Upper and 1-2% (ad) in Clareval Middle and Lower Seams. Clareval Seam is washed to produce both thermal and coking coal products.

Structural complexity has been identified from drilling and is observed in the open cut operation. Thrust faulting can generate seam repeats and thicken seams considerably. In current mining areas seam dips are steep (generally 30-60^{o}, however locally can be steeper) and typically dip to the east (except in zones of structural complexity).



Source: Gloucester Coal Ltd, modified MBGS

RPMGLOBAL

CLIENT: YANCOAL 兖煤澳大利亚有限公司

PROJECT
NAME: COMPETENT PERSON REPORT
DRAWING: STRATFORD DURALIE STRATIGRAPHIC COLUMN

Figure No.	PROJECT No.	Date
5-11	ADV-BR-11019	November 2018

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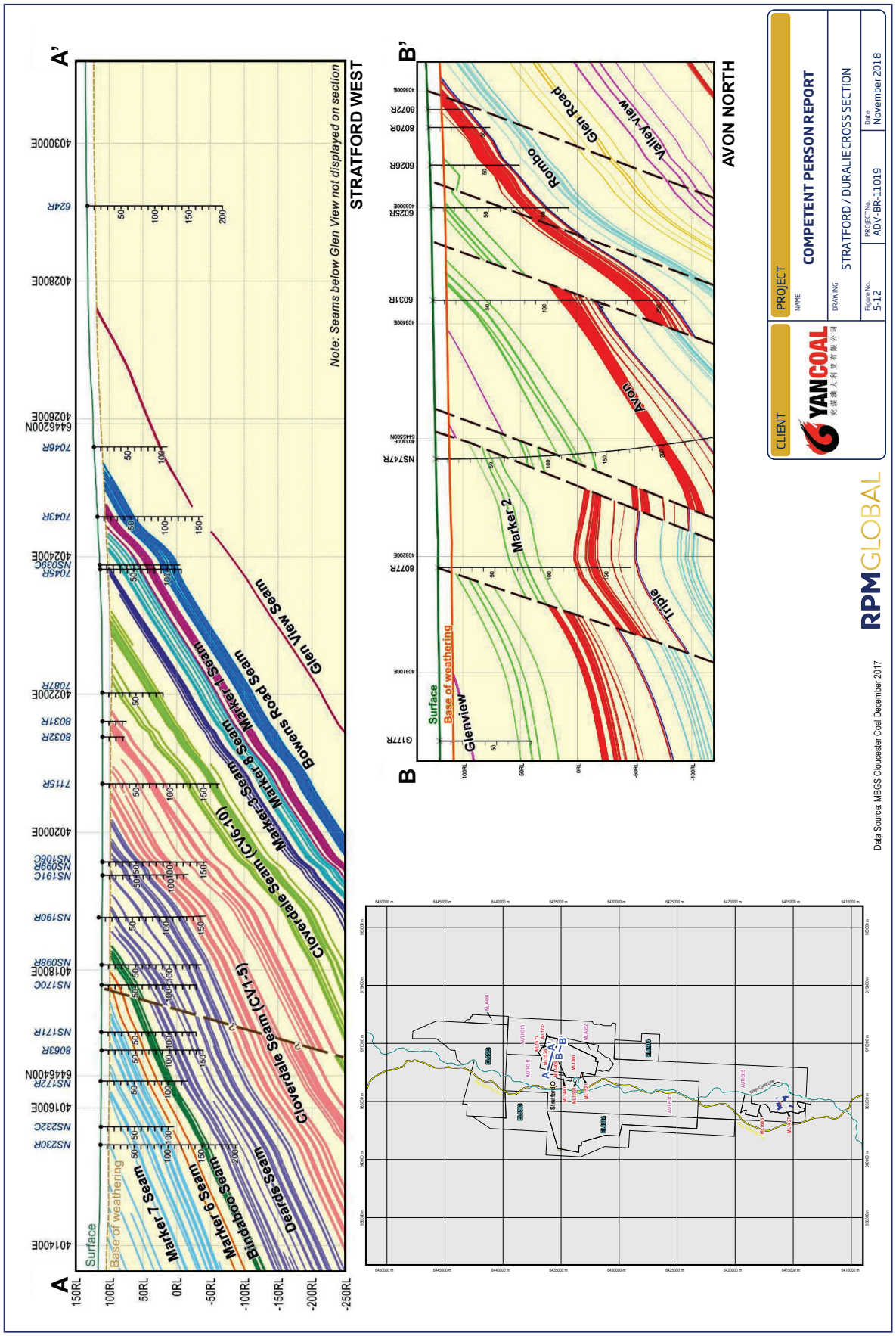

A'
STRATFORD WEST
Note: Seams below Glen View not displayed on section
Glen View Seam
Bowens Road Seam
Marker 4 Seam
Marker 8 Seam
Marker 3 Seam (CV6-10)
Cloverdale Seam (CV1-5)
Deards Seam
Blindaboo Seam
Marker 6 Seam
Marker 7 Seam
Surface
Base of weathering
A
B
B'
AVON NORTH
Glen Road
Valley View
Rombo
Avon
Triple
Marker 2
Glenview
Surface
Base of weathering
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
STRATFORD / DURALIE CROSS SECTION
Figure No.
5-12
PROJECT No.
ADV-BR-11019
Date:
November 2018
RPMGLOBAL
Data Source: MBGS Clouceste Coal December 2017

5.5 Austar

Regional Geology

The Austar Operation exploits the Greta Coal Measures in the South Maitland Coalfield, on the western side of the Newcastle Coalfield. As shown in the stratigraphic Column in ***Figure 5-13***. The Greta Coal Measures overlie volcanic sediments of the Dalwood Group at the base of the Permian succession. The thick (up to 2,000m) barren Maitland Group sediments (Branxton Formation, Muree Sandstone, Mulbring Siltstone) overlie the Greta Coal Measures and separate the Greta Coal Measures from the next coal measure sequence – the Tomago Coal Measures. These Coal Measures are the distal equivalent to the Whittingham Coal Measures located further to the northwest (approximately 50km) in the Hunter Coalfield. Overlying Tomago Coal Measures are the Newcastle Coal Measures which are in turn overlain by Early Triassic Narrabeen Group quartz rich sediments.

Greta Coal Measures are of Early Permian age (approximately 270 Ma) and in the Cessnock area comprise the following Formations:

- Paxton Formation (youngest)
- Kitchener Formation – Greta Seam
- Kurri Kurri Conglomerate – Homeville Seam
- Neath Sandstone (oldest)

Igneous dykes are present in the South Maitland Coalfield and although infrequent, were intersected at Ellalong and in old workings to the north. Dykes usually occur as a pair of dykes rather than a single dyke. The south trending Central Dyke (1-2 dykes) defined the eastern limit to longwall mining in the Stage 2 mining area. Recent exploration drilling, a review of mapping from past workings to the north (at Kitchener) and two ground magnetometer surveys has confirmed another southeast trending narrow zone of intrusive activity comprising two dykes (Kitchener Dyke) extending south into the Stage 3 mine area. From historical mapping and Austar's experience when intersecting dykes, there has been no evidence of intrusive sill bodies migrating horizontally from the dyke into the seam.

Deposit Geology

The major regional Lochinvar Anticline has a significant impact on the Greta Seam dip and strike, as well as the style of faulting which is observed within the South Maitland Coalfield. The deposit is located on the eastern flank of the south westerly plunging Lochinvar Anticline, with seam dip of approximately 4° and strike ranging from east to northeast. Knowledge of the local geology from surface and subsurface mapping and an extensive array of 2D seismic and borehole data has defined a number of significant faults that will impact on, or limit mining:

- The Quorrobolong Fault Zone (Stage 3 area);
- The Abernethy Fault Zone (Stage 3 area);
- The Swamp Fault Zone (Bellbird area),and
- The Barraba Fault Zone (Bellbird area).

These zones are well mapped and defined and have been included in the structure model. Two cross sections of the Austar resource are shown as **Figure 5--14**.

The Greta Seam

The Greta seam has a well--defined trend in thickness and quality from west to east within the tenement holdings. In the western portion, past mining extracted the Greta Seam where it was typically 3m-3.5m thick.

The Greta Seam thickness increases from 6 to7m in the central areas (Bellbird and eastern part of Stage 3) and comprises dull and bright to bright banded coal. The basal 4m of coal is generally devoid of claystone bands, while the upper 2m - 2.5m contains several thin claystone bands. When seam thickness is 6 to 7m Austar attempts to use LTCC methods to mine the coal.

Towards the east additional thin claystone bands gradually emerge in the basal half of the seam and eventually the seam splits into an upper 4m thick section and lower 1.5m thick section, along a broadly north south trending

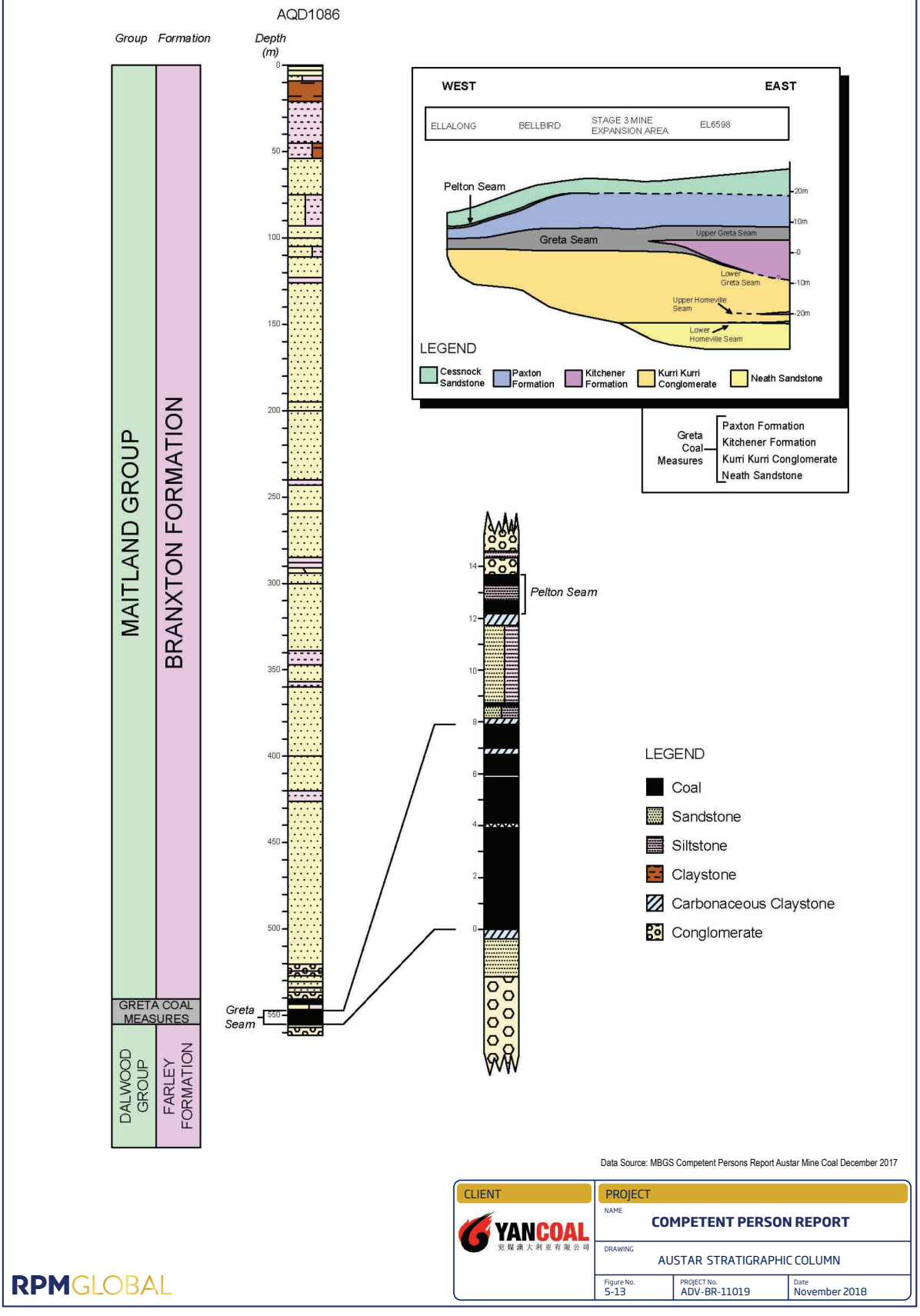
split line. The Upper Greta Seam has been intersected in old boreholes further to the east, in the eastern portion where it gradually thins over several kilometre distance to a minimal thickness of 2m. The Lower Greta Seam thins and deteriorates to the east and east of the split line is not considered a resource.

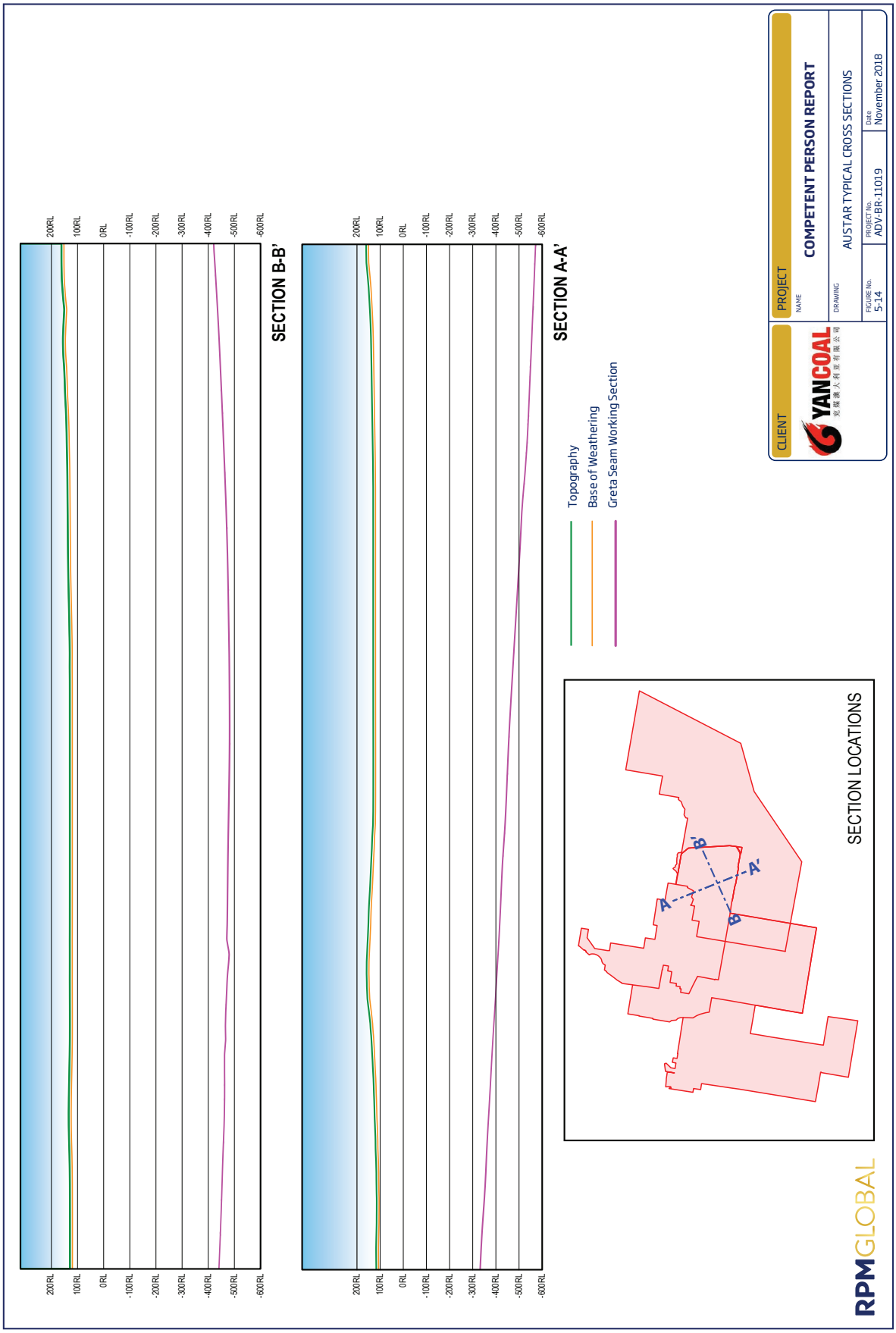
Coal Qualities

The Greta Seam is a low ash bituminous coal with high specific energy and importantly very good coking properties (Crucible Swell Number "CSN") – 6.5, Maximum fluidity – 20,000, Maximum dilatation – 450). The seam, however also has high sulphur content which is interpreted to be influenced by environmental conditions at the time of deposition. High sulphur concentration towards the top of the seam is thought to be related to increasing marine influence during peat deposition.

Total Sulphur content in the basal half to two thirds of the seam typically ranges from 0.8%-1.2%. This Total Sulphur content increases to greater than 3% in the upper portion, close to the top of the seam. Analytical tests indicate Organic Sulphur is the major component of the Total Sulphur content, as such by the marine influence on deposition. Organic sulphur is more difficult to remove by beneficiation by a CHPP.

Raw ash for full Greta Seam is generally less than 12%, however in the eastern portion, ash increases to greater than 20% with the gradual increase in claystone bands, as noted above. RPM notes that in general coal seams at the proposed depths of mining at Austar normally contain significant quantities of methane or carbon dioxide seam gas, however the Greta Seam at Austar surprisingly has very low seam gas content.


AQD1086
Group
Formation
Depth (m)
MAITLAND GROUP
BRANXTON FORMATION
GRETA COAL MEASURES
DALWOOD GROUP
FARLEY FORMATION
Greta Seam
Pelton Seam
WEST
EAST
ELLALONG
BELLBIRD
STAGE 3 MINE EXPANSION AREA
EL6598
Pelton Seam
Greta Seam
Upper Greta Seam
Lower Greta Seam
Upper Homeville Seam
Lower Homeville Seam
20m
10m
0
10m
20m
LEGEND
Cessnock Sandstone
Paxton Formation
Kitchener Formation
Kurri Kurri Conglomerate
Neath Sandstone
Greta Coal Measures
Paxton Formation
Kitchener Formation
Kurri Kurri Conglomerate
Neath Sandstone
LEGEND
Coal
Sandstone
Siltstone
Claystone
Carbonaceous Claystone
Conglomerate
Data Source: MBGS Competent Persons Report Austar Mine Coal December 2017
CLIENT
YANCOAL
兖煤澳大利亚有限公司
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
AUSTAR STRATIGRAPHIC COLUMN
Figure No. 5-13
PROJECT No. ADV-BR-11019
Date November 2018
RPMGLOBAL


SECTION B-B'
SECTION A-A'
200RL
100RL
0RL
-100RL
-200RL
-300RL
-400RL
-500RL
-600RL
Topography
Base of Weathering
Greta Seam Working Section
SECTION LOCATIONS
A
A'
B
B'
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
AUSTAR TYPICAL CROSS SECTIONS
FIGURE No.
5-14
PROJECT No.
ADV-BR-11019
Date
November 2018
RPMGLOBAL

5.6 Donaldson

Regional Geology

The Donaldson Mine is located in the northern-central portion of the Newcastle Coalfield, which forms the northern portion of the Permian/Triassic Sydney Basin. The stratigraphy comprises Late Permian Tomago Coal Measures overlain by the Newcastle Coal Measures (***Figure 5-15***). These Coal Measures overlie the Greta Coal Measures which host the Austar deposit as discussed in ***Section 5.5***. The non-coal bearing Triassic Narrabeen Group overlies the Newcastle Coal Measures and forms steep topographic relief which includes Mt Sugarloaf and Mt Vincent.

The north east trending Lochinvar Anticline fold axis is located west of the Donaldson leases, while the Macquarie Syncline fold axis trends in a north of ~~northwesterly~~north westerly direction through the central portion of the Donaldson leases. The overall structural fabric of the Donaldson area is north of ~~northwesterly~~north westerly The seams dip gently both to the east and west due to the Macquarie Syncline, which plunges to the south.

A zone of steeply dipping strata, known as the Buchanan Monocline, is located between these regional features, along the western boundary of Donaldson leases with stratigraphy dips steeply (up to 50°) toward the east. Immediately north of Donaldson are two north trending parasitic folds associated with the Macquarie Syncline, namely the East Maitland Syncline and the Four Mile Anticline. These two structures affect the Tomago Coal Measures however not in the tenement holding of the Company.

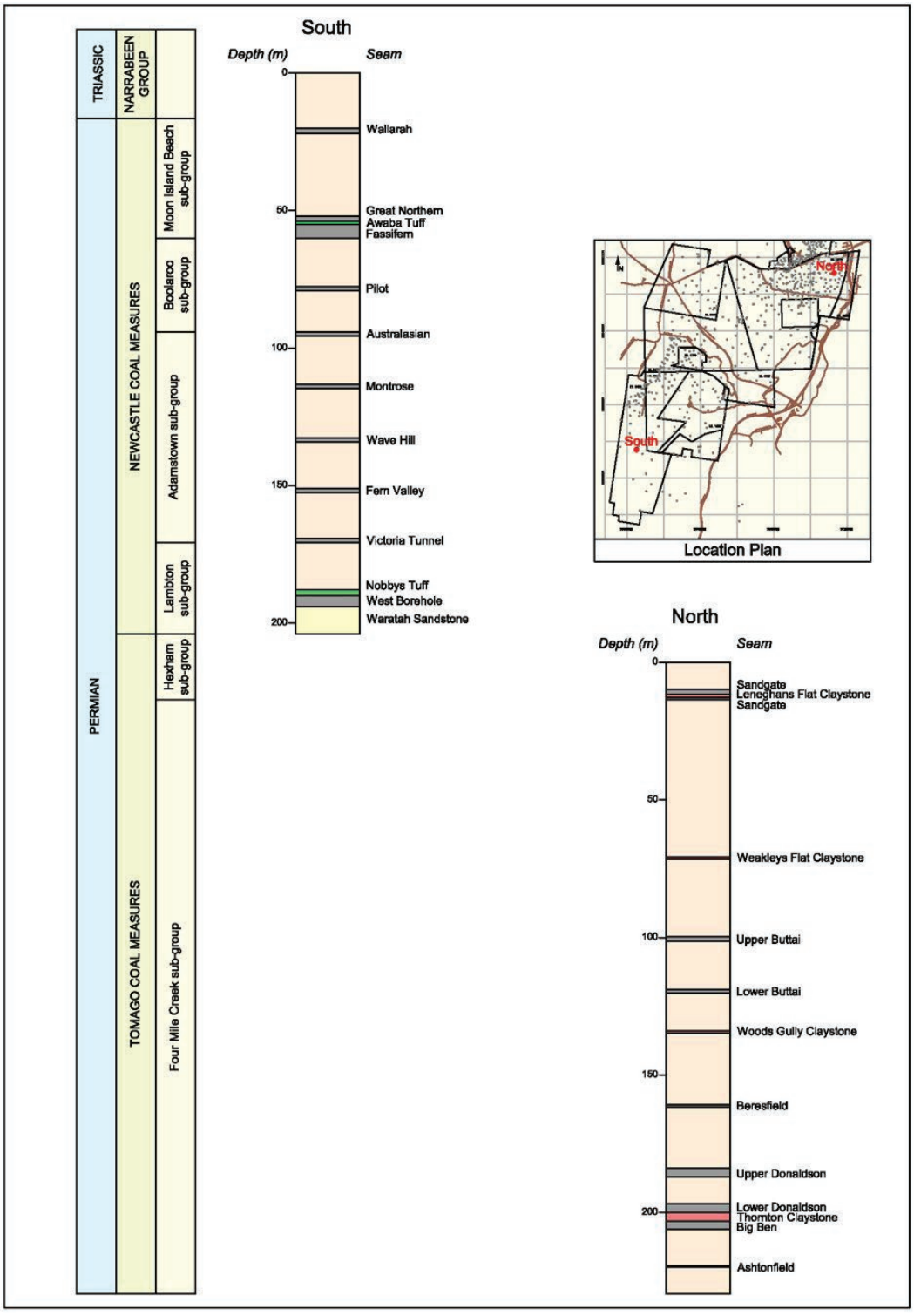
Local Geology

The long production history at Donaldson has highlighted the presence of faults and dykes which have impacted mining. Information provided to RPM indicates that the northwest trending dykes are generally 1 to 5m wide and produce limited cindered zones within surrounding coal. No sills have been identified, however drilling has identified minor intrusions within coal seams and associated cindered coal closely associated with the dyke activity. Small scale faulting with displacement less than 1m has been observed in Abel, Tasman and Stockrington No 2 mine workings, however a number of faults have been observed with throws between 2.5 and 6m. Faults and dykes in general have north of ~~northwesterly~~north westerly orientations that conform to the local geologic structural fabric.

Stratigraphy

The Tomago Coal Measures comprising up to 12 coal seams occur only on the eastern side of the Lochinvar Anticline and sub-crop toward the west between Hexham and Maitland. Beyond Hexham, the Coal Measures are covered by large deposits of unconsolidated Quaternary sediments. Near Maitland the Tomago Coal Measures stratigraphic pile is approximately 600m thick, which increase to over 1,000m toward the east. These Coal Measures exhibit variable characteristics such as splitting, coalescing and deterioration.

The Newcastle Coal Measures also occur on the eastern side of the Lochinvar Anticline. These Coal Measures occur over a large area from south of Maitland, to the middle reaches of Lake Macquarie and east to the coastal fringes. On the eastern flank of the Macquarie Syncline the Coal Measures are approximately 350m in thickness and contain up to 16 individual coal seams. (***Figures 5-15 and 5-16***) On the western flank of the Macquarie Syncline the Coal Measures decrease in thickness to approximately 250m and contain no more than 12 individual coal seams. The Coal Measures exhibit variable characteristics such as splitting, coalescing and seam deterioration.



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DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

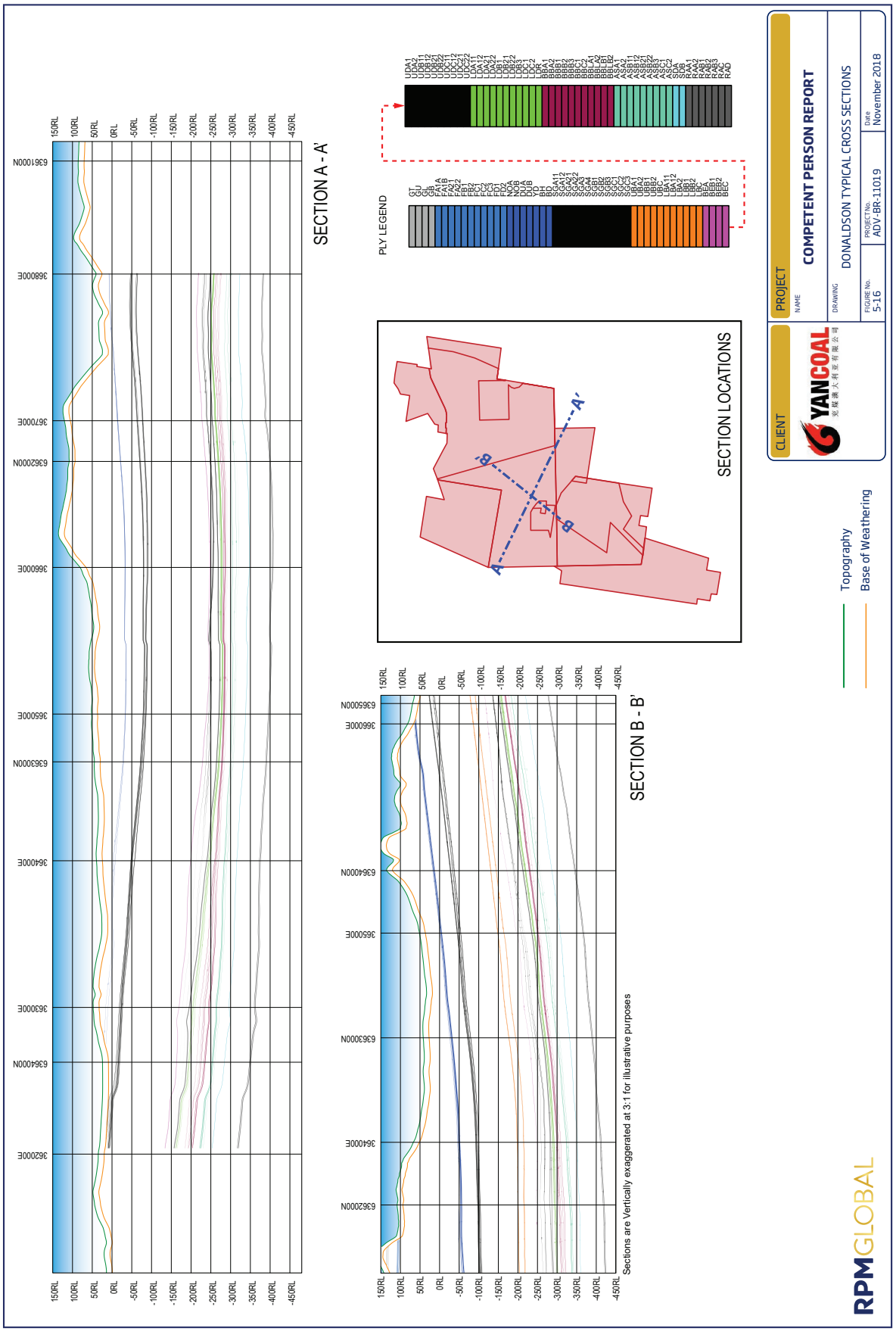
YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME: COMPETENT PERSON REPORT

DRAWING: DONALDSON STRATIGRAPHIC COLUMN

Figure No.	PROJECT No.	Date
5-15	ADV-BR-11019	November 2018


SECTION A - A'
SECTION B - B'
PLY LEGEND
SECTION LOCATIONS
A
A'
B
B'
Topography
Base of Weathering
Sections are Vertically exaggerated at 3:1 for illustrative purposes
CLIENT
YANCOAL
PROJECT NAME
COMPETENT PERSON REPORT
DRAWING
DONALDSON TYPICAL CROSS SECTIONS
FIGURE No.
5-16
PROJECT No.
ADV-BR-11019
Date
November 2018
RPMGLOBAL

5.7 Middlemount

Regional Geology

The Middlemount deposit is located in the central region of the Bowen Basin which covers an area of approximately 200,000 sq.km, Figure 2.3. The Basin consists of a sedimentary sequence of Permo-Triassic clastic sediments with a maximum thickness of 9,000m which are divided into number of tectonic units comprising north north-west to south south-east trending platforms or shelves that are, separated by sedimentary troughs.

Regionally, the stratigraphic sequence consists of the Permo-Triassic sediments, overlain by a thin covering of unconsolidated Quaternary alluvium and colluvium, poorly consolidated Tertiary. The Permian Blackwater Group coal measures and associated over- and interburden are located below the Triassic strata and overly the Back Creek Group, the basement.

Local Geology

The Middlemount resource contains the coal seams of the Rangal Coal Measures and Burngrove Formation of the Blackwater Group. The target seams within the resource consist of the Roper, Middlemount, Tralee and Pisces Upper seams (in descending order) which belong to the Rangal Coal Measures, while the Pisces Lower and Girrah seams belong to the Burngrove Formation and are not considered to have economic potential based on current studies.

Overlying the Rangal Coal Measures are alluvial sediments, inferred to be Tertiary in age, with a thickness of up to 30m. The depth of weathering averages 45m, ranging from 20m in the southeast to over 60m in the central and northern areas of ML70379.

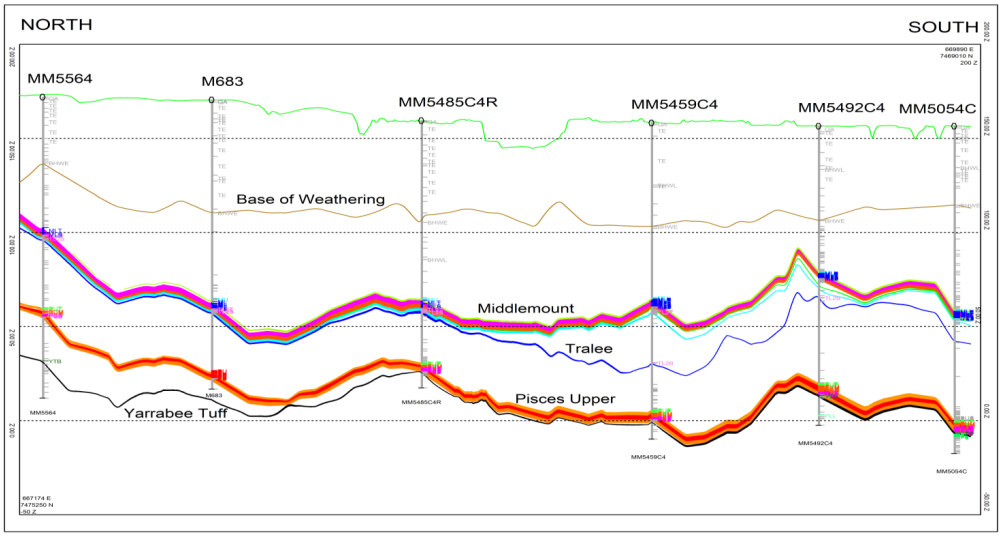
The Middlemount and Pisces seams have been subjected to the majority of the exploration mining works. The Middlemount seam averages 4.0m thick in the area west of the Jellinbah Fault, ranging from less than 2 to over 7 m. The Middlemount Upper working section is a high ash section that is present over most of the Middlemount area – the exception is in the north, where it is less than 0.3m thick. The top section of the Middlemount Lower Section is predominantly dull with some bright banded coal with an average raw coal CSN average of 1 to 1.5. The base section of the Middlemount seam has more bright coal than the top section and the average raw coal CSN is 4 to 5.

The Tralee seam underlies the Middlemount seam. At Middlemount, it ranges in thickness from 0.5 to 1.0m when it occurs just below the Middlemount seam (within 10m). The Tralee seam is divided into three working sections (TL1, TL2T and TL2B, top down) and similar to the Middlemount Lower seam the working section division is predominantly based on coal brightness. Where the seam splits further from the Middlemount seam, the Tralee seam thins to usually less than 0.3m.

The Pisces Upper seam averages 4.8m thick in the area west of the Jellinbah fault, ranging from 2 to over 6 m. Thickening and thinning of the seams is interpreted to be the result due to the same structural effects as noted for the Middlemount seam, while intersections outside this range were similarly excluded from the coal thickness model. The Pisces Upper seam is divided into three working sections (PUT, PUM and PUB, top down) and similar to the Middlemount Lower seam the working section division is predominantly based on coal brightness.

The Middlemount Seam is stratigraphically equivalent to the Leichhardt seam or Elphinstone seam of the Northern Bowen Basin, or the Pollux Seam of the Central and Southern Bowen Basin and the DU and D seam of the south-eastern Bowen Basin at Moura. The Pisces Seam is the stratigraphically equivalent to the Vermont or Hynds Seam of the Northern Bowen Basin and the E seam of the south-eastern Bowen Basin at Moura. The RPM Competent Person is familiar with the characteristics of the Middlemount and Pisces seams throughout the Bowen Basin.

Figure 5.~~17~~ 17 Middlemount Section showing coal seam stratigraphy



The potential open cut coal area strikes north-northwest and dips to the east at between 3- and 7-degrees; the deposit is approximately 7km long and 2km wide. The resource is limited to the east by the Jellinbah Fault; a major regional thrust fault which is oriented north-northwest and has displacement greater than 300m. This fault is located close to the boundary of ML70379 and ML 70417. The coal seams of the Rangal Coal Measures crop out to the west of the Jellinbah Fault, where the majority of the coal exploration has been completed. The strata present on the eastern or upthrown side of the Jellinbah Fault are from the Burngrove Formation, which are becoming visible in the highwall of the mining excavation. ***Figure 5.17*** shows a typical long section through the Middlemount resource area.

Exploration drilling and mining has identified that the deposit is complicated by localised thickening of seams in the vicinity of faults. Other than the Jellinbah fault, the deposit contains small-scale (<10m) normal and thrust faults, which is evidenced by the thickened and thinned Middlemount and Pisces seam intersections and by the changes in structural elevations between boreholes.

6. Data Verification

RPM completed a review of the geological and digital data supplied by the Client to ensure that no material data issues could be identified and that there was no cause to consider the data inaccurate or not representative of the underlying exploration results. RPM visited the Assets at HVO/MTW assets in March, 2017 and the reminder of the assets in April 2018 and reviewed the Assets operations. RPM concluded that the geological data was adequately acquired, validated and managed in databases according to a range of good to industry best practices as outlined below.

6.1 HVO / MTW

Bore Hole Data

Geological data acquisition has been ongoing in the MTW and HVO areas since 1949 when the Joint Coal Board commenced exploration in the MTW area. Exploration activity increased in the late 1960s and 1970s in response to increasing world energy consumption and demand for both thermal and metallurgical coal, with the Howick Mine commencing operations in 1968, closely followed by the Lemington Mine in 1971 and the Hunter Valley No. 1 operation in 1979. Mt Thorley and Warkworth Mines commenced operations in 1981.

The long history of HVO has led to the utilisation of a number of different data and planning practices and in particular seam correlations between the Howick, Hunter Valley and Lemington mine sites. During 2007, Minescape software was introduced to HVO as the preferred tool for technical mine planning functions, including geological database and geological modelling. A GDB borehole database called HVO was created from Minex seam interval data, with "stone" used to designate non-coal units within boreholes. Geological data acquired since 2007 was loaded with all detail into the HVO GDB database.

It became apparent to the Company's antecedent (previous owner) that significant proportions of pre 2007 geological data had not been uploaded into GDB and / or was unsuitable for geological model development and could not be easily validated compared to the original primary data. As a result, the Company's antecedent referred to all exploration data acquired prior to 2007 as legacy data. The Company's antecedent undertook a project referred to as the 'Hunter Valley Legacy Data Project' between mid-2013 and October 2015 whereby all legacy data for HVO was converted from non-digital to digital format, validated and added to the HVO geological database.

The MTW operation transitioned to Minescape software in 2006, with all legacy data being validated and uploaded to the GDB database by the end of 2006. RPM considers that the 'Legacy Data Project' has achieved a significantly complete geological data set which now can be used with a high level of confidence for geological modelling and Resource estimation.

RPM is aware that the Company's antecedent completed a significant tranche of work in 2015 whereby seam nomenclature and correlation was standardized for the Jerrys Plains and in particular the Vane Subgroup across the Howick, Hunter Valley and Lemington areas. This tranche of work enabled a single HVO geological model to be developed.

While RPM has not reviewed primary data sources such as geological logs, geophysical logs and laboratory coal quality reports as part of its data verification however has relied upon review of the following:

- Standards and Procedures (QA and QC) followed by the Company's antecedent for data acquisition, interpretation and database and model development and
- Data contained in the database and the geological models has been reviewed by several authors previously including third party competent persons and
- The laboratories which undertook the majority testing are ISO certified.

RPM conclude that the digital geological data for MTW and HVO has been adequately reviewed and validated using industry best practices as outlined below.

In addition, RPM is aware that the Company is performing a review of the geological data it acquired from its antecedent so that it meets the internal Company Standards.

Digital Data Base

The Company's antecedent utilised ABB's Minescape suite of geological database, modelling and mine design software which includes the system's Oracle-based geological database (GDB) and stratigraphic modelling package (Stratmodel). GDB is a relational database comprising a number of indexed tables linked by key variables including borehole collar, lithology, geophysics, coal quality (raw, wash and composite data) and geotechnical data.

As a result of the long exploration history and amalgamation of operations the HVO database includes data from multiple data sources and formats (Howick Mincom Geodas database, the Lemington Minex borehole database and Vulcan format database files from Hunter Valley No's 1 and 2 and Prolog files generated by field geologists). The majority of the data, with the exception of the Howick data, was a set of seam pick files consisting of from and to depths which could not be easily validated. During 2009 the original data was sourced, reformatted and in many cases encoded from English logs to populate the ABB GDB based borehole database. However, that work completed in 2009 was only an interim step and it was not until the completion of the Hunter Valley Legacy Data Project in 2015 that all geological data was transformed into a digital format and could be loaded to the GDB database.

The MTW database was subject to an extensive upgrade and validation process by 'Measured Resources' in 2012 where data quality, accuracy and completeness was improved significantly. As part of this validation a number of underlying "business rules" where built into the GDB database to ensure consistency and integrity of data including, however not limited to:-

- Relational link between geological, down hole geophysical and coal quality data
- Exclusion of overlapping geological intervals
- Restriction of data entry to the interval of the defined hole depth
- Use of defined rock type and stratigraphic codes
- Coal quality upper and lower limit bounds
- Basic coal quality integrity checks such ensuring data is within normal range limits, which proximate analyses add to 100 percent etc.

Drilling Types and Core Recoveries

Geological data generated since 2002 has followed the antecedent's data acquisition standards, documentation, systems and protocols for drilling, logging and sampling of bore core and chip samples, in pit mapping of rock exposures and geophysical data acquisition, interpretation and database management.

Data acquired prior to 2007 has been subject to the protocols of the Legacy Data Project and conforms to the standards followed by the Company's antecedent..

Both core and open holes have been completed at MTW with coring predominantly undertaken via HQ3-sized bit (63 mm) and open hole to an equivalent hole diameter size. RPM notes that seven holes at 150 mm and 49 holes at 200 mm diameter sizes were completed for evaluation of coal preparation properties. A total of 503 open holes and 230 cored holes were completed at MTW during the period 2004 to 2015 as shown graphically in Figure 6-1 while a summary of the holes completed since 2004 are provided in ***Table 6--1***.

Commencing with the 2008 drilling program a borehole grid design based on an equilateral triangular grid with cored boreholes spaced 250m apart and open holes spaced 125m apart was used at MTW. The MTW mined out area is largely supported by cored borehole data at 250m to 500m centres and open hole data at variable spacing but generally 125m apart. The intensity of core drilling is greater at Mount Thorley than it is at Warkworth, where there is a need to continue closing in core drill spacing to improve the status of Coal Resources. Borehole spacing of cored holes that intersect large parts of the sequence located west of Wallaby Scrub Road is relatively sparse and the spacing is 500 to 1,500m.

Table 6-1 Summary of Holes Completed since 2004

Type	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Totals
Open Holes	35	11	71	75	23	62	103	39	45	6	28	5	**503**
Cored Holes	7	1	6	19	18	17	24	47	44	31	13	3	**230**
Totals	**42**	**12**	**77**	**94**	**41**	**79**	**127**	**86**	**89**	**37**	**41**	**8**	**733**

Source: Provided by the Company

HVO

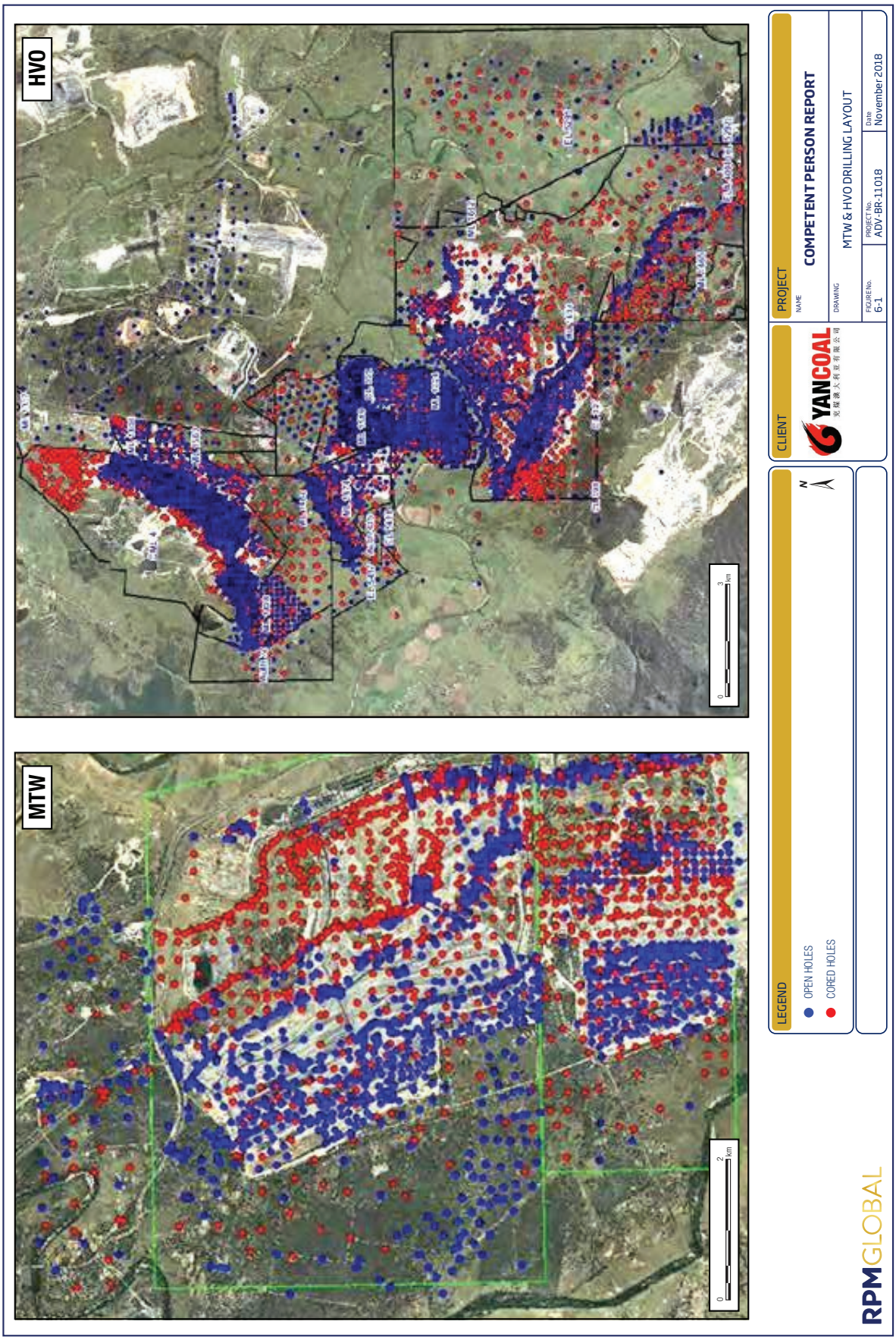
A combination of open holes (predominantly for structural definition) and cored (for coal quality, geotechnical and gas sampling) have been used for delineation of the HVO resource with the location of exploration boreholes at HVO is shown in ***Figure 6-1***. Borehole spacing for core holes is on an equilateral triangle grid of 500m or less, while open holes spacing is on a 250m or less equilateral triangle grid. Coring has predominantly been completed using a HQ3-sized (63mm) bit and open hole drilling to an equivalent hole diameter size. In addition a number of large diameter (LD) holes have been drilled with 103 holes at 101mm (4") and six holes at 200mm (8") diameter sizes.

A total of 1,010 open holes and 253 cored holes were completed at HVO during the period 2002 to 2015 as summarised in ***Table 6-2***.

Table 6-2 Summary of Drill Type for HVO Since 2002

	Area/Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Open Holes	Carrington	43	20	31							11	102				**207**
	Cheshunt	23	7	2	6	16	43		3	19	51		2	15		**187**
	West	37			25		9	134	38			6	5	4		**258**
	Mitchell	13										43				**56**
	Riverview	84			8		29		26	14	47		24	33		**265**
	Southern										12	25				**37**
	Totals	**200**	**27**	**33**	**39**	**16**	**81**	**134**	**67**	**33**	**121**	**176**	**31**	**52**		**1,010**
Cored Holes	Carrington		1	7				17	4		5	40				**74**
	Cheshunt	10	1		5	5	8		4	8	8	4		2		**55**
	West	4	7		8		3	7	4	4	3	9		2		**51**
	Mitchell										5	1				**6**
	Riverview				1	1			1	15	8	2				**28**
	Auckland											18			6	**24**
	Southern										15					**15**
	Totals	**14**	**9**	**7**	**14**	**6**	**11**	**24**	**13**	**27**	**44**	**74**	**0**	**4**	**6**	**253**

Source: Provided by the Company.


HVO
MTW
0
3
km
0
2
km
LEGEND
OPEN HOLES
CORED HOLES
N
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW & HVO DRILLING LAYOUT
FIGURE No.
6-1
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL

Topography and Collar Locations

The topographic surface at MTW is derived from a combination of 2m and 5m contour data digitised from topographic maps and 10m digitised data from the Bulga 1st edition topographic map covering the mined areas. This data was combined with surveyed borehole collars and mine survey data to form the final topographic map of the mined area. The topographic surface at HVO was developed from combinations of Lands and Property Management Authority ("LPMA") 10m contours which originated from the early 1980s and recent (September 2008) 2m contours derived from an AAM Hatch flyover. RPM notes that the historical mine out surfaces were on a coarse grid size, which doesn't allow suitable level of accuracy for the bench and batter definition. As such the depletion is potentially inaccurate however any potential change is not material and does not impact the forecast Ore Reserves.

Since 2007, borehole collars at MTW and HVO were surveyed post drilling by licensed surveyors using differential global positioning system with an accuracy of ±10 mm. RPM is aware that the Legacy data borehole collars have been converted to the MGA coordinate system and reviewed by the HVO survey team, while boreholes surveyed to local coordinate grids have not been converted to MGA where insufficient survey information was available and have not been used for model development.

Borehole collars have been compared with the natural topographic surface with reports nothing that the majority of borehole collars are located between 0 and 2m above the natural topographic surface. Some 1,100 boreholes have differences of greater than +/- 10m above or below the natural topographic surface, however all of these boreholes are located on in pit benches or on spoil and as such are considered suitable for geological model development that is used for Resource estimation.

RPM notes that all surveyed coordinates are within Map Grid of Australia 1994 MGA ("MGA94") Zone 56 projection using datum GDA94.

RPM considers that the topographic surfaces and borehole collar locations at both MTW and HVO have been developed with sufficient rigor to enable reliable Resource model development and Coal Resource estimation.

Down the Hole Survey

Geophysical logging at both MTW and HVO only became a common occurrence in the 1980's and 1990's respectively, while down hole borehole deviation data has only been acquired since the mid 2000's, however only deviation from 239 boreholes is loaded to the GDB database.

RPM considers that the historical lack of down the hole surveying is not material as the strata at both MTW and HVO are relatively shallow dipping and that borehole deviation particularly for HQ-3 cored holes will be negligible.

Geophysical Logging

Geophysical logging of boreholes has been carried out since the 1980's at Mt Thorley Warkworth and in general from the 1990s at HVO. Hard copy geophysical logs of boreholes are stored at each site. The suite of geophysical logs acquired generally includes natural gamma, short and long spaced density, compensated density, calliper, neutron, sonic and resistivity. Verticality surveys and acoustic and optical televiewer data has only been acquired since the mid 2000's. In 2006, LAS files were organised and stored on a server dedicated to mine planning. Not all geophysically logged boreholes have LAS data due to the borehole pre dating the time when geophysical data was acquired digitally.

RPM notes that down hole geophysical data is acquired by the geophysical service provider according to Company Standards and protocols.

Geological, Geotechnical and Geomechanical Logging

MTW and HVO are mature mining operations with the local and regional geology and geotechnical characteristics of the two areas well understood from open cut and underground mining operations and geotechnical logging and testing of bore core that have occurred over the past forty years.

Geological logging and sampling is performed by qualified geologists at the drill rigs in accordance with the Company Standards and procedures with all core logged for geology and geotechnical characteristics. Open hole chip samples are taken every 1m and logged for lithology. Quantitative logging for lithology, stratigraphy, texture and hardness is conducted using standard dictionary definitions, while colour and any additional qualitative descriptions are also recorded. Geological interpretation occurs by the following series of steps:

- Preliminary seam correlations are carried out with reference to geophysical logs and known marker intervals.
  - The primary marker intervals such as the Milbrodale Claystone, Fairford Claystone and Archerfield Sandstone are identified to provide the overarching stratigraphic framework for the Jerrys Plains Subgroup. The Archerfield sandstone is located below the Bayswater seam and has a distinctive bronze colour. The Fairford Claystone is located between the basal Warkworth ply and the uppermost Mt Arthur ply and the Milbrodale Claystone is located between the Arrowfield Zero and One seams;
  - Broad brush seam correlations are completed by use of 1:200 scale geophysical logs; and
  - The broad brush correlations are checked by referencing existing boreholes in the GDB database to ensure consistency with existing data and interpretations.
- LogCheck software which has similar business rules as the GDB database is used to encode lithology data.
- The lithology and seam data loaded into GDB are validated using GDB's business rules and validation tools.
- The LogCheck and GDB software business rules include but are not limited to:
  - relational link between geological, down hole geophysical and coal quality data;
  - exclusion of overlapping geological intervals;
  - restriction of data entry to the interval of the defined hole depth;
  - use only of defined rock type and stratigraphic codes;
  - basic coal quality integrity checks such as ensuring data is within normal range limits, that proximate analyses add to 100 percent etc;
  - Other checks are performed either periodically or before export of the data for loading into GDB include:-
    - missing or unlogged geological intervals highlighted;
    - stratigraphic picks out of correct stratigraphic sequence;
    - missing stratigraphic codes;
    - missing, anomalous, non-zero thickness, multiple or inappropriate (e.g. within overlying stratigraphy rather than host stratigraphy); and
    - Base of Weathering.
- A structural geology model is developed from which borehole postings, sections and contours are created and used by the geologists to validate seam correlations.
- Anomalous or incorrect seam correlations are corrected and the checking process repeated until the geological practitioner is satisfied with the integrity of the correlations.
- Fault locations and displacement are determined from surveyed seam roof or floor data, in pit mapping, from direct evidence in bore core and interpretation of missing or repeated sequences in boreholes.
- Fault displacements are calibrated by review of supporting seam roof or floor survey data in addition to ensuring that borehole seam data is honoured.
- Base of weathering data is interpreted from visual data from the original exploration boreholes.
- Geotechnical logging is completed by qualified geotechnical personnel and follows the Company Guidelines and Standards and is completed for all core boreholes at MTW and HVO. RPM also notes the following.

- Geotechnical logging is completed by qualified geotechnical personnel and followed the previous owners Guidelines and Standards and is completed for all core boreholes at MTW and HVO.
- The 'synthetic' formation strength is estimated from a regression equation developed from cross plots of Uniaxial Compressive Strength ("UCS") of bore core samples and sonic velocity correlations.
- Data acquired from acoustic or optical televiewer images provide more detailed information about defect orientation, spacing and intensity and the direction of horizontal stress.
- Additional geotechnical and structural data is acquired by field measurement by hand held compass and Maptek I-Site three dimensional laser scans of the excavation.

RPM considers that the recorded information is sufficient for reliable geological Resource and geotechnical models for development of reliable and safe LOM plans.

Bulk Density Determination

The density of coal and the immediate seam roof and floor have been determined from analysis of bore core samples while the density of interseam formations density is estimated from density logs. A range of relative density testing has been performed at MTW and HVO, with some samples having been tested for

- True RD analysis;
- Both ARD and true RD; and
- The majority of samples that have had ARD determined.

The relationships between ARD and true RD were determined from the paired sets of ARD and true RD analyses.

The relationships between ARD and true RD were determined from the paired sets of ARD and true RD analyses include:

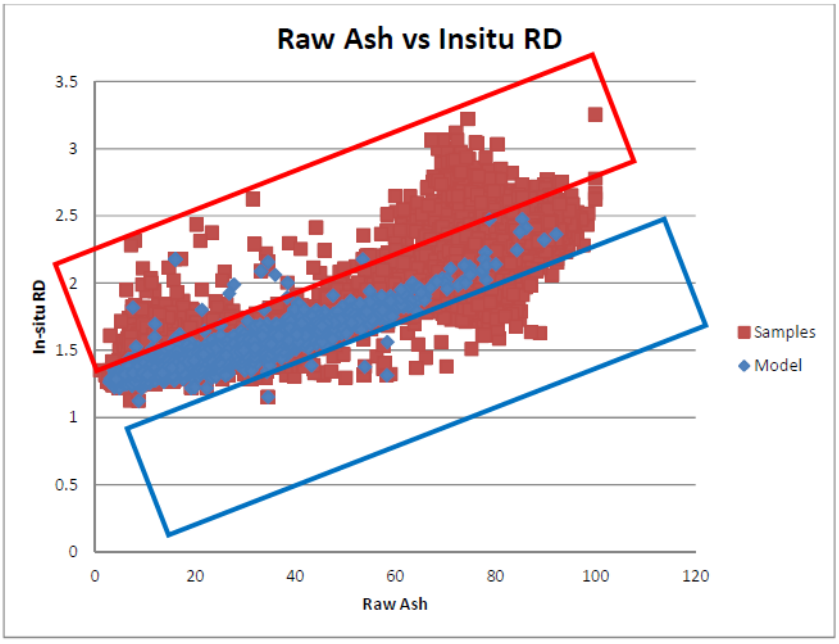
- MTW - The relationships used at MTW to populate the ply by ply data that has missing ARDs or true RD value are:
  - RD = 1.0003 x ARD 1.0645
  - ARD = 1.0045 x RD 0.9316
- HVO - The relationships used at MTW to populate the ply by ply data that has missing ARDs or true RD value are:
  - RD(ad) = 1.042 x ARD (ad) – 0.018
- The in situ relative density; i.e. the density of materials at an in situ moisture basis, was calculated using the Preston and Sanders equation:
  - RD2= [RD1*(100-M1)]/ [100+RD1*(M2-M1)-M2].

In situ moisture has been estimated by the equation moisture air dried + 4% for both HVO and MTW. Air dried moisture is typically 2% to 4% thereby in situ moisture will range between 6 and 8%. RPM considers this appropriate for the coal rank at HVO and MTW. In general the stratigraphically higher coal seams, such as Arrowfield, have total moisture closer to 8% and the Bayswater seam will have total moisture closer to 6%.

RPM considers that the work performed by previous owners to populate the ply by ply density data in the GDB database at MTW has resulted in a poor to average relative density data set. The cross plot of ply by ply un-composited relative density and ash values show that relative density is overestimated, as shown in ***Figure 6-2.*** This plot shows that the raw ash and relative density cross plots contain a large percentage of outlier relative density data values, both overestimated (red polygon) and underestimated (blue polygon). RPM is unaware of any coal measure sediment samples for coal where the rank as measured by vitrinite reflectance (Rv max) is less than 1% Rv max:

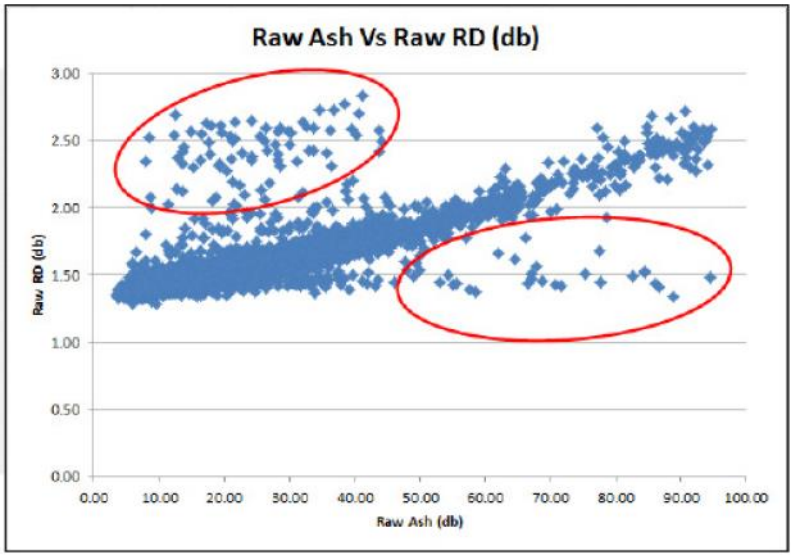
- Having ash content of less than 40% and relative density values greater than 1.8 and
- For coal seams to have relative density greater than 2.2 (and up to greater than 3) when ash values range from 60% to 80%.

Figure 6-2 Cross Plots of Raw Ash and In situ RD for All Samples and Modelled Seams at MTW



The HVO database contains similar relative density outliers to MTW, as shown in ***Figure 6-3***, where 141 composited raw coal sample outliers have been identified.

Figure 6-3 Cross Plots of Raw Ash and In situ RD for All Samples and Modelled Seams at HVO



RPM considers that the MTW and HVO database contains a large number of outlier relative density values that are causing both under and overestimation of relative density. RPM consider that potential estimation errors of relative density will not have a material impact on the Resources and Reserves estimate, because the number of overestimated and underestimated values will have a negating effect.

Good practice has been followed at HVO to develop relative density models for estimation of Coal Resources and Reserves. Outlier relative density values (those values above or below 1.5 times the interquartile range) were excluded from coal quality model development.

Sampling and Sample Preparation

The Company's antecedent followed the procedures outlined in the document 'Coal and Allied's Hunter Valley Borecore Testing Programme' documentation for coal sampling, preparation and testing which was introduced in March 2011. RPM is unaware of any documentation describing coal sampling, preparation and testing prior to 2011 but understands that relatively consistent informal practices were followed at both MTW and HVO prior to 2011.

Washability testing at MTW has historically been carried out at a range of different densities. In 2007, washability data was loaded into spreadsheet based LIMN simulation software to standardize the washability data into a consistent format.

All HQ-3 (63 mm diameter) core samples are weighed, air-dried and then re-weighed before being crushed to an 11.2 mm top size. Subsequently coal quality testing was completed over a three stage process consisting of:

- Raw coal quality testing;
- Washability; and
- Clean coal composite testing of washed coal fractions to simulate product quality.

Table 6-3 and ***Table 6-4*** summaries the analytical testing procedure followed by Company's antecedent for raw coal, float and sink and clean Product Coal composites. As noted previously a limited number of large diameter ("LD") holes have been drilled at MTW for evaluation of coal preparation properties. Testing of the LD holes was for eleven size fractions with a top size of 50mm.

Prior to May 2013 samples were analysed by ALS (previously named ACIRL) at their Steel River, Newcastle laboratory. Post-May 2013, samples have been sent to the Bureau Veritas laboratory in Brendale, Queensland. All sample treatment and analysis is conducted according to procedures which adhere to Australian (or International equivalent) standards in a National Association of Testing Authorities certified laboratory.

Table 6-3 Analytical Tests for Raw Coal and Stone Ply Samples

Raw Samples	Raw Coal Analysis	
	COAL	STONE
Relative Densityad (AS 1038.21.1.1 - 2002)	√	√
Moisture (ad)	√	√
Ash (ad)	√	√
Volatile Matter (ad)	√	
Fixed Carbon (ad)	√	
Calorific Value (gad)	√	
Total Sulphur (ad)	√	√

Source: Provided by the Company

Table 6-4 Analytical Tests for Float Sink Testing

Sample Type	Fractional Separation Density	Standard	Detailed
COAL	F1.3		√
	F1.4	√	√
	F1.5		√
	F1.6	√	√
	F1.7		√
	F1.8	√	√
	S1.8*	√	√
STONE	F1.6	√	√
	F1.8	√	√
	S1.8*	√	√

Source: Provided by the Company
(*) Denotes testing for total Sulphur on selected samples for acid rock drainage.

Table 6-5 Analytical Tests for Clean Coal Composite Testing

Borehole Analysis type	STANDARD		DETAILED		
Composite Type	**CF1.40**	**CF1.60**	**BYPASS**	**CF1.40**	**CF1.60**
Moisture (ad)	√	√	√	√	√
Ash (ad)	√	√	√	√	√
Volatile Matter (ad)	√	√	√	√	√
Fixed Carbon (ad)	√	√	√	√	√
Calorific Value (gad)	√	√	√	√	√
Total Sulphur (ad)	√	√	√	√	√
CSN	√	√	√	√	√
Moisture Holding Capacity			√		
Carbonate carbon (ad)		√	√	√	√
Ultimate Analysis		√	√	√	√
Ash Analysis		√	√		√
Ash Fusion (reducing)		√	√		√
Trace element analysis			√		√
Chlorine			√		
HGI			√		o
Abrasion Index					o
Petrography - macerals/reflectance				√	o
Giesler				√	o
Gray-King Coal Type				√	o
A-A Dilatometer				√	o
Forms of sulphur			√	√	o

Source: Provided by the Company
o = Optional

Core Recovery

Core recovery is recorded by the drill rig geologist while logging the bore core. Overall, linear core recovery of greater than 95 per cent was required by the Company's antecedent. Linear core recovery less than 95% in coal requires that section of the borehole to be re-drilled. Ply samples masses are also checked for representativeness against a theoretical mass after raw coal quality analysis and prior to composite definition. Open hole chip recovery is assessed qualitatively by the rig geologist.

Quality Assurance Quality Control

RPM is aware that non-formalised quality assurance/quality control (QA/QC) checks involving duplicate samples are regularly undertaken as per standard coal industry practices. In addition, RPM understands that check laboratory round robin and basic reproducibility tests are flowed both by ALS or Bureau Veritas. All coal quality results were assessed by the Company's antecedent using a range of validation methods that included:

- The sum of all percentages reported for proximate analysis, ultimate analysis and petrographic analysis should total 100%. The exception is ash analysis, for which the sum of the oxides has an allowable range between 98% and 102%.
- Ash Fusion Temperatures: Check deformation flow temperatures to ensure they are always increasing for the one sample.
- Review of classical statistics for the significant seams of each raw analytical element and produce relevant histograms from the quality samples used in model development.
- Review cross-plots of related parameters such as relative density and ash, energy and ash.
- Check that yields add up to 100%.
- Check sizing and relative density fractions to ensure they are reported in the correct order.

Data transfer from site is covered by the agreed protocol Company's antecedent.

Sample Security

All drilling activities prior to the Company's management were managed by its antecedent's on-site geological teams at each of the individual sites. Subsequent to the Company's management all drilling activities have been completed by contractors under the Company's supervision by Company staff geologists.

Due to the style of drilling undertaken within the Assets the personnel of the Company's antecedent completed core sample handling rather than the contractors. These activities include the drilling crews being responsible for delivering the core to the core logging facility where geologists log and sample the coal core and box the non-coal core. The geologist transports the coal core samples and core boxes to the core shed, where the coal samples are stored in a locked secure core shed until the cored hole has been completed. Samples from an entire cored hole were transported by a dedicated courier to the laboratory. Core samples from MTW are stored in a refrigerated unit in the MTW core shed prior to dispatch to the laboratory.

RPM considers these procedures to be industry standard and regards the sample security and the custody chain to be adequate, however notes that no details were provided for sample security prior to 2007.

Data Verification Statement

The review undertaken by RPM of the drilling and sampling procedures indicates that in general, good practices were used with no material issues noted.

RPM also notes the majority of the data within and used for the resource estimation were derived from drilling from post 2007 and have followed the relevant Company procedures and protocols. Data acquired prior to 2007 has been subject to the relevant Company procedures and protocols that were implemented as part of the HVLDP and as such all data is considers to be of good standard.

RPM considers that the data which supports the resource estimation has no material errors.

6.2 Moolarben

Bore Hole Data

Exploration in the resource area commenced in 1950 and is currently ongoing. A total of 1,025 drill holes have been completed..

Drill hole spacing varies from <250m to >1 km towards the edges of the lease. Drill hole data intersecting the Ulan Seam exist outside the MCC tenements and two coal mines mining the Ulan Seam (Ulan and Wilpinjong) are located adjacent to MCC, which is further confirmation of coal seam continuity.

Digital Data Base

Drill hole data is stored and validated in Geobank database. Geobank is a drill hole database software package that provides an environment for capturing, validating, storing and managing geological data.

Drilling Types

The Moolarben area includes contains 1,025 boreholes:

- 517 core holes, most of these holes were pre-collared to within 20m of the target Ulan Seam and then diamond cored using HQ size triple tube (HQTT) core barrels to core below the seam floor. Several holes have been fully cored to gather geological and geotechnical information on the full stratigraphic package and at least five large diameter holes (6") for full washability analysis.
- 285 rotary holes.
- 223 rotary air blast for limit of oxidation definition.

Topography and Collar Locations

Borehole collars and mined surfaces have been surveyed by registered surveyors using GPS equipment. The current grid system is GDA94 in Zone 55.

A LiDAR topography survey was acquired in 2010 to an accuracy of +/- 0.1m which is considered very accurate for the resource estimation process and mined out areas are surveyed by registered site surveyors.

Down the Hole Survey

All holes were drilled vertically which is considered the most appropriate given the flat lying nature of the deposit. As such no down hole surveys were completed which RPM considers suitable

Geophysical Logging

Most recent MC, MCOL and WMLB series holes (except redrills, some pilot holes and piezometer holes) have been geophysically logged to total depth and core has been photographed.

Groundsearch Australia Pty Ltd geophysically logged most of the holes. Groundsearch follows their calibration protocols for all the tools before using them on site.

An airborne magnetic survey was carried out over the planned underground longwalls (UG1 and UG2) to identify magnetic features. This survey identified a number of potential igneous bodies which may affect underground mining. Drilling targeted two main features and confirmed two diatremes. RIM borehole to borehole survey has been undertaken to define the size and shape of the diatremes at seam level ~~but~~however one of these features requires further investigation.

Geological, Geotechnical and Geomechanical Logging

All holes have detailed lithological logging through the whole length of the hole (100%), which have been used for seam correlation supported by geophysical logs where available. Core holes include geotechnical logging, point loading tests and selected samples are sent to geotechnical labs to support mining studies.

The amount, type and detail of information collected from logging of the boreholes is considered by RPM to be appropriate to support the Resource Estimate.

Bulk Density Determination

Relative density (RD) has been determined for most analysed samples on an air dry basis using Australian Standards. RD is then adjusted to in situ moisture basis using the Preston & Sanders equation at an estimated in situ moisture of 6%.

Sampling and Sample Preparation

The entire cored section of each coal ply sampled is placed in the sample bag. No splitting, subsampling or sawing of coal samples takes place outside of the laboratory. Coal quality analysis is completed by NATA approved laboratories which comply with Australian Standards for coal sample preparation.

Bureau Veritas and SGS Australia (for the latest samples) analysed the core samples from the MC, MCOL and some WMLB series holes. CCI Australia analysed earlier samples from WMLB holes. All laboratories followed similar treatment procedures. Coal samples undergo Proximate analysis, relative density, total sulphur and specific energy; and selected plies (DTP and DWS) were tested for hardgrove grindability (HGI). The remaining sample undergoes float/sink testing and each density fraction is analysed for ash. Clean coal analysis has been undertaken for each ply at 1.50 g/cc or 1.60 g/cc density, including Proximate Analysis, sulphur, calorific value, HGI, phosphorous and ash analysis.

Based on ply thickness and HQ core size the amount of sample available for testing is reasonable for the tests completed.

Core Recovery

Chip sample recoveries are not relevant as these samples are only used to define limit of oxidation not to assign quality parameters to the coal seam.

Core recovery is recorded by the drill rig geologist while logging the bore core and checked using geophysical logs and measured core lengths recorded in the lithology logs.

Core recovery for the coal seams is very good and core loss is infrequent in this deposit. Samples with core loss greater than 5% were excluded from the geological model and resource estimation.

Quality Assurance Quality Control

Borehole data is entered into Geobank and then depth corrected to downhole geophysical logs. Once the data is corrected it is flagged as completed and then requires special permissions to edit. Digital drill data is loaded into Minex for modelling and reporting. Seam thickness and ply correlations for each seam are checked in the Minex model via cross sectional analysis and contour plots.

Prior to modelling, statistical reports are generated to check anomalies have not been introduced to the dataset. Any anomaly is reviewed against original logs and reports.

Sample Security

All samples are sealed and marked appropriately with a tag inside and outside the plastic bag. Information is recorded on a third tag which is kept on site and on borehole sampling schedule forms. Copies of the sampling schedule are despatched with the samples. Coal samples are sent by secured courier to the laboratory

Data Verification Statement

RPM considers that the data which supports the resource estimation has been acquired and managed by following good to best practices and has no material errors.

6.3 Ashton

Bore Hole Data

The tenement area includes 297 holes of which 12 were drilled by YAL (10 non-core holes and 2 core holes). Of the 285 historical boreholes drilled prior to YAL ownership, 142 were cored for coal quality, geotechnical and gas studies and 143 were non-core structure holes.

There are an additional 4 drill holes located outside of the Ashton resource area that are included in the drill hole database to assist in modelling of the deposit with the Project boundaries.

Digital Data Base

Drill hole data is stored in a Geovia Minex drill hole database. Geovia Minex is a geological modelling and mine design software. The geological data including collar, lithological, seam pick, downhole geophysics, sampling and coal quality data is stored in a series of data files.

Geovia is not a true database, however RPM is aware that YAL is transforming all data to follow internal YAL Standards which is best practice.

Drilling Types and Core Recoveries

Both wireline coring (HQTT – 61mm diameter and NMLC – 51.8mm diameter) and non-core slim hole drilling have been conducted across the deposit. Historically, Ashton primarily used rotary air blast with percussion hammer bits to drill the non-core holes and the pre-collar sections of core holes, with some mud rotary drilling near areas containing shallow alluvial cover.

All surface and intra-mine IS series exploration holes have been drilled and cored vertically with no HQTT or NMLC core oriented. However, deviation data has been acquired by geophysical logging but is only available for surface exploration holes. Maximum horizontal deviation in the YAO series holes was up to 8.6m over 250m depth (in YAO-009). On this basis it was decided that the drill dataset did not require correction for verticality and all holes have been modelled vertically, because the correction for seam reduced level is not material, and there were no critical operational reasons that required more precise location of drill holes.

Topography and Collar Locations

All surveyed borehole collar data provided by Ashton Coal was supplied in GDA 1994 co-ordinates, MGA Zone 56. Collar data for some historical holes were excluded from the data due to lack of confidence in their collar locations.

The current topography DTM surface was supplied to Ashton Coal in September 2013 based on an aerial survey flown in January 2013. It appears satisfactory for resource modelling and estimation.

The current underground surveyed face positions of the Upper Liddell (ULD) and Upper Lower Liddell (ULLD) seams at 30th June 2018 and the LOM plans were used to excise mined coal from the geological resource model. The LOM plans have been used to determine the coal resources within and outside the current LOM.

A check of collar heights against the topography model grid derived from the DTM (TOPO_50 - 50m mesh) showed several anomalies up to +/-30m between collars and the surface topography. These large anomalies were identified as being the result of spoil emplacement above original topography, with the borehole collar located on the original surface R.L. A check of a regional original topography grid, which included the Ashton deposit, against collar showed differences of up to 4m in the areas with spoil dumps, this is reasonable as the original topography was most likely based on historic 1:25,000 Lands Department topographic maps. Elsewhere differences between collars and the DTM were modest, generally <+/-1.5m. ~~Down the Hole Survey~~

Down Hole Survey

All drill holes have been drilled vertically. There are only a very limited number of drill holes which have verticality logs however these are not incorporated into the geological model. Based on the limited number of

verticality logs and the regional experience, RPM considers that not using drill hole verticality will not be a material issue operationally and for Resource and Reserve estimation.

Geophysical Logging

A standard suite of downhole geophysical logs including ~~caliper~~calliper, natural gamma and density, were acquired in all holes used in the model. Some holes were also logged with resistivity, sonic, neutron, borehole televiewer and verticality.

Geophysical logs were acquired to supplement the geological description of the cores and to ensure that the core recoveries were satisfactory (>/= 95%) and to assist with correlation of the various seams present. All surface core holes and open holes used in the model have been geophysically logged. Historically, (prior to 2007) geophysical logs were acquired either by Wootmac or Rutherford. Since 2008, most boreholes have been geophysically logged by Groundsearch Australia. Regular calibration of geophysical logging tools is standard practice for logging companies.

All intra-mine (IS series) core holes were not geophysically logged however core recovery is recorded in logging and core photos taken.

Geological, Geotechnical and Geomechanical Logging

All drill cuttings and core from the Ashton historical boreholes were qualitatively lithologically described on hand written geological record sheets and then later encoded into the computer using Prolog software initially by Ashton's geologists, then later by Earthdata personnel. The computer files were uploaded into computer geological databases for modelling. YAL have adopted a similar methodology.

Logging of chip and core samples is detailed and includes a record of the recovery of the total length and the drilled core length, lithology type, lithology descriptions to describe the sample in terms of colour, grainsize, bedding and bedding spacing, bedding dip, mechanical state, weathering, bedding relationship, structure, dip of structures, mineral forms and there associations, primary bedding forms, sedimentary contacts, defects and spacing, all of which is entirely sufficient to describe the various lithologies and coal samples to support the coal resource estimation from a geological, geotechnical and coal quality consideration. All YAL core was photographed. Geos Mining determined that 40 historical WML and WMLC core holes contain core photos and 30 do not. All of the WMLC300-series holes contain core photography. The lack of core photos for the earlier WMLC holes is not considered to have a material impact upon the resource estimation.

Assessment of the geological and geotechnical logs indicate they have been logged to a level of detail to support appropriate Mineral Resource estimation and mining studies.

Bulk Density Determination

Relative Density (RD) which measures the coal density without the void space and ash measurements have been conducted systematically on many coal and stone core samples. The Moisture Holding Capacity (MHC) has also been tested on selected samples across the Ashton deposit which has enabled an assessment by Geos Mining using ACARP 10041C to determine the in situ moisture. An estimate of 6.5% for the coal was determined. In situ densities were calculated by use of the Preston & Sanders formula.

In situ density grids were generated from adjusted density values derived using in situ moisture of 6.5%.

Sampling and Sample Preparation

The entire core thickness was used in sampling (sawing, quarter or half sampling of core is not a standard sampling technique in coal exploration). No non-core samples were used in the database/model/resource estimate.

The core sampling protocol followed by Ashton was to sample the "cleanest" coal intervals based on visual examination and sample stone partings separately using a 0.30m minimum parting thickness limit. Roof and floor sub-samples were also taken. The nature, quality and appropriateness of these core sampling procedures was not documented but are expected to have been to an industry standard sampling the entire core

section/ply/sub ply into plastic bags with some form of identification. No sample preparation takes place outside the laboratory.

No coal core duplicates are taken as the analysis methods for coal require the whole cylindrical seam section for analysis. Sub-sampling of the sampled core is part of the treatment procedure at the laboratory where a portion of the sample is reserved for the purpose of sample analysis checks and or additional testing. The laboratories (SGS Australia, Carbon Consulting International Pty Ltd and currently Bureau Veritas) follow Australian Standards methods and are all NATA accredited.

The core size of 61mm for surface holes and 51.8mm for intra-mine (IS series) provide sufficient sample to conduct the typical proposed testing program. Significantly the coal industry standard for core diameters suitable for the analysis of coal core has increased to typically 83mm (PQTT) and 4" core (100mm) where possible which tends to improve the recovery of the coal and the quality of the core recovered. Limitations exist for the underground drilling operations and the core size although not typically ideal is satisfactory where good core recoveries are achieved.

Core Recovery

The documentation and reporting does not describe the methods of recording and assessing core recoveries, nor does it describe the measures taken to ensure sample respresentivity. Best practice in the coal industry requires that the coal core is matched to the geophysical logs and depth corrected prior to sampling ensuring that there are no depth misalignments and to establish core losses prior to sampling to determine if the core recovery is satisfactory (preferably >95% recovery) to sample and conduct coal quality testing.

In selecting boreholes suitable for use in developing the 2014 geological model, Geos Mining conducted a review of the historical core data on a seam by seam basis and some seam quality data was excluded where the sample did not meet minimum acceptable core recovery criteria of 80% volumetric or 95% linear recovery where sample mass information data was not available.

For the IS series holes (which have no geophysics) spot checks of core photographs to determine whether the mass recovery determined by the laboratory are acceptable were conducted by the geological consultant Geos Mining. Geos Mining commented that the mass recovery may have generally overstated the core loss sample intervals and that these values become unacceptable in cases where the laboratory reported values of less than 80% volumetric recovery. RPM recommends that comparison of the seam section graphic section with surrounding geophysical logged holes is completed to assess likely recovery of core relative to the stone partings to determine whether the present core recovery calculation is valid.

It is not expected that there is a sample bias due to preferential loss/gain of material. Coal seams range from bright banded to dull so preferential loss of bright coal could occur although drilling methods would try to minimise losses in these zones.

Quality Assurance Quality Control

Previous consultants including both Palaris and Geos Mining have conducted extensive validation exercises prior to completing their resource estimations in 2012, 2013 and 2014.

Geos Mining consolidated the data supplied by Ashton with the Palaris Minex resource estimation model 2013 database exports. Data was compiled into custom-designed tables within a Microsoft SQL Server 2008 database and served as the primary data source. Lithological logs, wireline geophysical logs, coal quality results (checked against NATA laboratory reports where available) and coal intersection depths were reconciled by Geos Mining before modelling and resource estimation in 2014.

In 2017, McElroy, Brian Geological Services (MBGS) directly used the collar survey and the coal quality databases provided by Geos Mining and incorporated updated geological and geophysical data provided by Ashton Mine.

RPM completed a selective audit of borehole data. Issues were identified with respect to where sample intervals and seam intervals were mismatched, and where relevant were updated.

The quality control procedures are inherent with NATA approved laboratories which undertake the testing of core samples to Australian Standard testing procedures and are subjected to regular round robin testing to ensure consistency of methods and results. The testing program procedures have sufficient reserve sampling in-built in the program to allow for checks of the analytical testing to be undertaken as required if the result is anomalous. External testing will be undertaken when required.

Sample Security

Measures to ensure sample security were not documented and reported historically. It was not possible to validate sample security.

The sample number, seam and ply number, depth interval and lithology type, were recorded in the digital sampling sheets. No documentation was available summarizing the "chain of custody" of the sample and the security systems established to ensure coal seam sample anonymity at the laboratory.

Data Verification Statement

RPM considers that the data which supports the resource estimation has no material errors.

6.4 Yarrabee

Bore Hole Data

Geological data acquisition has been ongoing at Yarrabee since the mid-1960s, when exploration was commenced by Minad and Bellambi coal.

The Yarrabee Mine area contains some 10,388 boreholes, of which 1,118 are cored holes of various diameters, ***Figure 6-4*** and forms the basis of the Yarrabee deposit knowledge. Open hole drilling was used for structural control, while core drilling was used for coal quality and gas desorption sampling and testing. ***Figure 6-4*** also shows the anticlinal area delineated by the Minad field mapping and exploration drilling completed during the mid-1960s. The yellow areas which represent the anticline area that contains the Burngrove Formation are relatively similar in both the Minad and the Company figures. The Minad plan has been rotated, because the plan was based on a local grid system.

A total of 4,575 boreholes are located in the mined out areas at Yarrabee. DOM 6 and DOM2S (The term DOM refers to Domain) contain a high percentage of historic data, however it appears to match the post 2008 data closely and has been retained. The Yarrabee East South (YES) area contains approximately 200 historic boreholes that also match the post 2008 data closely and has been retained.

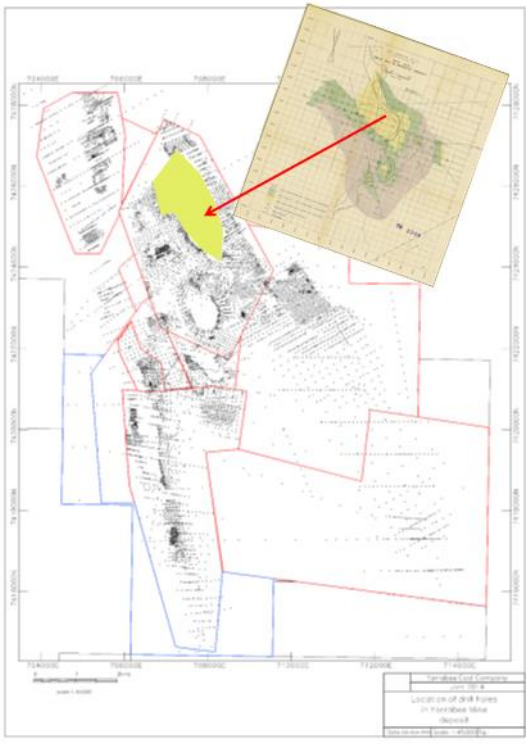
The distribution of boreholes in the Yarrabee area is concentrated in the northern and western areas of the resource areas because these areas are geologically the most complex. The southern part of the YEN and the YES resource areas have the least number of boreholes in the Yarrabee resource because these two areas are less structurally disrupted than the other areas.

The previous Competent Person opines that approximately 90% of the cored holes in the database meet the requirements of the Standard YAL core logging procedures. The majority of boreholes in the Resource area at Yarrabee is modern data that was acquired post 2008.

Geological data generated since 2008 has followed the Company data acquisition standards, documentation, systems and protocols for drilling, logging and sampling of bore core and chip samples, in pit mapping of rock exposures and geophysical data acquisition, interpretation and database management. All geological data acquisition since 2008 has been managed by Mr Stuart Whyte, the previous Competent Person.

Data acquired prior to 2008 has been subject to review by the previous Competent Person, according to the protocols he developed and made standard practice at the Company and is now implementing throughout the Yancoal organisation.

Figure 6.~~4444~~ Location of Exploration at Yarrabee



Digital Data Base

Since 2008, all field geological data logging was entered directly into GeoBank which is an electronic geological data management system. The coal quality laboratories provide the results of coal quality testing to Yarrabee in a template which is directly uploaded into Geobank which eliminates transcription and key in errors arising from data transfer. The Geobank database contains the following data types:

- collar survey;
- lithology;
- geophysics; and
- coal quality data.

Core and chip sample photographs are stored separately on a server.

GeoBank software is used by the geologists to encode lithology data at the drill site using tablet computers. Geobank contains validation and other business rules to ensure only acceptable codes that describe the rock types intersected can be entered by the geologists and that depth intervals and the like meet the business rule requirements of the database.

Drilling Types and Core Recoveries

Industry standard drilling techniques are used, with conventional rotary table drill rigs using air and water circulation. All drilling has been completed drilled vertical drill with no core orientation performed. RPM notes the following comments relating to drilling methods at the site:

- Blade/Hammer/PCD bits were used to drill open (chip) holes.
- Partially cored 4C (100 mm) core holes were drilled to obtain coal quality information. It is estimated by Yarrabee that 90% of core holes are 4C type holes.
- Due to the extreme geological complexity at Yarrabee, 4C (100 mm) core barrels were used to maximise core recovery. Minimum core recovery for core holes used in the model was 90%. It is observed that the brightest, lowest ash, friable/brittle coal is more susceptible to core loss, especially in faulted areas. Core loss usually occurs between core runs and thus the maximum 4C core barrel length of 4.5m was used to minimise the number of core runs and maximise core recovery
- In addition to minimising the number of core runs, the seam coring procedure used at Yarrabee for coring the Pollux seam is to stop the first core run in the middle of the Pollux Bypass Upper ply, (approximately 1m into the Pollux seam). The second core run is used to core the remainder of the Pollux seam. If any core loss occurs between the two core runs, it is entirely confined within the Pollux Bypass Upper ply which has the most consistent raw coal quality with less than 9% ash, less than 0.6% sulphur and less than 0.06% phosphorous
- Gas desorption testing was performed on HQ-3 core samples.
- All drilling has been completed using vertical drill orientation.
- No core orientation has been performed.

The Company coring instruction procedure, which is based on standard industry methods for obtaining bore core samples is followed by all the rig geologists.

Topography and Collar Locations

The topographic surface at Yarrabee is essentially flat lying. The topographic surface for the YES area has been developed from the borehole collars.

The initial borehole coordinates are obtained using handheld Garmin GPS by the site geologist using Aus Geoid 84 Zone 55. Final borehole collar survey is completed by the Yarrabee Coal Company personnel trained in surveying, using the Yarrabee Mine base station calibrated to AMG84_55.

Geological models are developed from topographic data from AAM Hatch airborne LiDAR, using control points to correct to the local grid. LiDAR data is acquired annually and is therefore up to date.

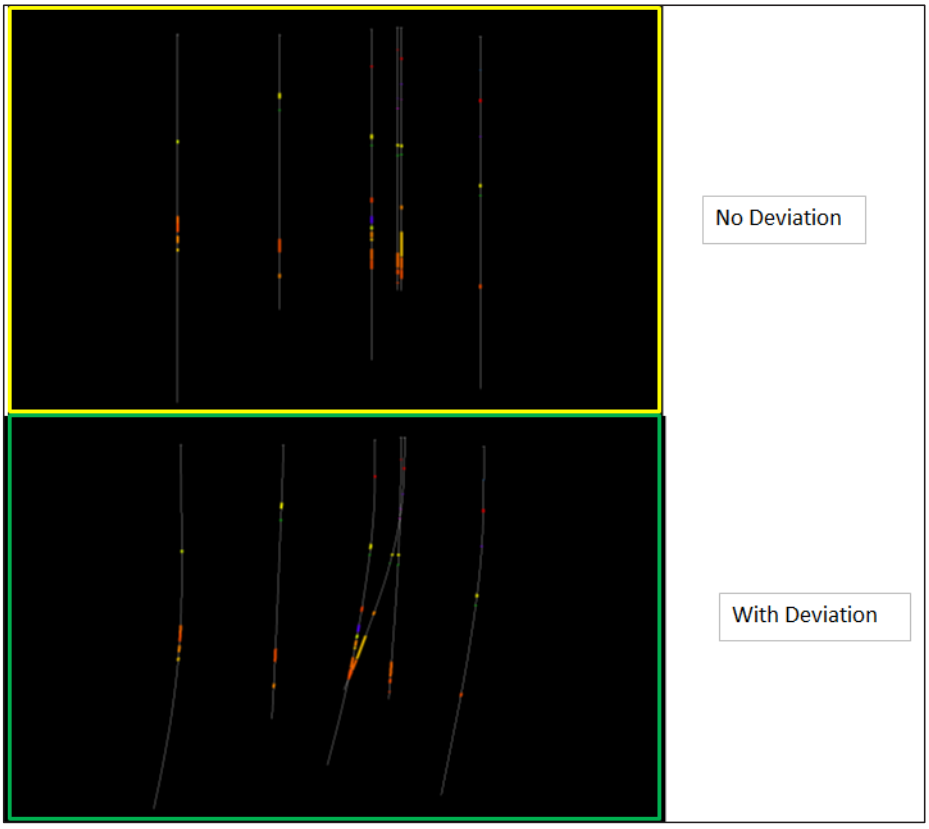
Down the Hole Survey

Boreholes were oriented and drilled vertically. Steep seam dips and the regional horizontal stress magnitude and direction cause boreholes drilled at Yarrabee to deviate significantly (updip) at greater than 60m depth, ***Figure 6.5,*** which shows the location of the seams intersected in six boreholes with no downhole deviation and the same boreholes with downhole deviation. The difference in the location of the coal seams in un-deviated and the deviated boreholes is 20 to 30m which is significant, when a geologist is interpreting the geology in areas of complex faulting.

Verticality data was acquired during geophysical logging and has been used for unambiguous location of the coal seams for 90% of boreholes used for development of geological models.

Core orientation has not been measured, because it is not a common industry method used for coal exploration and in general is less reliable and reproducible than use of deviation tools with dip meter.

Figure 6~~.5~~ .5 Seam Location in Vertical Holes Compared with Deviated Holes



Geophysical Logging

An estimated 90% of the Resource uses holes with digital geophysical logs. Some older holes only have paper copy geophysics. The holes without geophysics appear to have been corrected to geophysics and reliability has been verified from newer drilling and mining. Holes confirmed to be unreliable have been flagged in the Geobank database to avoid accidental use during modelling. In some areas these holes have been redrilled. The geophysical tools used were: short and long spaced density, natural gamma, calliper and verticality. A sonic sonde is run on cored holes.

RPM notes that down hole geophysical data is acquired by the geophysical service provider according to the Company Standards and protocols. The Company routinely acquires the following down hole geophysical data;

- Density,
- Gamma,
- Calliper,
- Downhole deviation and
- Acoustic Scanner.

Geological, Geotechnical and Geomechanical Logging

The Yarrabee coal mine is a mature mining operation with the local and regional geology and geotechnical characteristics being well understood from open cut mining operations that have occurred over the past forty years.

Standardised Yancoal logging systems and protocols are utilised for all drilling logging and sampling. Core is geologically logged and open hole chip samples are taken every 1m and logged for lithology changes. Geological logging and sampling is performed by qualified geologists at the drill rigs in accordance with the Company Standards and procedures.

All holes have been lithologically logged, with cored coal sections brightness logged. The logging of the chip and core samples is detailed and includes a record of the recovery of the total length and the cored length, rock type, stratigraphic unit and numerous adjectives to describe the sample in terms of colour, grainsize, bedding etc. all of which is sufficient to describe the various lithologies and coal samples to support the coal Resource estimation from a geological and coal quality consideration.

Limited geotechnical drilling has been completed at Yarrabee, due to the structural complexity of the area. RPM considers that interpretation of the faults on a 3D basis will enable most geotechnical hazards that may be present due to faulting to be interpreted. In general geotechnical assessment is not performed based on bore core data because the structural deformation at Yarrabee can be classified between complex and severe for some of the mining areas. Geotechnical drilling has been completed in the Yarrabee East South (YES) and Wilpeena areas. Geotechnical boreholes have been drilled vertically and as a result, do not intersect a significant number of defect structures, because joints and other structural features typically have subvertical orientation.

Open hole chip samples are taken every 1m and logged for lithology. Chip samples are photographed as they are sampled and laid out in 1m intervals. Quantitative logging for lithology, stratigraphy, texture and hardness is conducted using standard dictionary definitions, while colour and any additional qualitative descriptions are also recorded.

RPM considers that the recorded information is sufficient to define a reliable geological Resource model and geotechnical models for development of reliable and safe LOM plans.

Bulk Density Determination

The Yarrabee Mine has been in operation since 1982 with the density of the coal and its distribution within the seams well known. Most borehole samples have only true relative density (RD) analysis as such the relationships used to populate the ply by ply data with missing air dried relative density ("ARDs") or RDs are estimated by an ash RD regression.

The in situ density is estimated using laboratory ARD and adjusted to in situ density using the Preston Sanders method using the assumed in situ moisture of 5.5%. RPM considers that the insitu moisture estimate is suitable for coal of anthracite rank.

Sampling and Sample Preparation

Core sampling is completed at the drill site and is based on a set of standard criteria (determined by lithology and structure) that follows the Yarrabee sampling procedure which includes:

- All samples were photographed, double bagged and provided with a unique sample identifier prior to sending to the laboratory.
- Whole samples were used for quality analysis.
- All samples within the seam extents were analysed.
- Carbonaceous material and all stone bands were sampled to ensure that full coverage of each seam was obtained.

Seam extents were corrected to geophysics prior to coal quality analysis and then corrected to quality after the analysis was completed (if necessary).

Core Recovery

Core recovery is recorded by the rig geologist at the time of logging the bore hole based on measurements taken of stick up at the start and finish of core runs and the cored interval and the core recovered and visual inspection of the core. Actual recovered core lengths are measured with a tape measure and any core loss is recorded in geological logs, coal quality sample intervals and in the run by run drilling record field sheets.

Core loss is confirmed by the rig geologist after comparing the recovered core to the geophysical logs to determine which parts if any of the seam are missing due to core loss. Core loss is recorded and core samples are taken either side of the core loss interval in accordance with the Yarrabee Core Logging procedure. The Company estimates that 90% of the core holes in the database are compliant with the Standard procedure.

Historic boreholes (those boreholes completed prior to 2008) do not comply with the Yarrabee core logging procedure, however they have been reviewed by the Company geology team according to the Yarrabee procedures to select or exclude the borehole(s) from model development.

The database contains 1,316 parent seams with sample and coal quality data. Ninety two seams intercepts (7%) have less than 90% core recovery and that coal quality data is excluded from the coal quality model. Seventy three seams (5%) have between 90% and 95% core recovery and have been used in the model. 1,151 seams (87%) have greater than 95% core recovery.

If core recovery for a coal ply is less than 95%, then that section of the hole is redrilled to ensure a representative sample is taken, provided that the cored hole is not located in an area of high structural complexity, in which case lower core recovery is accepted.

Open hole chip recovery is assessed qualitatively by the rig geologist. The Company uses the accepted typical industry procedures for data acquisition.

Quality Assurance Quality Control

RPM is aware that non-formalised quality assurance/quality control (QA/QC) checks involving duplicate samples are regularly completed according standard coal industry practices. In addition, RPM understands that check laboratory round robin and basic reproducibility tests are followed by the NATA certified laboratories. All coal quality results were assessed by the Company geologist using a range of validation methods that includes but is not limited to the following examples of checks:

- The sum of all percentages reported for proximate analysis, ultimate analysis and petrographic analysis should total 100%. The exception is ash analysis, for which the sum of the oxides has an allowable range between 98% and 102%,
- Ash Fusion Temperatures: Check deformation flow temperatures to ensure they are always increasing for the one sample.
- Review of classical statistics for the significant seams of each raw analytical element and produce relevant histograms from the quality samples used in model development,
- Review cross-plots of related parameters such as relative density and ash, energy and ash,
- Check that yields add up to 100%,
- Check sizing and relative density fractions to ensure they are reported in the correct order.

Data transfer between the Company and the laboratories (as requests for analysis) and the laboratories and the Company is covered by an agreed Company protocol.

Since 2008, data has been stored in Geobank software. All required modifications are made in Geobank prior to being uploaded via ODBC to Minex for modelling. Some of the business rules contained in Geobank for validation of data include:

- planned borehole coordinates are within 20m of the actual as drilled collar coordinates;
- the borehole total depth matches the lithology depth and the drilled depth;
- the lithology data uses the correct codes;
- there are no negative thicknesses; and
- plies are constrained by the parent seam roof and floor constraints.

Sample Security

Core samples are bagged by the geologist and sent through the Yarrabee Mine Stores for dispatch. Samples are transported to the laboratory by dedicated courier service. Sample instructions are provided to the laboratory and Yancoal advise that no samples have gone missing to date.

In light of the bulk commodity nature of coal and the long mining history at Yarrabee, no higher level security measures are deemed necessary since it is very unlikely to be subject to material impact from sample tampering theft or loss. RPM considers these procedures to be industry standard and regards the sample security and the custody chain to be adequate, however notes that no details were provided for sample security prior to 2008.

Data Verification Statement

The review undertaken by RPM of the drilling and sampling procedures indicates that in general, good practices were followed by the Company and no material issues noted.

RPM also notes the majority of the data used for the resource estimation were acquired from drilling post 2008 that has followed the Company procedures and protocols. Data acquired prior to 2008 has been subject to The Company procedures and protocols to ensure the reliability of that data so that it could be used to develop the geological models.

RPM considers that the data which supports the resource estimation has no material errors.

6.5 Stratford and Duralie

There are approximately 2,500 boreholes contained within the databases for each of the deposit areas. Approximately 10% of the boreholes contain coal quality data used in the geological models. All holes used in the resource model and resources estimation were geophysically logged with downhole geophysical tools.

Digital Data Base

Borehole data is stored in Minex databases for each of the deposits for the Project. Data stored includes borehole survey, seam data, coal quality and, where loaded, downhole geophysics. Lease, fault, trend line and resource limit polygons are stored in Minex geometry files. Borehole seam structural, thickness and raw coal quality data are modelled in Minex grids

Drilling Types and Core Recoveries

Duralie

Non-core structural and core drilling initially targeted the Weismantel Seam with subsequent exploration targeting the more recently identified Cheerup and Clareval seams. Partially cored HMLC holes for Weismantel Seam were drilled during a 1995 drilling program. Large diameter boreholes (8" core) were drilled in 2002 to obtain a bulk sample from the Weismantel Seam. Approximately 20 LOX holes were drilled to define the seam sub-crop prior to mining. From 2005 onwards HQ and PQ partially cored holes were drilled to Weismantel, Cheerup and Clareval seams.

Exploration holes were drilled vertically. In the Early-mid 2010's several holes were drilled inclined to provide pit/geotechnical wall information ahead of mining. In 2017, 12 blast holes were geophysically logged to assist with structural interpretation in the Clareval bowl pit.

Stratford and Grant & Chainey

Non-core structural boreholes have been drilled to depths generally ranging from 50-250 m. Shallow limit of oxidation drilling (LOX) was completed to define pit low walls on now completed pit areas. Core hole drilling encompassed a number of diameter sizes: pre 2001 were 100 mm and 150 mm partially cored HMLC holes, post 2001 were HQ and PQ core size. Larger core sizes achieved better core recovery. In recent years (post 2009) core drilling has focused on PQ core size.

Holes were largely drilled vertically, however the exception to this is drilling in 2014-2015 in the northeast of Stratford where exploration drilling in steeply dipping areas was inclined, targeting multiple intersections of seams.

The Co-disposal resource is being mined and reprocessed. This resource is not supported by drill hole data. A surveyed volume is known and yields and product quality are estimated from CHPP actual performance.

Topography and Collar Locations

The original data was in the ISG coordinate system (Zone 56/1) and was converted to GDA94 (Zone 56) in early 2004. Since then models were created in GDA94.

Duralie

Good topographic control from digital terrain models (DTM), obtained pre 2000 and 2006. Borehole collars were surveyed and are generally within 1m of the DTMs (of approximately 900 holes approximately 100 holes are 1-2m from the DTM, 20 are 2-5m from the DTM and boreholes 1017R and 1165R are 23m and 35m respectively from the DTM). These two holes are located towards the centre of the syncline where Inferred Resources are estimated; the collar has not been altered as resurvey should be undertaken. Approximately 20 holes were drilled in 2015-2016 and 12 blast holes in 2017 in the mined Clareval Bowl area. These holes will show a discrepancy to the original topography and are acceptable.

Mine seam pick up data (up to April 2014) and pit survey (up to September 2017) is supplied by site surveyors and is of a good standard.

Stratford and Grant & Chainey

Although mining has occurred at Stratford, the 'original' topographic surface supplied by Gloucester Coal was used as the topographic surface for the models at Stratford and Grant & Chainey. This surface provides good original topographic control.

For Resource and Reserve studies the current mined surface was utilised. In Stratford West the mined surface for all pits (Roseville and Roseville Extension/West pits, Bowens Road West, Stratford Main pit and BRN pit) to the end of June 2014 was provided by mine site surveyors which RPM considers good quality data. This mined out pit data was blended with the base of weathering grid and the resultant surface was used to limit seam resources at Stratford.

No mining has occurred at Avon North, Stratford East or Grant & Chainey. For Stratford East the original topographic surface was merged with the 2014 DTM where the original topographic surface did not extend far enough east.. Original topographic surface is a combination of DTMs produced from aerial photography flown pre-2001, 2004, 2006 and 2014 (the majority of the area is covered by the 2006 DTM).

Borehole collars were surveyed and generally agree with the DTM. Borehole survey data are generally within 1-2m of the original DTM.

In some cases collar elevations differed by 2-5m and in rare cases 20m from the DTM (two holes were adjusted to comply with the DTM as this better fitted the surrounding structure). There are discrepancies between old borehole collars and the original surface in the Co-disposal area where reject material was emplaced and in the north of Grant & Chainey due to mine rehabilitation. There are also discrepancies where holes were drilled in partly mined out areas (including some 8000 series boreholes drilled in BRN Pit). These differences are acceptable.

Co-disposal area

The original topographic DTM is of good quality. The end of June 2012 surface was created from end June 2012 aerial photography with historical pits and voids to end September 2012 cut in (the end September survey of pits did not cover Cells 1-3). I.e. the upper surface for the Co-disposal area is dated end June 2012.

Down the Hole Survey

Borehole verticality has been collected for some however not all boreholes. Where available, borehole verticality has been used in the geological model. Some variation in seam thickness - is observed in the structural models as seam "kinking" due to the presence of or lack of down hole deviation. YAL consider that incorporation of verticality data produces more reliable models.

Geophysical Logging

As a standard procedure all holes were geophysically logged with downhole geophysical tools. Holes not successfully logged with downhole geophysics generally had poor hole wall stability. Poor ground conditions can occur in this highly structured syncline/basin with steeply dipping coal seams. Holes without geophysical logs could were not be used in the model as the drill hole data could not be validated.

Holes have at least density/gamma/~~caliper~~calliper logs run, a number of holes have sonic, verticality and/or acoustic scanner. The quality of some logs was poor, often related to the age or the company used. Weatherford, Ground Search and Coal Seam Wireline Services have provided the geophysical logging services. Presentation of the data varied between these logging companies and was at times poor, which has made it difficult to consistently pick thin plies. During recent drilling at Duralie in 2015-2016, Weatherford undertook geophysical logging of approximately 20 boreholes (logging suite included density/gamma/~~caliper~~calliper, vertically, sonic, neutron, dipmeter, acoustic scanner).

Geological, Geotechnical and Geomechanical Logging

Core holes were lithologically logged, coal core brightness logged and some post 2001 holes were also logged geotechnically. Generally logging was undertaken in sufficient detail (measurement and description); however there were a number of holes drilled during approximately 2009-2010, of which some were very basically/poorly logged. These holes heavily relied on geophysical logs to confirm thickness and depth of geological intervals.

Core and non-core holes were depth corrected and correlated using downhole geophysical logs and are considered reliable points of observation.

Generally logging is qualitative (core logging to ~~centrometric~~centimetre accuracy and non-core logging chip samples to metre accuracy). All core sections of boreholes were lithological logged. Most if not all non-core sections were also lithologically logged. Core photography is generally available for cored sections (largely for new holes not always available for pre 2001 holes). There are a number of holes drilled during approximately 2009-2010 some of which were very basically/poorly logged with coal core sections that were logged on a broad lithological basis rather than in detail.

No boreholes relate to the Co-disposal area this material is a waste emplacement area.

Bulk Density Determination

A mixture of Relative density and Apparent Relative density data was available from laboratory analyses. Only Relative density data was used in the database/gridding/resource estimate. Relative density data was converted to an in situ moisture basis (estimated at 6% moisture) to account for loss of void spaces during testing (Preston Sanders equation). An ash versus density regression was determined to enable estimation of in situ density for all plies with raw ash data.

Where sufficient data was available in situ density grids were generated. Default in situ density values were determined for each ply from the available data to use where gridded data was not available. Default density values range from 1.35-1.60 g/cc. For stone parting plies of the Weismantel Seam default density values used (when gridded data was not available) ranged from 1.80-2.1 g/cc.

For the Co-disposal area a default density of 1.10 g/cc was used as a reasonable density estimate for emplaced wash plant reject material.

Sampling and Sample Preparation

No splitting or sawing of coal core took place (quarter or half sampling core is not standard in sampling of coal).

Non-core coal samples were analysed from a small number of early chip holes intersecting the Clareval Seam to gain an initial understanding of basic coal quality parameters before a core rig was available to obtain standard core samples. No non-core samples were used in the database/model/resource estimate.

For holes completed prior to 2001, specific sampling techniques are unknown but were sampled generally to plies, however some were on a sub-ply or combined ply basis. For post 2001 holes core of coal seams were generally sampled on a correlatable ply basis but with some combined ply samples taken on thin plies and sub-plies on very thick plies (e.g. W2, CLM). A small number of core holes were correlated at the time of sampling and some holes were re-correlated post sampling. The entire cored section of each sample was placed in the sample bag with identification tags for subsequent quality analysis. Some samples include stone partings and this would affect raw quality results. Parting plies of the Weismantel Seam (P1, P2 and P3) were sampled and analysed.

No sample preparation took place outside the laboratory. Coal quality testing was undertaken at laboratories which comply with Australian Standards for sample preparation (including the ALS laboratory at Maitland).

HQ, PQ and 100 mm core sizes are appropriate for raw coal quality testing and float/sink testing. Large diameter holes drilled prior to mining commencing at Duralie were suitable for the drop shatter/float/sink testing undertaken. The ply thickness of samples at Duralie provided adequate sample mass for testing. At Stratford and Grant & Chainey there can be thin coal intersections and there is a potential that detailed float/sink analyses was undertaken in 2009-2010 holes on samples that were too thin.

RPM is unsure how sampling was undertaken at the Co-disposal area. Bulk samples from ongoing operations would provide an appropriate sample size for the material being sampled.

Core Recovery

Core recovery was recorded by the field geologist at the drill rig (drilled length and core recovered) and drill depths were subsequently corrected using down hole geophysical logs to accurately determine the location and magnitude of core loss. Varying core diameters have been used (largely HQ, PQ and 100 mm). Pre 2001 holes appear to have better core recoveries due to >100 mm core diameters used. Post 2001 - HQ holes often suffered poor recoveries. PQ holes were used post 2009 and generally achieved 90-95% core recoveries.

Coal seams in the Gloucester Basin have been subjected to considerable tectonic compression which can result in poor ground conditions when drilling. Some holes with high core loss were sampled. Only those holes with coal core recovery of greater than 80% were used in reporting and gridding qualities. 80% recovery was used to maximise the data due to the large number of plies in the deposit. Core loss intervals were inserted into the quality database to ensure correct selection of data in Minex software for reporting, gridding and tonnage estimation/reporting.

The effect of core loss at Gloucester is that analyses may underestimate the better qualities of the coal due to loss of the brighter parts of the sample (e.g. core losses generally result in higher ash, higher density, lower CSN), which results in underestimation of the quality of the insitu resource. However, a material bias in the quality values related to core recovery has not been identified.

Quality Assurance Quality Control

Significant intersections and/or anomalous geological or coal quality values are checked as part of the data compilation process (e.g. thick or thin intersections checked to geophysical logs/logged core sections, high or low quality values checked to original reports).

Raw coal quality data were compiled from original laboratory reports into a single spread sheet. Relevant data was standardised to a constant moisture basis of 2.5% (Stratford West, Avon North, Grant & Chainey) or 1.5% (Duralie and Stratford East). An ash versus density regression was developed (using RD at an estimated 6% in situ moisture) to enable generation of in situ density from raw ash data. An ash versus energy regression was also developed to generate energy data from all samples with raw ash data.

For Stratford and Grant & Chainey it was difficult to obtain original reports for pre-2001 holes and only a few are used in the data set. Sampling strategies pre-2001 often combined plies and inclusion of this data was difficult. For Weismantel Seam core holes prior to 2001, raw coal and float/sink data were compiled and validated by Quality Coal Consulting (QCC).

There are coal quality data for the co-disposal material available in laboratory reports. No adjustments have been made to the quality results of the co-disposal material.

Sample Security

Security measures of samples prior to 1999 are unknown, however are expected to reasonably follow standard industry practices.

Core trays are generally taken to the core shed as soon as possible (usually at the end of the day) after measurement and lithological logging of the core at the drill rig. The core shed is a secure location at the mine site. Core is sampled (after geophysical logging/correction/ correlation/core photography), bagged and tagged. Usually a site geologist transports the samples to the laboratory.

There have been occasions when the time frame between coring and sampling was over a few months and the core was not refrigerated. The coal seams at Duralie, Grant & Chainey and Stratford appear to hold fluidity very well and may not be adversely affected by a lag in time between coring and sampling of a few months.

Security measures for the Co-disposal area samples are not known.

Data Verification Statement

Borehole data reviewed by RPM were contained within Minex borehole databases and structural and coal quality grids. A number of downhole geophysical logs were loaded into the Stratford West and Avon North databases and checked against seam picks and coal quality intersections.

Given the steep seam intersections in Avon North and Stratford West, coal seam picks generally correlated well with downhole geophysical logs. Coal quality samples generally correlated well with geophysical logs and seam/ply picks. Some discrepancies occur in a few instances, possible due, in part, to differences between geophysical log picks and core intercept picks of steeply dipping seams.

RPM considers that the data which supports the resource estimation has no material errors.

6.6 Austar

The Austar resource is supported by a large range of data types in addition to borehole data. This additional support data includes;

- 103km 2D seismic that has been reprocessed a number of times as data processing capabilities have increased,
- 30.5km of ground magnetic surveys, and
- Mapping data from surrounding abandoned ~~mineworkings~~mine workings.

Bore Hole Data

Thera are approximately 180 ~~drillholes~~drill holes in the Austar Project area. Almost all drill holes were cored using HQ Triple Tube core systems, (HQTT- 61.3 mm diameter core) to recover core samples from the seam plus roof and floor strata. In addition some boreholes were drilled for structural investigation of faults that were interpreted from 2D seismic data and were fully cored (HQTT) from surface to acquire geological and geotechnical information for the full stratigraphic sequence.

All boreholes were spudded with vertical orientation. The Greta coal seam has almost horizontal (4° dip) to the southeast as a result all boreholes intersect the Greta seam almost orthogonally (85°). Borehole spacing varies throughout the Austar leases and is summarised by three spacing categories;

- The northern portion of CML2, core hole spacing ranges from approximately 250m to 600m while in the southern portion of CML2 core hole spacing ranges from 600m - 1,200m;
- CCL728 core hole spacing is approximately 1,000m, and
- EL6598 core hole spacing ranges from 1.0 km to 3.6 km. In addition to borehole data, an extensive array of seismic survey lines (>100 km) over CML2 and CCL728.provides support for seam continuity.

Digital Data Base

Austar has not described a true geological database. Data is stored in the Geovia Minex software, which does not have a true database. The Austar area contains a large volume of data which consists of approximately 180 boreholes most of which are geophysically logged, 103km of 2D seismic data, 30.5km of ground magnetic survey data and underground mapping data from the surrounding abandoned underground mine workings that are located predominantly to the north of Austar resource area.

Drilling Types and Core Recoveries

Due to the depth of the Greta Seam almost all holes were cored (HQTT- 61.3mm diameter core) to recover Greta Seam plus roof and floor strata. Some non-core holes were drilled for structural investigation of faults interpreted from seismic data. Some holes were fully cored (HQTT) from surface to gather geological and geotechnical information on the full stratigraphic package.

Topography and Collar Locations

Borehole collars over the last 17 years were surveyed by a registered surveyor using GPS equipment. Previously borehole collar surveys were carried out by registered surveyor using theodolite survey instruments. All collar data is considered by RPM to be adequate. Topography is from Department of Lands (supplied 2007) and is considered by RPM to be adequate.

Down the Hole Survey

All boreholes were vertical and the coal seam is almost horizontal (40º dip). All sampling from vertical boreholes is almost orthogonal (85º) to the target Greta Seam. No sampling bias has taken place.

Borehole verticality surveys have been incorporated into the structural model where available.

RPMGLOBAL

Geophysical Logging

Wireline logging companies that ran down hole geophysical tools for past and present exploration have, as standard operating procedures a calibration process which takes place on a regular (monthly) basis.

Surface seismic survey data acquired in the past at Austar is of high quality and has proved reliable in identifying faults in advance of mining and defining seam continuity between boreholes. The extensive network of seismic coverage has significantly improved confidence in the overall structural interpretation and continuity of the Greta Seam. Seismic survey data was all reprocessed by geophysicist J Saunders who specialises in seismic interpretation. The favourable nature of overburden strata above the Greta Seam allows for capture of very high quality seismic data. More recently geophysicist Mr. Gary Fallon has also reprocessed seismic data.

Geological, Geotechnical and Geomechanical Logging

Lithological logs are available for almost all boreholes. Some early NER prefixed non-core structure holes did not have lithological logs but down hole geophysical logs were available.

Coal seam depths are corrected to geophysical logs for both open and cored boreholes by the Austar geologist.

Logging of Maitland Group overburden strata may be of lesser detail as it is mostly non-core drilled. Core logging of roof and floor strata as well as the Greta seam has been detailed. Geotechnical logs are available from 1999. Core photography from pre 1999 holes is not available however since that time core photography has been standard procedure.

Bulk Density Determination

Relative Density (RD) and Apparent Relative Density (ARD) values have been reported on coal core samples in past and present drilling programs. Differing eras of exploration reported either RD or ARD on each ply sample.

For this resource estimate, coal quality data was separated into those reporting RD or ARD as per information from original coal quality reports. RD and raw ash data were then converted to an in situ moisture basis of 5% (using the Preston/Sanders change of base equation) and a regression was developed to allow estimation of in situ density (ID) for all data, from raw ash values. This included coal quality data which reported ARD only.

Sampling and Sample Preparation

Coal samples were taken from cored borehole intersections. Core sample size is generally HQTT (61 mm). HQTT coring is a coal industry standard technique to maximise core recovery and ensure sample is representative.

The Greta seam has been sampled on a ply by ply basis using the density geophysical log responses to determine sample intervals.

Coal core of Greta Seam is divided into plies using down hole geophysics and then sampled. The entire cored section of each ply is placed in sample bags. No splitting or sawing of coal core takes place. No sample preparation takes places outside the laboratory. Coal quality analytical laboratories used to analyse Greta Seam coal comply with Australian Standards for sample preparation.

Sample sizes are considered appropriate for the material being sampled and the coal testing regime.

Sampling of the Greta seam may not be consistent due to a number of differing eras of drilling plus gradational changes within the Greta seam that occur from west to east, with the seam splitting into an upper and basal section in the eastern part of the resource area. The correlation of individual plies may not be fully consistent across the Austar leases.

Austar has developed a number of composite intervals based on the ply samples to accommodate the variability of the older sample intervals.

Austar has merged all previous borehole ply correlations into one standard system comprising three basal plies each 1m thick each and up to eight consecutive 0.5m thick plies to the seam roof, which gives them the capability to assess standard longwall operations and longwall top coal caving (LTCC) options. However, given the cessation of TLCC in the Bellbird area due to high sulphur product coal and thinner seam section, it is likely that this methodology cannot be used successfully to predict product quality.

The more recent exploration data have been sampled with three basal plies each 1m thick each and up to eight consecutive 0.5m thick plies to the seam roof.

Core Recovery

Core recovery for the Greta Seam in most holes has been greater than 95%. Core recovery is measured at the drill rig when comparing drill run length to core recovered. This calculation is audited and confirmed by down hole geophysics (density log). Where core recovery has been less than 90% the hole has been redrilled. Using HQTT as the standard method of drilling is considered optimal to maximise coal seam recovery with minimal disturbance.

No bias in coal quality due to recovery has been identified and due to the high core recovery, any bias is considered unlikely or immaterial.

Quality Assurance Quality Control

Laboratories used to analyse Greta Seam cores have complied with Australian Standards for coal quality testing and are certified by the National Association of Testing Authorities Australia (NATA). Repeat sampling on a regular basis to validate results is standard procedure for proximate analysis testing.

Digital geological data for Austar resides in a Minex borehole database. This includes borehole survey data, seam picks, raw coal quality data and verticality data for more recent holes. Data in the database includes boreholes up to AQD1123. Recent holes drilled in 2017 will be loaded into the next geological model.

Sample Security

Coal core sample bags are sent to the laboratory via courier. In the past they have also been delivered to the laboratory by the field geologist or picked up from site by laboratory personnel. RPM considers this is appropriate for coal core samples.

Data Verification Statement

The borehole information was reviewed as part of the process of developing the geological and coal quality models used for this Resources estimate. No external audits or reviews are known to have been completed, however the data and model is considered by RPM to be suitable for inclusion in a Coal Resource estimate.

6.7 Donaldson

Bore Hole Data

In total there are 793 drill holes in the database for the Donaldson Project. Of the 793 drill holes:

- 361 have graphic logs and geophysical logs.
- 402 have graphic logs only.
- 30 have no graphic or geophysical logs.

Drill hole data at Donaldson has been acquired by many different parties, commencing in 1951 as outlined in **Section 4.1**.

Digital Data Base

In 2015, a third party collated and reviewed all the available drill hole data for Donaldson and re correlated all coal seams within the entire deposit. Subsequently, a third party obtained all available laboratory reports from

site and upgraded the coal quality database. Drill hole information is stored on the Donaldson mine geology drive. The compiled information used in the geological model is stored in a Maptek Vulcan Isis Database.

Drilling Types and Core Recoveries

Seventeen different phases of exploration have occurred at the Donaldson Project since the early 1950s. Hence, a variety of drilling techniques have been followed. All boreholes are vertical and are fully cored, partially cored or non-cored open holes. The majority of the holes are either non-core or partially cored HQ3 diameter holes.

Contractual arrangements requiring greater than 95% recovery on a seam basis have been in place for drill holes that have recently been drilled. The recovery is recorded in the geological database for a large portion of holes and it is generally at an acceptable level (>80%). Where the recovery is recorded and it is less than 80% then the sample is rejected from the geological modelling process. Where sample recovery has not been recorded it has been accepted as adequate if the results are considered consistent with surrounding data values.

Topography and Collar Locations

A topographic surface was created in the geological model built in July 2015 using LiDAR data acquired by Donaldson Coal in 2014/2015. The quality and adequacy of the topographic surface is considered good.

Boreholes recently completed have been surveyed by a registered surveyor using an RTK GPS system with a base station control. These collars have been captured and stored in the Map Grid of Australia (MGA) 1994 Zone 56 system. Locations of historical holes are recorded in either the old Integrated Survey Grid (ISG) or in Chains from referenced cadastral locations. Historical borehole surveys have been converted to the MGA 94 Zone 56 system; however, the accuracy of the conversion is not known by the Competent Person.

Down the Hole Survey

All drill holes at the Donaldson Project have been drilled vertical and are generally perpendicular to the coal seams. More recent drill holes have downhole verticality data recorded and show little deviation of the drill holes through the strata.

Geophysical Logging

Where downhole wireline geophysical data has been obtained it generally includes natural gamma, ~~caliper~~calliper and dual density. On occasions other tools have been acquired, including resistivity and sonic. Wireline logging tools are calibrated by the geophysical logging contractors in accordance with their company standards.

Geological, Geotechnical and Geomechanical Logging

Lithological and geotechnical logging has been undertaken on core and chip samples for the majority of boreholes. For a small collection of older boreholes these data have been lost and these holes are not used in the geological model. In most cases the logging is of a detailed enough nature to provide an accurate reflection of the geology. In most cases lithological logging encompasses the full length of the borehole.

Bulk Density Determination

In situ density was calculated for all samples using two regression equations developed by coal quality specialist Bob Leach. Bob Leach provided one regression equation for samples under 50% ash (adb) and another for samples over 50% ash (adb). In situ density was calculated at an in situ moisture of 4% using the Preston Sanders equation.

Sampling and Sample Preparation

Samples taken at Donaldson are generally only sub-sampled by the laboratory as a part of their coal quality analysis procedures. Sub-sampling by the laboratory involves either riffle or rotary splitting in order to receive a representative sub-sample to undertake each step of the analysis procedure.

Historically coal quality samples taken from boreholes have not undergone any pre-treatment, rather they have been crushed to pass 11.2 mm and then analysis performed. It is understood that coal quality samples received through channel sampling are subject to a pre-treatment process that involves drop shatter, sizing, wet tumbling and hand knapping.

The more modern coal quality analysis has involved analysing ply samples on an individual basis and the re-combining into working/seam sections on an RD x length basis.

Core Recovery

Contractual arrangements requiring greater than 95% recovery on a seam basis have been in place for boreholes that have recently been drilled. The recovery is recorded in the geological database for a large portion of holes and it is generally at an acceptable level (>80%). Where the recovery is recorded and it is less than 80% then the sample is rejected from the geological modelling process. Where sample recovery has not been recorded it has been accepted as adequate. No relationship between sample recovery and a quality bias has been identified.

Quality Assurance Quality Control

The Competent Person does not know of any audits or reviews of the sampling techniques.

In 2015 a third party undertook a large review of the seam and ply correlation as well as a comparison of the coal quality data against the original lab results. This extensive exercise resulted in a completely new geological model, which removed numerous small and several large errors.

Sample Security

Any sample security measures applied to historical samples is unknown by the Competent Person. Holes recently drilled (those holes completed in 2014) were double bagged with sample tickets included between the bags. A copy of the sample ticket was retained on site at Donaldson Coal.

Data Verification Statement

RPM considers that the data which supports the resource estimation has no material errors.

6.8 Middlemount

Bore Hole Data

Exploration data collection for Middlemount Coal has been managed by Peabody Energy Australia since 2008; all borehole data is completed using industry standard practices outlined in the CoalLog Manual for Geology & Geotechnical Data Collection ("CoalLog"). Data acquired prior to the release of the CoalLog industry standard in 2012, including holes obtained in tenement acquisitions and in open file Government reports, have been assessed by Peabody geologists and deemed to provide an adequate representation of the deposit.

The Middlemount Mine area contains some 1076 boreholes which forms the basis of its orebody knowledge; 732 of which were used in the 2018 geological model. Data is managed through multiple systems due to limitations on data capture abilities; however, paper copies are kept on site and network locations are used for data repositories. Three separate databases are used to perform different functions on the data: Task Manager, GeoCore and Isis. Their uses are explained in the following data flow process, as confirmed by Peabody's Geology Team:

1. The Field Geologist logs lithology data on paper. The paper log is kept in a borehole file on site and also scanned to network.
2. The Field Geologist data enters lithology into Task Manager and files are saved as <Hole>_FIELD for raw data.
3. Contract Geophysical logger logs the hole and provides hard copy and digital files to Geologist. Geophysics printouts for boreholes are kept at the Middlemount Mine Site and Peabody Field Exploration

Office. LAS and PDF files are acquired from the geophysical contractor and saved to Task Manager. All digital LAS is uploaded to the GeoCore database.

4. Mine surveyor surveys the hole and provides coordinates to the Exploration Manager for upload to the GeoCore Database. CSV files are kept on network.
5. Core photos are stored on the network and can be viewed with the lithological data via Task Manager
6. Task Manager is setup to validate data and flag data entry errors which do not conform with CoalLog 1.2.
7. Field Geologist validates all primary data and completed geophysical adjustments, based on gamma, calliper and density traces.
8. Once the hole correction is complete, it is saved as <Hole>_CRX on the network. The CRX file is then checked and edited as required by the Exploration Manager resaved as Hole.xls and uploaded to the Peabody GeoCore Database via Task Manager.
9. GeoCore does not store all fields, therefore, Excel records are kept on the network.
10. Sample advice summaries are exported from Task Manager to provide coal quality instructions to the laboratory.
11. All coal quality results are saved on the network and uploaded directly to GeoCore by the Coal Quality Department at Peabody.
12. When a model update is required, the headers, lithology, geophysics and raw quality data is exported from GeoCore and provided to the Resource Geologist as a CSV file.
13. The Resource Geologist creates an Isis database from the exported CSV files for Vulcan modelling.
14. The Resource Geologist models structure and raw coal quality from the created Isis database.
15. Any changes made during resource modelling are provide back to Peabody as CSV files. The relevant data is amended directly in GeoCore, however, this could take longer than 6 months for the data to be updated.
16. The updated model and Isis database are provided to site personnel at Middlemount Mine. There is no Mine Geologist at Middlemount and the responsibility falls on the Technical Service Manager.
17. In-house coal quality experts simulate washability and product coal quality upon the reporting of results by the lab.
18. Washability and product quality data is not accounted for in the resource model, however provided to mining engineers for reserving.

RPM is concerned that the data management practices could lead to divergence of data sets due to loss of version control, and data misuse. There are risks associated with data entry from field notes; using multiple versions of CSV files through importing and exporting into different systems which have different data storage abilities; and personnel accessing different systems for geological data. The lack of integration of the coal quality and structural data, and use of that data by the resource geologists is also of concern because it does not appear that product coal quality data has been considered in the Resource estimation process.

Drilling Types and Core Recoveries

RPM Global understand that industry-standard drilling techniques are used at Middlemount, with conventional rotary table drill rigs using air and water circulation.

Both open hole and coring techniques have been applied to the Middlemount deposit (Core drilling is typically by both HQ (nominal 60mm diameter) and 100mm diameter tungsten carbide drill bits and triple tube barrels.

(**Table 6-6**). Open hole drilling is used for structural control and to confirm seam continuity and the occurrence of coal is confirmed through downhole geophysical techniques. Blade/Hammer/PCD bits were used to drill open (chip) holes. Core holes have been drilled to understand the seam quality. Core drilling is typically by both HQ (nominal 60mm diameter) and 100mm diameter tungsten carbide drill bits and triple tube barrels.

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Table 6-~~-~~6~~:~~ Modelled hole types for 2018 Middlemount resource estimations

Total Model Holes	Open Holes	4-inch Core Holes	HQ Core Holes	Large Diameter Core Holes
732	429	69	231	3

Contractually, a redrill is required if less than 95% core recovery is obtained. Recovery less than 95% is occasionally accepted if the drilling environment is difficult, or when the loss is deemed acceptable by comparing against geophysics density logs and the position of the loss in the seam.

Topography and Collar Locations

Geological models are developed from topographic data from Middlemount Coal supplied Digital Terrain Model (DTM) data for the Middlemount area, as at the end of June, 2018. The topography of the Middlemount project area is gently undulating, with surface elevations generally ranging from 160-170m (AHD). Roper Creek flows west to east in the south of the project area.

Drill sites are located using handheld GPS by the Site Geologist and final borehole collar survey is completed by the Middlemount Coal personnel trained in surveying, using the Middlemount Mine base station calibrated to Aus Geoid heights and GDA94 Zone 55 datum and projection system.

RPM considers that the topographic surface and borehole collar locations at Middlemount have been developed with sufficient rigor to enable reliable Resource model development and Coal Resource estimation.

Down the Hole Survey

All drilling has been completed using vertical drill orientation. Downhole deviation data has only been collected on selected holes drilled in 2017, which accounts for only 7% of modelled holes. Deviations <5% was observed at depths greater than 100m and no adjustment for drill hole verticality has been applied to drill hole data used to develop the geological structural model.

RPM has reviewed a selection of verticality analyses and suggests that the Resource model would provide a more reliable estimate of coal seam depth and thickness with deviation data applied and could assist with identifying unmapped geological structures.

Geophysical Logging

RPM notes that down hole geophysical data is acquired by the geophysical service provider according to Company Standards and protocols.

An estimated 75% of the resource uses holes with digital geophysical logs. Some older holes only have paper copy geophysics. The holes without geophysics appear to have been corrected to geophysics and reliability has been verified from newer drilling and mining. Holes confirmed to be unreliable have been flagged in the Isis database to avoid accidental use during modelling. In some areas these holes have been redrilled.

The standard geophysical tools used were: density, gamma and calliper. Selected historic holes have verticality, sonic, resistivity, temperature and spontaneous

Geophysical logs are used to confirm the reliability of the Geologist's observation, provide a more accurate assessment of coal seam depth and discriminate coal seams and plies across the Middlemount deposit.

Geological, Geotechnical and Geomechanical Logging

Geological logging and sampling is performed by qualified Geologists at the drill rigs in accordance with the CoalLog Manual for Geology & Geotechnical Data Collection; however, only basic geotechnical characteristics are recorded such as defect type and surface roughness, with rare recording of defect infill type. Quantitative logging for lithology, stratigraphy, texture and hardness is conducted using standard dictionary definitions, while

colour and any additional qualitative descriptions are also recorded. Geological interpretation occurs by the following series of steps:

- Preliminary seam correlations are carried out with reference to geophysical signatures and known marker intervals:
  - The medial stone band present in the Middlemount Seam (which is the same as the medial stone band in the Pollux Seam at Yarrabee Mine in the central Bowen Basin);
  - The ~0.30m deteriorated material of the Tralee Upper ply at the base of the Middlemount Seam;
  - A thick interburden (~60m) between the Middlemount Seam and the Pisces Seam, both of which contain approximately 4-5m accumulated coal thickness;
  - The Yarrabee Tuff marker band at the base of the Pisces Upper ply.
  - Interbanded coal and tuffaceous material of the Girrah seam (Fort Cooper Coal Measures)
- Insertion of horizons such as Base of Weathering and recognition of Tertiary material interpreted from visual data from the original exploration boreholes
- A structural geology model is developed from which borehole postings, sections and contours are created to validate seam correlations
- Anomalous or incorrect seam correlations are corrected and the checking process repeated until the geological practitioner is satisfied with the integrity of the correlations.
- Faults locations and displacement are determined from surveyed seam roof or floor data, in pit mapping, from direct evidence in bore core and interpretation of missing or repeated sequences in boreholes. 2D seismic data has also contributed to the positioning of the Jellinbah Fault.
- Fault displacements are calibrated by review of supporting seam roof or floor survey data in addition to ensuring that borehole seam data is honoured.

With only basic geotechnical parameters noted in exploration drilling, it is the opinion of RPM that the level of geotechnical investigation at Middlemount is not sufficient for understanding highwall and ~~lowwall~~low wall stability, pit and dump slope designs and failure mechanisms encountered by the interaction of water, Tertiary material, regional faulting, upthrown strata on the east of the Jellinbah Fault and the Yarrabee Tuff as pit floor material. Further geotechnical investigation should also be carried out to understand roof and floor characteristics and vertical and horizontal stress regimes to assess the viability and suitability of underground mining methods.

Bulk Density Determination

The density of the coal and its distribution within the seams has been well established as the Middlemount Mine has been in operation since 2011. Most borehole samples have true relative density (RD) analysis.

The insitu density is estimated using laboratory air dried Relative Density (RD) and adjusted to insitu density using the Preston Sanders equation using the assumed insitu moisture of 5%.

Sampling and Sample Preparation

Core sampling is completed at the drill site and is based on a set of standard criteria (determined by lithology and structure) that follows the Middlemount sampling procedure. Both HQ and 4-inch core have been used across Middlemount's exploration campaigns for coal quality analysis.

Coal quality samples are based on the coal brightness in an attempt to maximise coking potential (typically associated with brighter coals). Carbonaceous material and all stone bands are sampled to ensure that full coverage of each seam intersection is obtained. Roof and floor strata (approximately 20-30cm of material) is also sampled and tested so that dilution qualities can be applied in the conversion of insitu quality to ROM quality. All samples are photographed and provided with a unique sample number before being placed into double plastic bags and sealed.

Samples are air dried and weighed prior to analysis. Raw analysis samples were crushed to -12.5mm and split into portions using a rotary splitter prior to coal quality analysis. One quarter of the sample is analysed for raw

coal parameters (***Table 6-7***), which the remaining three-quarters of the sample make up the reserve mass and washability samples (***Table 6-8***).

RPM opine that coal quality testing at 12.5mm top size does not enable the evaluation of plus and minus 16mm fractions for optimisation of the metallurgical coal products and thermal products.

Table 6-7: Analytical Tests for Raw Coal and Stone Ply Samples

Raw Samples	Raw Coal Analysis	
	COAL	STONE
Relative Density (ad)	✓	✓
Moisture (ad)	✓	✓
Ash (ad)	✓	✓
Volatile Matter (ad)	✓	
Fixed Carbon (ad)	✓	
CSN	✓	
Total Sulphur (ad)		✓

Table 6-8: Analytical Tests for Float Sink Testing

Sample Type	Fractional Separation Density	Ash (ad)	Cumulative CSN
COAL	F1.3	✓	✓
	F1.4	✓	✓
	F1.5	✓	✓
	F1.6	✓	✓
	F1.7	✓	✓
	F1.8	✓	✓
	F2.0	✓	✓

Although washability and product analysis are reported to be conducted across the resource area (following Middlemount's washability and product coal procedures), this data is not used for resource modelling. Raw coal ash and CSN are used to determine the coal mining sections for washed coal products.

Core Recovery

Core recovery is recorded by the rig geologist at the time during logging the bore hole, based on measurements taken of the cored interval and the core recovered and visual inspection of the core. Actual recovered core lengths are measured with a tape measure and any core loss is recorded in geological logs and core reconciliation sheets. Core run recovery differences are also noted on the core board and photographed.

A full assessment of core loss is confirmed by the rig geologist after comparing the recovered core to the geophysical logs to determine which parts if any of the seam are missing due to core loss.

Quality Assurance Quality Control

Sample instructions are issued by Middlemount Coal personnel, who are currently using ALS Global Coal Quality laboratory at Richlands, QLD for coal testing. RPM understands that the lab conducts round robin validation checks to ensure a high standard of reporting is maintained and follow appropriate Australian Standards for analysis.

Laboratory Project Managers collate and validate the data, looking for abnormalities in the results. The primary

means of validation include looking for known trends in the data, by creating cross plots of the results on a seam by seam basis. Typical industry practices include the comparison of the following (for example):

- Ash vs. Relative Density
- Volatile Matter vs. Ash
- Specific Energy vs. Volatile Matter
- Ash vs. Total Sulphur

Validation is conducted before and after data is loaded into Task Manager. The coal quality department at Peabody are responsible for the management and integrity of coal quality results.

RPM were provided with clean coal (product) quality composites by Peabody. In the absence of coking indices, the basicity index has been calculated (which can be used as an indicator of coking potential). A basicity index below 0.10 indicates reasonable coking potential. Of the 431 product coal composites, only 25% (108 samples) have coking potential based on the basicity index of the complete sample. The seams with the highest coking potential on a complete seam basis (where >50% of samples have basicity index <0.10) are the MU and TL2B seams).

Sample Security

All geology and exploration activities at Middlemount are managed by Peabody's Geology department. Core samples are bagged by the geologist and kept in refrigerated storage until they are dispatched to the laboratory by dedicated courier service. In light of the bulk commodity nature of coal, no higher level security measures are deemed necessary since it is very unlikely to be subject to material impact from sample tampering theft or loss. RPM considers these procedures to be industry standard.

Data Verification Statement

RPM completed review of the geological and digital data supplied by the Client to ensure that no material data issues could be identified and that there was no cause to consider the data inaccurate and not representative of the underlying samples. RPM visited the Middlemount Mine in April 2018 and reviewed the Asset's operation. RPM concluded that the data was adequately acquired and validated following industry best practices as outlined

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7. JORC Coal Resources

Coal Resources have been independently developed in line with the Australian Guidelines for the Estimation and Classification of Coal Resources (2014) and reported in line with the requirements of the JORC Code 2012.

7.1 Coal Resource Classification System under the JORC Code

A "Mineral Resource" is defined in the JORC Code as 'a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories (JORC Code – Clause 20).'

Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results.

For a Mineral Resource to be reported, it must be considered by the Competent Person to meet the following criteria under the recommended guidelines of the JORC Code:

- There are reasonable prospects for eventual economic extraction.
- Data collection methodology and record keeping for geology, assay, bulk density and other sampling information is relevant to the style of Mineral and quality checks have been carried out to ensure confidence in the data.
- Geological interpretation of the resource and its continuity has been well defined.
- Estimation methodology that is appropriate to the deposit and reflects internal grade variability, sample spacing and selective mining units.
- Classification of the Mineral Resource has taken into account varying confidence levels and assessment and whether appropriate account has been taken for all relevant factors i.e. relative confidence in tonnage/grade, computations, confidence in continuity of geology and grade, quantity and distribution of the data and the results reflect the view of the Competent Person.

The terms 'Mineral Resource(s)' and the subdivisions of these as defined above, apply also to coal reporting, however if preferred by the reporting company, the terms 'Coal Resource(s)'' and the appropriate subdivisions may be substituted. (JORC Code - Clause 43). As such in this report RPM will refer to Mineral Resource, as Coal Resources.

7.2 Area of the Resource Estimation

The Assets consists of several exploration and mining rights under the NSW and QLD mining codes. RPM notes that the reported Coal Resources include the following areas:

- **HVO Open Cut** – The resource area is contained within HVON and HVOS areas. The Resource in the HVON area is located in the Vane Subgroup and the Resource in the HVOS area consists of all seam groups within the Jerrys Plains and Vane Subgroups.
- **HVOS Underground** – The resource area is contained within the Arties and Barrett seams of the Vane Subgroup.
- **Mt Thorley Open Cut** - The resource area is contained within MTW (south of the Putty Road) and consists of a number coal seams within the Whittingham Coal Measures which occur within 320m of surface and exploitable by Open Cut methods.
- **Warkworth Open Cut** – The resource area is contained within MTW (south of the Golden Highway and north of Putty Road) and consists of a number of coal seams within the Whittingham Coal Measures and which occur within 320m of surface and exploitable by Open Cut methods.

- **Mt Thorley Underground** - The resource area is contained within MTW (south of Putty Road) and consists of the coal seams which are potentially exploitable via Longwall Underground methods.
- **Warkworth Underground** - The resource area is contained within MTW (South of the Golden Highway and north of Putty Road) and consists of the coal seam which is potentially exploitable via Longwall Underground methods.
- **Moolarben Open Cut** – The combined Resource area at Moolarben covers an area stretching 20km north to south and up to 8km east to west. The open cut resource targets the shallow coal of the Ulan Seam and some minor quantities of the Moolarben and Glen Davis Seams to the south of Ulan Road and Ulan-Wollar Road.
- **Moolarben Underground** – The underground Resource area includes the deeper areas of the resource, generally located beneath natural ridgelines that are unfavourable to mine via open cut methods and is restricted to the Ulan Seam (excluding the top A1 ply), of which the lower portion (DWS) is currently being mined via Longwall mining methods.
- **Ashton Open Cut** – The resource is typically covers a large portion of the licence holding, including the Bayswater and Lemington Seams above the current underground in the western portion of the Project and the Hebden through to Arties Seam in eastern portion of the Project including the South East Open Cut area.
- **Ashton Underground** – The Resource area covers ML1533, ML1623, EL4918 and EL5860 which includes the current underground operations and includes the Pikes Gully Seam, Upper Liddell Seam, Upper Lower Liddell Seam, Upper Barrett Seam and Lower Barrett Seam.
- **Yarrabee Open Cut** – The Resources are contained within the Yarrabee licence holding (approximately 12km by 8km) and are limited by drilling and an overall strip ratio of 25:1 (bcm:t).
- **Stratford and Duralie Open Cut** – The Resources are contained within three areas including the Stratford area in the north, the Grant and Chainey area in the central region and Duralie in the South. The Resources are limited ~~in the~~in the Stratford west to a depth of 150m, in Stratford Avon North and Stratford East to 200m. ~~At Duralie~~At Duralie the Resource boundary is limited to the north by drilling and to the east by the Mammy Johnson River.
- **Stratford and Duralie Underground** – The Resource is contained predominately in the Duralie area below the open pit resource, to a depth of 500m for the Weismantel Seam.
- **Austar Underground** – Resources are estimated to a depth of 800m (mining is planned up to 720m) for the Greta Seam.
- **Donaldson Open Cut/Underground** – Coal Resources north of John Renshaw Drive and east of the closed Donaldson open cut mine are considered open cut Resources due to their shallow depth. All other resources at Donaldson are considered underground Resources either due to depth, or surface constraints that prohibit open cut mining.
- **Middlemount Open Cut** – The Middlemount deposit is approximately 7km in strike length (north-northwest) and 2km wide (east-west). Coal resources commences at the subcrop line in the west of the deposit and extends towards the Jellinbah fault, which bounds the east of the deposit. The Resource area includes ML70379, ML70417 and MDL282.

7.3 JORC Statement of Coal Resources

Results of the independent Coal Resources estimate for the Assets are tabulated in the Statement of Coal Resources in ***Table 7-~~-~~1*** and shown graphically in ***Figure 7-1*** below, which are reported in line with both the requirements of the 2012 JORC Code and the reporting standards of Chapter 18 of the HKEx Listing Rules. The Statement of Coal Resources is therefore suitable for public reporting. The Statement of Coal Resources are inclusive of the Coal Reserves reported in ***Section 8***.

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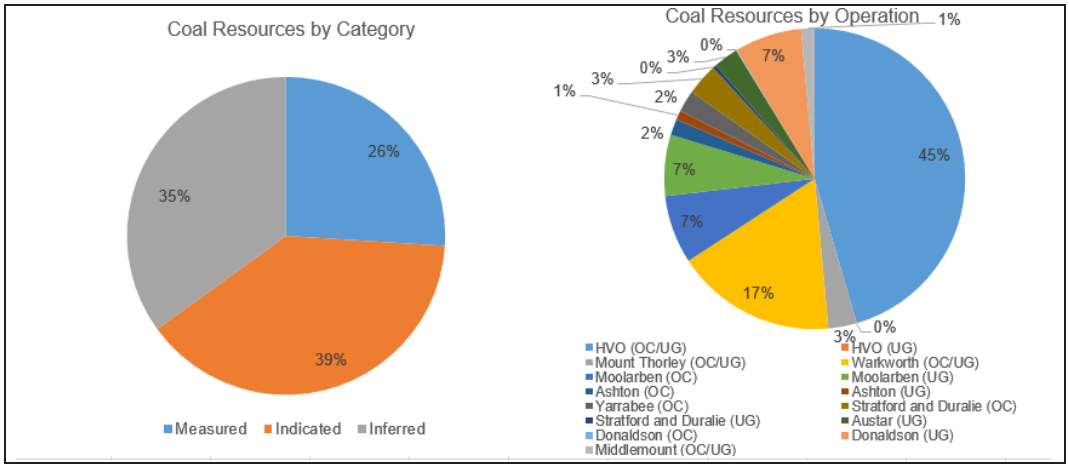
Table 7-1- Statement of Coal Resources by Operation as at 30th June, 2018.

Operation	Classification				
	Measured (Mt)	Indicated (Mt)	M + I (Mt)	Inferred (Mt)	Total (Mt)
HVO (OC/UG)	704	1,430	2,134	1,654	3,788
Mount Thorley (OC/UG)	27	75	102	153	255
Warkworth (OC/UG)	197	713	910	527	1,437
Moolarben (OC)	438	105	543	69	612
Moolarben (UG)	287	131	418	129	547
Ashton (OC)	25	49	74	70	144
Ashton (UG)	52	18	70	15	85
Yarrabee (OC)	94	80	174	20	194
Stratford and Duralie (OC)	11	196	207	76	283
Stratford and Duralie (UG)	-	1	1	35	36
Austar (UG)	70	80	150	69	219
Donaldson (OC)	10	-	10	-	10
Donaldson (UG)	178	326	503	95	598
Middlemount (OC/UG)	73	47	120	1	121
Total (100% Basis)	**2,165**	**3249**	**5,414**	**2,913**	**8,327**
Yancoal Attributable Share[6]	**1,610**	**2,355**	**3,964**	**1,952**	**5,916**

Note:

1. *The Statement of JORC Coal Resources for HVO and MTW have been compiled under the supervision of Mr. Peter Ellis who is a full-time employee of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Ellis has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
2. *The Statement of JORC Coal Resources for Yarrabee and Middlemount have been compiled under the supervision of Mr. Michael Johnson who is a a sub-consultant of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Johnson has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
3. *The Statement of JORC Coal Resources for all others deposits have been compiled under the supervision of Mr. Brendan Stats who is a full-time employee of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Stats has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
4. *All Coal Resources figures reported in the table above represent estimates at 30th June, 2018. Coal Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.*
5. *Coal Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Coal Reserves Committee Code – JORC 2012 Edition).*
6. *Based on owner at the latest applicable date.*

Figure 7-1 Graphical Representation Coal Resources (100% basis)



In addition to the Coal Resources for the operating assets, a total of 16.8Mt of Indicated and 80Mt of Inferred for a total of 96.8Mt is contained with the Monash Deposit located 25km south of Singleton.

7.4 Classification

While Table 1 as required by the JORC Code 2012 edition is presented in ***Appendix C*** for reference, a summary of the resource estimate classification approach is provided below. The RPM Resource classification system is based on industry best practices and generally included the following process:

- Review the regional geology to understand seam continuity and other characteristics beyond the Company's mining tenure boundaries that may impact the geology within the Client's tenure.
- Review or develop a geological model to represent the geological data and understanding of the deposit.
- Define the Points of Observation (PoO's) for quantity and quality.
- Define supportive data types – is the stage at which a determination is made as which data will be in the classification of the resources.
- Determine Resource and Reserve entities – is the stage at which seam groups and which ply will be separated and PoO determined for each seam.
- Determine PoO spacing.
- Stage 1 is a mechanical stage that produces two maps for the Resource entity, one for quantity and the second for quality, which shows the polygons of influence surrounding the PoO's. Stage 1 assigns areas of high, moderate and low levels of confidence.
- Stage 2 is the stage at which the judgement of the Competent Person is applied. The two Stage 1 maps are reviewed and modified by the Competent Person to:
  - Reflect the importance of supporting ~~PoOs~~PoO's for structure and quality as distinct from primary data.
  - Take into account regional and other geological knowledge and the like, which cannot be distilled down into ~~PoOs~~PoO's
  - Remove outliers, fill in between inliers where appropriate, reduce excessive extrapolation and smooth polygon boundaries
- Stage 3 is the final stage in which the categories are assigned based upon both physical continuity/existence and coal quality. To achieve this position the minimum area of each category for each map is taken as being the final area for that category. For example, if an area of 100 ha is considered to

be Measured based on physical existence/continuity, however only 65 ha of this is considered to be Measured based on knowledge of coal quality, then the final area of Measured coal is the 65 ha intersection of the two polygons.

Below is a brief description of each of the steps and the parameters assumed.

Review of Regional Geology

HVO / MTW

RPM has performed a high level review of the geology surrounding the Assets and concludes that the Whittingham Coal Measures are continuously developed within and surrounding the MTW and HVO areas. However, there are differences in how the stratigraphic sequence of the Whittingham Coal Measures has been interpreted between the Assets sites and with the surrounding sites as outlined in ***Section 5***.

Moolarben

The Moolarben coal deposit is located on the western margin of the Sydney Basin's Western Coalfield where sedimentary strata of Permian, Triassic and Jurassic age dip towards the northeast at 1° - 3° and overlie Carboniferous granite and folded metamorphic basement. The Permian strata comprise the coal-bearing Illawarra Coal Measures and the underlying Shoalhaven Group, which in turn unconformably overlies the Lachlan Fold Belt basement rocks. Surface Quaternary alluvial deposits and remnant Tertiary basalt flows are common in the area.

The regional geology is well defined and understood from a long history of exploration and mining in the area and a relatively simple geological setting.

Ashton

Ashton is located in the Hunter Coalfield in the North East of the Sydney Basin. The basal seams of the Burnamwood Formation in the Jerrys Plains Subgroup and all seams of the Foybrook Formation in the underlying Vane Subgroup exist within the Project. These subgroups exist within the Late Permian age Wittingham Coal Measures. The strata and coal seams outcropping in the Ashton area are from the Late Permian Wittingham Coal Measures. The Wittingham Coal Measures maximum thickness of about 250m occurs at its deepest development at the boundary with Ravensworth Underground Mine to the west. Towards the east seams subcrop on the western limb of the Camberwell Anticline with progressive erosion of overlying seams from west to east resulting in subcrop of the Bayswater Seam to Hebden Seam sequence

The regional geology of Ashton is well defined by the extensive exploration and mining from not only Ashton but also the surrounding operations in the Hunter Coalfield.

Yarrabee

RPM has performed a high level review of the geology of surrounding the Yarrabee area and concludes that the Rangal Coal Measures are present within thrust slices and that coal seams have been established to be continuous within each of the structural domains.

The Yarrabee resource is contained in a thrust slice bounded by the Yarrabee Fault that is located contiguously with the western boundary of the Dawson Tectonic Zone and another thrust fault located immediately to the west of the coal zone that has been defined between DOM 6 and DOM 2S.

Stratford and Duralie

The resource areas within the Stratford and Duralie deposits are located in the Permian aged Gloucester Basin of New South Wales, Australia. The Duralie deposit is contained within the southern extent of the basin where that portion of the syncline plunges to the north. There are two main seams at Duralie; the Weismantel and Clareval and two minor seams; Duralie and Cheerup. The interburden between the topmost Weismantel and

bottom-most Clareval seam is approximately 200m. The Clareval seam is located near the base of the basin stratigraphy.

The Stratford area is comprised of three regions referred to as Stratford West, Avon North and Stratford East, where:

- Coal seams in Stratford West are from the Gloucester Coal Measures and include a ten coal seam packages from the Marker 7 to the Bowens Road seam groups. Strata at Stratford West dip to the west at 10-50 degrees and can be steeper when associated with faulting.
- Avon North is a small area (0.6 x 1.25 km) approximately 100m northeast of Stratford Main Pit. Strata at Avon North are from the Avon Sub-group, which forms the lower part of the Gloucester Coal Measures. The Avon North area is north of a major east-west trending fault which was intersected at the northern end of the Stratford main pit. The Avon North area steeply dipping to the west at 25 to 50 degrees, which is intersected by five reverse faults.
- At Stratford East the strata dip steeply to the west. Drill holes at Stratford East intersect Weismantel, Cheerup and Clareval Seams contained within the Weismantel and Duralie Road Formations of the Dewrang group.

The geology while complex, is well understood. Further information is provided in ***Section 5***.

Austar

The Greta Seam occurs within the Greta Coal Measures in the South Maitland Coalfield, on the western side of the Newcastle Coalfield. The Greta Coal Measures are of Early Permian age (approximately 270 Ma) and in the Cessnock area comprise the following Formations:

- Paxton Formation (youngest)
- Kitchener Formation – Greta Seam
- Kurri Kurri Conglomerate – Homeville Seam
- Neath Sandstone (oldest)

In the western portion of CCL728 and CML2, past mining (Ellalong Colliery) extracted Greta Seam where it was typically 3m-3.5m thick. In the central and eastern portions of CML2 where longwall top coal cave mining has been taking place, Greta Seam increases to 6m-7m thick and comprises dull and bright to bright banded coal. The basal 4m of coal is generally devoid of claystone bands while the upper 2m-2.5m contains several thin claystone bands. Towards the east in CML2 additional thin claystone bands gradually emerge in the basal half of the seam.

Close to the eastern boundary of CML2, the Greta Seam splits into an upper 4m thick section and lower 1.5m thick section, along a broadly north south trending split line. The Upper Greta Seam has been intersected in old drill holes further to the east, in the eastern portion of EL6598 where it gradually thins over several kilometres distance to a minimal thickness of 2m. The Lower Greta Seam thins and deteriorates to the east and east of the split line is not considered a resource.

The Lochinvar Anticline is a major regional feature which has a significant impact on Greta Seam dip and strike, as well as the style of faulting in the South Maitland Coalfield. Austar mining and exploration leases are located on the eastern flank of the south plunging Lochinvar Anticline, with gentle seam dip of approximately 4° and seam strike rotating between east to north-east. The presence of extensive old workings (and mapping data) within the Greta Seam to the north of Austar leases has been beneficial in interpreting regional fault structures extending south from old workings into CML2 and EL6598. This, along with an extensive array of seismic and drill hole data has defined a number of significant faults that will impact on, or limit mining:

- The Quorrobolong Fault Zone (Stage 3 area)
- The Abernethy Fault Zone (Stage 3 area)
- The Swamp Fault Zone (Bellbird area)

- The Barraba Fault Zone (Bellbird area)

To the north of Austar, extensive past workings (last 100 years) have extracted Greta Seam from surface down to a depth of approximately 350m. Austar leases CCL728, CML2 and EL6598 are located further down dip, south of past workings and so depth to Greta Seam ranges from 400m to in excess of 700m.

Igneous dykes are present in the South Maitland Coalfield and although infrequent, were intersected at Ellalong and in old workings to the north. When dykes have been intersected they usually occur as a pair of dykes rather than a single dyke. The south trending Central Dyke (1-2 dykes) defined the eastern limit to longwall mining in the Stage 2 mining area. Recent exploration drilling, a review of mapping from past workings to the north (at Kitchener) and two ground magnetometer surveys has confirmed another southeast trending narrow zone of intrusive activity comprising two dykes (Kitchener Dyke) extending south into the Stage 3 mine area. From historical mapping and Austar's experience when intersecting dykes, there has been no evidence of intrusive sill bodies migrating horizontally from the dyke into the seam. Igneous activity within the Greta Seam, to date presents as dykes.

The geological understanding of the Project is considered by RPM to be consistent with the regional geology.

Donaldson

Donaldson Coal and its associated mining/exploration titles are located in the northern-central portion of the Newcastle Coalfield, which forms the northern portion of the Permian/Triassic Sydney Basin. Stratigraphy comprises Late Permian Tomago Coal Measures overlain by Newcastle Coal Measures. The non-coal bearing Triassic Narrabeen Group overlies the Newcastle Coal Measures and form steep topographic relief which includes Mt Sugarloaf and Mt Vincent.

The regional geology is well defined from extensive exploration and mining activities in the Newcastle Coalfield and more specifically from the Abel, Tasman and Stockrington No 2 underground mine workings and Donaldson open cut. The geological model and Resources estimate is consistent with the Regional geological understanding.

Middlemount

Stratigraphically, the first seam intersected in the Rangal Coal Measures in the Middlemount area is the thin Roper seam; which is rarely present, because it subcrops closer to the Jellinbah Fault than the other coal seams as outlined in ***Section 5***.

The Middlemount seam is typically a single seam, however in places splits into a high ash upper split, (MU) and the upper (MLT) and lower (MLB) seam section. The MLT and MLB are contiguous. The split into MLT and MLB sections is for coal quality reasons, with the upper section being a low ash dull coal that has PCI / thermal coal properties and the lower section being a low ash bright coal section with metallurgical coal properties.

The Middlemount seam thickens from 3m in the south to up to 5m in the north. Seam thickness generally follows sedimentary trends, however it is obvious that some of the seam thickness variability in the north is due to structural rather than sedimentary reasons. RPM considers that there is likely to be at least three north east striking fault structures located north of the current northern end wall that have not been interpreted.

RPM considers that the Tralee seams are in fact the lower plies of the Middlemount seams based on our knowledge of the Elphinstone and Leichhardt seams elsewhere in the Bowen Basin. Furthermore RPM considers that the non-sedimentary thickness variations observable in the Middlemount and Pisces seams will not have a material impact on the Resource estimate.

RPM has interpreted a number of subsidiary thrust faults which are upthrown to the east. The structural changes noted down dip of the current highwall have been interpreted to be due to a subsidiary thrust fault to the Jellinbah Fault because there is no sign of north-easterly structures in the current highwall. In RPM's opinion if the faults causing the structural disruption east of the current highwall have an easterly orientation the faults should be visible in the highwall. As a result, it is RPM's opinion that the structure requires more careful consideration in future mine design and resource classification work, because the remainder of the Middlemount resource potentially has greater structural disturbance than the area that has been mined to date.

These ~~structure~~structures could impact on plans to employ highwall mining and underground mining methods at Middlemount.

For a review of the deposit's coal quality and verification of the deposit's potential to continue to product coking coal, RPM have been provided with a subset of laboratory data from selected exploration campaigns and a full dataset of clean coal quality composites. In the absence of coking indices, the basicity index has been calculated (which can be used as an indicator of coking coal). A basicity index below 0.10 is sought for coking potential. Of the 431 product coal composites, 25% (108 samples) have coking potential based on the basicity index on the sample mass as a whole. Plies with the highest coking potential on a whole ply basis (where >50% samples with basicity index <0.10) are MU and TL2B.

Ash analysis was also reviewed for anomalies in calcium (CaO) and iron (Fe2O3), which are known to affect the coking potential of the Rangal Coal Measures in Queensland. The spatial distribution of high values of CaO (>8%) and Fe2O3 (>10%) were examined and it was identified that these correlated with a decrease in vitrinite content, suggesting a change in coal type, potentially caused by changes in water level in the peat swamp at the time of deposition. In addition, phosphorus levels at these locations were also high (>0.07%). While only a subset of this data was provided for core holes drilled in 2015, there is enough information to cast doubt on the coking potential, as is currently assumed in the north, particularly in the Middlemount Seam. As such RPM recommends further studies be completed to confirm the assumptions made based on historical production and current knowledge.

Geological Models

All geology models were created by third parties and review by RPM to ensue no material issues were noted. Below is a summary of the outcomes of these reviews.

MTW

The MTW_1208_LOM model was developed and validated by Measured Resources, utilising the standard ABB FEM interpolator for structural modelling and the standard ABB model settings used. The inverse distance squared interpolator was used for coal quality model development on grids with 20m by 20m node spacing.

The model consists of the coal seams only with waste modelled by default and not assigned any grade. Resource estimates are therefore of the coal seams only.

RPM considers that the coal quality model is developed to an acceptable standard however notes the following:

- The database and the model do not contain clean coal composite values when raw coal ash of a coal ply is greater than 50%. In these cases the coal quality model will underestimate ash and overestimate yield.
- Coal quality data has not been acquired when coal seams are less than 0.1m thick. Due the seam characteristics there are a large number of thin seams modelled that do not have coal quality data. The coal quality grids will interpolate missing coal quality values between boreholes and extrapolate values beyond boreholes. The interpolations and extrapolations could either under or overestimate values. There is no definitive conclusion to be made about the impacts of coal quality data being missing for thin seams less than 10cm thick.
- The coal quality model was developed by using all borehole data with a number of coal quality data points that do not have supporting structural data. It appears that the final quality models were developed prior to the final structural models which have excluded some of the coal quality boreholes from those that were used in the coal quality model.

Having noted the above, RPM is of the opinion that the misalignment of the raw coal and clean coal quality models with the structural model is unlikely to make a material difference to the Resources and Reserves estimate.

HVO

The HVO_1508_LOM model was developed and validated by HVO personnel using Minescape Version 5.9. software and subsequently externally reviewed by Encompass Mining. The ABB FEM interpolator was used for structural modelling with Standard ABB settings used.

The inverse distance squared interpolator was used for coal quality model development. Subsequent to structural modelling the inverse distance squared interpolator was used for surface and both the structural and coal quality model development on grids are based on a 50m by 50 me node spacing. A single structural model and single coal quality model cover the entire HVO area. The model consists of the coal seams only with waste modelled by default and not assigned any grade. Resource estimates are therefore of the coal seams only.

RPM considers that the coal quality model is developed to an acceptable standard however notes the following:

- RPM consider that the coal quality models contain many inconsistent data input values, with numerous coal seams being modelled with ash values between 50% and 90%. A large percentage of the boreholes with anomalously high ash values are located in areas of low coal quality data density. These boreholes will be over represented in the coal quality model by having a disproportionate area of influence and as a result coal tonnage will be excluded from the Reserves estimate.
- The coal quality model was developed by using all borehole data. There are number of coal quality data points that do not have supporting structural data. It appears that the final quality models were developed prior to the final structural models which have excluded a larger number of boreholes that were used in the final coal quality model

Having noted the above issues, RPM considers that the above are unlikely to make a material difference to the global Coal Resources estimate, however will potentially impact short term models and schedules. RPM further comments that these high raw ash anomalies are likely to be ignored during mining, given the long history of mining these seams in the region.

Moolarben

The geological computer model 'Moolarben_0217' was built using Minex software (version 6.5.2) in 2017. The geological model is based primarily on the borehole database and incorporates exploration data completed up to mid-January 2017. The model was generated using Minex proprietary growth algorithms. Structural and quality grids were generated using 20m mesh size mesh size.

The geological model includes structure grids for all relevant geological surfaces, including the major stratigraphic boundaries, base of weathering and all coal seams identified in the Illawarra Coal Measures on a ply basis.

The geological model includes a raw ply coal quality model which provides grid surfaces for density, ash, volatile matter, fixed carbon, energy and sulphur on a ply basis as well as raw coal quality, washability and clean coal quality data.

Ashton

The geological model was developed in 2014 using Micromine software. This model was subsequently updated in 2015 and 2017 using Minex software. The 2017 Minex geological model supplied included structure and raw coal quality grids on a ply basis (for Open Cut Resources) and on a working section basis (for Underground Resources). RPM completed a model update for the Open Cut Resources for the South East Open Cut area. The updated RPM model is named 'Ashton_1805'.

Yarrabee

The geological (structural and coal quality) models for Yarrabee were developed using the Geovia Minex software version 6.3. Five geological models were developed by Company personnel. The model names are shown in ***Table 7-42***. The model for Domain 6 was finalised after the LOM plan was completed and as a result the Domain 6 Resource did not transfer to Reserve.

Table 7.~~2~~-2 Graphical Representation Coal Resources

Mine Area	Structural Model Name	Quality Model Name	Date of Release
Yarrabee East (YEN Pit)	EAST_PLY_CUT_DEC15	EAST_PLY_QUAL _FEB17	23/12/2015
Yarrabee East (YES Pit)	EAST_PLY_CUT_DEC15	QUALITY _FEB17	18/12/2015
Domain 2 North	EAST_PLY_CUT_DEC15	QUALITY _FEB17	18/12/2015
Domain 2 South	DOM 2STH_CUT_2017	QUALITY _FEB17	23/03/2017
Domain 6			After LOM finalised

Coal seams are initially correlated in GeoBank using geophysical logs and cross sections, to ensure consistency of the seams.

Borehole data is transferred to Minex and where the data is visually inspected to detect any seam pick anomalies by using the borehole display and from solid triangulation. Errors are edited in GeoBank.

Exclude core holes and create structure models. Fault thickened core hole seams are not edited so that seam thickness matches the average surrounding seam thickness, because the cored seam intervals cannot be changes otherwise they will not match the coal quality data.

Missing seams are interpolated in boreholes by Minex for those seams that are;

- Interpreted to exist at a reduced level above the borehole collar,
- Are interpreted to exist below the total depth of a borehole when that borehole has been terminated before the full seam sequence had bene intersected,
- Missing between named seams due to faulting or sedimentary reasons.

Missing seams that are present between named seams are set to zero which ensures that coal tonnage is not overestimated.

Missing seam interpolation is a modelling process that takes place in most geological modelling software packages such and Stratmodel and Vulcan.

Check seam thickness and set over thickened seams in structure holes (open holes) to the average surrounding seam thickness.

Fault thickened cored hole seam thicknesses have not been trimmed to the average seam thickness to ensure that the entire seam quality result can be composited and used in the coal quality model. Fault thickened cored hole seam are excluded from generating structure and thickness grids. YAL estimates that less than 5% of cored hole seam intersections are fault affected.

Geological models are developed such that grids are not extrapolated infinitely beyond the last borehole intersection for a seam or surface. The extrapolation distances are shown in ***Table 7-8***. The maximum extrapolation distance is 1,000m which is the extrapolation distance used for Inferred resource classification.

Structure models were created at 10x10 mesh size and coal quality models were created with a 50x50 mesh size. The mesh sizes were selected to achieve the most representative grid node spacing for both the quantity (structure) and coal quality models.

Faults were modelled as vertical structures. The Company considers that vertical faults are acceptable due to high coal losses occurring during the mining process in the vicinity of faults and any repeat seams have relatively low coal recovery. Seam repeats have been modelled for large displacement faults where the repeated seam is continuous between multiple holes.

RPM considers that The Company has identified the fault slices in the Yarrabee area with sufficient accuracy and detail that angled thrust structures could be modelled by ABB Stratmodel software using standard modelling techniques, or by use of wireframes using the Geovia Minex software. The angled faults would

provide a greater degree of certainty to the models and also provide a better understanding of the geotechnical hazards that may be expected in the vicinity of the faults.

Trend strings were used to control the model in complex areas of tight folding, vertical seam dip and fault displacement. Trend lines are used to manipulate the grid where necessary. This technique is used to maintain seam trends beyond the limits of the borehole data, in areas of steep seam dip such as the north-eastern part of the YEN pit and to maintain seam dip past the coal subcrop limits.

Limit masks have been applied to coal quality and seam thickness grids to limit the minimum and maximum modelled thickness and coal quality attribute ranges to the maximum and minimum values within the data set. RPM expects that a different interpolator setting would achieve a similar result.

Stratford ~~an~~and Duralie

Duralie

The geological model for Duralie (DUR_0614) was produced in 2014, using Minex software. The model was created using borehole intersections, seismic data reprocessed in 2004 and pit survey data for the Weismantel Seam (to April 2014). Largely reverse faults were not specifically modelled but reasonably closely spaced borehole data allowed control of gridding. This model was used for most of the Duralie resource area. In 2016 an updated model was produced over the LOM area to incorporate new drilling and update the structural interpretation. This model (DURmicro16) was used for Resources for areas within the LOM.

Seam thickness grids were gridded on a 5m (DURmicro16) or 10m mesh (DUR_0614) using Minex growth technique. Raw quality grids were gridded on a 50m mesh using inverse distance squared gridding methods.

Stratford

The computer models for Stratford West (WCR0811), Avon North (STRAT0315) and Stratford East (SE0512) were generated using Minex software. The computer models were created using borehole intersections, fault interpretations (not all if minimal throw or extent) and trend lines to correct the synclinal structure. Not all faults in resource areas were modelled but the borehole data controlled the seam elevations. Faults in WCR0811 model were modelled as vertical faults. STRAT0315 (Avon North) reverse faults were modelled using Minex 3D faulting software and modelled as steeply inclined reverse faults or vertical normal faults. For Stratford East, no faulting was incorporated into the model, however faults are expected (probably minor in extent and offset and/or insufficient data to interpret laterally).

Seam thickness grids were gridded on mesh sizes of 10m (WCR0811) or 15m (STRA0315 and SE0512) depending on average borehole spacing or structure, using Minex growth techniques. Raw coal quality grids were modelled on 50m (SE0512) or 100m (WCR0811) mesh sizes, extrapolated 250m from borehole data. No raw coal quality grids have been developed for the STRAT0315 model at this time (default values are used for the Avon North resource estimate).

Grant & Chainey

The Minex computer model generated in August 2012 (GC_0812), incorporating all current borehole data in the resource area, was used for resource estimation. No mining has occurred in the area (in the northern limit of the area there is a portion covered by mine rehabilitation) and the original topographic surface has been used. The base of weathering was developed from visual base of weathering in boreholes.

The model was produced using borehole seam intersections, the current fault interpretation and trend lines to assist modelling the syncline structure. Not all faults were specifically modelled but the borehole data allowed to control the seam elevations. Any faults modelled were modelled as vertical faults. Confidence is highest in the Bowens Road and Avon Seams due to the number of borehole intersections. Structural grids were gridded on a 20m mesh and quality on a 100m mesh.

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Austar

The Resource Estimate for Austar is based on the Austar Minex Geological Model called 'Austar_1015', released on the 9th of April 2018. The geological model was developed by a third party in early 2018 using Minex software. The geological model contains structural and coal quality grids of the working section of the Greta Seam which represent the geological model The Structural and coal quality grids use a 50m grid mesh and cover the extents of the Project. The drill hole database is also provided in the geological model.

The Austar deposit contains the Greta Seam (GR). This seam splits towards the east into upper (UG) and lower (LG) plies. The working section of the Greta Seam (WGR) was generated from the full GR Seam where the seam is coalesced or the UG ply where the seam splits. The split line is defined where the interburden between UG and LG is <0.2m.

Several normal faults were interpreted and incorporated into the model.

Donaldson

The Resource estimate is based on the geological model 'DON_0815' developed in 2015 by a third party. The geological model was generated in version 9.1 of Maptek's Vulcan software. This model, DON_0615, was built after a major re-correlation exercise that incorporated all boreholes within the existing Donaldson mining/exploration tenure.

The geological model contains structure grids and raw quality grids using a grid spacing of 25m. The Raw quality values modelled on a ply basis where ash, fixed carbon, volatile matter, specific energy, total sulphur and density. All quality grids where generated at a standardised air dried moisture basis of 2.5%.

Middlemount

The geological model for Middlemount was constructed using Maptek Pty Ltd geological modelling software, Vulcan, version 10.1.4. One all-encompassing model (mar18) was completed in March 2018.

The structural model was created at 20x20 mesh size, using inverse distance modelling interpolation, to the power of two (2) with no trending. It combines information from 732 boreholes, interpreted seam roof data from selected locations along 2D seismic lines and in-pit survey of coal seam roof, floor and fault strings.

Stratigraphic ~~mapfiles~~files in Vulcan were used to interpolate horizons in every hole to control the development of the structure and thickness grids. Where holes were not drilled deep enough to intersect seams lower in the sequence (e.g. in LOX holes), the interpolation of the seams into these holes was ignored and only true intersections were recognised so that the structural integrity of the model was kept intact.

Seams were split into their plies and modelled as contiguous elements. Coal thickness and seam midburden thickness was modelled over the area. The seam roof and floor models were "stacked" up from the Pisces Upper (PUB) floor and Middlemount Lower (MLB) floor surfaces, which were generated with a 1st order linear interpolator to obtain initial floor grids. A base of weathering grid was developed from borehole intersections and all final structure grids used for resource estimations were clipped to the base of weathering to ensure oxidized coal was excluded from the calculations

Thrust faults at Middlemount are modelled with a dip of 25-30º and normal faults are modelled with an average dip of 60º. To constrain the seams against the Jellinbah Fault, the location where the fault plane intersects the roof and floor of each seam has been estimated. In the case of the Jellinbah Fault, a 50m buffer to the west of this point has been applied as the fault line, due to uncertainty of the faults' location and its characteristics.

Raw coal quality modelling created with a 100x100 mesh size, using inverse distance modelling interpolation, to the power of two (2) with no trending. Washability and product coal results were not modelled for Middlemount. 3312 raw quality samples were composited across all seams to generate the coal quality model. The seam intervals were determined from the structural model and samples required a minimum of 90% linear recovery for each respective interval to be modelled.

RPMGLOBAL

Company/RPM Validation of Geological Models

RPM is aware that the Company undertook validation of the geological models to support their use in Coal Resource reporting. For reference and transparency RPM presents the following summary and outcomes which are sourced from the YAL Competent Person statements.

MTW

The following reviews were undertaken by the previous owners Competent Persons prior to acquisition and confirm by RPM:

- Comparison of modelled seam reduced levels with input borehole seam reduced level was performed by comparison of structure contours and data postings. No material issues are reported. RPM agrees with this finding.
- Visual inspection of sampled and modelled intervals for raw coal ash to determine if the sampled intervals match the seam picks. No material issues are reported. RPM considers that there is mismatch between coal quality data due to the high raw ash issue previously discussed.
- Comparison of input ash and relative density values with modelled ash and relative density values. No material issues reported. RPM considers that the comparison is not particularly valid because it compares un-composited ply by ply input data with composited seam data.

HVO

Prior to acquisitions the previous owners completed most of what RPM considers to be a normal suite of model validation procedures which has included:

- Comparison of modelled seam thickness with input seam thickness values. No material issues are reported.
- Comparison of modelled seam reduced levels with input seam reduced level. No material issues are reported.
- A comparison of waste volumes and tonnage for the previous HVO_1408_ model with the HVO_1508_LOM model showed increased waste volume and coal tonnage of 1%, which RPM considers is not material.
- Review of coal quality cross plots of ash and relative density, ash and energy, specific energy and relative density and volatile matter and energy was completed for all seams. In general the cross plots showed that coal quality data was reliable, although coal quality data outliers are present in the database.
- The Company has not completed a comparison of input coal quality values compared to the output gridded coal quality values.
- The HVO_1508_LOM model was reviewed by a third party which identified issues which were partially corrected by the Company before release of the final model (which formed the basis for RPM's review). A number of these issues were not corrected for the final model release and currently remain uncorrected, these include the two main issues identified and discussed by RPM:
  - There are a total of 701 composited raw coal samples with a raw coal ash value greater than 50%.
  - A total of 141 composited raw coal density sample outliers are present in the database (as discussed in ***Section 6***)

RPM considers that the above issues are not material however recommends further analysis and reviews be undertaken as part of the next update to the geological models.

Moolarben

RPM reviewed the 'Moolarben_0217' geological model by comparing the borehole data with the geological grids and ensuring the grids honoured the data. RPM also interrogated the geological model using cross sections and contour plots to ensure the geological model was consistent with the geological understanding. Unusual values identified in the geological model grids were reviewed to ensure that the features were

supported by borehole data. The geological model 'Moolarben_0217' is considered robust and well developed based on the review and suitable to support Resources estimation and detailed mine planning.

Ashton

The geological grids were cross referenced against the borehole data and geological understanding of the project to ensure the grids honour the underlying data. RPM also developed a geological model in 2018 using Minescape software and made comparisons in order to validate the geological model supplied.

Yarrabee

RPM is aware that the Company completed significant validation of the geological models to support their use in Coal Resource estimation and reporting. The general model validation process followed by the Company is predominantly by visual inspection of input borehole data and output model data and is summarised below:

- Check for structural anomalies visual inspection of the model grid surface values compared to the input borehole data values. Determine validity of data and edit data as required,
- Check for coal quality anomalies, particularly for raw coal ash and phosphorus. Determine validity of model grid quality surfaces compared to the input borehole data values and edit data as required,
- Check the correlation of seams using cross sections through adjacent boreholes throughout the resource area,
- Create and check the topography and base of weathering grids,
- Create model grid and check structure and thickness compared to input borehole data,
- Reconcile new model against prior model (structural and tonnage).
- Create Strip ratio grid using all seams to the Pisces seam, regardless of their resource status (It is assumed that all upper seams will be mined during pit progression to the basal seam).
- Create strip ratio grids for each seam increment

A review completed by RPM of the geological models indicates that the interpretations appear to honour input borehole and seam thickness and reduced level values and are considered appropriate for reporting of Coal Resources.

RPM considers that the Company followed good practices for development of their database and geological models. The Company model validation process is a basic process, however appears to have been completed to a high standard. The Company has identified five similar structural domains of borehole data and has modelled that data as five model areas. RPM considers that good practice has been followed using this methodology.

RPM considers that use of basic statistical methods for comparison of gridded model data and input data could also have been used for model validation by the Company, as such in future model should be considered as an alternative method.

Stratford and Duralie

Data supplied included a Minex borehole database and associated seam/ply structural, thickness and raw coal quality grids, except in Avon North where coal quality grids were not computed and resources were estimated using default quality values (see below).

The borehole database comprised seam pick data and raw coal quality data, excepting Avon North, which was supplied on request. The structure grids contained faults. The Avon North model grids contained detailed 3D faults showing good detail of reverse faulting and seam repeats. Borehole data checked for resources, coal quality variation, seam thickness variation and number of borehole seam intersections appears consistent.

Validation of the models included checks of topography versus borehole collar, seam correlation, coal quality and where available geophysical data. Resources were re-estimated using the geological and were consistent with previously reported Resources.

At Avon North default coal quality values were used to estimate coal resources and raw coal quality. RPM modelled the coal quality and estimated resources for the Avon Seam (Indicated) with coal quality using Minex software. Grids were computed where four or more boreholes contained data for each seam/ply. For seams/plies with less than four data points, weight averaged coal quality values were used to estimate resources. Approximately 92% of the resource estimated for the Avon Seam contained borehole coal quality data. This data appears consistent for seam ash with In-situ data for Stratford Main Deposit Mine in the September 2001 quarter and previous 12 months data as detailed in the Runge Pty Ltd Reconciliation (Stratford Coal – Stratford Main Deposit Reconciliation January 2001 – September 2001 Runge Pty Ltd).

Austar

The Geological Model 'Austar_1015' was reviewed by RPM to assess if the geological model was suitable to support the Resources Estimate and detailed mine planning. RPM reviewed the modelling method, drill hole data and resultant geological model grids. Based on review, RPM considers that that the resultant geological model honours the drill hole data and is consistent with the geological understanding of the Project.

RPM completed a shadow estimate of Resources from the geological model and considers the Resource Estimate is consistent with the Geological Model.

Donaldson

RPM reviewed the geological model 'DON_0815' to asses if the modelling method was appropriate, geological model honours the borehole data, and the geological model is consistent with the geological understanding of the Project. RPM reviewed the modelling parameters and a number of reports and graphical outputs including contours and cross sections from the geological model. RPM completed a shadow estimate of Resources from the geological model. Based on the review RPM considers the geological model to be suitable for the Resource estimation and mine design.

Middlemount

A review completed by RPM of the geological models indicates that the interpretations appear to honour input borehole and seam thickness and reduced level values and are considered appropriate for reporting of Coal Resources. A brief outline if provided below:

- Comparison of modelled seam thickness with input seam thickness values. No material issues are reported.
- Comparison of modelled seam elevations with input seam elevation values. While there are no material issues associated with the seam intersections being honoured at the drilled elevation, there are significant implications for resource categorisation surrounding the lack of faults modelled in the deposit, which can be identified through the rapid changes in seam elevation presented in structural floor contours produced from the geological model. These faults are also likely to preclude the proposed underground and highwall mining methods and cast significant doubt over the classification of resources in these area.
- Review of coal quality cross plots of ash and relative density and coal quality spot checks between laboratory data and modelled qualities. In general these verified that raw coal quality data was reliable, although data outliers are present in the database.
- Holes composited in the coal quality model are also used in the structural model.
- However, the geological model does not include washability or product coal parameters.

While considered not material given the current information, RPM recommends further analysis and reviews be undertaken, particularly in regards to the structural interpretation, as part of the next update of the geological model.

Points of Observation Definition and Supportive Data

RPM defined the following for reference:

- **Quantity Point of Observation**: A Quantity or Structure Point of Observation ("PoO") requires a reliable collar location and downhole geophysical log data acquired for the full seam interval that is to be classified.
- **Quality Point of Observation**: A Quality PoO requires a reliable collar location and raw ash data. Down hole geophysical log data acquired for the seam interval in a cored hole is optional, because the cored holes are predominantly fully cored.

HVO / MTW

As part of the above definitions, RPM considers that all bore core has been acquired and logged to a high standard so that the amount and location of any core loss has been managed by the geologist logging the core. RPM review of cored hole data suggests that the requirement for greater than 95% core recovery for a Quality PoO has been met because significant core loss was not found in bore core log descriptions.

In addition, RPM considers that downhole geophysical logs will have a depth accuracy of+/- 20 to 30cm, depending on the source to detector spacing of the sonde and that it is unlikely that bore core would be logged with error of greater than 20 to 30cm. RPM consider that potential depth error of 20 to 30cm is not material due to the depth of the large scale mining methods employed at the Assets being greater than 100m.

As part of its initial review RPM utilised a PoO definition that used clean coal product ash which identified to correspond well with the number of raw coal ash PoO's at HVO. However, at MTW it was noted that samples with raw ash content of greater than 50% were not submitted for washability and determination of clean product quality parameters. As a result within MTW Raw coal ash was used by RPM for the PoO definition.

RPM considers that raw coal ash can be used as proxy for relative density and specific energy and considers that reliable relationships have been established that relate raw ash to washed product yield and ash given the long production historical data and product generation.

The RPM PoO definitions are shown in ***Table 7-23***.

Supportive Data

The following data has been used as supportive data for the PoO:

- Surveyed in pit seam observations and inspection of open pit highwalls as supportive data to assist with determining PoO spacing.
- Borehole data not used for model development was reviewed to provide additional data to support seam continuity.

Table 7-~~-~~3332 Points of Observation Definitions

PoO Attribute	PoO Type			
	Quality		Quantity (Structure)	Support Data
	Type 1	Type 2	Type 3	
Non Cored Borehole				
Reliable Collar Location	✓	✓	✓	
Geophysical log for seam interval (Requires density and gamma)	✓	✓	✓	
No Geophysical Log				✓
Cored Borehole				
Reliable Collar Location	✓	✓		
Geophysical log for seam interval (Requires density and gamma)	✓			
No Geophysical Log		✓		
Greater then 95% linear core recovery	✓	✓		
Raw Ash (MTW)	✓	✓		
Clean coal product Ash (HVO)	✓	✓		
Other				
Surveyed in pit seam observation				✓

Moolarben

~~PoOs~~PoO's are based on the borehole intersection of coal seams which includes lithological and downhole geophysical log. For quality PoO, a sample is required to have raw proximate analysis from a coal seam/ply where the sample has a linear core recovery greater than 95%.

The PoO from borehole data are supported be an airborne magnetic survey was carried out over the planned underground longwalls (UG1 and UG2) to identify magnetic features. This survey identified a number of potential igneous bodies which may affect underground mining. RIM borehole to borehole survey has been undertaken to define the size and shape of the igneous diatremes at seam levels.

The consistency and continuity of the Ulan seam is supported by surrounding mining operations (Ulan and Wilpinjong) where the Ulan Seam is also mined and geology is defined by extensive exploration and mining.

Ashton

~~PoOs~~PoO's are based on the borehole intersection of coal seams. For quality PoO, a sample is required to have raw proximate analysis from a coal seam/ply where the sample has a:

- minimum core recovery 80% volumetric or 95% linear (where volumetric data unavailable~~);~~), and
- minimum 80% overlap between sample and ply interval.

Borehole data is supported by proximal underground workings and surrounding coal mine information adjacent to Ashton. High frequency RIM surveys are also completed routinely in advance of mining areas to identify geological variations. The continuity and properties of the coal seams is also supported by the extensive exploration and mining experience in the surrounding tenements.

Yarrabee

The RPM Points of Observation definitions are shown in ***Table 7-~~24~~***.

Table 7-4443 Points of Observation Definitions

PoO Attribute	PoO Type			
	Quality		Quantity (Structure)	Blastholes
	Type 1	Type 2		
Non Cored Borehole				
Reliable collar location			✓	✓
Down hole deviation survey			✓	
Geophysical log for seam interval			✓	✓
Cored Borehole				
Down hole deviation survey	✓	✓		
Geophysical log for seam interval	✓			
No geophysical log		✓		
Greater than 90% linear core recovery	✓	✓		
Raw coal ash	✓	✓		
Raw coal phosphorus	✓	✓		

Stratford and Duralie

Core and non-core boreholes with downhole geophysical logs were considered PoO for confidence in the deposit in conjunction with information from mined areas and supporting information from seismic data. Classification of the Coal Resources into Measured, Indicated, and Inferred was based on the Competent Persons confidence in the estimate.

The Resource classification is based on the confidence to identify coal plies between holes, understanding the changes/variability of the coal seams, the interpreted structure and how the computer model manages to 'model' the structure. In some structurally complex areas the model has not defined the faulted structure specifically (such as the Clareval Bowl or structurally complex area in Stratford West or Rombo/Parkers Road seams in the north of Grant & Chainey, where borehole seam intersections were allowed to control seam elevation/thickness); however the borehole spacing was sufficient to show coal seam continuity and reasonable confidence in tonnages to support the classification category. An example of this is the Clareval Bowl area at Duralie. This is an extremely complex small synclinal structured area with numerous reverse faults and folds. In the early years of mining none of the faults had been modelled specifically; allowing the closely spaced boreholes to control the geology. Mining found on a day to day basis there were differences between the model and the actual structure encountered, however overall mined tonnes reconciled with modelled tonnes. From discussions with the Duralie site geologist at the time, the model underestimated the tonnage slightly as a result of repetition of coal seams because of thrust faulting. This area is covered by approximately 100 m spaced drill lines with holes averaging 50m along these lines (supported by coal quality data). The confidence in this estimate is Measured.

Often the availability of coal quality data on a ply basis is variable per seam due to core recovery or the ply not existing in the hole (minor upper and lower plies have rare quality data due to fewer borehole intersections due to variability of these plies). In the absence of borehole coal quality data, a history of nearby mining or geophysical log trends were used to support the classification. Sometimes the estimate of particular plies depended on default quality values. This was more common for Inferred Resources, however also used for Measured and Indicated Resources. Core holes often do not provide data on all plies in an intersected/sampled seam, due to either core recovery or variability in a seam.

Austar

Core holes with geophysics and non-core holes with geophysics have both been used as PoO. To support drill hole data, there exists an extensive array of seismic survey lines (>100km) over CML2 and CCL728. There is also extensive historical workings within the Project area that are used to support the geological understanding

and Resource classification. The PoO for quantity and quality and support information used for resource classification are shown in ***Table 7-~~4~~5***. It is noted that quality ~~PoOs~~PoO's can be used for quantity, however quantity PoO's cannot be used for quality classification.

Table 7-~~4~~5 Austar PoO

PoO Attribute	PoO Type			
	Quality		Quantity (Structure)	Other Data
	Type 1	Type 2		
Non Cored Borehole				
Reliable collar location			✓	
Down hole deviation survey				
Geophysical log for seam interval			✓	
Cored Borehole				
Down hole deviation survey				
Geophysical log for seam interval	✓			
No geophysical log		✓		
Greater than 90% linear core recovery	✓	✓		
Raw coal ash	✓	✓		
Raw coal total sulphur	✓	✓		
Support Information				
2D Seismic Data				
Faults				✓
Magnetic Data				
Dykes				✓
Existing Underground Workings				
Faults				✓
Dykes				✓
Seam Levels and Continuity				✓

Donaldson

Core holes with geophysics and non-core holes with geophysics have both been used as PoO.

Historical workings in the Fassifern seam (Tasman mine) and the West Borehole Seam (Stockrington No 2 mine, Buchanan Mine) and current Abel workings in the Upper Donaldson Seam have been used as PoO in the classification of surrounding coal resources.

Coal quality data has not be used as a criteria to define a PoO however the distribution and spatial variation in coal quality has been assessed and taken into account in determining Resource categorisation. Borehole core recovery (volumetric) for coal seams at Donaldson typically ranged between 85%-100% and so an 80% cut-off was applied to the coal quality data used in the geological model.

Middlemount

The classification of the Mineral Resources into varying confidence categories is based on a standardised process of utilising PoO according to their reliability. The PoO are used to categorise quantity and quality continuity (or both) or support continuity.

The resource classification at Middlemount has been completed by JB Mining and is based on the Competent Person's confidence of the seam continuity and coal quality variability within boreholes.

A **Quantity** PoO has the following attributes:

- Open or cored hole;
- Seam interval geophysically logged, or where geophysical data is missing for a seam(s), it is up to the Competent Persons discretion to determine if the seam level and thickness is consistent with nearest neighbour boreholes; and
- Reliable collar survey.

~~A~~ **Quality** PoO has the following attributes:

- Cored hole;
- Linear core recovery greater than 90%;
- Reliable collar survey;
- Cored hole in which 100% of the seam interval has been cored;
- Seam interval geophysically logged, or if ~~If~~ no geophysics log data is available it is up to the Competent Persons discretion to determine if the seam level and thickness is consistent with nearest neighbour boreholes; and,
- Raw coal ash.

Support Data for PoO include:

- In pit mapping data for faults;
- Seam floor or roof survey data; and,
- Elevations from interpreted 2D seismic surveys.

Resource and Reserve Entities

HVO / MTW

The Company's Resource and Reserve entities are interpreted to be the seam groups mined, which at MTW number 15 and number 17 at HVO. As part of the classification of the Coal Resource, RPM applied further analysis to seam groups and separated individual ply's to 34 entities at MTW and 25 entities at HVO.

RPM reviewed the borehole intersections on a seam basis and identified that in many cases the number of seam intersections and coal quality data were not the same for each seam element in a seam group. As outlined in Table 7-3, the Vaux seam at MTW which includes the VAA, VAB, VAC, VAD, VAE, VAF, VAG, VAH, VAJ elemental intervals and the various compound seams, the VAA and VAB elements have 230 borehole intersections. The VAC to VAH elements have 300 to 350 borehole intersections and the VAJ element has 125 borehole intersections. As a result RPM created 3 Resource entities, VAAB, VACH and VAJ for the Vaux seam at MTW. The Resource entities used by RPM are shown in ***Table 7-~~4~~6***.

RPM applied a similar approach to that described for the Vaux seam, to all of the seams at MTW and HVO based on the number of structural and coal quality borehole intersections. As a result, RPM applied entities varies from that of the Company which impacts the classification applied to the seam groups as outlined below.

Limits

RPM notes that the below limits have been applied as part of the entities applied to the resource estimate:

- No minimum seam thickness limit has been applied to the RPM Resource; and
- No upper ash limit has been applied to the RPM Resource estimate.

RPM considers the above appropriate for resources considering the further applied entities and aggregation applied to the mining planning to form the recoverable ROM working sections.

Table 7 ~~-~~ ~~6665~~ Vaux Seam Number of Borehole Intersections by Seam Element and Compound

Compound Intervals	Element	Number of Intersections
	VAA	231
VAAB		
	VAB	234
VA		
	VAC	326
VACD		259
	VAD	341
VACE		249
	VAE	340
VACH		
	VAF	357
VAFG		360
	VAG	360
VAFH		
	VAH	305
VACJ		
	VAJ	125

Moolarben

Moolarben leases cover a length of approximately 20 km (north-south) and up to 8 km wide (east-west). The Ulan seam is present over most of the area covered by the leases with exception towards the west boundary where the seam subcrops at the edge of the basin. The full Ulan Seam (except A2 ply) is included in the Resource estimate.

No coal quality cut-offs were used as the Ulan Seam is currently mined in its entirety in the open cut pits with the exception that the A2 ply is treated as a waste unit on account of high ash and is therefore excluded.

Where the Moolarben and Glen Davis seams are coalesced to a thickness of approximately 3m and are located above Open Cut Resources of the Ulan Seam, they are considered a Resources. This is a very small percentage of the overall Resource.

Ashton

Resources have been estimated for open cut and underground domains with a number of resource polygons.

Open cut resources extend from below the base of weathering (nominally 14m below surface) to a maximum depth of approximately 200m. The open cut resource estimate included all individual or coalesced plies available in the sequence with a 50% maximum raw ash content (adb).

Open Cut Resources sequences in the west include Bayswater to Lemington 19 located in EL5860 West, ML1533, ML1623 and EL4918N with Lemington 9 the uppermost resource interval in ML1623 and Lemington 14 uppermost resource interval within ML1533 North. Open Cut Resources are excluded in EL4918 West due to surface constraints associated with the Hunter River alluvium.

The open cut resource sequence in the east include Upper Liddell to Hebden which progressively subcrop across EL4918 East and EL5680 East and are life of mine open cut targets for the proposed South East Open Cut. Resources are excluded from Glennies Creek and Hunter River alluvium areas.

Underground resource extend to a maximum depth of less than 350m.

Underground resources occur in ML1533, ML1623, the northern and southern portions of EL4918 as well as EL5860 west of ML1533 adjacent to Ravensworth Underground Mine. Underground Resources are restricted to the Pikes Gully (remnant resources following completion of longwall operations), Upper Liddell, Upper Lower Liddell, Upper Barrett and Lower Barrett seams. Of these Upper Liddell, Upper Lower Liddell and Barrett are life of mine underground targets.

The Pikes Gully Seam, Upper Liddell Seam and Upper Lower Liddell Seam Underground Resources exclude all coal mined up to 30th June, 2018.

Yarrabee

The Resource entities at Yarrabee are the seven seams present at Yarrabee, namely, Cancer, Aries, Caster Upper, Caster Lower, Pollux, Orion and Pisces.

Resources have been limited to a 45% raw ash cut-off (determined through washability analysis), for seam extents in core holes. The equivalent geophysical signature was adopted and applied as an estimate to equivalent seams in the chip holes for interpretation of the 45% raw ash extents.

Resources are limited to the 25:1 strip ratio which was the economic limit during the 2010 resource boom. The limit is determined by doubling the economic strip ratio, which is approximately 12.5:1. The assumption by The Company is that metallurgical coal prices could once again increase to high levels based on decreasing volumes of economic metallurgical coal.

Minimum seam thicknesses are determined by the structural complexity of each resource domain and in conjunction with practical mining limitations, as well as consultation with mine planning engineers. In areas of low structural complexity, seam thickness limit are as thin as 40cm. No seam thickness limit is applied where seams coalesce other seams (ie are contiguous).

Open cut is considered as the only suitable method of operation. The structural complexity of the deposit currently excludes underground extraction methods. Truck and excavator with dozer push assist methodology is considered the most appropriate method of open cut mining at Yarrabee.

Stratford and Duralie

Duralie

Resources were estimated using thickness grids and in situ density grids (or default density values where gridded data was not available) from the uncut model (DUR_0614 or DURmicro16). Coal seams were limited to below base of weathering grid combined with the end of September 2017 mined surface within vertical sided polygons. To update resources to December 2017, forecast tonnes from October 2017 to December 2017 were subtracted from the resource estimate.

Clareval Seam resources were limited to a maximum depth of 300m (<300m west limb and <200m east limb, largely controlled by borehole data). Weismantel Seam resources were limited to 500m depth of cover. Resources are not extrapolated beyond borehole data. No minimum seam thickness was applied to the Weismantel Seam as the seam is generally 10-12m across the deposit. A minimum seam thickness was applied to the Cheerup and Clareval Seams of 0.1m (this would only exclude minimal tonnes). No quality limits were applied to the resource as current mine practices wash all coal from Duralie and blend if required at the Stratford CHPP.

Stratford

Resources were estimated using thickness grids and in situ density grids (or default density values where gridded data was not available) from the current models (WCR0811, STRAT0315 and SE0512). Coal seams were limited to below the base of weathering grid combined with the end of June 2014 mined surface, within vertical sided polygons. Essentially no mining has occurred in Roseville West and Bowens Road North pits

since July 2014. Resources were limited to a maximum depth of 150m (Stratford West) or 200m (Avon North, Stratford East) (largely controlled by borehole data). Resources were not extrapolated beyond borehole data.

No minimum seam thickness was applied to the estimate to allow maximisation of the reserve estimate (due to the numerous plies in the deposit/splitting and coalescing, applying a minimum ply thickness in previous works limited reserve studies from accessing all potential coal). No quality limits were applied to the resource as current mining practices mine coal thick enough for the equipment being used and the coal is washed and potentially blended.

Grant & Chainey

Resources were estimated in Minex software using thickness grids from the uncut model (GC_0812) limited to below the base of weathering and in situ density grids or default density values where gridded data was not available. Resources were estimated within vertical sided polygons to a maximum depth of 200m below topography. Resources are not extrapolated beyond borehole data. No minimum seam thickness was applied to the estimate to allow for maximisation of the Reserve estimate (as requested by the Reserves Competent Person). No quality limits were applied to the resource as current mining practices mine coal thick enough for the equipment being used and all coal is washed and, if required, blended.

Austar

The following list details the limits used;

- Limit of Mining as at 30 June 2018,
- 50m barrier pillar exclusion zone around underground mined areas,
- 5m offset either side of dykes,

The following assumptions have been made regarding the Austar Resource estimate:

- The proposed extraction methods are LTCC and conventional longwall operation for the remaining Bellbird, Stage 3 and the Inferred resource stated in EL6598.
- Longwall mining in the Austar area has been at depths of 420 to 540m depth of cover. The current LOM plan shows extraction plans for the Greta seam to a depth of approximately 720m. The assumption is that mining at up to 800m depth of cover could be achieved.
- A minimum seam thickness has not been applied because the Greta seam and Greta upper seam maintain seam thickness greater than 3m throughout the Austar tenure.
- That the coal in the resource area will have similar washability characteristics to the coal that is currently being mined and processed.
- Ash and total sulphur cut off limits have not been applied. It is assumed that the coal can be washed to achieve a 5.5 to 6.5% ash product coal with total sulphur content in the range of 1 to 2.5% based on the results of coal quality testing of ~~borecore~~core.
- Bord and pillar and potentially longwall extraction of remnant coal blocks as a scavenging operation is proposed.
- That access can be gained to the remnant coal blocks surrounding the proposed longwall panels.

The resource entity is the Greta Seam working section which consists of the Greta Upper and Lower seams west of the split line and the Greta Upper seam east of the split line. Resources have been categorised on a resource block basis according to tenure as the first discriminator for simplicity, rather than spacing of ~~PoOs~~PoO's.

The Measures resource in the Austar resource is well known from information seam elevation, thickness and quality and the location of faults and dykes from the mined out areas, in conjunction with borehole and 2D seismic data. Indicated Resource is estimated in the majority of the Stage 3 area, southeast of the drift to the Stage 3 area and southwest of the Bellbird area. Boreholes are typically spaced at less than 1000m in these

three areas of Indicated coal. Historical workings located to the north and borehole data confirm the presence of the Greta seam in the areas of Indicated resource.

Significant numbers of 2D seismic lines have been completed, processed and interpreted in the area of Indicated resource. The location of faults is well understood from drilling and 2D seismic data. The location of the Kitchener Dyke is also well known from magnetic survey data.

Consistent seam thickness that follows the expected gradual thickness changes associated with sedimentary trends, except for a number of thinned Greta seam occurrences that align with the Kitchener Dyke and the Quorrobolong Fault zone in the mined out area of Stage 3. The areas of seam thinning are also associated with increased raw ash content.

Inferred Resource is estimated in ML1661 and EL6598 for resource blocks ML1661F1 and EL6598IN. The Inferred resource is dependent upon the following information for classification;

- Historical workings located to the north and borehole data confirm the presence of the Greta seam in EL6598.
- Boreholes are spaced at 1 to 4km. Some of the boreholes do not have geophysics and have highly variable raw ash of less than 8% and 26% ash in adjacent boreholes. It is likely that there are differences in the sampling methodology and sample compositing philosophy of older and more recent data.
- The inferred resource reported for ML1661 (block ML1661F1) is located in the Abernathy Fault Zone. Raw coal ash in this area is anomalously high and seam thickness is highly variable in this area. It is suggested that the borehole data used in the model is not representative of the resource in this area due to faulting affecting the thickness and ash of the ~~borecore~~core samples.

Donaldson

Coal resources have been estimated for the Fassifern Seam, West Borehole Seam, Upper Donaldson Seam, Lower Donaldson Seam and Big Ben Seam

Coal resources north of John Renshaw Drive and east of the closed Donaldson open cut mine are considered open cut resources due to their shallow depth. All other resources at Donaldson are considered underground resources either due to depth, or surface constraints that prohibit open cut mining.

The limits and assumptions used to define resource areas are:

- Limited to lease boundaries
- Limited to seam subcrops
- Limit of mining as at 30 September 2016
- Abel mine ROM tonnes from 1 October 2015 to 31 December 2015 were 228,704t. ROM tonnes from 1 January 2016 to 30 September 2016 were 266,365t. Forecast tonnes from 1 October to December 31 2016 are 0 tonnes. These tonnage figures are included in the Abel Mine production figures in the Reconciliation Table.
- A 50m exclusion zone around historical workings
- A minimum seam thickness of 1.2m has been applied
- A maximum raw ash cut-off of 50% has been applied to most target seams (except Lower Donaldson Seam)
- For Lower Donaldson Seam a maximum ash cut-off of 55% has been used as mine planning and financial analysis studies completed by Donaldson mine and Yancoal Corporate indicate this mine plan has a positive NPV.
- Seams without reasonable prospects for eventual economic extraction excluded from estimate.
- No surface constraints have been applied

Middlemount

The Company's Resource and Reserve entities are interpreted to be the seam groups mined; that is,

- Middlemount Seam plies of MU, MLT, MLB;
- Tralee Seam plies of TL1, TL2T, TL2B; and
- Pisces Upper Seam plies of PUT, PUM, PUB

The minimum seam thickness for resource estimation is 0.30m; a limit that has been applied due to practical mining limitations, as well as consultation with mine planning engineers. This effectively excludes the TL1 ply from resource estimations across most of the deposit. No seam thickness limit is applied where seams adjoin (coalesce) with other seams; however, there is a minimum separable interburden thickness is 0.30m also.

Based on the effects of dilution observed in coal quality data reviews by RPM, the limit of 37%ad raw ash applied to the resource categorisation by JB Mining appears reasonable. Other limits applied to the resource exclude all coal within a 50m buffer of the Jellinbah Fault and all coal to the east of the fault; all weathered coal; and all fault-repeated coal from resource estimations.

Points of Observation Spacing

RPM has completed a detailed review of the PoO spacing from a first principles to determine an independent view of classification applied to the resource.

HVO / MTW

RPM has reviewed the following attributes for 100 seam elements and 65 compound seam intervals for MTW and 104 seam elements and 55 compound seam intervals for HVO to assess the variability of the Resources to determine PoO spacing:

- Seam thickness,
- Interburden thickness,
- Seam splitting and coalescing patterns to determine whether they are sedimentary or due to seam correlation inconsistency between stages of exploration.
- Structural elevation,
- Coal quality,
- The relationship between raw coal quality and washed Product Coal quality,
- The relationship between overburden / interburden thickness variation and coal quality variability,
- Histograms, statistics and cross plots of coal quality attributes of seam groups.
- Review of the as mined seam roof or floor survey data in conjunction with modelled roof and floor contours and borehole intersections to assess reliability of input data and model output.

RPM acknowledges that some of the variability present in the MTW and HVO geological data is in part due to the inconsistency of the work that was performed by a large range of geologists over a time period in excess of 30 years. It is likely that the geology of the MTW and HVO areas may be less variable than that exhibited by the MTW and HVO databases, however, the Resource estimate must be made by making an assessment based on the variability of the data that is available.

The largest variability of the MTW and HVO data is caused by the seam correlations. In general the seam splits do not show any trend which is counter to geological processes. Groups of certain seam correlations appear to be clustered into groups that are aligned in strips parallel to the highwall suggesting that seam correlations are dependent upon the geologist completing the work rather than the geology. RPM has ignored this aspect of variation and has assessed seam thickness and coal quality variation within each of the different seam name domains and considers this not a material issue given the large scale mining practices.

RPM has determined the PoO spacing for both the MTW and HVO resource areas by review of variation between nearest neighbour boreholes for the attributes listed above. The PoO spacing was determined when less than 10% and 20% variability of between adjacent boreholes was established. In general coal quality data showed low variability between adjacent boreholes, except in the following circumstances:

- Incorrect data has been loaded to the database, or data has been incorrectly composited. There are a large number of coal seams in HVO with coal seam ash ranging between 50 and 90%.
- Interburden thickness above a coal seam thickens. It is common for interburden thickness to increase from 0.2m to greater than 20m over a horizontal distance between 100 and 150m. In general the underlying coal seam shows increased raw ash and product ash in the zone where the interburden thickens.

The coal quality PoO spacing was assessed by RPM to usually be double the spacing of the quantity or structural PoO as shown in ***Table 7-~~6~~7*** and ***Table 7-~~7~~8***.

Table 7-~~7776~~ PoO Spacing MTW

Seam Group / Seams	PoO Radius Quantity			PoO Radius Quality		
	Measured	Indicated	Inferred	Measured	Indicated	Inferred
Whybrow						
WYAB	100	200	400	200	400	800
WYC	100	200	400	200	400	800
WYD	100	200	400	200	400	800
WYE	100	200	400	200	400	800
WYF	100	200	400	200	400	800
WYG	100	200	400	200	400	800
Redbank Creek						
RCA	125	250	500	250	500	1,000
RCB	125	250	500	250	500	1,000
RCC	125	250	500	250	500	1,000
RCD, RCE, RCF	125	250	500	250	500	1,000
Wambo						
WBAC	125	250	500	250	500	1,000
WBD	125	250	500	250	500	1,000
Whynot						
WNA	125	250	500	250	500	1,000
WNB, WND	125	250	500	250	500	1,000
WNC	125	250	500	250	500	1,000
Blakefield						
BLAB, BLC, BLE, BLF, BLG, BLH	160	320	900	250	500	1,000
BLD	125	250	500	250	500	1,000
BLJ	125	250	500	250	500	1,000
Glen Munro	125	250	500	250	500	1,000
Woodlands	125	250	500	250	500	1,000
Arrowfield						
AFA	125	250	500	250	500	1,000
AFB	125	250	500	200	400	600
Bowfield	170	300	1,000	250	500	1000
Warkworth	150	300	600	300	600	1,200
Mount Arthur	150	300	600	300	600	1,200
Piercefield						
PFAB	200	400	800	400	1,000	1,200
PFCE	200	400	800	400	1,000	1,200
Vaux						
VAAB	225	450	900	400	1,000	1,200
VACH	225	450	900	400	1,000	1,200
VAJ	225	450	900	400	1,000	1,200
Broonie						
BNAF	200	400	800	400	1,000	1,200
BNGH	200	400	800	400	1,000	1,200
BNJQ	200	400	800	400	1,000	1,200
Bayswater	250	500	1,000	400	1,000	1,200

Table 7.~~8887~~ PoO Spacing HVO

Seam Group	PoO Radius					
	PoO 1 to 3			PoO 1 and 2		
	Quantity			Quality		
	Measured	Indicated	Inferred	Measured	Indicated	Inferred
Wambo	75	150	400	150	300	800
Whynot	75	150	400	150	300	800
Blakefield	75	200	400	150	300	800
Glen Munro	75	200	400	150	300	800
Woodlands	75	150	400	150	300	800
Arrowfield	75	150	400	150	300	800
Bowfield	100	200	500	200	400	1,000
Warkworth, WK2, WK3, WK4, WK5, WK6, WK9, WK10	125	250	600	250	500	1,000
WK1	125	250	600	250	500	1,000
WK7, 8A, 8C	125	250	600	250	500	1,000
Mount Arthur	125	250	600	250	500	1,000
Piercefield	175	350	700	350	700	1,000
Vaux	200	400	800	300	600	1,200
Broonie	175	400	800	300	600	1,200
Bayswater	200	400	800	300	600	1,200
Lemington	100	200	400	200	400	1,000
Pikes Gully	125	250	600	300	600	1,200
Arties	125	250	600	250	500	1,000
Liddell	125	250	600	250	500	1,000
Barrett	125	250	600	250	500	1,000
BAR	150	300	600	300	600	1,000
BAR1	125	250	600	250	500	1,000
BAR2	125	250	600	250	500	1,000
LBA	125	250	600	250	500	1,000
LBA1	125	250	600	250	500	1,000
LBA2	125	250	600	250	500	1,000

Moolarben

Resource classification and estimates are limited and based entirely on borehole data and supported by exiting data outside Moolarben. Resources were mostly extended to lease boundaries as boreholes and existing mine operations intersected and target the Ulan Seam within and outside the Moolarben boundaries.

Measured Resources are supported by boreholes approximately 500m apart but up to 900m apart (south and north areas). The consistent nature and predictability of the Ulan Seam and utilizing public information and knowledge of neighbouring operations provides confidence in Measured status resources.

Indicated Resource are mainly towards the edge of the lease where there is supporting data outside the Moolarben tenements. Classification supported by boreholes up to 1.2 km.

Inferred Resources are supported by boreholes up to 2 km apart. Inferred Resources exist on the edges of the lease, classified using data outside the Moolarben tenements to extend resources to the lease boundaries.

RPMGLOBAL

Ashton

Coal resources were classified Measured Resources - where geological data points based on detailed and reliable close spaced borehole data where sampling and testing information supports a reasonable level of confidence in seam thickness, continuity and coal quality of the seam. Adjacent past workings both underground and open cut provide additional supporting information confirming seam presence and continuity. Distance between boreholes can be up to 500m depending on the consistency of seam character.

Indicated status done last year has locally required borehole spacing in excess of 1,100m. Justification for this is based on regional lateral persistence extending through to adjoining tenements and mine operations. Coal resources were classified Indicated Resources - where geological data points contribute to a reasonable level of confidence in seam thickness and continuity and coal quality. Distance between boreholes can be up to 1100m depending on the consistency of seam character.

Coal resources were classified Inferred Resources - where there is a paucity of coal quality data and borehole spacing is only sufficient to delineate seam thickness to a low level of confidence. Distance between boreholes is generally greater than 1100m or in areas of extrapolation beyond PoO.

Yarrabee

The Yarrabee Resource is well understood based on exploration and open cut mining operations that have occurred over the past forty years or so, sale of predominantly raw coal up until 2009 and sale of washed coal from 2009. The major turning point in understanding of the geology at Yarrabee occurred over the past ten years or so under Yancoal ownership and the work by the previous Competent Person during that time.

The PoO used to classify the Yarrabee Resource are shown in ***Table 7-~~3~~9***. The PoO spacing are intended as a guideline only for quantity and have been used as shown in ***Table 7-~~3~~9*** for coal quality. The coal quality at Yarrabee has a greater level of certainty between ~~PoOs~~PoO's than quantity due to the highly structured nature of the Yarrabee resource.

Seam thicknesses for the Resource entities follow sedimentary trends, which is expected in a coal deposit and means that the coal quantity estimate will predominantly have moderate to high confidence.

Coal seams can be correlated with a high level of confidence across the Yarrabee resource using geophysical logs. However, RPM highlights that the structure is critical and structural domains DOM6, DOM3, DOM2, DOM2S, YEN and YES is based on the nature of the geology, such as seam dip direction and magnitude, faulting and the likely modifying factors that impact conversion of Resource to Reserve.

Borehole spacing in parts of DOM6, DOM3, DOM2, and DOM2S may be as close as 20 to 50m in order for the structure to be understood. Therefore, the spacing for the quantity ~~PoOs~~PoO's is really a guideline only. The ability to interpret, describe and model the geology is the key driver to assigning a Resource status to a coal resource in a structurally complex area such as Yarrabee.

Table 7-~~3~~-9 Points of Observation Spacing

General Resource Classification Parameters				
Category	Quantity PoO		Quality PoO	
	Spacing	Radius	Spacing	Radius
Measured	200	150	400	250
Indicated	400	250	800	500
Inferred	800	500	1000	1000

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Stratford and Duralie

Duralie

Measured Resources – typical drilling density involved 100m spaced east-west drill lines (range from 50-150 m) with boreholes along these drill lines averaging 50m spacing. Some fault delineation drilling down to 15m spacing may be present. Cored holes are spaced approximately 200-500m apart. Indicated Resources – 200-500m spaced east-west drill lines, with boreholes along the drill lines up to 300 m. Core holes are located generally 400-1,000m apart. Inferred Resources – for Weismantel Seam borehole data is generally located at the edges of Inferred areas, rare data within these areas (up to 1.5 km apart). Core holes are rare in Inferred Resource areas however are generally adjacent/nearby to areas with core data.

Stratford

Measured Resources: there is a small Measured Resource at Stratford in the Bowens Road Seam (this is a consistent seam, which was mined extensively immediately north of the measured area). Holes are located on approximately 100m spaced drill lines with holes along these lines 75-100m apart and with coal quality data available from holes or previous mining within 500 m. Indicated Resources: holes were located on 200-300m spaced east-west drill lines with holes along the lines 20-200m apart. For Avon North the holes were spaced on 100m drill lines but were classified Indicated due to seam complexity and quality data limitations. Core holes were 150m to approximately 1,000m apart or near mined areas of those seams. Inferred Resources: boreholes up to 800m apart with rare coal quality data. Some areas had far more closely spaced holes but quality data rare/absent.

Co-disposal area

These resources were classified as Indicated Resources due to the good quality of survey and mapping data, continuous emplacement of wash plant reject material into these cells from 1995-1999, a history and continued use of this material as feed to the Stratford Mine wash plant and coal quality results indicating usable products.

Grant & Chainey

Measured Resources: Boreholes are located on 100-150m spaced east west drill lines. Holes along drill lines are spaced 20-150 m. Core holes are located up to 400m apart along strike due to the steeply dipping nature of seams. Indicated Resources: Boreholes are located generally on 200m spaced east west drill lines. Holes along these drill lines are 40-150m apart. Core holes are located generally 400-800m apart, however can be up to 1.5 km apart (often along strike due to the steeply dipping seams). At the nose of the seam sub-crops in the south, there is no coal quality data, however the spacing and grid of boreholes, coal quality data available in nearby areas on certain seams (including Bowens Road and Avon seams) and consistency of coal seam character determined from downhole geophysical logs, has enabled these resources to be classified as Indicated Resources. Inferred Resources: For some minor seams, boreholes are located as close as 200m spaced east-west drill lines, however there may be little up-dip/down-dip data on the seam or inconsistency of the plies. For major seams, holes are spaced on drill lines up to 2 km apart. Core data is 500m apart to rare on some minor seams and sparse to rare for major seams (including Bowens Road and Avon Seams).

Austar

In the northern portion of CML2, core hole spacing ranges from approximately 250m-600m while in the southern portion of CML2 core hole spacing ranges from 600m-1200m. In CCL728 core hole spacing is approximately 1000m. In EL6598 core hole spacing ranges from 1km -3.6km.

As part of the resource estimation process, the total resource area was divided based on various geological, structural, PoO, past mining or lease boundary considerations, into discrete polygons. Once resource polygons were defined, the status of coal resources within each polygon was classified either as:

• Measured Resources - where geological data points based on detailed and reliable exploration, sampling and testing information support a reasonable level of confidence in Greta Seam thickness, continuity, coal quality

and structure of the Greta Seam. Supporting geological information in the form of reprocessed seismic data was also used to interpret continuity of Greta Seam along seismic lines. Adjacent past workings provide additional supporting information confirming presence and continuity of Greta Seam.

Indicated Resources - where geological data points contributed to a reasonable level of confidence in seam thickness and continuity and some coal quality. Supporting geological information in the form of reprocessed seismic data was also used to interpret continuity of Greta Seam along seismic lines.

Inferred Resources - where there was a paucity of coal quality data and drill hole spacing was only sufficient to delineate Greta Seam thickness to a low level of confidence. Past mining to the north provides supporting information confirming the presence and continuity of Greta Seam.

Donaldson

Measured Resources were categorised where geological data points based on detailed and reliable borehole data, sampling and testing information support a reasonable level of confidence in seam thickness, continuity and coal quality of the seam. Adjacent past workings (if present) provide additional supporting information confirming seam presence and continuity. Distance between boreholes can be up to 700m depending on the consistency of seam character.

Indicated Resources were categorised where geological data points contribute to a reasonable level of confidence in seam thickness and continuity and coal quality. Distance between boreholes can be up to 1300m depending on the consistency of seam character.

Inferred Resources were categorised where there is a paucity of coal quality data and borehole spacing is only sufficient to delineate seam thickness to a low level of confidence. Distance between boreholes is generally greater than 1500m.

Middlemount

The radii of influence for PoO were determined by consideration of the following for all coal plies:

- Seam continuity;
- Variability of seam thickness;
- Variability of interburden thickness;
- Structural variability;
- Variability of coal quality (particularly raw ash); and
- Review of the variability of the geology between boreholes and the reliability of borehole data.

Rudimentary geostatistical analysis was completed by previous authors on modelled seam thickness and raw ash across the deposit, based on previous studies by Noppe & de Klerk (2013). This study noted that the "range" on the variogram – which is the zone where mineralisation is correlatable, i.e. the values which fall between the nugget and the sill – is the maximum radii for PoO. On average, the range for modelled coal thickness was 2100-2500m and for raw ash (%ad), it was 1000-1500m.

Noppe & de Klerk (2013) noted that the range provided a guide to estimating the maximum extrapolation distance for the Inferred resource category, with two-thirds of the range being the maximum radii for Indicated resources and one-third of the range being the maximum radii for Measured resources.

Raw ash was selected as the basis for confidence categories for all seams resulting in the following:

- 1000m was confirmed as the radius for Inferred resources;
- 500m was confirmed as the radius for Indicated resources; and,
- 250m was confirmed as the radius for Measured resources.

7.5 Exploration Potential

HVO / MTW

Exploration has been undertaken over numerous generations over the last decades with the main focus on the two operation main pits for which Coal Resources have been estimated. Although the area has a long history of exploration, RPM considers there to be good potential to define further coal seams bodies within the Project area both near planned mining infrastructure and within the broader exploration concession. RPM considers the large concession holding of the Company contains a number of key targets which present opportunities to increase the resource base and add feed sources to the plant thereby in turn increasing the mine life, these include:

- **Inferred material**: Within the current final pit designs for the Projects a combined total of approximately 46Mt of "inferred" material has been reported. Targeted drilling to improve the geological confidence is required in these areas.
- **Downdip Targets**: The Company has undertaken exploration in the areas surrounding the defined near surface resource, however in addition further down dip targets have been identified predominately to the west of the current Inferred material. RPM notes this target is limited by the license boundary is underground potential only.
- **Underground**: While resources are currently defined further drilling is required to fully define the extent on potential underground mining. As detailed in ***Section 16*** as conceptual study has been completed on the currently define resources which highlights the economic potential on this area.

Moolarben

There is very limited potential for additional Resources based on future exploration. This is due to the coal seams being very consistent and well defined by the current extensive exploration data over the extents of the Project area.

Any future exploration is expected to not have a material impact on the total Resources although would be expected to increase resource classification from Inferred and Indicated to Measured status.

Ashton

There is very limited potential to increase the total Resources for the Ashton Project through further Exploration. All recognised coal seams are defined as Resources throughout the Project area. Further exploration would be expected to upgrade the Resource Categorisation, therefore increasing the percentage of Measured Resources.

Yarrabee

RPM considers that there is limited resource upside located within the current Mining Lease areas, because exploration drilling has been completed on a regular pattern over the most prospective parts of the Mining Leases.

RPM considers that underground or highwall extraction in the deeper parts of the Yarrabee resource should not be ruled out without additional exploration such as 2D seismic data acquisition and targeted exploration drilling in the eastern part of the resource.

It is likely that additional resource tonnage from the Rangal Coal Measures and more certainly from the Burngrove Formation, could be located in the EPC tenure located to the north of Yarrabee in what is referred to as the Wilpeena area.

RPMGLOBAL

Stratford and Duralie

Duralie

For potential underground resources drilling is required to evaluate the Weismantel Seam in the deeper central portion of the Gloucester Syncline. Much of these resources are currently classified as Inferred.

Stratford

Potential works include update of the coal quality database/model over Stratford. Also further exploration to improve definition of resource/reserve (Avon North and Stratford East), including additional coal quality data, further definition of structure.

Grant & Chainey

Further work planned includes reviewing the geophysical data recently obtained. Other works could include defining the Weismantel and Clareval Seams through the Grant & Chainey area, on the eastern limb of the syncline

Austar

Exploration potential exists for shallower underground coal in the eastern part of EL6598. The characteristics of the Greta seam from the east of EL6598 are:

- Depth of cover increases from 280m in the east to greater than 700m in the west,
- Seam thickness increases from 2 to 4m from east to west,
- Raw coal ash shows an overall trend of decreases from east to west, however data is sparse and variability in EL6598 is very high, with adjacent boreholes showing values of less than 8% raw ash and 26% ash.
- Raw coal total sulphur increases from less than 1% in the east to 3% in the west
- The Resource block EL6598l1 is located in EL6598 to the east of the Stage 3 area. The primary attributes of the Greta Seam in this area include the following;
  - Seam thickness; 2.7m
  - Average depth of cover; 513m
  - Raw coal ash; 17.9%
  - Raw coal total sulphur; 1.35%
  - The raw total sulphur in this area is the lowest of the Austar resource area.

Donaldson

The exploration potential of the Project is considered limited due to the extensive borehole database and mining history already defining any potential Resources.

Middlemount

RPM notes that sufficient work has been completed to establish seam continuity in the planned life of mine LOM area, however, further fault delineation drilling or 2D seismic surveys should be considered for the delineation of the Jellinbah Fault; the north east striking faults and the subsidiary thrust faults to the Jellinbah Fault; and the potential offsets of the Jellinbah Fault that RPM has interpreted.

Additional drilling is required to delineate the limits of oxidation of the Middlemount and Pisces seams in the future mining areas located north and south of the mined out area.

Additional core drilling and coal quality analysis will be required to increase confidence in the resource in the north and south of the deposit which is currently only at Indicated or Inferred status. Re-drilling sites where ply data is not available should also be considered to increase the understanding of coal quality trends.

To identify areas of the deposit where coking properties are likely to be impacted, ash analysis and maceral analysis should continue if no other coking tests are going to be conducted.

In 2017 Middlemount purchased a portion of an adjacent lease to the north-west of ML70370. This area has been explored by the previous owners and has been incorporated into the Resource estimate as at 30 June 2018.

7.6 Reasonable Economic Prospects

HVO / MTW

The Assets are mature open cut mining operations that have approvals and license to operate in place for an extended period of time. Coal products are semi soft coking and thermal coal products that have strong market acceptance. Given the active mining both Assets have sufficient infrastructure including rail and port capacity and a well-trained and competent work force that should enable the life of mine plans to be followed (See various sections for further commentary).

RPM has made the following general assumptions to define the reasonable prospects for economic extraction:

- The HVO open cut operations are economic to 17 to 1 for in situ prime strip ratio which is considered to approximate the break-even strip ratio and an approximate depth of cover between 300 and 350m (See Section 9 for further details).
- The MTW open cut operations are economic to the 16 to 1 for in situ prime strip ratio.
- Benchmarking with other open cut operations and future proposed operations in the Hunter Valley suggests that a 350m depth of cover cut off is appropriate,.
- RPM considers underground longwall operations below open cut excavation floor typically requires 80 to 120m of cover above the seam being mined by longwall methods. A minimum of 60m has been assumed for this Resource estimate based on RPM's assumptions used for other underground mining studies where the underground working sections are separated by 60m.
- Future demand for thermal and semi soft coking coal will remain strong and
- License to operate will not change to adversely affect the duration of the current LOM plan with mining consents are in place for HVO North to 2025, HVO South to 2030 and MTW to 2036. RPM assumes these will be updated in due course of standard applications in NSW.

In addition RPM has made the following assumptions specific to MTW:

- The Company has stated open cut Resources down to the Mt Arthur seam in the West Pit and Warkworth D seam in the North Pit.
- RPM considers that the Piercefield and Vaux seams are potentially economic open cut seams based on sufficient spoil room being available as such are included.
- That the slope and dump management plan will successfully manage the geotechnical aspects of mining below the current Mt Arthur and Warkworth seam floor to recover the Piercefield and Vaux seams.
- The Broonie and Bayswater seams are not potentially economic seams due to a lack of spoil room.
- The Company does not have title to the Bayswater seam by virtue of the title conditions and as such the Bayswater seam cannot form part of the current Coal Resource.
- MTO open cut Coal Resources are stated to the Woodlands Hill seam.
- The Bayswater seam has been reported as the Underground Resource in the WML area as it has been assumed that open cut mining will continue to the Vaux seam from the highwall location as of December

31 2016. The Company depicts plans for longwall panels in the Vaux seam in both WML and MTO. RPM has reviewed the separation thickness between the Mount Arthur seam floor and the Vaux seam and determined that the separation thickness is insufficient (less than 60m) to support a practical longwall in the Vaux seam, should open cut mining progress to the Mount Arthur seam.

- RPM reviewed the open cut potential in the MTO area and concluded that it was likely that only a single longwall operation was possible due to requirement of having at least 60m separation between mined intervals below the Woodlands Hill seam floor in the open cut. RPM selected the Vaux seam as a reasonable longwall target seam because it appeared to have consistent seam thickness and separation between the VAF, VAG and VAH plies. The Mt Arthur MAC to MAJ plies are also a possible longwall resource but were rejected on the grounds of closer proximity to the floor of the Mt Arthur seam open cut and inferior roof conditions due to the Mount Arthur MAA and MAB plies, Fairford Claystone and Warkworth WKE to WKK plies being present in the primary and secondary roof.

RPM has made the following assumptions specific to HVO:

- All seams within the Jerrys Plains and the Vane Subgroups in the HVON area have open cut economic potential because depth of cover is less than 320m and the prime strip ratio 5.8 as outlined in Section 8.
- The coal seams of the Vane Subgroup only have open cut economic potential to the proposed limit of the Auckland Pit highwall. All seams of the Vane Subgroup down dip of the proposed Auckland Pit highwall and located in the axial plane area of the Bayswater Syncline can only have underground potential due to having depth greater than 320m and in situ strip ratio greater than 9:1. The Wollombi Brook and its associated river flats is also considered to be the western limit of the Auckland open cut resource area.
- A 100m offset has been applied to the bord and pillar underground operations in the MA3, PF1 and PF2 seams. The area of underground working has been excluded from the Resource estimate.
- The HVO underground Resource is located in the HVO South area in the Arties and Barrett seams of the Vane Subgroup. The Resource area has been subject to a mining study by the Company in 2010.
- All Resource from the Jerrys Plains and Vane Subgroups in HVO North has been classified and reported as an open cut Resource and as such no underground Resources are reported.
- The HVO underground Resource is located in the HVO South area in the Arties and Barrett seams of the Vane Subgroup. The underground Resource area has been subject to an Order of Magnitude Study by the Company in 2010.
- RPM has assumed that tenure below the Vaux seam in CCL 755 and below the Bayswater seam in ML 1324 would be granted to the tenure holder of the HVO leases upon application. The Resource in these areas is estimated to be 453Mt to a depth of 350m.
- RPM has not reduced the Coal Resource footprint in areas of waterways and alluvial land. RPM considers that extraction of coal by methods other than open cut could be possible in such areas however notes that coal does not extend under the hunter river. Offsets from waterways and alluvial land are considered to be modifying factors when classifying Reserves.

Appendix D provides graphical representation of the classification applied to the Coal Resource for various seams.

Moolarben

Moolarben mine plan considers open cut potential mostly where depth of cover is less than 100 m. Coal resources for the uppermost ply of the Ulan seam (A1) is only reported at less than 100m depth because it is considered that this ply only has economic potential if mined by open cut methods. The rest of the Ulan Seam can be mined by either open cut or underground methods as it is currently mined at Moolarben and adjacent operations.

No coal quality or thickness cut-off parameters are applied as adopting reasonable cut-off parameters will not impact on the Resources.

Other seams above the Ulan Seam are present within the deposit but only Moolarben and Glen Davis seams are considered a resource in some areas of the open cut pit OC4 where these two seams coalesced to a thickness of approximately 3 m. This report considers these two seams as an Inferred Resource at this stage due to lack of quality data to better define economic mining potential.

Moolarben contains an active open cut operation mining the full Ulan Seam and an active underground longwall operation on the lower section of the Ulan Seam which provides the basis for the 'Reasonable Economic Prosects' test.

Ashton

Both Open Cut and Underground Resources are estimated for the Ashton Project based on what is considered the most likely method of extractions. The 'Reasonable Prospects Test' was applied based on the most likely mining method identified.

Relevant mining parameters depending on the mining method were considered to determine 'Reasonable Economic Prospects'.

For Underground Resources this included consideration of depth of cover, seam dip limit, working section thickness and interburden thickness between working sections.

For Open Cut Resources these included in situ cumulative strip ratio, depth of cover, minimum seam thickness and surfaces constraints including rivers and associated floodplain ~~alluvials~~alluvial material.

Constraints associated with rivers and creeks, floodplain ~~alluvials~~alluvial material and surface infrastructure were not applied to the Underground Resources. These were considered but as coal can technically be recovered from under these surface constraints no limits were applied. To determine if coal can be economical recovered requires detailed consideration during the development of mine plans associated with preparing Reserves.

In general, due to the nature of the deposit, the Resources are not sensitive to the consideration applied. Ashton has mined coal from both open cut and underground mining methods which supports the criteria used to determine the 'Reasonable Economic Prospects'.

Yarrabee

The Yarrabee Mine is a mature open cut mining operation that has an approved Environmental Authority and license to operate in place for an extended period of time (the current LOM is up to 2031). All Resources are located within current Mining Leases. Coal products are PCI and thermal coal products that have strong market acceptance. Given the active mining The Company has sufficient infrastructure including rail and port capacity and a well-trained and competent work force that should enable the life of mine plans to be followed.

RPM has made the following general assumptions to define the reasonable prospects for economic extraction:

- The Yarrabee open cut operations are economic to the 21 to 1 insitu prime strip ratio which is considered to approximate the break-even strip ratio.
- The Yarrabee Resource has been stated to the 25:1 in situ prime strip ratio, which is based on coal prices achieved during the previous boom in 2010, as such the maximum depth of mining.
- The Company has excluded the underground potential of the Yarrabee resource due to structural complexity. RPM is of the view that extraction methods other than open cut should be considered and has not ruled out underground extraction for the eastern part of the Yarrabee resource. RPM considers that Concept or Order of Magnitude Studies should be completed to assess the deeper resources at Yarrabee,
- Future demand for thermal and PCI coal will remain strong, with commensurate reasonable coal prices and
- License to operate will not change to adversely affect the duration of the current LOM plan.

Appendix D provides graphical representation of the classification applied to the Coal Resource for various seams.

Stratford and Duralie

Duralie

Currently open cut mining methods are used at Duralie in the Weismantel, Cheerup and Clareval seams. Current mining depths are 115m below original topography in the Weismantel Seam pit and 150m in the Clareval Bowl area. It is expected this method will continue for 'shallow' coal resources. The actual limit of open cut mining is a Reserve issue, depending on coal price and geotechnical issues. For resources in the deeper parts of Weismantel Seam, it is assumed mining will be by underground mining methods, including bord and pillar, hydraulic mining, etc. taking into account the relative steep dip of the seam.

Clareval Seam resources at Duralie are limited to depths of 200-300m below original topographic surface (largely controlled by borehole data). With in situ strip ratios in the order of 8:1, to depths of 200 m, it is possible that in the future (<50 years) these resources will be viable.

Stratford

Mining at Stratford has been by open cut mining methods. It is assumed remaining coal resources at Stratford will be extracted by open cut methods. Resources at Stratford are limited to depths of 150m (Stratford West) or 200m (Avon North and Stratford East) below original topographic surface (largely controlled by borehole data). Mining depths reached in the Stratford Main Pit and Bowens Road Pit were 125m and 120m from topography respectively. Approximate in situ strip ratios in the order of 6:1-10:1 indicate it may be possible that resources to depths of 200m may be economic in the future (<50 years).

In Roseville Extension and Roseville West pits, thin seam mining was used to extract the coal plies (coal bands down to 0.15m thick were mined). Small mining equipment was used to achieve this. In BRN Pit the Marker plies were mined at thicknesses down to 0.2-0.3 m. Due to the nature and coking quality of the coal a lot of care was taken in recovering the coal. Mining in the Roseville West Pit ceased during the downturn in prices however with the recent upswing in coal prices this pit will be viable again.

Resources are estimated for in situ coal seams that occur beneath the co-disposal material. It is assumed the co-disposal material will be completely extracted before mining the underlying seams. The geological model for Stratford West used the base of weathering below the original topographic surface in this area for resource estimation.

Coal resources have been limited by the mined surface as at the end of June 2014. In areas around some of the completed pits (e.g. Roseville Pit, Bowens Road West Pit) resources have been estimated below/adjacent to the pits. No buffer zone was applied to allow mining studies to determine reserve limitations and future mining opportunities.

Mine infrastructure, such as the Stratford East Dam over some of Stratford East, was not used to limit resources to allow mining studies to determine viability. The exception to this was coal under the main Stratford mine infrastructure (the wash plant, stock piles, ROM pad and coal handling facilities). This exclusion zone has removed approximately 1.5Mt of potential Indicated and 0.8Mt of potential Inferred Resources from the Marker 3-Bowens Road seams.

Co-Disposal Area

The material in the Co-disposal area has been mined by open cut methods and incorporated into the plant feed at Stratford CHPP for more than 15 years. Due to the depths of the material (<20m from surface) it is expected this mining method will continue with the remaining resource.

Grant & Chainey

The same coal seams and similar geology occur at Grant & Chainey as Stratford Mine and it is assumed coal resources at Grant & Chainey will be extracted by open cut mining methods, as at Stratford Mine. Resources at Grant & Chainey are limited to depths of 200m below original topographic surface (largely controlled by borehole data). Approximate in situ strip ratios in the order of 10:1 indicate that resources to depths of 200m may be viable in the future (<50 years).

Austar

The Austar resource has reasonable prospects of eventual economic extraction for the following reasons:

- Austar was an operating mine with sufficient onsite infrastructure to extract proposed tonnages, existing markets for high sulphur metallurgical coal and sufficient offsite infrastructure to rail and ship the proposed products
- Approximately 80% of the Austar Measured and Indicated Resource is located at less than 500m depth of cover. Mining is planned to 720m depth. Modifying factors which may affect the conversion of Resource to Reserve have not been discussed.
- Other assumptions made by the Competent Person for assessing reasonable prospects include;
  - Demand for high sulphur metallurgical coal remains high,
  - The price achieved for high sulphur metallurgical coal remains high,
  - Geotechnical issues (such as depth of cover) do not constrain mining, or cause mining closure prior to completion of the LOM plan,
  - Regulatory controls enable mining to continue for the duration of the LOM plan,
  - License to operate is not challenged in the future, such that the LOM plan cannot be completed,
  - The washability characteristics of the resource coal do not change significantly from the current washability characteristics,
  - There are remnant coal around areas of historical coal extraction and outside of the current LOM which would be difficult to extract with the current mining method and equipment. It is assumed that these blocks could potentially be recovered during 'scavenging' operations using Bord and Pillar mining method. This may be reasonable as would add flexibility to the operation and supplement tonnes coming from the longwall as required.

Donaldson

Both open cut and underground Resources are estimated for the Donaldson Project based on what is considered the most likely method of extractions. The 'Reasonable Prospects Test' was applied based on the most likely mining method identified.

The Reasonable Economic Prospects for the Resources was determined by applying a general mining criteria based on the most likely mining method.

For open cut Resources the depth and cumulative strip ratio were used to determined 'reasonable prospects'.

For underground Resources, a minimum working section thickness of 1.2m and maximum raw ash cut off of 50% (55% for Lower Donaldson) were used to determine 'reasonable prospects'. Also, underground Resources were assessed to determine if under assumed and justifiable technical, economic and development conditions, might, in whole or part, become economically extractable. On this basis, the Sandgate and Ashtonfield Seams were excluded from the Resources.

Middlemount

The Middlemount asset is a mature open cut mining operations that has approvals and license to operate in place for an extended period of time. Coal products are semi hard coking and PCI metallurgical coal products

that have strong market acceptance. The asset has sufficient infrastructure including rail and port capacity and a well-trained and competent work force that should enable the life of mine plans to be followed.

RPM has made the following general assumptions to define the reasonable prospects for economic extraction:

- The break-even strip ratio is estimated to be 17 and an approximate depth of cover between 60 and 200 m,
- Benchmarking with other open cut operations and future proposed operations in the Bowen Basin suggests that a 350m depth of cover cut off is appropriate,
- 37% Ash content and 5% IS moisture cut off,
- 50m barrier pillar to the underground resource,
- Minimum seam thickness of 0.3m,
- Basement unit Yarrabee tuff unit,
- Future demand for metallurgical coal, in particular semi hard coking and PCI coal, will remain strong,
- License to operate will not change to adversely affect the duration of the current LOM plan,
- RPM notes that Middlemount Coal has negotiated and achieved successful outcomes to relocate the Bingegang pipeline and to mine through other easements. RPM assumes that the relevant approvals will be granted for any required diversions of Roper Creek, and
- All coal seams from the Roper to Pisces Upper have open cut economic potential because depth of cover is less than 200 m and the average life of mine insitu prime strip ratio is 12:1.

RPM makes the following specific assumptions about the open cut resources;

- RPM has identified that slope stability will potentially be an issue at Middlemount based on our observations made during the site visit. The issues of concern are the failures that are present in the current highwall in both the Tertiary and Permian strata.
- The Permian strata are faulted by the Jellinbah Fault and its subsidiary faults in the upper parts of the Permian highwall, however these faults will be located closer to the pit floor with future highwall advance to the east. RPM considers that there is high potential for strata on the upthrown side of the Jellinbah Fault to have westward dips (into the open cut excavation), thereby creating geotechnical, operational and safety hazards.
- RPM has interpreted northeast striking faults with significant displacement at both the planned northern and southern end walls in the current LOM. Both faults intersect offset the Jellinbah Fault. The location of the intersection of the northern and southern faults with the Jellinbah Fault is close to the proposed intersection of the endwalls and highwall, thereby creating potential geotechnical hazards.
- That the final southern highwall will not be required to be moved to the north to avoid the southernmost northeast striking fault interpreted by RPM. The fault is downthrown to the south by 50-100m. Should additional data acquisition result in no change to its current location the final southern highwall may be moved to the north of its current location, thereby reducing the open cut Resource and Reserve.
- The Tertiary strata appear to be highly reactive and contain significant volumes of ground water. Groundwater seepage is occurring at the Tertiary/Permian interface in the current highwall. RPM assumes that the relevant structural and geotechnical data will be acquired by Middlemount Coal to understand and manage geotechnical risk associated with their LOM plan.
- RPM assumes that the potential groundwater issues associated with the Tertiary will be studied and understood prior to mine advance into the deeper parts of the resource.
- RPM assumes that Middlemount Coal will follow a suitable slope and dump management safety standard to ensure that the LOM Plan can be achieved.

RPM makes the following specific assumptions about the underground Resources;

- The Middlemount underground Resource is located in the southern part of the Middlemount ML70417 and ML70379. The proposed mining method is bord and pillar. The underground Resource area has not been subject to a mining study by Middlemount and no conceptual underground layout plan has been provided to RPM for review.
- The results of a mining study will return a positive rate of return and NPV.
- Sufficient cognisance in the proposed underground layout will be given to minimum thickness of fresh Permian strata in the goaf to avoid connectivity with the Tertiary strata which are approximately 40m thick.
- The required approvals will be granted to Middlemount for underground mining to proceed below Roper Creek and the Dysart Middlemount Road.
- Suitable access can be made to the underground Resource from the open cut southern end wall across the 50-100m displacement southern-most fault.
- 50m boundary pillar from above open cut resources
- 50m Barrier pillar from Mining Lease to the south.
- 37% ash and 5% IS Moisture content cut off.

RPM makes the following specific assumptions about the highwall mining Resources;

- Further and more rigorous delineation of structure and increased knowledge of the highwall geotechnical issues/assessments need to be conducted in order to assume the results of a future mining study would return a positive rate of return and NPV. Thus no Coal Resources have been estimated for this area.

7.7 Variation from 2017 Company Reporting

All resources have been depleted to the 30th June, 2018 compared to the 31st December, 2017. The mined material for each operation is outlined in ***Table 4-1***.

HVO / MTW

None

Moolarben

None

Ashton

Resources for Ashton have decreased by approximately 30Mt from previously reported Resources. This is principally due to the exclusion of Open Cut Resources from within the extents of the Hunter River and Glennies Creek and associated alluvium.

Yarrabee

Depletion to 30 June 2018.

Stratford and Duralie

None.

Austar

None.

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Donaldson

Resources for Donaldson have decreased by approximately 93Mt due to the exclusion of the Sandgate and Ashtonfield Seams from the Resources Estimate. These seams were excluded based on RPM's opinion that they did not have 'Reasonable Prospects for Economic Extraction' based on the current information.

The Sandgate Seam consists of three major plies SGA, SGB and SGC that deteriorate and split into many sub plies towards the south and west. The uppermost ply and sub-plies (SGA) have a maximum cumulative thickness of 2m through portions of ML1618 and EL5497, however distinctive claystone markers exist within SGA which have a large impact on ash content of the seam and potential working sections. The SGB and SGC rarely combine and reside between 1m – 15m below the SGA ply. As only a relatively thin and high ash working sections can be determined from the Sandgate seam, it is considered by RPM unlikely to support the development of a mining operation in this seam and it is therefore excluded from the Resources estimate.

The Ashtonfield Seam occurs throughout the deposit but rarely forms a consistent minable seam package due to its splitting nature. A working section within the seam is only greater than 1.2m over a relatively small area which would be unlikely to support the development of a mining operation in this seam and therefore it is excluded from the Resource Estimate.

Middlemount

Highwall resource area excluded as further study required to confirm potential for economic extraction.

Monash

None.

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8. JORC Coal Reserves

The JORC Code defines a 'Coal Reserve' as the economically mineable part of a Measured and/or Indicated Coal Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Coal Reserves are sub-divided in order of increasing confidence into Probable Coal Reserves and Proved Coal Reserves. (JORC Code - Clause 28). Marketable Reserves allow for practical yields in a beneficiation plant, the result of processing commonly being known in the industry by the term "product coal".

The terms 'Mineral Resource(s)' and 'Ore Reserve(s)' and the subdivisions of these as defined above, apply also to coal reporting, however if preferred by the reporting company, the terms 'Coal Resource(s)' and 'Coal Reserve(s)' and the appropriate subdivisions may be substituted. (JORC Code - Clause 43). As such RPM will refer to Ore Reserves as Coal Reserves in this Report.

8.1 Areas of Coal Reserves

The estimation of Coal Reserves is based on the following areas which are planned to be exploited through open cut mining methods:

- **Hunter Valley Operations** – this mine is currently being exploited via open pit methods and contains total Coal Reserves of **796Mt** made up of 333Mt Proved and 463Mt Probable. The Reserve at HVO includes existing pits and additional pits that will be developed when required to maintain production. The total Marketable Reserves at HVO are **554Mt**.
- **Mount Thorley Warkworth** – this mine is currently being exploited via open pit methods and contains total Coal Reserves of **322Mt** made up of 125Mt Proved and 197Mt Probable. The Reserve at MTW is made up from pits that are currently operated at the site. The total Marketable Reserves at MTW are **225Mt**.
- **Moolarben Coal Mine** – this mine is currently being exploited via open pit and underground methods and contains total Coal Reserves of **256Mt** made up of 232Mt Proved and 25Mt Probable. The Coal Reserves can be further divided into 196Mt Open Cut Reserves and 71Mt Underground Reserves. The total Marketable Reserves at Moolarben are **215Mt**.
- **Ashton** - this mine is currently being exploited via underground methods. In addition to this there is a planned open cut project. The total Coal Reserves at Ashton is **47Mt** made up of 23Mt Proved and 24Mt Probable. The underground Reserve at Ashton mine includes layouts in the Upper Liddell, Upper Lower Liddell and Lower Barrett Seams and contains 33Mt of Coal Reserves. The total Marketable Reserves at Ashton are **26Mt**.
- **Yarrabee -** this mine is currently being exploited via open pit methods and contains total Coal Reserves of **55Mt** made up of 36Mt Proved and 19Mt Probable. The Reserve at Yarrabee includes existing pits and expansion pits that will be developed when required to maintain production. The total Marketable Reserves at Yarrabee are **42Mt**.
- **Stratford and Duralie -** this mine is currently being exploited via open pit methods and contains total Coal Reserves of **44Mt** which is all classified as Probable. The reserves at Stratford and Duralie include existing pits and expansion pits. The total Marketable Reserves at Stratford and Duralie are **26Mt**.
- **Austar**– this mine is currently being exploited via underground methods and contains total Coal Reserves of **41Mt** which is all classified as Probable. The Reserve at Austar is contained in the Bellbird South and Stage 3 areas. The total Marketable Reserves at Austar are **31Mt**.
- **Donaldson –** this project is currently on care and maintenance. It is proposed to be exploited via underground methods and contains total Coal Reserves of **62Mt** which is all classified as Probable. The reserves at Donaldson are based on proposed longwall mining operations in the Lower Donaldson Seam. The total Marketable Reserves at Donaldson are **32Mt**.

- **Middlemount -** this mine is currently being exploited via open pit methods and contains total Coal Reserves of **87Mt** made up of 50Mt Proved and 37Mt Probable. The Reserve at Middlemount includes the existing pit. The total Marketable Reserves at Middlemount are **67Mt**.

8.2 JORC Statement of Coal Reserves

The Proved and Probable JORC Coal Reserves estimate for the Assets is summarised in ***Table 8-1*** and ~~***Table 8-2***~~ and shown graphically in ***Figure 8-1***. The JORC Coal Reserves estimates reported below are included in the Measured and Indicated Coal Resources quantities reported in ***Section 7*** and are not additional to.

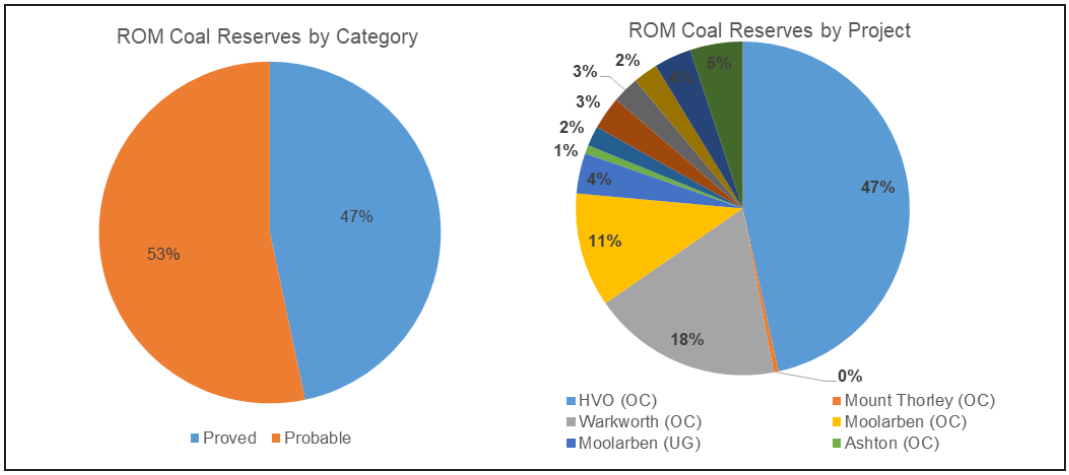
Table 8-1 Statement of JORC Coal Reserves Estimate as at 30th June, 2018

Operation	Coal Reserves			Marketable Reserves		
	Proved (Mt)	Probable (Mt)	Total (Mt)	Proved (Mt)	Probable (Mt)	Total (Mt)
HVO (OC)	333	463	796	229	325	554
Mount Thorley (OC)	0	8	8	0	5	5
Warkworth (OC)	125	189	314	87	133	220
Moolarben (OC)	178	12	189	136	12	148
Moolarben (UG)	54	13	67	54	13	67
Ashton (OC)	0	14	14	0	7.8	7.8
Ashton (UG)	23	10	33	13	6	18
Yarrabee (OC)	36	19	55	28	14	42
Stratford and Duralie (OC)	0	44	44	0	26	26
Austar (UG)	0	41	41	0	31	31
Donaldson (UG)	0	62	62	0	32	32
Middlemount (OC)	50	37	87	40	27	67
Total (100% basis)	**799**	**912**	**1,710**	**587**	**632**	**1,218**
Yancoal Attributable Share[5]	**547**	**631**	**1,178**	**406**	**432**	**837**

Notes:

1) *The Statement of JORC Open Cut Coal Reserves has been compiled under the supervision of Mr. Doug Sillar who is a full time Senior Mining Engineer employed by RPM and is a Member of the Australian Institute of Mining and Metallurgy. Mr. Sillar has sufficient experience which is relevant to the style of Coal and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
2) *The Statement of JORC Underground Coal Reserves has been compiled under the supervision of Mr. Graeme Rigg who is a full time Senior Mining Engineer employed by RPM and is a Member of the Australian Institute of Mining and Metallurgy. Mr. Rigg has sufficient experience which is relevant to the style of Coal and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
3) *Tonnages are metric tonnes*
4) *Figures reported are rounded which may result in small tabulation errors. Coal Reserves have been estimated under the 2012 Edition of the JORC Code.*
5) *Based on owner at the latest applicable date*

Figure 8-1 Graphical Representation JORC Coal Reserves Estimate within the Final Designs



8.3 Reserves Estimation Procedure

Open Cut Projects

Open Cut Coal Reserves were estimated using a suite of specialised geological and mine planning software. The approach typically includes a pit limit optimisation or margin ranking and supported by life of mine production scheduling which has been completed by the Company. The input parameters selected are based on the review of the mining studies completed by the Company, discussions with site personnel and site visit observations. To enable the estimation of JORC Coal Reserves, RPM has:

- Reviewed approach, assumptions and outcomes from the Company mine planning studies, including the operating and capital cost forecasts.
- Reviewed information on current mine performance including operating costs and processing recoveries.
- Reserves are based on the end of June 2018 surfaces. As a result, all Coal Reserves and production schedules presented in this report reflect the Reserves as at the 30th June, 2018.
- Reviewed the results of the pit limit optimisation or margin rank and independent break even strip ratio analysis and selection of appropriate pit shells.
- Reviewed the mining method and current life of mine pit designs.
- Reviewed methodology used to estimate coal recovery parameters in the model.
- Reviewed production schedules generated by the Client.
- The Coal Resource geological confidence limits of Measured, Indicated and Inferred polygons were overlaid on the mine plan and any Inferred or unclassified Resources excluded from the estimate.
- The Coal Reserve was then categorised as Proved or Probable based on the Coal Resource confidence, application of modifying factors and the level of detail in the mine planning.
- Generated a discounted cash flow model for the LOM schedule incorporating operating and capital costs and revenue as detailed in ***Section 14*** and outlined below. RPM reviewed the operating and capital cost estimates prior to applying them in the economic model.

Underground Projects

Coal Reserves were estimated using predominantly XPAC mine planning software, however also Minex software. The input parameters selected by RPM are based on the review of the mining studies completed by

the Company, discussions with site personnel and site visit observations. To enable the estimation of JORC Coal Reserves, RPM has:

- Reviewed the approach, assumptions and outcomes from the Company's mine planning studies, including the operating and capital cost forecasts.
- As part of the initial studies prior to the development of the underground mine layouts, costs and revenue factors were used to determine one or more "target areas". Mine layouts were subsequently generated and have since been refined. The various factors, combined with other criteria such as location of faults and dykes, lease boundaries, etc were cross checked by RPM to confirm the current mine layouts. The Company mine layouts have subsequently been used for the estimation of Reserves.
- Reviewed information on current mine performance including operating costs and processing recoveries.
- RPM used the end of June 2018 face positions as the basis for production schedule forecasts at the various underground Assets. As a result, all Coal Reserves and production schedules presented in this report reflect the tonnes as at the 30th June, 2018.
- Independently estimated operating costs to confirm economic viability across the mine life.
- Reviewed the mining method and current life of mine designs.
- Reviewed methodology used to estimate coal recovery parameters in the model.
- The tonnes within the mine layout were then estimated through the application of modifying factors, the potential Reserves in the mine layout checked.
- Review of detailed production scheduling was carried out in XPAC software.
- Review of equipment and other resources were selected to enable delivery of the production schedule which allowed a capital cost schedule and an operating cost schedule to be derived for the production schedule.
- Review of the financial model outcomes confirmed the economic viability of the mine.
- The Coal Resource geological confidence limits of Measured, Indicated and Inferred polygons were overlaid on the mine plan and any Inferred or unclassified Resources excluded from the estimate.
- The Coal Reserve was then categorised as Proved or Probable based on the Coal Resource confidence, application of modifying factors an, the level of detail in the mine planning and the level of risk.

RPM generated a discounted cashflow model for the LOM schedule incorporating operating and capital costs and revenue as detailed in Section 14 and outlined below. RPM reviewed the operating and capital cost estimates prior to applying them in the economic model.

8.4 Coal Reserve Economic Viability

As part of RPM's process to justify the economic viability of the reported Coal Reserves separate revenue cash flow analyses were completed for each operation, based on the following:

- All variable unit costs for the mine life, including mining, coal processing and handling, transportation costs, overheads and royalty costs;
- The forecast production schedules as shown in ***Section 9*** and ***Section 10***;
- Capital expenditure ("CAPEX") costs including sustaining and closure costs as outlined in ***Section 14***;
- Applied the forecast prices as agreed with the Company. Both the metalliferous and thermal coal markets are susceptible to both up and downswings over the medium and long term with various market forces impacting demand and supply. Given the market forces and the increased complexities in forecasting prices, in the DCF model RPM considered the use of long term average price suitable; RPM has sourced these prices from the Company. RPM is not a price forecast expert and has relied on third party and expert opinions however considers them reasonable;
- Discount rate of 10%, which was selected based on the quantity, long history of mining and well established community relations;

- For the purposes of confirming project economics a simple 30% company tax rate was applied; and
- State levies and royalties.

Based on the above parameters the outcomes of all models showed positive cashflow when all costs, CAPEX and pricing assumptions were applied. Further to the construction of the DCF model, sensitivities were tested. The key elements found to be sensitive to the Assets economics are coal price as well as process operating costs. The Donaldson underground project and the SEOC at Ashton returned negative NPV's with reductions to revenue drivers or increased costs of 5%. This suggests these projects are marginal based on current inputs. Middlemount returns a negative NPV under a 15% reduction in Revenue and Stratford and Duralie returns negative NPV's for 15% decrease in revenue scenario and a 15% increase in operating cost scenario. For all other projects the Coal Reserves were found to be resilient to +/-15% variation in key parameters employed for sensitivity test over the life of the mine.

As such RPM considers that the quantities and grades reported are economically robust and suitable for reporting as Coal Reserves.

The averaged aggregated annualised costs which resulted from the cashflow model are presented in ***Section 14*** for each operation.

8.5 Reserves Comments

RPM notes the following in relation to the Coal Reserves:

HVO/MTW

- A number of years require peak waste movement to achieve the required throughput. The approach to modelling by RPM has been to assume that hire equipment is utilised to meet short term peaks in waste stripping requirements over and above the base annual capacity of the owner's fleet. This is consistent with operations.
- As part of the LOM plan the MTW operation requires the closure of the Wallaby Scrub road. RPM is aware the Company has an environmental permit as well as the required mining permits for mining in this area however required local council approval to close the road. RPM is aware of recent meetings with the Council and a visit was undertaken in February, 2017 which commenced the close out procedure and final approval is now with the NSW State Government. RPM highlights that this road closure is not required for 3-4 years, after which operations will be materially affected, as such considers this a low risk which can be managed as per normal community discussions of this type.
- Underground operations have not been considered for this statement of Coal Reserves. There are significant resources with underground potential at both MTW and HVO and preliminary studies have been completed. Further detailed study is required to confirm the feasibility of underground extensions prior to inclusion as a Reserve however RPM outlines the study shown in **Section 16**.

Moolarben

- Mining commenced at Moolarben in late 2010 when the open cut operation was opened up. Moolarben has subsequently operated exclusively as an open cut operation until 2016 when the underground workings were established and longwall operations commenced in the UG1 underground mine. Upon completion of mining in this area, operations will shift to the UG4 underground mine, followed by the UG2 underground mine.
- The target underground mining areas are the deeper areas of the resource, generally located beneath natural ridgelines that are unfavourable to mine via open cut methods. The underground mining strategy is to continue with a single longwall operation, sequentially working through the underground resource areas.
- As per the reporting requirements of the JORC Code, the Inferred material within the final open cut pits is considered waste and not included in the Reserve estimate. RPM notes that within the final open cut pits at Moolarben there is an additional 20Mt of Inferred Coal Resources, which is less than 5% of the Coal Reserves. If additional exploration successfully delineates this Coal and it is upgraded to Indicated and/or Measured this material can be included in an updated Coal Reserve estimate.

- The ELW ply has been included as a Reserve for the first time in the 2017 Reserves statement. The inclusion of this seam has added 11Mt of additional Coal Reserves and is supported by recovery of the seam during operations 2017.
- Optimisation of working section horizons and the associated impact on project costs and CHPP yields is ongoing at the site and may have a minor impact on the stated reserves.
- Open Coal Reserves that are supported by Measured Resources are classified as Proved Reserves and Coal Reserves supported by Indicated Resources are classified as Probable Reserves. The one exception is at the southern end of OC3 where all Coal Reserves are classified as Probable for both Measured and Indicated Resources, primarily due to limited sub-crop drilling.
- RPM is not aware of any other environmental, legal, marketing, social or government issues which may hinder the economic realisation of the Reserves.

Ashton

- Coal Reserves that are supported by Measured Resources are generally classified as Proved Reserves and Coal Reserves supported by Indicated Resources are classified as Probable Reserves. Approximately 10Mt of Probable Reserves have been derived from Measured Resources, this being the lower seam panels around the Bowmans Creek alluvials. The detailed level of mine planning and ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.
- The multi-seam nature of the deposit complicates the mining process. The mine layouts adopt an offset strategy, such that gateroads in underlying seams are below the goaf of the immediate seam above. The offset layout strategy is consistent with contemporary practice for extracting from multiple seams. This practice generally allows greater resource recovery than the alternative of stacking longwalls and having the gateroad panel below an overlying goaf results in improved development conditions. The trade-off however is the potential for additional face crush resulting from stress concentration on the longwall face of lower seams. This may negatively impact longwall productivity, increase out-of-seam dilution and increase operating costs.
- Current impacts to alluvial groundwater resources are within the approved predictions and impacts. The previous extraction of LW6b in the Pikes Gully Seam resulted in higher peak inflows than what was estimated in the groundwater modelling. The groundwater model was revised in 2016 and further updated in 2017 and the new model indicated that there are potential compliance risks with extracting the lower seam longwall panels around the Bowmans Creek alluvials. Assessment is ongoing and, in the interim, the longwall panel extraction sequence has been modified such that the first 5 longwall panels in the Upper Lower Liddell Seam will be extracted prior to the final 3 longwall panels in the Upper Liddell Seam being extracted. This permits further time to assess the potential groundwater issue but there remains the risk that some or all of the lower seam longwall panels around the Bowmans Creek alluvials will not be extracted. At a worst case scenario, this could reduce Reserves by 10Mt and Marketable Reserves by 5Mt however RPM considers this a low risk
- The Ashton open cut Reserves are subject to the Company reaching an agreement to purchase land in the SEOC area. The open cut is not scheduled to commence until 2024
- RPM is not aware of any other environmental, legal, marketing, social or government issues which may hinder the economic realisation of the Reserves

Yarrabee

- Coal Reserves that are supported by Measured Resources are classified as Proved Reserves and Coal Reserves supported by Indicated Resources are classified as Probable Reserves. The detailed level of mine planning and ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.
- Reserves have not been reported in the DOM 6 Pit at Yarrabee due to the structural complexity in this area. This area represents potential Reserves upside.
- Reserves have not been reported for the YES pit as additional planning is required. This area represents potential Reserves upside.

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Middlemount

- Coal Reserves that are supported by Measured Resources are classified as Proved Reserves and Coal Reserves supported by Indicated Resources are classified as Probable Reserves. The detailed level of mine planning and ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.
- As per the reporting requirements of the JORC Code, the Inferred material within the final pit shells is excluded from the Reserve estimate. RPM notes that within the final pit shell at Middlemount there are minor quantities of Inferred Coal Resources and that the inclusion of this coal would not have an impact on the economic pit limits.
- A re-alignment of a small section of Roper Creek is required to extract the full extent of Reserves at Middlemount.
- Middlemount Coal recently acquired a portion of an adjacent lease which has been incorporated into the mine plan in 2018 and has been included in this estimate. Approvals to enable operation in this area are ongoing, however are expected within the timeframe these areas are planned to be mined.

Austar

- The reporting of Coal Reserves for Austar is based on the assumption that the operations permit will be reinstated following discussions with the regulators. If this permit is not reinstated the currently reported Coal Reserves will need to be revised and an alternative mine design, based on the geotechnical conditions will need to be undertaken. This revised mine plan may impact the economics of the project and as such the ability the mine profitably and the quantities of Coal Reserves reported.
- All coal Reserves that are supported by Measured Resources and Indicated Resources are classified as Probable Reserves. The detailed level of mine planning and ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.
- From a geotechnical perspective, the most significant issues relate to coal bursts, rib control and periodic weighting. Of these, the coal burst issue is easily the most significant and ongoing investigations are being undertaken to improve the ability of the mine to deal with the issue.
- The depth of cover for the future workings ranges from 450 – 700 m. These depths are high by Australian standards.
- RPM is not aware of any other environmental, legal, marketing, social or government issues which may hinder the economic realisation of the Reserves.

Donaldson

- The mine is sufficiently viable to provide a positive NPV under current cost and revenue assumptions but the NPV magnitude is not significant. As such the economic viability of the mine will be particularly sensitive to changes in costs and coal prices.
- The Hunter Expressway traverses the target area and has formed a subsidence protection zone that will necessitate longwall equipment being relocated from one side of the expressway to the other in each longwall panel, leaving a subsidence protection pillar in between.
- Depth of cover for the Lower Donaldson Seam in the target area varies from 120m to a maximum 520m, with an average of 340m. These values are within the range of depths for Australian underground coal mines and are not considered likely to create any major impediments to mining.
- Measured and Indicated Resources have been classified as Probable Reserves. No Inferred Resources have been converted to Reserves. Approximately 1Mt of Probable Reserves have been derived from Measured Resources.
- Donaldson currently pays significant rail and port Take or Pay penalties. Once the mine becomes operational (assuming favourable economic conditions) it will be necessary for the rail and port contracts to mesh better with the actual mine output, otherwise Take or Pay penalties could impact significantly on project value.

- RPM is not aware of any other environmental, legal, marketing, social or government issues which may hinder the economic realisation of the Reserves.

Stratford and Duralie

- Coal Reserves are primarily supported by Indicated Resources with only minimal Measured Resources estimated in the deposit. These have been classified as Probable Reserves due to the Measure Resources lying outside currently approved operations and an absence of modelled yield data. The ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.
- As per the reporting requirements of the JORC Code, the Inferred material within the final pit shells is excluded from the Reserve estimate. RPM notes that within the final pit shells there is a large amount of Inferred coal at the Roseville West Pit that predominantly is sitting below the target seams for Reserves. RPM is of the opinion that the exclusion of this coal will not impact on the Reserves.
- Yields at Stratford and Duralie are based on actual ~~Washplant~~washplant data collected at site on a seam by seam basis.

Overall permitting, approval and native title

See ***Section 15***.

9. Consolidated Operations Plan

9.1 Current Life of Mine Plans

The production plans for the current Assets prepared by RPM, as shown in ***Table 9-12*** *and* ***Figure 9-1,*** are based on the total mineable economic coal. Specifically, this includes Coal Reserves and Inferred Resource contained within the economic pit and underground limits. Based on the total mineable economic coal, the development sequence, pit and/or underground designs, the forecast mine lives for the operations are shown in ***Table 9-1*** as at 30th June, 2018. RPM considers the proposed Life of Mine Development Sequence and Production Forecast to be reasonable and achievable based on the current mining equipment forecasts and designs. RPM does however recommend that further optimisation and long term planning be completed to confirm and optimise the LOM plan outcomes on an ongoing basis as per normal industry practices. This optimisation should focus of the sequence of development in conjunction with capital and operating cost analysis to maximise the profitability of the each operation in particular the fleet management.

RPM highlights that the production schedules in this report includes Inferred Resources which is excluded from the RPM Coal Reserves presented in ***Section 8*** as required by JORC Code.

Based on the Ore Reserve estimate, Mineable Quantities, the project Development Sequence and the Designs, the forecast mine life's for each operation is shown in ***Table 9-1*** as at 30th June, 2018. RPM considers that the proposed Life of Mine Development Sequence and Production Forecast to be reasonable and achievable based on the current mining equipment and designs. RPM does however recommend further optimisation and short term planning. This optimisation should focus on the sequence of development in conjunction with capital expenditure and short term grade variability to maximise the profitability of the Projects.

Table 9-1 Operations Mine Life Estimates as at 30th June, 2018

Operation	Mine life (Years)
HVO	43
MTW	23
Moolarben	20
Yarrabee	38
Austar	17
Ashton	13
Stratford and Duralie	35
Donaldson	11
Middlemount	20

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Table 9-2 Operations LOM Plan as at 30th June, 2018

Operation	Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	ROM Coal	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Coal Processed	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Plant Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.9	69.2	69.6
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	7.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8	14.6	14.6	14.5	14.2	14.3	14.2	13.9	13.8	10.7	567.4
	Effetive Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.8	69.6	69.6
MTW	ROM Coal	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Coal Processed	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Plant Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.6			69.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
	Coal Product	Mt	5.9	11.5	11.8	11.9	11.8	11.9	11.8	11.8	11.7	11.6	11.6	11.4	11.6	11.6	10.4			256.5
	Effetive Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.4			69.7
Moolarben	ROM Coal	Mt	8.9	18.9	20.0	20.0	20.0	18.8	18.7	18.6	17.6	15.5	12.0	11.9	11.3	11.4	1.3			270.6
	Coal Processed	Mt	6.1	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	1.3			212.7
	Plant Yield	%	71.8	77.1	74.6	72.8	75.4	75.4	76.4	77.7	78.4	78.5	78.4	78.4	78.4	77.8	74.1			76.9
	Coal Bypassed	Mt	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5								57.9
	Coal Product	Mt	6.1	15.9	16.7	16.5	16.8	15.6	15.9	15.9	15.1	13.0	9.4	9.3	8.8	8.9	0.9			222.3
	Effetive Yield	%	90.8	84.2	83.5	82.3	84.0	83.0	84.9	85.6	85.3	83.4	78.4	78.4	78.4	77.8	70.2			82.1
Yarabee	ROM Coal	Mt	2.1	4.0	4.3	4.8	4.6	5.2	5.1	4.9	5.2	4.2	4.2	4.2	4.0	4.2	4.0	4.0	3.5	147.6
	Coal Processed	Mt	1.1	2.3	3.2	3.6	3.4	3.6	4.1	4.1	4.1	3.5	3.4	3.5	3.4	3.5	3.4	3.4	2.7	120.6
	Plant Yield	%	78.8	85.5	75.9	78.6	76.5	77.4	74.0	74.7	80.4	75.8	75.5	74.1	74.1	73.8	73.4	74.1	75.8	76.1
	Coal Bypassed	Mt	0.9	1.7	1.1	1.2	1.2	1.6	1.0	0.8	1.1	0.7	0.8	0.7	0.8	0.7	0.6	0.5	0.8	26.9
	Coal Product	Mt	1.8	3.7	3.5	4.0	3.8	4.4	4.0	3.9	4.4	3.4	3.4	3.3	3.1	3.3	3.1	3.1	2.9	117.5
	Effetive Yield	%	88.2	91.5	82.0	83.8	82.9	84.4	79.2	78.7	84.4	79.9	79.9	78.2	77.9	77.9	77.1	77.5	82.0	79.6
Austar	ROM Coal	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Coal Processed	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Plant Yield	%	0.0	86.0	79.0	74.0	70.0	73.0	68.0	70.0	73.0	67.0	73.0	71.0	77.0	73.1				72.9
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	0.0	1.4	1.7	2.1	1.9	2.0	2.1	2.0	2.4	1.7	2.0	2.2	1.9	1.9				31.0
	Effetive Yield	%	0.0	86.0	79.0	74.0	70.0	73.0	68.0	70.0	73.0	67.0	73.0	71.0	77.0	73.1				72.9
Ashton	ROM Coal	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6					47.6
	Coal Processed	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6					
	Plant Yield	%	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0
	Coal Product	Mt	0.7	1.8	1.6	1.4	1.3	1.7	1.8	3.1	3.6	3.3	3.5	2.9	0.3					27.0
	Effetive Yield	%	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
Stratford Duralie	ROM Coal	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	68.2
	Coal Processed	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	68.2
	Plant Yield	%	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	58.4
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	0.2	0.6	1.0	1.1	1.0	0.8	1.1	1.3	1.2	1.2	1.2	1.2	1.4	1.2	1.1	1.1	0.7	38.2
	Effetive Yield	%	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	56.0
Middlemount	ROM Coal	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Coal Processed	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Plant Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	2.1	4.1	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0	3.8	4.0	4.1	4.1				76.0
	Effetive Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
Total	ROM Coal	Mt	34.6	71.9	74.1	75.1	74.4	73.8	74.6	77.0	77.1	72.7	69.6	68.6	63.3	62.9	42.6	25.7	20.9	1,859.9
	Coal Product	Mt	26.2	53.4	55.1	55.6	55.3	55.2	55.7	56.8	56.9	52.8	49.4	48.5	45.5	45.3	29.3	18.0	14.3	1,377.7

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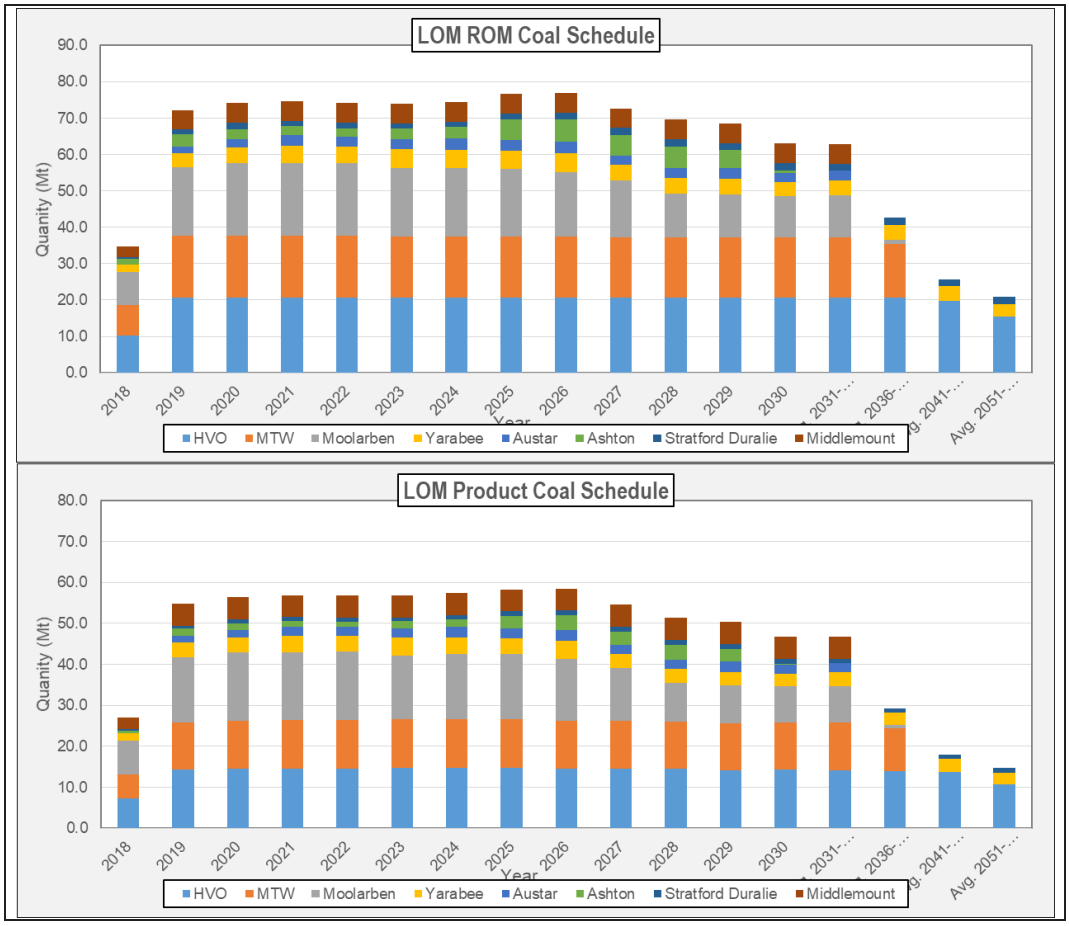
Operation	Year	Units	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	ROM Coal	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Coal Processed	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Plant Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.9	69.2	69.6
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	7.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8	14.6	14.6	14.5	14.2	14.3	14.2	13.9	13.8	10.7	567.4
	Effective Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.8	69.6	69.6
MTW	ROM Coal	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Coal Processed	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Plant Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.6			69.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
	Coal Product	Mt	5.9	11.5	11.8	11.9	11.8	11.9	11.8	11.8	11.7	11.6	11.6	11.4	11.6	11.6	10.4			256.5
	Effective Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.4			69.7
Moolarben	ROM Coal	Mt	8.9	18.9	20.0	20.0	20.0	18.8	18.7	18.6	17.8	15.5	12.0	11.9	11.3	11.4	1.3			270.6
	Coal Processed	Mt	8.1	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	1.3			212.7
	Plant Yield	%	71.8	77.1	74.6	72.8	75.4	75.4	76.4	77.7	76.4	78.5	78.4	78.4	78.4	77.8	74.1			76.9
	Coal Bypassed	Mt	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5								57.9
	Coal Product	Mt	8.1	15.9	16.7	16.5	16.8	15.6	15.9	15.9	15.1	13.0	9.4	9.3	8.8	8.9	0.9			222.3
	Effective Yield	%	90.8	84.2	83.5	82.3	84.0	83.0	84.9	85.6	85.3	83.4	78.4	78.4	78.4	77.8	70.2			82.1
Yarabee	ROM Coal	Mt	2.1	4.0	4.3	4.8	4.6	5.2	5.1	4.9	5.2	4.2	4.2	4.2	4.0	4.2	4.0	4.0	3.5	147.6
	Coal Processed	Mt	1.1	2.3	3.2	3.6	3.4	3.6	4.1	4.1	4.1	3.5	3.4	3.5	3.4	3.5	3.4	3.4	2.7	120.6
	Plant Yield	%	78.8	86.5	75.9	76.6	76.5	77.4	74.0	74.7	80.4	75.8	76.5	74.1	74.1	73.8	73.4	74.1	75.8	76.1
	Coal Bypassed	Mt	0.9	1.7	1.1	1.2	1.2	1.6	1.0	0.8	1.1	0.7	0.8	0.7	0.6	0.7	0.6	0.5	0.8	26.9
	Coal Product	Mt	1.8	3.7	3.5	4.0	3.8	4.4	4.0	3.9	4.4	3.4	3.4	3.3	3.1	3.3	3.1	3.1	2.9	117.5
	Effective Yield	%	88.2	91.5	82.0	83.8	82.9	84.4	79.2	78.7	84.4	79.9	79.9	78.2	77.9	77.9	77.1	77.5	82.0	79.6
Austar	ROM Coal	Mt	0.0	1.7	4.2	4.9	4.7	4.7	5.1	4.8	5.2	4.5	4.6	3.1	2.5	2.6				42.6
	Coal Processed	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Plant Yield	%	0.0	88.4	86.1	84.1	84.1	84.2	84.2	84.0	84.0	84.0	84.0	84.0	84.0	84.0				84.3
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	0.0	1.5	1.9	2.4	2.3	2.3	2.6	2.4	2.7	2.1	2.4	2.6	2.1	2.2				35.9
	Effective Yield	%	0.0	88.4	86.1	84.1	84.1	84.2	84.2	84.0	84.0	84.0	84.0	84.0	84.0	84.0				84.3
Ashton	ROM Coal	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6					47.6
	Coal Processed	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6					
	Plant Yield	%	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0
	Coal Product	Mt	0.7	1.8	1.6	1.4	1.3	1.7	1.8	3.1	3.6	3.3	3.5	2.9	0.3					27.0
	Effective Yield	%	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
Stratford Duralie	ROM Coal	Mt	0.5	1.4	1.7	1.5	1.5	1.5	1.5	1.6	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	67.1
	Coal Processed	Mt	0.5	1.4	1.7	1.5	1.5	1.5	1.5	1.6	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	67.1
	Plant Yield	%	51.2	57.1	59.6	59.0	59.0	59.9	59.9	68.4	68.0	60.9	60.5	61.1	61.0	62.0	57.6	53.9	54.3	59.5
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	0.3	0.8	1.0	0.9	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	38.2
	Effective Yield	%	51.2	57.1	59.6	59.0	59.0	59.9	59.9	68.4	68.0	60.9	60.5	61.1	61.0	62.0	57.6	53.9	54.3	56.9
Middlemount	ROM Coal	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Coal Processed	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Plant Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	76.9	76.1				75.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	2.1	4.1	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0	3.8	4.0	4.1	4.1				76.0
	Effective Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	76.9	76.1				75.7
Total	ROM Coal	Mt	34.7	72.2	74.2	74.7	74.1	74.0	74.5	76.6	76.9	72.7	69.6	68.6	63.0	62.9	42.6	25.7	20.9	1,858.8
	Coal Product	Mt	26.3	53.6	55.3	55.7	55.5	55.6	56.1	57.0	57.1	53.2	49.7	48.9	45.5	45.5	29.3	18.0	14.6	1,389.1

Figure 9-1 Graphical Representation of Operations LOM Schedule



RPM highlights that Donaldson is not included in the Operations LOM Schedule as it is currently on care and maintenance pending re-start at the Company's discretion. As outlined in ***Section 8 and 10***, Coal Reserves have been estimated and are included in this Report with detailed studies confirming the economic viability. RPM understands the re-start of Donaldson is dependent on optimal market conditions and performance of the Company's other operations to best fit the asset portfolio and is not dependent on capital or any other technical requirement and demonstrates "Commercial Path to Production". RPM agrees with this approach.

9.2 Upside Opportunities

While the current LOM plans display significant mine lives for each operation, there is potential to further optimise the operation to increase the mine life, bring forward production or realise value through detailed planning. The key opportunities include:

- **HVO/MTW Underground** – High level studies have highlighted the significant potential for an economically viable underground operation. As further outlined in ***Section 16*** this would include multiple areas and could be undertaken in conjunction with the current open pit operations. If undertaken this would increase ROM production by up to 5 to 7Mtpa for each asset and have the added advantage of augmenting take or

pay commitments of the groups operation. RPM is aware advanced studies are underway to further evaluate the potential and synergies across the operation.

- **HVO Boundary Coal Pillar**- The current Coal Reserves and LOM plan excludes significant coal within the boundary pillars of the tenement holdings due to the inability of mining across the tenement boundary on the neighbouring tenement (***Figure 9-3***). With the recent Joint Venture Company formed between the Company and Glencore for HVO, this presents the potential for this coal to be exploited via agreement with Glencore. RPM notes that the majority of this coal is within the breakeven strip ratio and would become economic if mining were to occur across the tenement, as such presents significant upside to the current LOM plan. The Company has engaged a third party consultant to estimate the potential boundary coal at HVO. The study indicates that an additional coal tonnage of between 100 and 120Mt could be exploited with extensions of the West, Carrington East, Riverview East and West and Cheshunt Deep pits as shown in ***Figure 9-2***. Detailed integrated planning is required to confirm these tonnages.
- **Blending** – The current LOM plan presented in this Report and the supporting cashflow analysis, assumes no blending occurs either within the operations or between the operations. RPM is aware that the Company has a dedicated marketing department which analyse both short and medium term market conditions to strategically blend the various coal products from each operation to maximise revenue generated. The products generated by the operations are generally high value coal types and blending based on product qualities can realise additional value rather than selling single products from the operations. In addition, as the Company further incorporates HVO/MTW into its operations this blending strategy could be used to further optimise mining operations in both short and medium term planning through careful and meticulous mine plans focusing on:
  - Maximise the exploitation of the in situ resources by potentially increasing pit limits using improved revenue streams and
  - Incorporate the ability to react quickly to market condition by changing the short term mine plan to target seams with specific coal qualities.
- **Moolarben Expansion** –The expansion of the open cut involves optimisations of the approved Stage 1 and Stage 2 operations to increase site ROM coal production to 24Mtpa from the current circa 18Mtpa. The Modification also involves a minor extension to the OC2 pit limit, minor extensions and reductions of the OC3 pit limits, rehabilitation, water management and relocated/additional surface infrastructure. The successful implementation of the Stage 2 expansion plans from 8Mtpa to the forecast at Moolarben demonstrates the Company's ability to achieve organic growth targeting low cost/high margin coal.

RPMGLOBAL

LEGEND

Boundary Pillar Locations

N

0 5km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

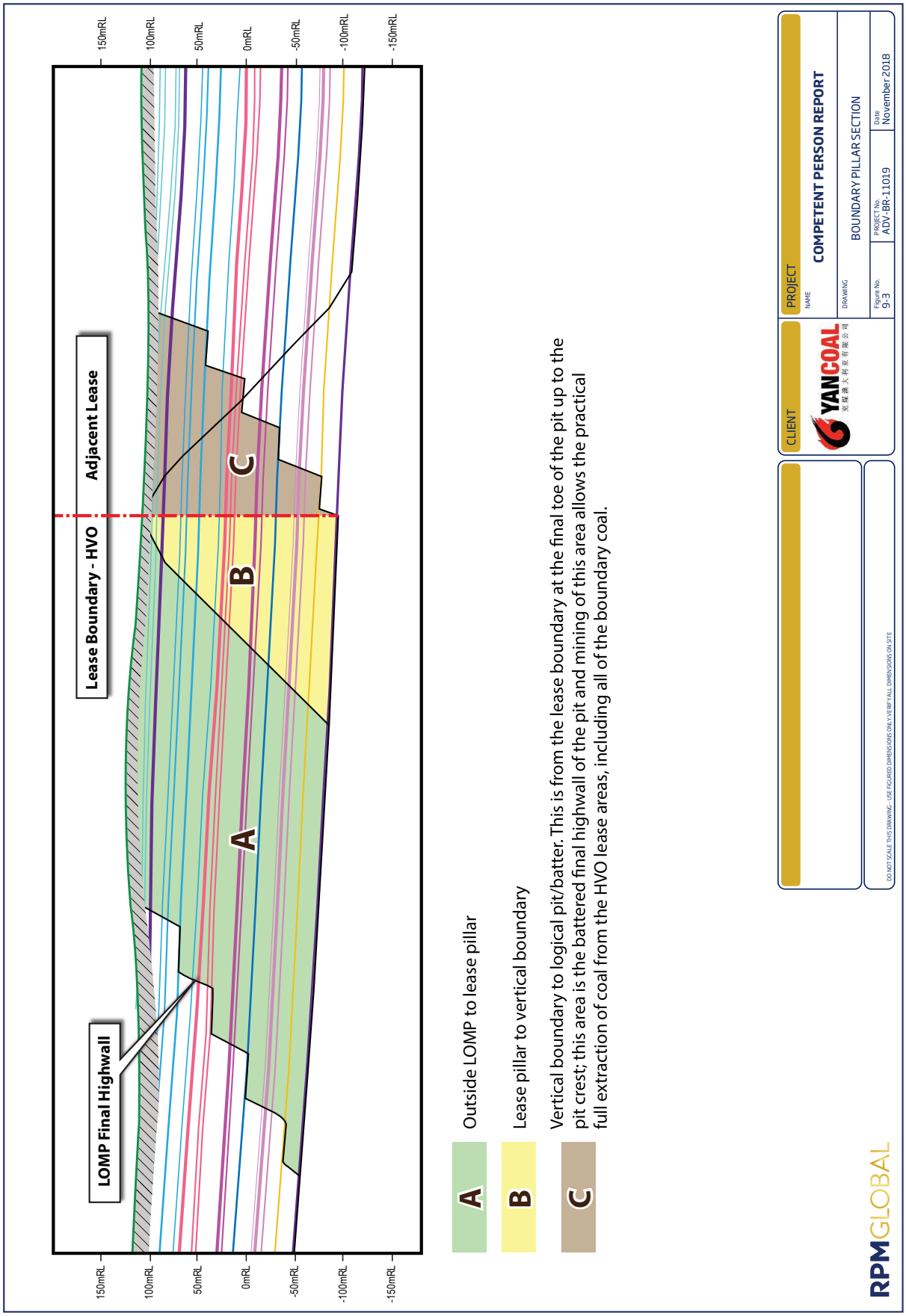
YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME
COMPETENT PERSON REPORT

DRAWING
HVO BOUNDARY PILLAR LOCATIONS

Figure No.	PROJECT No.	Date
9-2	ADV-BR-11018	November 2018


150mRL
100mRL
50mRL
0mRL
-50mRL
-100mRL
-150mRL
LOMP Final Highwall
Lease Boundary - HVO
Adjacent Lease
A
B
C
A Outside LOMP to lease pillar
B Lease pillar to vertical boundary
C Vertical boundary to logical pit/batter. This is from the lease boundary at the final toe of the pit up to the pit crest; this area is the battered final highwall of the pit and mining of this area allows the practical full extraction of coal from the HVO lease areas, including all of the boundary coal.
RPMGLOBAL
CLIENT
YANCOAL
PROJECT NAME COMPETENT PERSON REPORT
DRAWING BOUNDARY PILLAR SECTION
Figure No. 9-3
PROJECT No. ADV-BR-11019
Date November 2018
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE

10. Mining

All mining operations at the Assets are undertaken via conventional truck, shovel, excavator and/or dragline open cut or via underground Longwall mining methods. ROM coal is hauled to Coal Handling Preparation Plants which produce marketable product coal. Subsequent to blending and stockpiling, product coal is loaded onto trains and transported to the Port for sale on the international market.

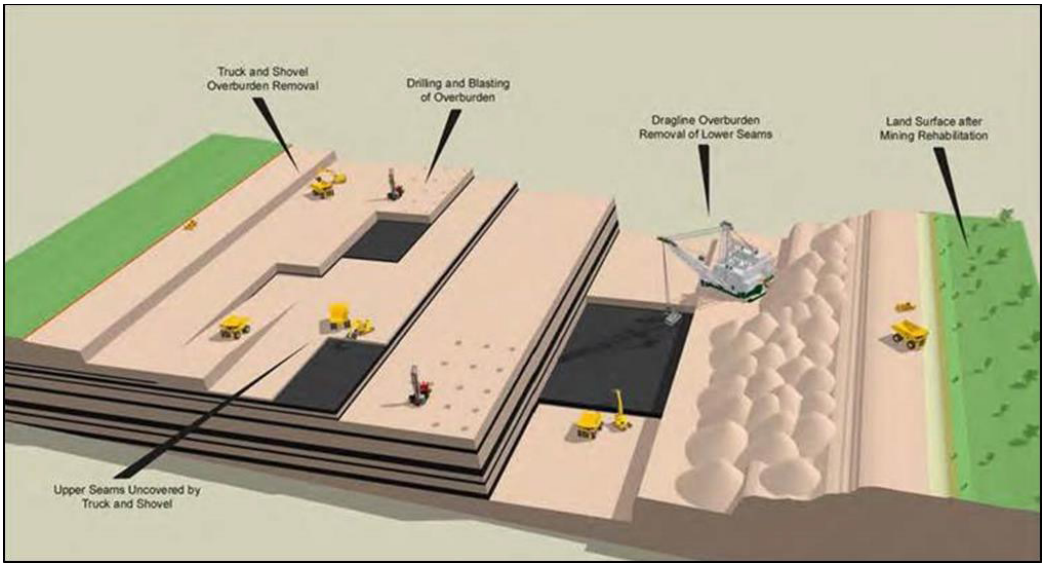
10.1 Mining Method

Open Cut Methods

Coal within the majority of operations occurs as large sub-horizontal bodies which are laterally very extensive. The exception to this is the Stratford and Duralie operation which has steeply dipping coal due to geological structures. The operations utilise large scale open cut mining methods which is summarised below and shown graphically in ***Figure 10-1***.

- Removal and storage of topsoil material via truck and front end loader methods.
- Drilling of a blast pattern.
- Blasting to fragment rock.
- Excavation of waste material with truck and shovel/excavator in the upper benches to uncover coal.
- Excavation of waste material in lower benches by draglines (in certain pits) and
- Digging, loading and hauling of coal via truck and excavator/front end loader methods.

Figure 10-1 Graphical Representation of Open Cut Coal Mining



Some operations utilise additional equipment, when the geological structure permits, that is typically lower in unit operating costs. These include:

- Draglines – usually sit in the lower strata and expose the bottom one or two seams with waste is dumped directly adjacent to the strip of coal being exposed. Draglines are currently operating at HVO and MTW.

- Dozer Push – a single or set of dozers are used to push waste adjacent to the strip being exposed. These can be used with truck and shovel operations and/or a dragline. Moolarben and Middlemount operations currently use dozer push as a primary production method.

The mining direction can also define the mining method. Draglines and dozer push require a strip mining operation where coal is typically mined in long strips, down dip with waste placed in the adjacent strip, usually with large vertical haulage for waste. Haulback, or Terrace Mining, typically mines perpendicular to seam dip with mining progressing along strike. This method may mine deeper coal early in the schedule but also moderates waste haulage which can be placed in the void with minimal vertical haulage.

RPM notes that the open cut mines in this report use the following methods:

Table 10-1 Primary Open Cut Mining Methods

Open Cut Mine	Mining Method	Pre-strip Removal	Additional Waste Removal
HVO	Haulback and Strip mining	Truck and shovel/excavator	Dragline
MTW	Strip mining	Truck and shovel/excavator	Dragline
Moolarben	Haulback mining	Truck and excavator	Dozer Push
Ashton	Haulback and Strip mining	Truck and excavator	
Yarrabee	Strip mining	Truck and excavator	
Stratford and Duralie	Haulback	Truck and excavator	
Middlemount		Truck and excavator	Dozer Push

Underground Methods

As outlined in **Table 10-2**, two underground mining methods are employed within the operation, conventional Longwall and Longwall Top-Coal Caving methods. Both method are well known and understood methods in Australia and are considered conventional mining methods.

Table 10-2 Primary Underground Mining Methods

Underground Mine	Mining Method
Moolarben	Longwall
Ashton	Longwall
Austar	Longwall and Longwall Top Coal Caving
Donaldson	Longwall

Longwall

Longwall mining roadways are cut by continuous miners around the perimeter of a rectangular block of coal to form ventilation and access passageways. A longwall shearer is set up at one end of the panel and travels back and forth across the width of the panel, cutting a slice of coal with each pass.

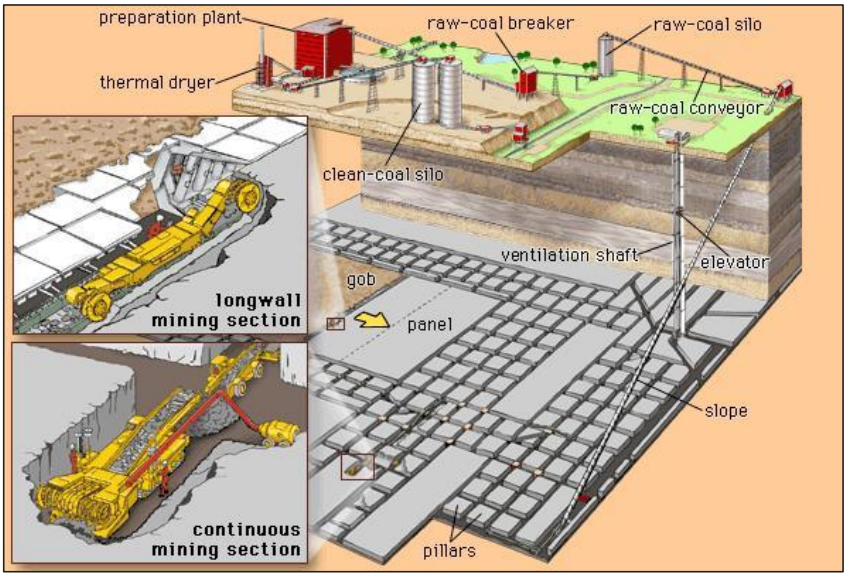
Typically, panels are between 150 metres and 400 metres wide and 1,500 and 5,000 metres long. They are between 2 metres and 5 metres high, dependent on the thickness of the coal seam. The coal is transferred to the surface by conveyors.

The area at the coal face is supported by a series of large hydraulic roof supports. These provide a protective cocoon within which the workers can operate with safety. As each slice of coal is taken, the longwall equipment is advanced. The roof that had been supported by the hydraulic supports subsequently collapses into the void that is created by the removal of the coal seam. The void is referred to as the goaf.

Longwall mining is generally considered to be the safest underground extraction method for coal. It is also superior to other underground mining methods in terms of resource recovery, as well as being more productive and therefore more cost effective. It is however less favourable where the coal seam is affected by geological

structures such as faults, rolls, dykes, sills and plugs, or where there are strong inconsistencies in coal quality, seam gradients or seam thickness.

Figure 10-2 Graphical Representation of Longwall Underground Mining



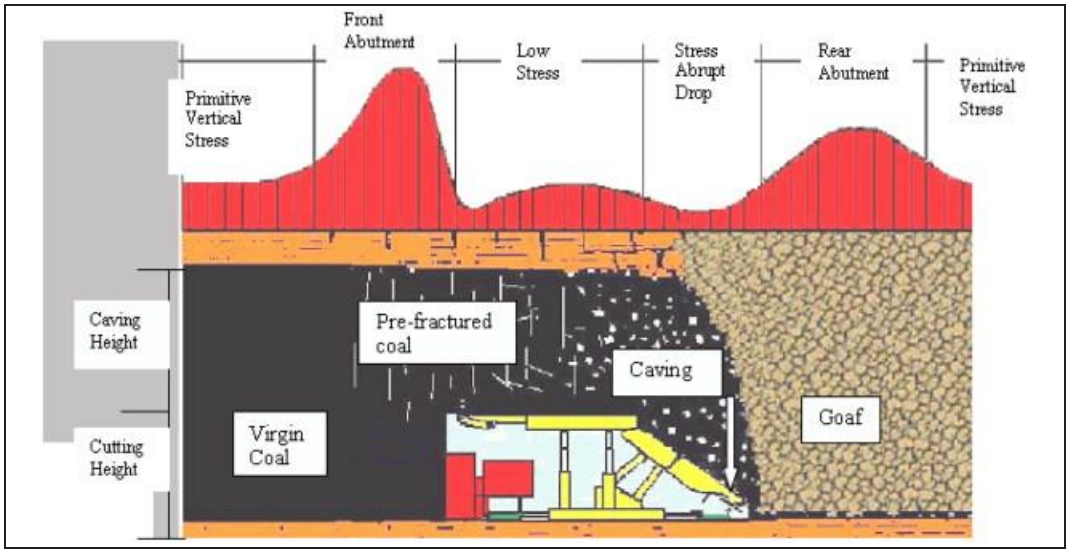
Longwall Top Coal Caving

Longwall Top Coal Caving ("LTCC") is a type of longwall mining applicable to very thick seams (greater than 4.5m) where coal is being left because "conventional" longwall equipment typically cannot mine beyond around 5m mining height. As a result, it generally enables an increased recovery for only an incremental additional cost. The method originated in Europe but has been developed in China in more recent years before being implemented in Australian coal operations.

As shown in ***Figure 10-2***, the lower section of the seam is cut by a conventional longwall set-up except that the longwall supports have a longer rear canopy extending past the base into the goaf. The extended canopies have a sliding door fitted into them. An additional armoured face conveyor ("AFC") is attached to the rear of the chocks and runs directly below the canopy openings.

As the face moves forward, the coal left above the section cut by the shearer falls onto the extended canopies, providing the goaf is caving normally. The sliding doors in the canopies are sequentially opened and the coal falls through onto the rear mounted AFC. The main gate stage loader is extended beyond the face conveyor to enable the rear mounted AFC to discharge coal directly onto it and carry coal to the main gate conveyor system.

Figure 10-3 Graphical Representation of Longwall Top Coal Caving Underground Mining



10.2 HVO

The HVO site area is approximately 20 km long (North to south) and 10 km wide (Figure 2-2). HVO is divided into HVO North (HVON) and HVO South (HVOS) which are separated by the Hunter River which flows through the HVO leases. There are a number of current active pits and potential future developments at HVO, with the existing operation producing approximately 20Mtpa of run-of-mine coal which results in approximately 14 to 15Mtpa of coal products.

Pit Limits

YAL completed a margin ranking process using XPAC mine planning software which is a process which attributes revenue and costs factors to a set of discreet block data to estimate the incremental and cumulative margin for each coal horizon. The margin ranking results provide an indication of the economic pit limits and also may assist in strategic planning as it allows the relative ranking of pits from high to low margin. The margin ranking was limited to the extents of the pit shells for HVO. The cost assumptions for the margin ranking include:

- Waste removal costs based on budget forecasts with operational improvements to productivity based on YAL benchmarks.
- Drill and blast costs based on YAL cost data.
- All other onsite costs as per the sites budget.
- Offsite costs updated as per YAL expectations.

The outcomes from the margin ranking were analysed and, allowing for cost of capital, a cut off margin of AUD 10.00 per product tonne was selected. Although the margin ranking process is indicative, it provides a good guide for targeting economical reserves for mine planning and scheduling.

The potential basal seams resulting from the margin ranking are outlined in ***Table 10.3***. The basal seam applied in the LOM plan and Reserves reporting is also shown. In some cases the potential economic basal seam may be below the pit design and presents upside for further expansion of the pits.

RPM has reviewed YAL's margin ranking exercise and considers it suitable and has applied these basal seams to the LOM Schedule presented in this Report.

Table 10-3 Margin Rank and Design Seam Floor

Pit	Margin Rank Basal Seam	LOM / Reserve Basal Seam	Comments
West Pit	Barrett	Barrett / Liddell	South of bridge, the pit steps up to Liddell
Wilton Pit	Barrett	Barrett	
Mitchell Pit	Barrett	Barrett	
Carrington West Pit	Bayswater	Bayswater	
Riverview Pits	Warkworth	Warkworth	
Cheshunt Pits	Lower Liddell	Bayswater	Pit limited to Bayswater seam for practical purposes
Southern Pit	Hebden (Lower Barrett)	Lemington	Pit limited to Lemington seam for practical purposes
Auckland Pit	Hebden (Lower Barrett)	Lower Barrett	

In addition to the margin rank, RPM generated a break-even strip ratio to confirm the pit limits. A break-even strip ratio is the ratio of burden (waste) to ROM coal tonnes at which there is ~~$0~~AUD0 margin. The cost inputs in the estimation of the break-even stripping ratio were as per those used in the above described margin rank process. The estimated break-even strip ratio for HVO is 17:1. Cumulative strip ratio plots were generated in Geovia Minex software to the appropriate seam floors for each pit area and compared against the break-even strip ratio estimate.

The break-even strip ratio analysis confirmed the results of the margin rank study completed by YAL. RPM also used the break-even strip ratio method to confirm the pit limits at Auckland South and Carrington East which were not included in the margin ranking as they were not included in the previous works completed by the YAL.

The pit limits are shown in ***Appendix C***.

Mine Design

Seismic hazard studies were not included in the documents available. However, the region is classified as a low seismicity area and seismic hazard is not a critical design consideration. RPM considers the geotechnical parameters applied to Assets pit designs are suitable and reasonable for the rock types identified.

The slope criteria adopted in the LOM plan for HVO are shown in the ***Table 10-4***. RPM notes that in some sections of wall the overall slope design may vary depending on the depth and the number of berms in the wall design.

Table 10-4 HVO Pit Design Slopes

Pit	North	East	South	West
West	30	38	30	N/A
Riverview	N/A	N/A	50	37
Cheshunt 1&2	40	N/A	45	45
Cheshunt Deep	40	40	40	40
Carrington West	40	45	44	38
Wilton/Mitchell	40	39	30	17-27
Southern	37-40	22	37-40	37
Auckland	35	35	35	35
Auckland South	37	31-37	37	37
Carrington East	47	45	55	45

Coal is planned to be mined from up to 10 separate pits over the life of the mine. Mine designs are generally based on those generated by the Company however have been reviewed by RPM and considered reasonable. RPM notes the following with regards to mine design:

- Some geotechnical issues have had an impact on design such as mining through alluvial land or in proximity to underground workings, however these have not had a significant impact on the operation,
- In the current pits, bedding is inclined in the direction of the highwall and major faulting generally trends perpendicular to the highwall.
- The weakest strata on site is the alluvial material, which requires significant geotechnical and hydrogeological study to confirm impact on pit design and stability.
- The ongoing design criteria used at the site includes input from:
- Regular geotechnical inspections, reviews and design advice from external geotechnical consultants throughout the entire period of mining operations; and
- Inspections and back analysis of any wall failures to demonstrate causes of failure with preventative measures being incorporated back into wall design.

At HVON the current active mining area is the West pit, however there has been recent mining in the Wilton and Carrington pits. West pit is a dragline pit whereas the Wilton and Carrington pits are planned to be mined via truck and shovel methods only. The West pit targets a Barrett seam floor. Coal seams from the Barrett seam at the bottom of the pit up to the Lemington seam are found in the West pit area with the upper seams more developed as the pit progresses down dip to the southeast.

A centre bridge system is used by the dragline at West pit to gain access into each successive cut. The coal beneath the centre bridge is not recovered with a low-wall ramp system used to gain access to the Liddell and Barrett coal seams at West pit. The pre-strip operations are undertaken by electric rope shovels and large hydraulic excavators loading rear dump trucks. Pre-strip waste is placed into the inpit dumps with coal mined by front end loaders and hydraulic excavators hauled to either of the CHPP's.

Within HVOS, there are two currently operating pit areas; Cheshunt 1 and 2 and Riverview. Riverview pit is located to the west of the Cheshunt pits on the western limit of the HVO lease boundary and has planned to pit limits of approximately 1.2 km wide (west to east) and 1 km north to south. Riverview is a dragline operation with truck and shovel pre-strip with the pit advancing to the south. In the north, the basal seam of the pit was the Warkworth seam (area mined out), with the central area of the pit the Warkworth seam splits away from the Bowfield seam and the floor of the pit is stepped up to a Bowfield floor.

Coal from the Riverview pit is mined by front end loaders and hauled to either CHPP. The in-pit spoil from the Riverview pit will ultimately be rehandled as part of the Cheshunt Deep pit which will target the Bayswater seam beneath the current Riverview pit.

Cheshunt 1 and 2 pits are adjoining mining areas located at the northern end of the HVOS area. The pits are mined by truck and shovel methods with waste being hauled to out of pit / inpit dumps to the north east of the pits either via the eastern endwall or cross pit access between the Cheshunt 1 and Cheshunt 2 pits. A ramp system up the advancing waste dump has been developed which provides access to a number of active dump tip heads. The combined length of operating face at the two pits is approximately 3 km. The pits are developed to the south and southwest and are a subset of the Cheshunt Deep pit extension which is planned in later years of the mine life. Coal seams from the Warkworth seam down to the Barrett seam are identified in the area, however the Cheshunt 1 and 2 pits mine down to the Bayswater seam floor only.

A third party dump study carried out on the 2017 LOM plan identified the following point:

- At the Auckland pit there was a significant shortfall in dump capacity when using the HVO's dump shell limit of 140 mRL. Accordingly, the planned dump height has been increased to 180 mRL to allow a spoil balance to be achieved. RPM highlights there is sufficient time to review and improve the mine plan at Auckland as the pit is not scheduled to commence until 2052.

RPM considers the HVO waste dump designs and strategy to be adequate to support the Life of Mine Production Schedules. Opportunities may exist to optimise waste handling and storage through detailed reviews of mine designs and scheduling.

Mine Schedule

The HVO LOM schedule was developed targeting a ROM coal production rate of 20.6Mtpa from a number of active mining areas at the site. West Pit, due for completion in 2034, is currently mined using a combination of truck and shovel for pre-strip operations and a dragline uncovering the lower coal seams, has a target of 4.5Mt ROM Coal per annum. At the completion of this pit the dragline will be retired from use at the mine. Riverview Pit is currently being mined by truck/excavator and dragline method. The Riverview Pit is mined to the Warkworth Seam with spoil placed into the mined out void. Following completion of the Riverview Pit in 2024 the dragline will be retired. The in-pit spoil at Riverview will also be re-handled as part of the larger Cheshunt Deep it which targets the deeper seams. The Cheshunt 1 & 2 Pits are adjacent active truck and shovel pits and are a subset of the larger Cheshunt Deep Pit. The Cheshunt 1 & 2 Pits are forecast to mine up to 14.7Mtpa and will be completed in 2023 following transition into the Cheshunt Deep Pit.

The future pits at HVO are the Cheshunt Deep Pit, Southern, Auckland, Carrington East and Auckland South Pits. The Cheshunt Deep Pit is scheduled to be completed in 2041 at which time the Southern, Carrington East and Auckland South Pits will be developed to maintain the total site production rate of approximately 20Mtpa. As these pits are depleted, the Auckland pit will be developed in 2052 with the operation transitioning to a lower production rate of 10Mtpa before completion in 2060.

The HVO schedule results, which RPM consider to be practical and achievable, are presented in ***Table 10-5.***

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Table 10-5 HVO/MTW LOM Production Schedule

Operation	Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	**Mining**																			
	ROM Coal	**Mt**	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	**814.9**
	Prime Waste Mined	**Mbcm**	50.1	87.6	97.4	113.5	121.5	99.5	131.2	140.6	114.2	118.0	120.4	122.7	102.1	114.7	108.5	118.0	88.9	**4,604.1**
	Rehandle Waste	**Mbcm**	6.1	10.0	11.2	11.7	11.3	11.3	11.1	8.7	8.2	8.0	7.9	7.8	7.2	5.7	2.2	2.4	1.8	**201.2**
	Total Waste mined	**Mbcm**	56.3	97.6	108.6	125.2	132.7	110.8	142.3	149.3	122.5	126.0	128.3	130.5	109.3	120.4	110.7	120.4	90.7	**4,805.3**
	Prime Strip Ratio	**bcm/ROM t**	4.9	4.3	4.7	5.5	5.9	4.8	6.4	6.8	5.5	5.7	5.8	6.0	5.0	5.6	5.3	6.0	5.8	**5.6**
	Total Strip Ratio	**bcm/ROM t**	5.5	4.7	5.3	6.1	6.4	5.4	6.9	7.2	5.9	6.1	6.2	6.3	5.3	5.8	5.4	6.1	5.9	**5.9**
	CHPP																			
	Coal Processed	**Mt**	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	**814.9**
	Plant Yield	**%**	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.9	69.2	**69.6**
	Bypass Coal	**Mt**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
	Coal Product	**Mt**	7.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8	14.6	14.6	14.5	14.2	14.3	14.2	13.9	13.8	10.7	**567.4**
	Effective Yield	**%**	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.8	69.6	**69.6**
	Product Type																			
	Semi Soft Coking	**Mt**	1.2	4.5	4.6	4.9	4.2	4.1	4.0	4.2	3.7	3.4	2.7	2.7	3.2	3.0	2.6	3.2	2.0	**127.3**
	Thermal (low ash)	**Mt**	2.7	4.4	4.4	4.3	4.7	4.9	5.0	4.9	5.1	5.3	5.6	5.5	5.3	5.6	5.8	5.7	4.7	**222.2**
	Thermal (Mid ash)	**Mt**	3.1	5.0	4.9	4.7	5.0	5.1	5.1	4.9	5.0	5.1	5.2	5.0	4.8	4.6	4.3	3.6	2.9	**173.4**
	Thermal (high ash)	**Mt**	0.3	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.2	1.3	1.1	**44.4**
MTW	**Mining**																			
	ROM Coal	**Mt**	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			**368.1**
	Prime Waste Mined	**Mbcm**	51.1	88.5	101.8	105.1	105.8	101.7	102.2	104.4	104.2	102.7	103.1	99.1	95.7	97.2	90.3			**2,203.3**
	Rehandle Waste	**Mbcm**	8.0	13.0	16.0	15.4	14.0	13.8	13.8	14.3	14.9	15.0	15.0	15.1	13.9	15.8	13.0			**326.3**
	Total Waste mined	**Mbcm**	59.1	101.6	117.7	120.5	119.8	115.5	116.1	118.7	119.1	117.7	118.1	114.2	109.6	113.0	103.4			**2,529.6**
	Prime Strip Ratio	**bcm/ROM t**	6.0	5.2	6.0	6.2	6.2	6.0	6.0	6.2	6.2	6.1	6.2	6.0	5.8	5.8	6.1			**6.0**
	Total Strip Ratio	**bcm/ROM t**	6.9	6.0	6.9	7.1	7.1	6.8	6.9	7.0	7.1	7.0	7.1	6.9	6.6	6.8	7.0			**6.9**
	CHPP																			
	Coal Processed	**Mt**	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			**368.1**
	Plant Yield	**%**	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.6			**69.7**
	Bypass Coal																			
	Coal Product	**Mt**	5.9	11.5	11.8	11.9	11.8	11.9	11.8	11.8	11.7	11.6	11.6	11.4	11.6	11.6	10.4			**256.5**
	Effective Yield	**%**	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.4			**69.7**
	Product Type																			
	Semi Soft Coking	**Mt**	1.0	2.2	3.0	2.3	2.5	2.7	2.2	2.1	2.3	2.4	2.4	2.4	2.3	3.0	2.7			**58.2**
	Thermal (low ash)	**Mt**	2.7	5.2	4.9	5.4	5.3	5.2	5.4	5.5	5.4	5.3	5.3	5.2	5.4	5.1	4.6			**114.4**
	Thermal (Mid ash)	**Mt**	1.4	2.7	2.5	2.7	2.6	2.6	2.6	2.6	2.5	2.5	2.4	2.4	2.4	2.2	1.8			**51.9**
	Thermal (high ash)	**Mt**	0.7	1.4	1.4	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.3			**32.1**

10.3 MTW

Pit Limits

The MTW pit had a margin ranking process carried out by the YAL. RPM has reviewed YAL's margin ranking exercise and considers it suitable for the estimation of pit limits and has applied basal seams as per **Table 10-6** to the LOM Schedule presented in this Report.

Table 10-6 MTW Margin Rank and Design Seam Floor

Pit	Margin Rank Basal Seam	LOM / Reserve Basal Seam	Comments
Loders Pit	Woodland Hill	Woodland Hill	
West Pit	Mount Arthur	Mount Arthur	
North Pit	Mount Arthur	Warkworth	the Company currently mine to Warkworth Seam

RPM generated a break-even strip ratio to confirm the pit limits. The estimated break even strip ratio for MTW is 16:1 bcm:t.

The Pit limits are shown in ***Appendix C***.

Mine Design

There are currently three operational pits at MTW:

- Loders pit,
- West pit and
- North pit.

Coal is planned to be mined from up to three different pits of which Loders will be completed in 2019. The Company advised RPM that the final highwall overall design slope for the North, West and Loders pit is 55° and the end walls (northern and southern walls) vary between 25° and 35° for operational reasons. In all pits the overall slopes may vary depending on the depth of the pits, the number of benches and the number of required access roads.

RPM has reviewed the current mine plans for the pits that are scheduled to be mined over the life of the project and considers that the pit limits were designed with suitable level of detail taking into account the recommended geotechnical and mining operation parameters.

The strategy used for waste haulage and dumping at MTW can be described by the following rules:

- Loders Pit (Mt Thorley) waste is hauled in pit to Mt Thorley dumps (2018 only),
- Loders pit void will be primarily used as a tailings dam. Some waste will also be placed in the void late in the LOM Plan'
- West Pit waste is hauled to the following dumps in order of preference:
- West Pit in-pit dumps,
- South out of pit Dumps (2018 to 2028 after which South out of pit Dump is full)
- West out of pit dump (2028 to 2038 after which West out of pit dump is full) and
- Loders Pit final void (2038 to 2040),
- North Pit waste is hauled to the following dumps in order of preference:
- North Pit in-pit dumps,
- North Pit out of pit dump (2018 to 2022 after which North out of pit dump is full),
- West Pit final out of pit dump (2022 to 2038 after which West out of pit dump is full) and

- Loders Pit final void (2038 to 2040).

At MTW, waste generally fits within the approved dump limits with the one exception being where the dump over the Loders pit area will need to increase by 5m above the approved dump height of 155 mRL. The additional volume is estimated to be 2.5 Mbcm and is not considered by RPM to be a material issue.

Mine Schedule

In the MTW LOM schedule, the Loders Pit is planned to cease in 2019 leaving the West and North Pits to support production. YAL plans to retire the dragline that was operational at Mt Thorley and modify the dragline operating method in the West and North Pits to a tandem offset dragline method which will commence in 2019. The reduction from three operating dragline pits to two will require a change in the dragline operating method to maintain the required production rates, as a result YAL have completed detailed investigation of the revised dragline operating method. The features of the dragline offset method include:

- Operating two draglines in the same pit;
- Increasing the strip width from 55m to 80 m;
- Allows two coal seam horizons to be exposed at the same time;
- Two pass operation in the West Pit, one pass operation in North Pit;
- Spoil pullback pass in West Pit to achieve a spoil balance and
- 30 day delay for both draglines at the end of each strip to allow for de-coaling operations to take place and preparation of the next strip for dragline operation.

The West and North Pits will continue to develop down dip towards the west of the licence area and have a combined production target of approximately 17Mtpa. The ROM coal production from each pit is variable as it depends on the proportion of time the draglines are operating in each pit for any given year. North Pit ceases production in 2040 and West Pit is completed in 2036.

As the North and West Pits near their western limits the proportion of Inferred coal increases. This presents significant upside for future Reserves if successful drilling results in upgrade of the resource classification. The LOM plan schedule results are presented in ***Table 10-5***.

10.4 Moolarben

Mining operations at Moolarben are undertaken via underground longwall mining and conventional large scale open cut methods using owner operator equipment. Open cut ROM coal is hauled to a Coal Handling Preparation Plant and the underground coal is bypassed, all of which produces a marketable thermal product coal. Product coal is loaded onto trains and transported to the Port of Newcastle for sale on the international market.

Pit Limits

Open Cut

The open cut mine targets the Ulan seam with plies mined together as working sections. Some plies, such as the A2 and the top 200mm of the CL ply are wasted to improve product quality. These adjustments to mining have improved yield outputs which have been included in this estimation.

RPM has determined suitable technical parameters including costs, recoveries to apply in the Coal Reserve estimation process following; discussions with site personnel, review of pre-feasibility level documents, proposed life of mine plans, mining method, tailings dam capacity and the forecast processing plant recoveries for the areas of the Assets where Measured and Indicated Resources have been estimated. RPM notes that the sites are currently operating and that at least pre-feasibly study level documents were available for expansion areas, which formed the basis for the selected parameters.

The following parameters (***Table 10.7***) have been used for the Coal Reserve estimate and reporting at Moolarben:

- Variable metallurgical recoveries (yield) dependent on the ROM coal quality were utilised in the study and are based on the laboratory testing of slim core data. Adjustments are made to allow for inefficiencies of a coal preparation plant when compared to laboratory test work. The factors applied are 93% yield factor and a 1.4% increase in the product ash (reported product ash = laboratory Ash + 1.4%).
- Thermal products are based on the resultant thermal ash which typically ranges from 14.5% to 28% ash products.
- Mining and processing operating costs utilised in the margin ranking and break-even were based on actual operating cost data and forecast performance of the operations as per YAL's life of mine planning process. These costs are based on various expected volumes, plant maintenance and cost estimates over the life of the project. All mining is undertaken by the owner, as such the input costs reflect this with separate operating costs and capital costs for mobile equipment.
- In situ coal estimates have been converted to Run of Mine estimates through the application of Modifying Factors which are outlined in **Table 10-7**. In addition a minimum thickness cut off of 0.3m is applied to the A1 ply and ELW which also has a 55% raw ash cut off. The recoveries are based on reconciliation of site data.

Table 10-7 Moolarben OC Yields

	OC1	OC2	OC3	OC4
A1 Recovery	55%	55%		55%
A1 Ash Addition	13%	13%		13%
ELW Recovery				90%
WS1L Recovery	98%	98%	93%	97%
WS2L Recovery	98%	98%	95%	98%
WS1L Total Moisture	6.1	6.5	6.5	6.1
WS2L Total Moisture	7.5	8.3	8.3	7.5
WS1L Dilution	-0.90%	-0.90%	-0.90%	-0.90%
WS2L Dilution	1.40%	1.40%	1.40%	1.40%

Long term forecast prices were utilised for the economic modelling to underpin reporting of Coal Reserves. The prices for margin ranking and reporting of Coal Reserves are at the point of sale of the products (free of board). The long term forecasts were sourced from third party reports completed by marketing experts provided to the YAL along with discussions with YAL personnel. YAL updates long term pricing forecasts on a 6 monthly basis. RPM is not a commodity forecasting specialist and has relied on third parties for price assumption. As per the JORC Code reporting requirements, RPM has completed independent reviews based on public and internal pricing information and considers the price assumption to be reasonable.

Table 10-8 Moolarben Open Cut Break Even Strip Ratio Input Parameters

Description	Units	Moolarben
Prices		
SSCC	USD /tonne	-
Thermal	USD /tonne	66 – 88
Exchange Rate	AUD/USD	0.75
Average Mining Costs		
Coal Mining	AUD /tonne	1.70
Waste Mining	AUD /bcm	2.70
Site Overheads		
Processing	AUD /t ROM	5.30
Administration	AUD /t Prod	4.09
Offsite Costs		
Rail	AUD/t Prod	8.45
Port	AUD/t Prod	5.14
Other Offsite Costs	AUD/t Prod	1.68
Average Yield		
CHPP	%	77
Bypass[4]	%	UG Only

Notes:
1. *Coal Prices in USD*
2. *Thermal coal price varies for Mid and High ash products*
3. *All costs in Australian Dollars*
4. *Currently no bypass assumed for the open cut at Moolarben*

The pit limits are shown in ***Appendix C***.

Underground

The target underground mining areas are the deeper areas of the resource, generally located beneath natural ridgelines that are unfavourable to mine via open cut methods. The underground mining strategy is to continue a single longwall operation, sequentially working through the underground resource areas. As per standard practice, the longwall is supported by development activity which currently utilises continuous miners. Development activity proceeds ahead of the longwall and as such there will be points in the mining schedule when two mining areas are operating simultaneously, as development progresses into UG4 while the longwall completes UG1.

There are currently three approved underground mining areas (UG1, UG2 and UG4) although as shown on ***Figure 10-4***, only UG1 and UG4 are included in the LOM plan. UG2, which lies between OC2 and OC4, is relatively small and considered a less attractive target than the other two underground targets. Additional resource areas (UG3, UG5, UG6 and UG7) as shown on ***Figure 10-5***, are considered for underground extraction but exploration and study for these areas have yet to reach a sufficient level of maturity to be included in the plan.

Figure 10-4 Moolarben underground mining areas

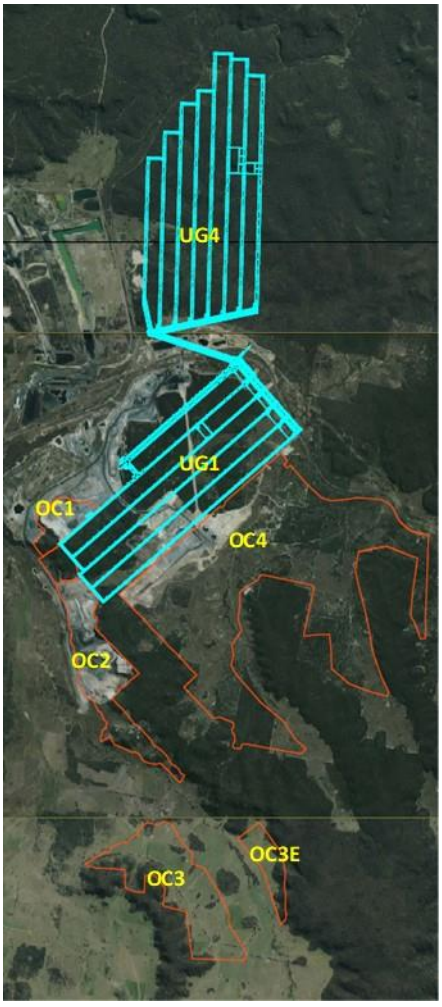
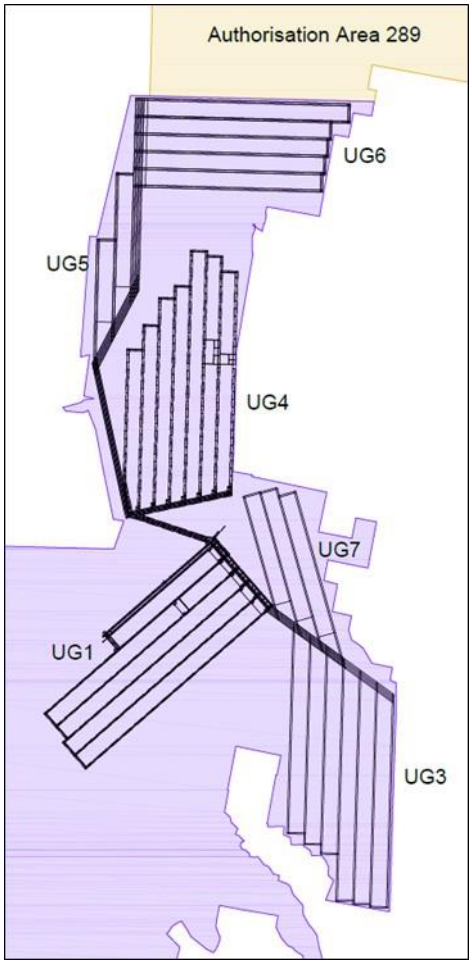


Figure 10-5 UG pipeline projects



Mine Design

Open Cut

The open cut operations consist of five pits labelled OC1, OC2, OC3, OC3E and OC4. Mine designs are based on the 2017 LOM plan generated by Yancoal however have been reviewed by RPM and considered reasonable. RPM note that Reserves are reported for all pits with the exception of OC3E Pit. Pit designs are based on a 75° pre-split wall or 70° trimmed wall with a 45° batter through weathered material. A 12m – 15m berm is placed at the base of the weathering and at required intervals to avoid batters greater than 45m in height. Strip widths vary from 50m to 100m to suit dozer push and excavators respectively.

Information provided by YAL notes the following with regards to pit design:

- An in situ barrier of coal has been left between OC1 and UG1 pits,
- Factors such as 1 in 100 year flood extents, economic limits, adjacent mining operations, geological features, approval limits, coal crops, watercourses and infrastructure define the pit boundaries and
- Extensions to OC3 to the south are under investigation, as such are not included in Coal Reserves.

Waste will be placed as per the approved final rehabilitation surface. RPM have not reviewed this surface but due to the very low stripping ratio in the LOM plan, spoil fit is not seen as a potential issue in the Moolarben mine plan. Dump planning needs to be carried out to ensure the site maintains a minimal noise and dust pollution output.

Both waste and coal mining will be completed using hydraulic excavators in both backhoe and shovel configuration dumping into rear dump trucks. OC4 will have the assistance of a dozer push fleet that has recently been introduced. RPM view this equipment as appropriate for the operations at Moolarben.

Underground

Underground development is undertaken using conventional development equipment. Single-pass bolter-miners (continuous miners) are used in development sections, with shuttle cars used to transport coal to the coal clearance system. The coal extraction methodology has been based on the use of standard Australian continuous miner practices for development and retreat longwall practices for production.

Development in UG1 and UG4 is performed by a combination of conventional development and super unit configurations. Conventional development units consist of one continuous miner and up to two shuttle cars in a panel alternately advancing each roadway and completing a pillar cycle. Super units consist of two continuous miners and two shuttlecars in a panel, with a continuous miner in each roadway to increase the rate of advance of the panel.

Longwall extraction is undertaken using a CAT longwall system applying the Bi-Di method of cutting through use of a twin ranging arm shearer cutting a conventional mining section with a 1m web. Automation technology is being used on the face to ensure face alignment and correct horizons are mined, to support efficient and productive operations.

Long / wide panels with modern longwall equipment, incorporating automation technology provides the potential for highly productive and reliable operations. Although these dimensions are in line with other highly productive longwall operations, they are within current experience levels with the longest panels up to 6 km in length and the widest, up to 400 m. The dimensions are largely constrained by the geometry of the resource and are unlikely to be increased.

UG1 and UG4 are at low to moderate depths of cover, as such stress conditions will be more favourable than experienced at deeper operations. RPM understands that there are no major issues with the strength or competence of the roof and floor.

Exploration has determined that seam gas content is low to negligible across the planned mining domains. Practical ventilation rates are expected to be sufficient for seam gas management by dilution of the atmosphere.

UG1

In UG1 longwall mining will extract the combined D working section (DWS) and DTOP plies of the Ulan Seam with up to 3.4m (3.0m to 3.4m) of the seam to be recovered. Longwall panels will range from 2.4 km to 4.6 km in length and will be 300m wide. The panels have been laid out in a southwest to northeast orientation with an extraction sequence of sequentially mining panels from north to south (towards OC4). Within each panel the longwall will retreat from the southwest (inbye) end to the main headings along the north-eastern boundary. The longwall is currently operating in the first panel (short) panel on the northern side. Both development and longwall operations are currently operating to plan and underground conditions have been favourable as are expected.

Igneous plugs (diatremes) which are expected to impact on production and quality have been identified in UG1 in panel 2 and panel 3. The longwall has been planned to "step around" i.e. not mine, the diatreme in panel 2 but schedules still show full mining through the igneous feature on the inbye end of panel 3. It is expected that the decision on how to mine the inbye end of Panel 3 will be made when more information has been made available as per typical grade control practices.

Although the face width reduces from 300m in UG1 to 250m in UG4, it is relatively straight forward to modify the face equipment for the shorter panel length and there would be no requirement for a major additional capital purchase to affect the transition.

UG4

Expansion into the UG4 mining area will occur once development of UG1 is completed. Due to changes in coal quality, longwall mining in UG4 will extract the DWS seam only with up to 3.0m (2.8m to 3.0m) mining height. Longwall panels will range from 2.4 km to 4.7 km in length and will be 250m wide. The subsidence criteria set out in the Stage 1 approval for UG4 has resulted in retaining a narrower panel width. The panels in UG4 based on YAL's plan will be oriented generally north to south.

Panel layout is impacted by the location of "The Drip" on the Goulburn River (a surface featured waterfall sourced from groundwater). The mine is further bounded by Ulan Road, Goulburn River National Park and the old Goulburn River Valley palaeochannel. In particular the significance of "The Drip" has resulted in a 500m standoff being required from the Goulburn River so that there are no subsidence impacts.

Additionally, several archaeological sites are located above the workings. The approved design accounts for their locations, including the use of a mini-wall to negotiate a cliff line.

Access

The underground access is via portals in the OC1 highwall which has been left open for this purpose. By using an existing highwall the project was able to avoid the significant capital cost of driving inclined drifts from the surface down to the seam. Travelling roads and coal conveying routes have been established between the portal area and the CHPP to provide mine access for personnel, equipment and materials and to clear coal from the mine.

The portals enter the underground at the western corner of the first underground panel in UG1. Access to the main headings is via a double-entry drive running in a north-easterly direction parallel to the first panel. The access roads connect with the UG1 main headings at the northern tip of the layout, which is also the point from which an underground connection to UG4 will be driven. This will be a key junction for the underground operations for both UG1 and UG4 and depending on mine design may remain the central point for all underground operations going forward.

Mine Schedule

Margin ranking has been used to direct the mining sequence and specifically cash rate. The key drivers to this are coal quality, stripping ratio and haulage distance to the CHPP. The strategy takes the low ratio coal from OC2 and OC3 first. OC3E contains a low ratio coal that is used to balance the strip ratio early in the schedule. The high ratio coal in OC 4 is the last to be mined with progression on two faces simultaneously.

The production schedule as per the 2017 LOM plan are shown in **Table 10-9**.

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Table 10-9 Moolarben Quantity Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	2036	Total LOM
Total ROM Coal	**Mt**	**8.9**	**18.9**	**20.0**	**20.0**	**20.0**	**18.8**	**18.7**	**18.6**	**17.6**	**15.5**	**12.0**	**11.9**	**11.3**	**11.4**	**1.3**	**270.6**
OC Mining																	
ROM Coal	**Mt**	6.1	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	1.3	**212.7**
Prime Waste Mined	**Mbcm**	20.2	43.2	42.5	48.7	48.1	37.1	51.6	52.9	49.6	47.8	50.4	49.3	49.5	52.6	1.1	**854.8**
Rehandle Waste	**Mbcm**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Total Waste mined	**Mbcm**	20.2	43.2	42.5	48.7	48.1	37.1	51.6	52.9	49.6	47.8	50.4	49.3	49.5	52.6	1.1	**854.8**
Prime Strip Ratio	**bcm/ROM t**	3.3	3.3	3.3	3.7	3.7	2.9	4.3	4.4	4.1	4.0	4.2	4.1	4.4	4.6	0.9	**4.0**
Total Strip Ratio	**bcm/ROM t**	3.3	3.3	3.3	3.7	3.7	2.9	4.3	4.4	4.1	4.0	4.2	4.1	4.4	4.6	0.9	**4.0**
UG Mining																	
UG ROM Coal	**Mt**	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5						**57.9**
UG Development	**Mt**	0.3	0.6	0.5	0.5	0.5	0.5	0.4	0.3	0.1							**3.8**
UG Longwall	**Mt**	2.5	5.3	6.5	6.5	6.4	5.3	6.3	6.2	5.6	3.5						**54.1**
Development	**km**	11.6	21.0	19.7	19.9	20.8	19.4	16.4	13.3	3.1							**145.2**
CHPP																	
Coal Processed	**Mt**	6.1	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	1.3	**212.7**
Plant Yield	**%**	71.8	77.1	74.6	72.8	75.4	75.4	76.4	77.7	78.4	78.5	78.4	78.4	78.4	77.8	74.1	**76.9**
Plant Product	**Mt**	4.4	10.0	9.7	9.5	9.8	9.8	9.2	9.3	9.4	9.4	9.4	9.3	8.8	8.9	0.9	**163.5**
Bypass (UG only)	**Mt**	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5						**57.9**
Coal Product		7.2	15.9	16.7	16.5	16.8	15.6	15.9	15.9	15.1	13.0	9.4	9.3	8.8	8.9	0.9	**221.4**
Effective Yield	**%**	80.6	84.2	83.5	82.3	84.0	83.0	84.9	85.6	85.3	83.4	78.4	78.4	78.4	77.8	74.1	**81.8**
Product Type																	
14.5% Ash @ 6,040 NAR	**Mt**	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5						**57.9**
17.0% Ash @ 5,850 NAR	**Mt**	3.1	5.7	5.1	5.2	5.0	5.2	5.0	5.2	5.2	5.2	5.2	5.0	4.8	4.9	0.4	**89.5**
28.0% Ash @ 5,200 NAR	**Mt**	1.9	4.0	4.2	3.8	4.3	4.1	3.6	3.6	3.7	3.6	3.6	3.7	3.4	3.5	0.5	**65.8**
23.0% Ash @ 5,450 NAR	**Mt**	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5		**9.0**
Total Product	**Mt**	**8.1**	**15.9**	**16.7**	**16.5**	**16.8**	**15.6**	**15.9**	**15.9**	**15.1**	**13.0**	**9.4**	**9.3**	**8.8**	**8.9**	**0.9**	**222.3**

Figure 10-6 Moolarben ROM Coal Schedule

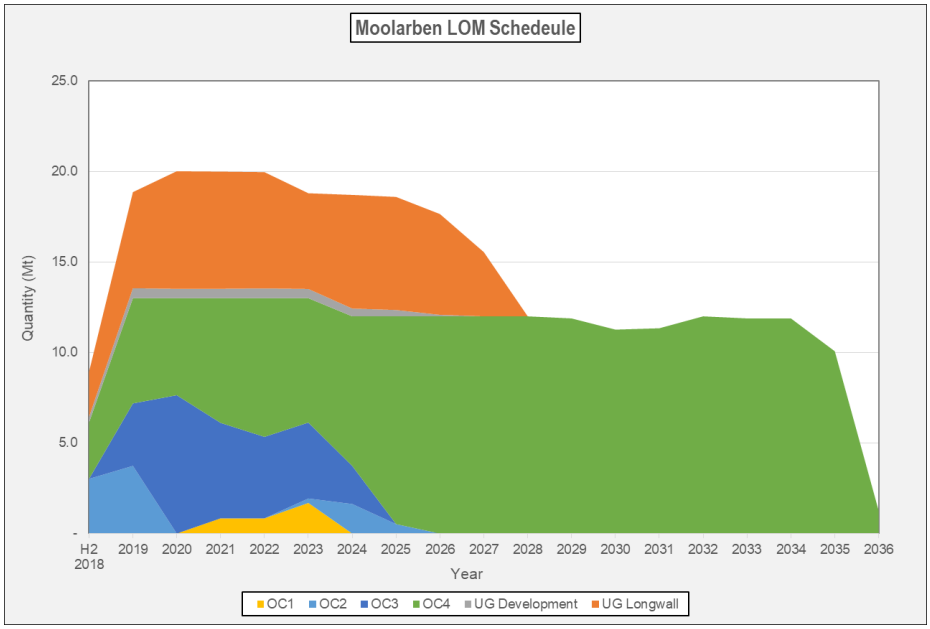
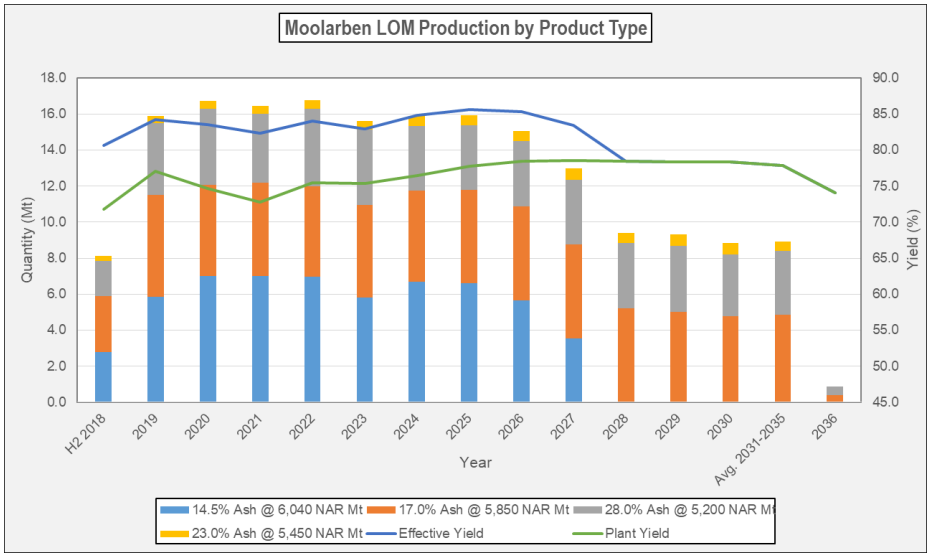


Figure 10-2 -7 Moolarben Product Coal Schedule



10.5 Ashton

Pit Limits

Open Cut

The pit limits at Ashton were defined in the South East Open Cut (SEOC) PFS study. The SEOC pit is constrained by a combination of surface features, lease boundaries and seam subcrop. The western and northern limit is based on an offset from Glennies Creek which flows across the Ashton leases and into the Hunter River in the south. Seam dip to the west and sub crop to the east. The Lower Barrett Seam subcrop form the basis for the ~~lowwall~~low wall of the pit in the east. The southern limit is determined by the lease boundary.

RPM reviewed the pit limits through the estimation of a break even stripping ratio and comparison to the ROM model. The key inputs to the estimate of the break-even strip ratio are shown in **Table 10-10**. Based on the inputs the estimated break even strip ratio is 12:1 (bcm/t ROM) which is significantly higher than the LOM strip ratio.

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Table 10-10 Ashton SEOC Break Even Strip Ratio Input Parameters

Description	Units	Ashton
Prices		
SSCC	USD /tonne	110
Thermal	USD /tonne	-
Exchange Rate	AUD/USD	0.75
Average Mining Costs		
Coal Mining	AUD /tonne	6.02
Waste Mining	AUD /bcm	4.68
Site Overheads		
Processing	AUD /t ROM	5.79
Administration	AUD /t Prod	4.71
Offsite Costs		
Rail	AUD/t Prod	5.45
Port	AUD/t Prod	3.07
Other Offsite Costs	AUD/t Prod	7.15
Average Yield		
CHPP	%	61
Bypass[4]	%	N/A

Notes:
1. *Coal Prices in USD*
2. *All costs in Australian Dollars*
3. *No Bypass assumed for Ashton SEOC*

The pit limits are shown in ***Appendix C***.

Underground

The Ashton underground mine covers an area approximately 4 km long (N-S) and 2 km wide (E-W). The physical mining constraints used to determine the underground target area are the lease boundary to the east, south and west, whilst the New England Highway traverses the lease and has formed a boundary between the open cut operations to the north and the underground mine on the southern side.

Depth of cover for the four seams in the target area varies from 40m to a maximum 290m. These depths are not considered likely to create any major impediments to mining.

Mine Design

Open Cut

A geotechnical study of the SEOC area was completed in the 2010 by a third party. The outcomes of the study was the recommendation of pit design criteria which included overall slopes of 60 to 62 degrees. The pit design includes bench slopes of 75 degrees and up to two 15m wide berms. The ~~lowwall~~low wall design is a 45 degree slope from the base of weathering to topography.

A flood protection levee is required to be constructed along the western and northern limits of the pit. Incorporated into the levee structure is the ROM pad for the SEOC. Materials to construct the levee will be sourced from within the SEOC mine footprint. Ashton plan to develop a low permeability barrier along the western side of the pit to prevent groundwater inflows via the alluvial material associated with Glennies Creek. The barrier will be developed as a trench ahead of the mining operation.

The out of pit dump has been designed to the east of the pit between the ~~lowwall~~low wall and the lease boundary. The out of pit dump is ultimately merged with the inpit dump.

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Underground

From a geotechnical perspective, the mine has generally good development and longwall conditions. Roof and floor materials are generally competent and the underground roadways exhibit high levels of roof and rib stability. The seams vary in thickness, as well as undulating across the lease. This results in slightly higher levels of out-of-seam dilution, as well as reducing confidence in seam volume calculations.

Three drifts have been driven from the open cut to gain access to the target area. One drift houses the main coal clearance conveyor. A second drift is for personnel and materials access, configured as a rubber tyred drive in, drive out drift. The remaining drift initially served as return ventilation roadway and was connected to the main mine fan. This roadway has since been superseded by a 5.5m internal diameter upcast shaft to satisfy the return air ventilation requirements.

Typical parameters used for the mine plan layout include:

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Table 10-11 Ashton UG Design Parameters

Parameter	Ashton
Main headings roadways	5
Gateroad panel roadways	2
Main headings pillar length (centres) (m)	30 – 100
Main headings pillar width (centres) (m)	25.3
Gateroad pillar length (centres) (m)	100
Gateroad pillar width (centres) (m)	33.4 – 60.4
Roadway width (m)	5.4
Roadway height (m)	2.7
Longwall panel width (block width) (m)	205
Longwall cutting height (m)	
Longwall caving height(m)	
Lease boundary Minimum barrier (m)	20
Longwall Extraction Height (m)	2.3 – 2.8

The longwall mining method is employed at Ashton underground. The mine is operated seven days a week, 24 hours a day on a rotating shift basis.

One feature of multi-seam mining is that the location and severity of geological structure in the lower seams is generally significantly clarified during mining of the upper seams. As the Pikes Gully Seam has been fully extracted at Ashton underground, no reduction in recoverable tonnes of the lower seams has been made for geological structure.

A small north-south trending ~~doleritic~~dolerite dyke was mined through in the eastern part of the Pikes Gully and Upper Liddell seam layouts. The dyke was found to be up to 4m thick and up to 214 MPa UCS. Softer zones within the dyke were mined by the longwall without significant issues, while explosives were used to mine through the harder zones. The dyke has been pre-mined in the Upper Lower Liddell Seam, ahead of longwall extraction.

Additional mining factors were applied to the Coal Resources model for deriving ROM Coal quantities. The approach to convert in situ to ROM coal and the application of mining factors involved the following:

- Roof and Floor Dilution: It was assumed that a combined minimum of 100 mm of higher ash material will be mined with the roof and the floor of the coal seam during development and longwall operations, thereby diluting the in situ coal quality. The quality defaults assigned to the waste rock were assumed to be relative density of 2.34 t/cu.m, ash of 85% and specific energy of 0 kcal/kg;
- Moisture: Relative density data in the geological model is based on assumed in situ moisture of 6.5%, while all qualities are based on air-dried moisture gridded values. Preston Sanders has been used in the estimation of in situ moisture. RPM has assumed that ROM moisture will be 8.65% and product moisture will be 8.5%.

Mine Schedule

Mining commenced in the ULLD Seam longwall in 2017. Panels progress from east to west until 2021 when the longwall is planned to be moved to the ULD seam to exploit the remainder of the western longwall panels. Following this the eastern longwall panels are completed in the ULLD before moving to the Lower Barrett seam in 2024. Underground operations are scheduled to be completed at Ashton in 2029.

The South east open cut (SEOC) has been approved however a condition of approval is that Ashton owns 100% of the land or has access agreements in place. At present this has not been achieved and hence the commencement date is not currently scheduled until 2024. RPM notes that this date is not fixed nor does the current plan if changed impact the underground operations. As such if all approvals and permit conditions are met operations can commence prior to ~~planned~~plan. The SEOC schedule commences in the northern end of

the pit and progresses to the south in a haulback mining method. All waste is initially hauled to out of pit waste dumps followed by inpit dumping when sufficient dump capacity is generated.

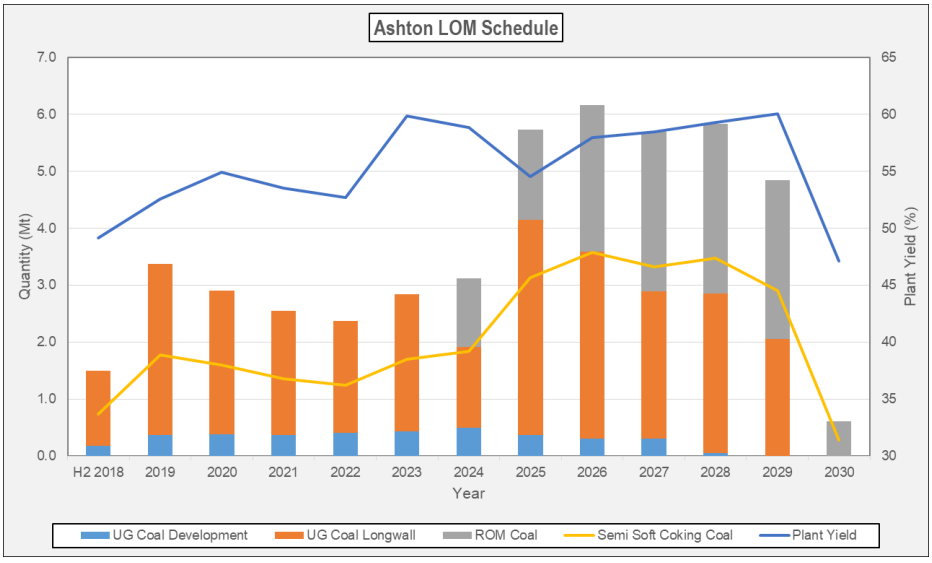
The combined underground and open cut quantity schedule for Ashton is shown in **Table 10-12**.

Table 10-12 Ashton Quantity Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total LOM
Total ROM Coal	**Mt**	**1.5**	**3.4**	**2.9**	**2.6**	**2.4**	**2.8**	**3.1**	**5.7**	**6.2**	**5.7**	**5.9**	**4.8**	**0.6**	**47.6**
UG mining															
Total UG Coal	**Mt**	1.5	3.4	2.9	2.6	2.4	2.8	1.9	4.2	3.6	2.9	2.9	2.1		**33.0**
UG Coal Development	**Mt**	0.2	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.0			**3.7**
UG Coal Longwall	**Mt**	1.3	3.0	2.5	2.2	2.0	2.4	1.4	3.8	3.3	2.6	2.8	2.1		**29.3**
Development	**km**	7.0	14.3	15.0	13.5	15.7	15.5	17.8	13.6	11.7	11.4	3.0			**138.5**
OC Mining															
ROM Coal	**Mt**							1.2	1.6	2.6	2.8	3.0	2.8	0.6	**14.5**
Prime Waste Mined	**Mbcm**							11.3	12.9	18.2	20.4	20.5	16.7	2.4	**102.3**
Rehandle Waste	**Mbcm**							0.1	0.1	0.2	0.2	0.2	0.2	0.0	**1.0**
Total Waste mined	**Mbcm**							11.4	13.0	18.4	20.6	20.7	16.9	2.4	**103.4**
Prime Strip Ratio	**bcm/ROM t**							9.3	8.1	7.1	7.3	6.9	6.0	4.0	**7.0**
Total Strip Ratio	**bcm/ROM t**							9.4	8.2	7.1	7.4	7.0	6.0	4.0	**7.1**
CHPP															
Coal Processed	**Mt**	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6	**47.6**
Plant Yield	**%**	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1	**56.7**
Bypass	**Mt**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Coal Product	**Mt**	0.7	1.8	1.6	1.4	1.3	1.7	1.8	3.1	3.6	3.3	3.5	2.9	0.3	**27.0**
Effective Yield	**%**	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1	**56.7**
Product Type															
Semi Soft Coking Coal	**Mt**	**0.7**	**1.8**	**1.6**	**1.4**	**1.3**	**1.7**	**1.8**	**3.1**	**3.6**	**3.3**	**3.5**	**2.9**	**0.3**	**27.0**

Figure 10-3 shows the Ashton life of mine quantities including the product coal and predicted Washplant yield.

Figure 10-3-8 Ashton LOM Schedule Summary



10.6 Yarrabee

Yarrabee operations are contained within 10 Mining Leases (ML's), one Mineral Development Licence (MDL) and four Exploration Permits for Coal (EPC's). The area covered by these licenses and permits is about 9,100ha with the area having approximate dimensions of 13.5 km north south and 10 km east west.

Pit Limits

Within in the mine footprint are the designated mining pits:

- On the eastern side of the deposit Yarrabee East North (YEN) in the northern and central eastern side of the deposit;
- Also on the eastern side of the deposit to the south of YEN pit is Yarrabee East South (YES) pit;
- Domain (DOM) 6 the northern most pit on the western side of the deposit; and
- DOM 2 N and DOM 2 S in the central to southern regions of the west side of the deposit.

Previous mining Domains 1, 3, 4 and 5 and the northern most part of YEN have been mined out. These areas were also structurally complex however containing the lower strip ratios of Yarrabee.

Pit optimisation completed by the YAL has been used as the basis to determine Yarrabee's pit limits. The input costs were validated against the annual budget costs and the revenue values for the product coal were sourced from the marketing team of YAL.

Pit limits were targeted to achieve sufficient margin based on the optimiser shell to allow for a buffer of sustaining capital and other variances not captured in the optimiser process.

Pit limits at Yarrabee are not only defined by pit optimisation, however by the complex geology where the pits end at major fault intersections or at the edge of synclines. Pits are generally designed along the floor of the basal seam for stability. As a result structural regions can become entirely economic or not. Many of the areas within the pit limits have steeply dipping coal and requires additional coal to maintain wall stability.

RPM generated a break-even strip ratio to confirm the pit limits. The cost inputs in the estimation of the break-even stripping ratio were similar to those used in the above described margin rank process. The estimated break-even strip ratio for Yarrabee is 24:1 bcm /t ROM.

The break-even strip ratio analysis confirmed the results of the pit optimisation study completed by YAL. RPM has reviewed the current mine plans for the pits that are scheduled to be mined over the life of the projects and considers that the pit limits were designed with suitable level of detail taking into account the recommended geotechnical and mining operation parameters.

Table 10-13 Yarrabee Break Even Strip Ratio Input Parameters

Description	Units	Yarrabee
Prices		
High Ash PCI	USD /tonne	98
PCI	USD /tonne	131
Exchange Rate	AUD/USD	0.75
Average Mining Costs		
Coal Mining	AUD /tonne	1.75
Waste Mining	AUD /bcm	3.06
Site Overheads		
Processing	AUD /t ROM	11.45
Administration	AUD /t Prod	4.60
Offsite Costs		
Rail	AUD/t Prod	20.4
Port	AUD/t Prod	13.3
Other Offsite Costs	AUD/t Prod	3.5
Average Yield		
CHPP	%	75
Bypass	%	15

Notes:

1. *Coal Prices in USD*
2. *All costs in Australian Dollars*

The Pit limits are shown in ***Appendix C***.

Mine Design

Seismic hazard studies were not included in the documents available however, the region is classified as a low seismicity area and seismic hazard is not a critical design consideration.

Geotechnical hazards are controlled through mine planning via determination of wall angles, placement of benches and pit wall orientation. Independent geotechnical assessments are conducted annually and recommendations are implemented in the mine plans.

Pits are generally designed to be mined down dip of the deposit to reduce geotechnical hazards. Pit orientation is designed to intersect major faults and the bedding planes in the area perpendicular to their strike. This limits the presence of wedge material in highwalls through fault and fracture planes. Highwalls are designed to achieve an average angle of approximately 45° with shallower wall angles in the tertiary material and catch benches at the base of weathering (BoW)

The Yarrabee mine planning team manages the technical components on site. A specialist geotechnical consultant is used to monitor mine plans, conduct regular field inspections and validate the Yarrabee geotechnical management process. Each of the current pits are assessed and all of the dig plans are assessed to ensure a Factor of Safety associated with the design is greater than 1.2.

RPM considers the geotechnical parameters applied to pit designs are suitable and reasonable for the rock types identified.

Overburden is hauled to a combination of in-pit and out of pit or out of pit dumps. Once pits are in a steady state of operation (after completion of the boxcut) all of the waste that is excavated can be hauled to inpit dumps.

With the development of DOM 6 and YES pits during the LOM plan, boxcuts will be excavated for the development of these pits that will require out of pit dumping before steady sate conditions are in place that will require all waste removal to be dumped in pit.

Waste movements from the excavation source to its destination assumes all waste is scheduled block by block for the entire schedule and waste dumps are designed for each annual period using the "max spoil" method to determine the closest practical dumps for each period.

RPM considers the Yarrabee waste dump designs and strategy to be adequate to support the Life of Mine Production Schedule. Opportunities may exist to optimise waste handling and storage through detailed reviews of mine designs and scheduling.

Mine Schedule

The current operation is producing from DOM 2 and YEN pits at an annual mining rate of approximately 3.5Mtpa ROM coal which will produce about 3.0Mt per annum of product coal. DOM 2 coal is being produced down to the Pollux seam which constitutes the pit floor. YEN pit coal seams are also being mined down to the Pollux seam which constitutes the pit floor.

The LOM plan for Yarrabee is to increase the annual production from the current level of about 3.5Mtpa to an average level of 4.1Mtpa ROM with the annual tonnage ranging between 3.4Mtpa ROM to 5.2Mtpa ROM. The earlier years of the schedule, when the higher margin pits are mined, allows for an increase in the maximum production due to the higher bypass recovery, while in the later years in the poorer quality pits (YEN South and YES) the bulk of the ROM coal that is produced requires washing to produce product specification and hence the annual product coal production in the schedule decreases.

The years of increased production is realised through a capital upgrade to the wash plant that will increase the feed rate to 585tph with an annual washing capacity of 4.1Mt per annum. Where the feed tonnage is less than the annual tonnage requiring washing, the excess coal will be bypassed as high ash thermal coal product YP5.

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Table 10-14 Yarrabee Quantity Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-	Avg. 2041-	Avg. 2051-	Total LOM
OC Mining																			
ROM Coal	Mt	2.1	4.0	4.3	4.8	4.6	5.2	5.1	4.9	5.2	4.2	4.2	4.2	4.0	4.2	4.0	4.0	3.5	**147.6**
Prime Waste Mined	Mbcm	23.5	43.9	63.7	65.3	66.8	67.9	67.8	69.1	67.5	66.9	61.1	68.5	67.7	67.4	67.7	67.1	43.8	**2,277.0**
Rehandle Waste	Mbcm	1.2	2.2	3.2	3.3	3.3	3.4	3.4	3.5	3.4	3.3	3.1	3.4	3.4	3.4	3.4	3.4	2.2	**113.9**
Total Waste mined	Mbcm	24.6	46.1	66.9	68.5	70.1	71.3	71.2	72.5	70.8	70.3	64.1	71.9	71.0	70.7	71.1	70.4	46.0	**2,390.9**
Prime Strip Ratio	bcm/ROM t	11.4	11.0	14.8	13.6	14.5	13.1	13.3	14.1	13.0	15.9	14.5	16.3	16.9	16.0	17.1	17.0	12.5	**15.4**
Total Strip Ratio	bcm/ROM t	12.0	11.5	15.5	14.3	15.2	13.7	14.0	14.8	13.6	16.7	15.3	17.1	17.8	16.8	18.0	17.8	13.1	**16.2**
CHPP																			
Coal Processed	Mt	1.1	2.3	3.2	3.6	3.4	3.6	4.1	4.1	4.1	3.5	3.4	3.5	3.4	3.5	3.4	3.4	2.7	**120.6**
Plant Yield	%	78.8	85.5	75.9	78.6	76.5	77.4	74.0	74.7	80.4	75.8	75.5	74.1	74.1	73.8	73.4	74.1	75.8	**76.1**
Bypass	Mt	0.9	1.7	1.1	1.2	1.2	1.6	1.0	0.8	1.1	0.7	0.8	0.7	0.6	0.7	0.6	0.5	0.8	**26.9**
Coal Product	Mt	1.8	3.7	3.5	4.0	3.8	4.4	4.0	3.9	4.4	3.4	3.4	3.3	3.1	3.3	3.1	3.1	2.9	**117.5**
Effective Yield	%	88.2	91.5	82.0	83.8	82.9	84.4	79.2	78.7	84.4	79.9	79.9	78.2	77.9	77.9	77.1	77.5	82.0	**79.6**
Product Type																			
PCI Coal Ash 9.5% S 0.65% P 0.100%	Mt	0.7	2.7	2.8	2.4	2.5	2.8	2.9	2.7	3.1	2.6	2.5	2.5	2.3	2.4	2.1	2.3	1.5	**82.1**
PCI Coal Ash 12.0% S 0.85% P 0.150%	Mt	0.2	0.4	0.3	0.5	0.5	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.9	**15.7**
YP5 High Phos High Flourine (Thermal)	Mt	0.9	0.6	0.4	1.1	0.8	1.2	0.9	0.7	0.8	0.5	0.5	0.5	0.6	0.5	0.6	0.4	0.4	**19.7**

Figure 10-1114 Yarrabee LOM Schedule by Pit

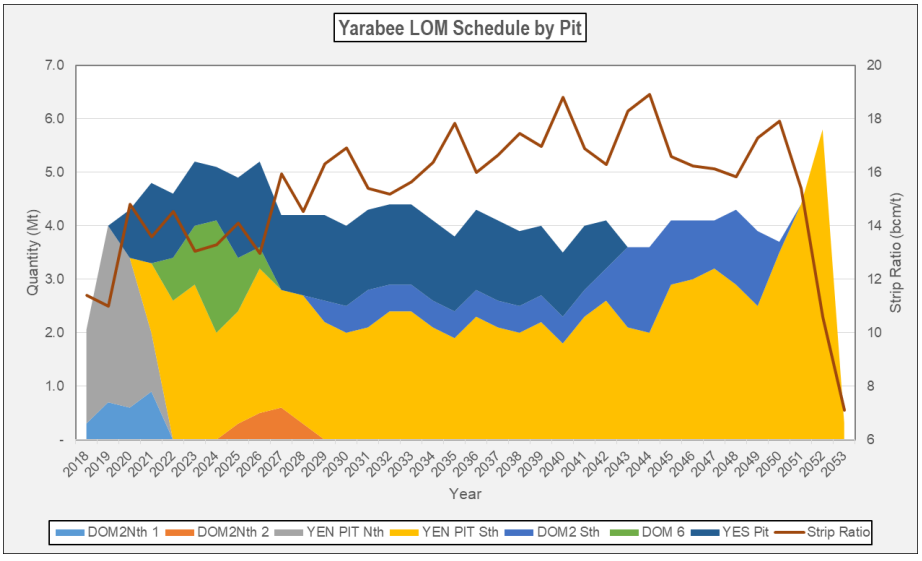
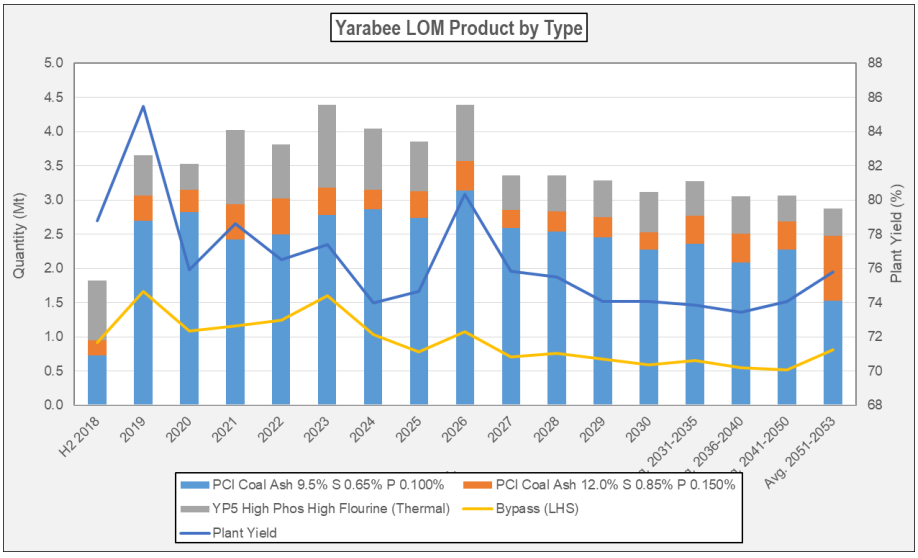


Figure 10-2225 Yarrabee LOM Product Schedule



10.7 Stratford and Duralie

Pit Limits

The ply geological models provided by a third party included both coal surfaces and quality for coal plies, except for the CoDam model and the Avon North model which only included structure. The geological models used are outlined in ***Table 10.15***. In the case of Avon North, insufficient raw coal quality data existed to allow a model to be generated. In this instance coal quality defaults were used based on historical experience in the same seams in the neighbouring Stratford Main Pit.

Table 10-15 Stratford and Duralie Geological Models

Pit Area	Model Name	Model Date	Quality Included
Roseville West (RVW)	WCR _0811	Sep 2011	Yes
Avon North (AN)	StratfordStrat_0315model	Mar 2015	No
Stratford East (SE)	SE_0512	Jun 2012	Yes
CoDisposal (CoDam)	CODAM_0912	Sep 2012	No
Stratford South (SS)	GC_0812	Aug 2012	Yes
Grant & Chainey (GC)	GC_0812	Aug 2012	Yes
Duralie West (DW)	DuralieMicroModel0716	Jul 2016	Yes
Duralie East (DE)	DUR_0714	Jul 2014	Yes

The process used by a third party for the 2017 JORC Reserves estimate included a minimum interburden thickness of 300 mm which was applied to the Coal Resource geological model to create a working section. The mining quantities from this model subsequently had a 95% recovery factor applied to represent the in situ to ROM coal mining factor. The values reflect current working knowledge for various hydraulic excavator and truck mining methods and equipment sizes used for waste and coal mining at Stratford and Duralie. Small excavators (350 t class and 100 t class) and trucks (150 – 180 t class) have been selected for mining as an owner/operator mine.

The Roseville West geological model had an additional mining factor applied with the rejection of isolated coal plies. Any ply that met two of the following criteria was removed from the ROM model:

- Where the incremental stripping ratio was less than 10:1 bcm:t;
- Where the coal thickness was less than 500 mm; and/or
- Where the underburden is greater than 5m.

All in situ density was modelled at 6% total moisture and washed product was produced at an 8% as received moisture.

To provide guidance on the selection of pit limits, the ROM geological models and metallurgical, cost and revenue factors were used as inputs for a series of pit optimiser simulations completed across the deposit as part of the 2017 Coal Reserves. Each mining area was simulated in the Geovia Minex Optimiser (Optimiser) based on specific combinations of working section geological models and assumptions relevant to each mining area.

The pit limits are shown in ***Appendix C***.

Mine Design

The following pit designations were created by a third party and both the process and outcomes have been reviewed by RPM and deemed appropriate for the Coal Reserves estimation.

Roseville West Pit

- The Roseville West LOM pit is a result of pit optimiser analysis using current economic assumptions. No detailed pit design has yet been completed on this pit with the optimiser shell used to estimate Coal Reserves. The northern and southern pit limits are constrained by the lease limit and the coal ROM stockpile respectively. The northern end of the pit targets the Bowens Road seam with the southern end saw toothing on the Bowens Road seam and the Deards seam. The pit shell does include over 50% of Inferred Coal Resource, however, this coal generally lies in the bottom and western edge of the pit which can be excluded from mining with little impact on the upper lying, Reserve classified coal seams.

Avon North

- The Avon North mining area has extensive reverse faulting. This faulting results in a terraced pit design to the east with the Avon H ply the basal seam on the eastern ~~lowwall~~low wall. Detailed ramp designs are needed to demonstrate how access to the bottom of the pit will be achieved.

Stratford East

- The SE pit is limited to the east by seam outcrops with the ~~lowwall~~low wall following the Clareval seam. The highwall angle and endwall batter angles were at a maximum of 40°. The northern limit of the pit is a dam and out of pit dump.

Stratford South Avon

- The northern endwall crest is limited by a watercourse and runs to the fault in the south and the ~~lowwall~~low wall targets the Avon seam. Detailed pit design with ramp access has not been completed for this pit but is not considered a major risk with a similar pit structure mined previously in the Duralie Mine.

Duralie West

- The Duralie West Weismantel current pit design is almost complete. Optimisation work showed a potential expansion to the north called Wards River Station Pit (Wards). Most of this pit falls in AUTH0315 which Yancoal are currently applying to have converted to a mining lease. The Pit runs along the same strike as the current DWW pit and stops approximately 300m before the Bucketts Way road.

Duralie East

- Two pits were identified in the eastern crop of the Duralie deposit, targeting the Clareval and Weismantel crops. Pits designs were created and used in LOM schedule however only the Weismantel pit was taken forward a potential coal Reserve.

RPM has previously developed mine plans for the Stratford and Duralie mining areas as part of the Stratford and Duralie Coal Basin Mine Planning Study. The key pit design changes in this JORC Reserve are larger and

deeper Avon North (AN) and Roseville West (RW) pits, smaller Stratford East, Stratford South Avon and Duralie East Weismantel pits. The high level dumping analysis conducted as part of the Mine Planning Study is still deemed relevant to this JORC Reserve estimate.

Mine Schedule

The mining schedule was based on the block data for each pit supplied by a third party, generated as part of the 2017 JORC Reserve estimate. The data includes Inferred and non-classified coal and has been included in the schedule but has not been classified as a Coal Reserve. RPM have used the block data to create a LOM schedule that aligns with the first five years of the site's forecast. Production increases to 1.4Mt in 2019 and then 2.0Mtpa ROM coal is achieved in 2027 and held for the life of the mine. With these targets, Stratford and Duralie has a predicted mine life of 36 years to 2053.

Table 10-16 Stratford and Duralie Schedule Summary

Year	Units	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2053	Total LOM
OC Mining																			
ROM Coal	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	**68.2**
Prime Waste Mined	Mbcm	2.8	7.0	7.9	13.0	11.5	7.6	12.4	14.2	13.6	11.1	11.7	11.1	14.3	11.3	10.3	10.0	4.4	**359.4**
Rehandle Waste	Mbcm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Total Waste mined	Mbcm	2.8	7.0	7.9	13.0	11.5	7.6	12.4	14.2	13.6	11.1	11.7	11.1	14.3	11.3	10.3	10.0	4.4	**359.4**
Prime Strip Ratio	bcm/ROM t	6.2	6.5	4.7	6.8	6.4	5.8	7.7	7.1	6.8	5.6	5.9	5.5	6.2	5.7	5.1	5.0	2.2	**5.3**
Total Strip Ratio	bcm/ROM t	6.2	6.5	4.7	6.8	6.4	5.8	7.7	7.1	6.8	5.6	5.9	5.5	6.2	5.7	5.1	5.0	2.2	**5.3**
CHPP																			
Coal Processed	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	**68.2**
Plant Yield	%	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	**58.4**
Bypass Coal	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Coal Product	Mt	0.2	0.6	1.0	1.106	1.0	0.8	1.1	1.3	1.2	1.2	1.2	1.2	1.4	1.2	1.1	1.1	0.7	**38.2**
Effective Yield	%	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	**56.0**
Product Type																			
Semi Hard Coking	Mt	0.1	0.4	0.6	0.5	0.4	0.3	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.3	**17.4**
High Ash Thermal	Mt	0.1	0.2	0.4	0.6	0.6	0.5	0.6	0.7	0.7	0.6	0.6	0.6	0.8	0.7	0.6	0.6	0.4	**20.8**

Figure 10-9 Stratford and Duralie Schedule by Pit

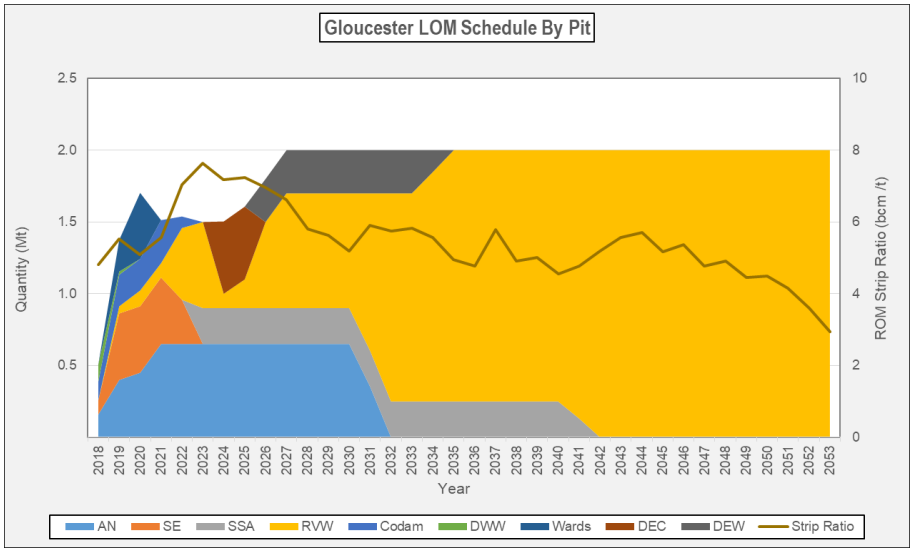
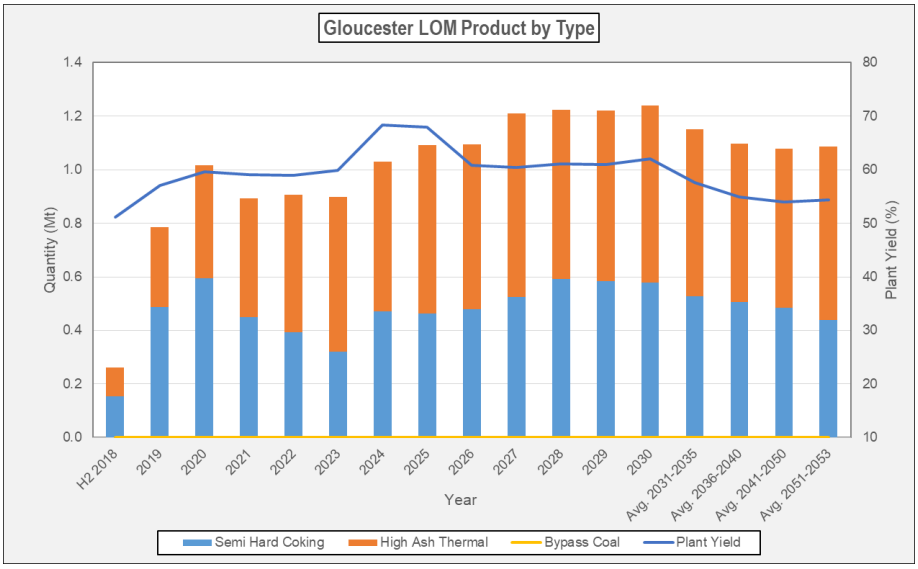


Figure 10.7 -10 Stratford and Duralie Product Schedule Summary



10.8 Austar

The conventional longwall and the Longwall Top Coal Caving ("LTCC") mining methods are employed at Austar Mine.

Mine Limits

The Austar underground mine covers an area approximately 6.5 km long (N-S) and 9.5 km wide (E-W). The physical mining constraints used to determine the underground target area are a combination of the lease boundaries, geological structure and old mine workings. Seam thickness over the target area is consistently above 6m except where the identified seam splitting in the east occurs.

The Quorrobolong Fault extends down the south-west side of the Stage 3 area and the Abernathy Fault along the northern boundary of the Stage 3 area. The Kitchener Dyke runs through the middle of the Stage 3 area and it is currently proposed to take the longwall face through the dyke. The dyke is proposed to be pre-mined where appropriate but it may also be necessary to step the longwall face around the dyke in areas.

The Pelton Seam overlies the Greta Seam. The interburden varies considerably in thickness but is consistently laminated and caves well. The strata above the Pelton Seam (which has a material impact on the mining environment) is the Cessnock Sandstone which is typically 30m thick and very strong.

The Greta Seam at Austar is unusual in comparison to other seams, in that it has a very low, consistent desorbable gas content at seam depths in excess of 400 m. The desorbed gas is predominantly CO_2.

Gas drainage requirements to date have been limited, with in-seam exploration holes connected to return airways where required.

The Greta Seam has high pyritic content in its roof plies. This renders the seam liable to spontaneous combustion. An underground fire did occur in 2003, due to spontaneous combustion in a longwall goaf. The mine has adopted new practices aimed specifically at preventing any further spontaneous combustion incidents. These practices include revised goaf seal construction methods, as well as the inclusion of a surface nitrogen plant to assist with goaf inertisation. Subsequent mining experience has shown that sound management of this issue can prevent any significant incidence of spontaneous combustion.

Mine Design

A drift has been driven from the surface to gain access to the Greta Seam. The drift houses the main coal clearance conveyor, as well as being used for personnel and materials access, configured as a steep grade drift with rails and a dolly car system. The mine has 5 shafts which provide the bulk of the ventilation capacity for the underground workings.

Table 10-17 Austar UG Design Parameters

Parameter	Austar
Main headings roadways	5
Gateroad panel roadways	2
Main headings pillar length (centres) (m)	90 – 100
Main headings pillar width (centres) (m)	50 - 61
Gateroad pillar length (centres) (m)	100 – 150
Gateroad pillar width (centres) (m)	51 – 60
Roadway width (m)	5
Roadway height (m)	3.2
Longwall panel width (block width) (m)	226
Longwall cutting height (m)	2.3 – 2.8
Longwall caving height(m)	0.0 – 3.9
Lease boundary Minimum barrier (m)	20
Longwall Extraction Height (m)	

Additional mining factors were applied to the Coal Resources model for deriving ROM Coal quantities. The approach to convert in situ to ROM coal and the application of mining factors involved the following:

- Coal Loss: It was assumed that an average of 25% of the coal from the caving section coal will be lost during longwall extraction utilising the LTCC method;
- Roof and Floor Dilution: The development roadways incorporate coal tops and bottoms and therefore no out-of-seam dilution has been included for development operations. It was assumed that a 30 mm of higher ash material will be mined with the floor of the coal seam during longwall operations and that any longwall caving tonnes will be supplemented with an additional 8% (by mass of the caving tonnes) of roof dilution. The quality defaults assigned to the waste rock were assumed to be relative density of 2.38 t/cu.m for floor dilution and 2.40 t/cu.m for roof dilution and ash of 90%;
- Moisture: Relative density data in the geological model is based on assumed in situ moisture of 5.0%, while all qualities are based on air-dried moisture gridded values. Preston Sanders has been used in the estimation of in situ moisture. RPM has assumed that ROM moisture will be 6.0% and product moisture will be 6.0%.

Mine Schedule

RPM is aware that the longwall operating permit is currently suspended with no definitive timeframe for reinstatement. Through discussions with the Company, RPM has assumed that this permit will be reinstated by the end of the 2018 and as such normal operations will recommence in 2019. Furthermore, RPM notes that all site personnel have been relocated to other mines in the district and have not be made redundant. As such upon reinstatement the site personnel can be recommissioned to the mine at short notice.

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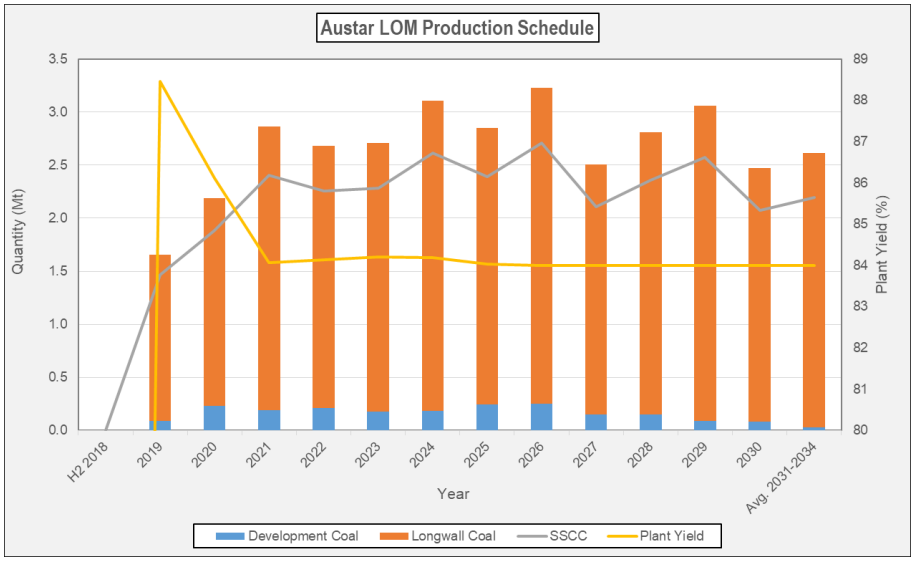
Table 10-18 Austar Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2034	Total LOM
UG Mining																
UG ROM Coal	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6	**42.6**
Development Coal	Mt	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.0	**2.2**
Longwall Coal	Mt	0.0	1.6	2.0	2.7	2.5	2.5	2.9	2.6	3.0	2.4	2.7	3.0	2.4	2.6	**37.8**
Development	km	0.0	4.2	10.4	8.5	9.4	8.0	8.3	11.0	11.1	6.6	6.5	3.9	3.7	2.8	**97.3**
Development main	km	0.0	1.6	3.0	0.7	3.8	1.3	1.3	3.8	2.0	2.2	1.6	0.0	0.4	1.0	**22.7**
Development gateroad	km	0.0	2.7	7.5	7.8	5.7	6.7	6.9	7.2	9.1	4.4	5.0	3.9	3.3	2.3	**74.6**
CHPP																
Coal Processed	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6	**42.6**
Plant Yield	%	0.0	88.4	86.1	84.1	84.1	84.2	84.2	84.0	84.0	84.0	84.0	84.0	84.0	84.0	**84.3**
Bypass Coal	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Coal Product	Mt	0.0	1.5	1.9	2.4	2.3	2.3	2.6	2.4	2.7	2.1	2.4	2.6	2.1	2.2	**35.9**
Effective Yield	%	0.0	88.4	86.1	84.1	84.1	84.2	84.2	84.0	84.0	84.0	84.0	84.0	84.0	84.0	**84.3**
Product Type																
Semi Hard Coking Coal	Mt	0.0	1.5	1.9	2.4	2.3	2.3	2.6	2.4	2.7	2.1	2.4	2.6	2.1	2.2	**35.9**

Figure 10-8-11 Austar Production and Product Summary



10.9 Donaldson

Mine Design

The Donaldson underground mine covers an area approximately 8km long (N-S) and 7km wide (E-W). The physical mining constraints used to determine the underground target area are the existing workings to the north, M1 Freeway to the east, the lease boundary to the south and seam splitting to the west. The Hunter Expressway traverses the target area and has formed a subsidence protection zone that will necessitate longwall equipment being relocated from one side of the expressway to the other in each longwall panel, leaving a subsidence protection pillar in between.

Depth of cover for the Lower Donaldson Seam in the target area varies from 120m to a maximum 520m, with an average of 340m. These values are within the range of depths for Australian underground coal mines and are not considered likely to create any major impediments to mining.

From a geotechnical perspective, the mine is expected to have generally good development and longwall conditions. Roof and floor materials are generally competent and the underground roadways should exhibit satisfactory levels of roof and rib stability. The seam varies in thickness from 2.0 – 2.9m.

The three existing adits at Abel Mine will be used to gain access to the target area. One drift houses the main coal clearance conveyor. A second drift is for personnel and materials access, configured as a rubber tyred drive in, drive out drift. The remaining drift initially served as return ventilation roadway and was connected to the main mine fan. This roadway has since been superseded by a 5.5m internal diameter upcast shaft to satisfy the return air ventilation requirements.

Table 10-19 Donaldson UG Design Parameters

Parameter	Donaldson
Main headings roadways	5
Gateroad panel roadways	2
Main headings pillar length (centres) (m)	70 – 100
Main headings pillar width (centres) (m)	35
Gateroad pillar length (centres) (m)	100 – 150
Gateroad pillar width (centres) (m)	35 – 50
Roadway width (m)	5.4
Roadway height (m)	2.7
Longwall panel width (block width) (m)	250 - 300
Longwall Extraction Height (m)	2.4 – 3.2

The longwall mining method is proposed at Donaldson underground.

Seam splitting in the roof in some areas could create localised zones of less competent roof. It is anticipated that the level of roof support will need to be increased in these areas.

Gas studies have determined that compared to other operating and planned longwall operations, Donaldson would be considered in the medium range for longwall gas emissions. Various levels of pre-drainage and post-drainage will be necessary, as depth of cover and other factors vary.

Additional mining factors were applied to the Coal Resources model for deriving ROM Coal quantities. The approach to convert in situ to ROM coal and the application of mining factors involved the following:

- Out of Seam Dilution: Seam splitting and seam thickness variation across the target area results in stone forming part of the working section (mid-seam or at the seam roof) during development and longwall operations, thereby diluting the in situ coal quality. The quality defaults assigned to the waste rock were assumed to be relative density of 2.2 t/cu.m, ash of 80% and specific energy of 0 kcal/kg;
- Moisture: Relative density data in the geological model is based on assumed in situ moisture of 2.5%, while all qualities are based on air-dried moisture gridded values. Preston Sanders has been used in the estimation of in situ moisture. RPM has assumed that ROM moisture will be 6% and product moisture will be 11%.

Mine Schedule

The mining schedule was based on the XPAC model created by Donaldson, generated as part of the 2017 JORC Reserve estimate. The data includes Inferred and non-classified coal and has been included in the schedule but has not been classified as a Coal Reserve. RPM have reviewed the LOM schedule and considers it reasonable, albeit that there is currently no set date for commencement of the mine. ROM production peaks at 5.8Mt in year 10 of operation. Average ROM production (once in steady state operation) is 4.7Mtpa. With these targets, Donaldson has a predicted mine life of 18 years.

Table 10-20 Donaldson Schedule Summary

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	TOTAL
Development	metres	9,661	23,409	27,016	24,713	17,988	9,182	9,525	9,340	10,055	12,423	18,588	14,681	9,358	9,457	9,575	8,348	-	-	223,318
Development ROM Coal	kt	227	534	617	580	422	220	223	219	236	290	433	338	214	217	224	198	-	-	5,192
Longwall ROM Coal	kt	-	-	4,331	4,309	4,342	4,537	5,227	4,311	5,286	5,507	4,109	4,328	4,700	4,031	3,914	3,633	3,467	2,667	68,701
TOTAL ROM PRODUCTION	kt	227	534	4,948	4,889	4,764	4,757	5,451	4,529	5,523	5,798	4,542	4,666	4,915	4,249	4,138	3,830	3,467	2,667	73,893
CHPP Feed	kt	227	534	4,948	4,889	4,764	4,757	5,451	4,529	5,523	5,798	4,542	4,666	4,915	4,249	4,138	3,830	3,467	2,667	73,893
CHPP Product	kt	122	316	3,023	2,926	2,505	2,306	2,629	2,130	2,489	2,570	2,094	2,129	2,306	2,134	2,191	2,086	1,917	1,462	37,335
CHPP Yield	%	54%	59%	61%	60%	53%	48%	48%	47%	45%	44%	46%	46%	47%	50%	53%	54%	55%	55%	51%
Bypass	kt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Effective Yield	%	54%	59%	61%	60%	53%	48%	48%	47%	45%	44%	46%	46%	47%	50%	53%	54%	55%	55%	51%
TOTAL PRODUCT COAL	kt	122	316	3,023	2,926	2,505	2,306	2,629	2,130	2,489	2,570	2,094	2,129	2,306	2,134	2,191	2,086	1,917	1,462	37,335

RPM is aware ongoing studies are being completed to optimise Donaldson prior to commissioning.

10.10 Middlemount

Middlemount operations are contained within two Mining Leases (ML's) and one Mineral Development Licence (MDL). The area covered by these licenses and permits is about 1,600 ha with the area having approximate dimensions of 5 km north south and 2 km east west.

Pit Limits

The open cut pit limits at Middlemount are based on the following criteria:

- An off set of 50m on the Middlemount seam from the Jellinbah fault on the eastern side of the deposit;
- An off set of approximately 300m on the Pisces Upper seam along the northern boundary of ML 70379;
- The southern boundary within ML 70379 is the diversion and flood protection levee associated with Roper Creek.

RPM generated a break-even strip ratio to confirm the pit limits. A break-even strip ratio is the ratio of burden (waste) to ROM coal tonnes at which there is ~~$0~~AUD0 margin. The cost and revenue inputs in the estimation of the break-even stripping ratio are outlined in the table below. The estimated break-even strip ratio for Middlemount is 17.5:1 bcm /t ROM.

RPM has reviewed the current mine plan for the pit and notes that the majority of the strips and blocks in the Middlemount design are within this break-even strip ratio and is satisfied with the determination of the mine pit limits.

Table 10-21 Middlemount Break Even Strip Ratio Input Parameters

Description	Units	Yarrabee
Prices		
SHCC	USD /tonne	147
PCI	USD /tonne	131
Exchange Rate	AUD/USD	0.75
Average Mining Costs		
Coal Mining	AUD /tonne	4.72
Waste Mining	AUD /bcm	4.92
Site Overheads		
Processing	AUD /t ROM	5.63
Administration	AUD /t Prod	6.3
Offsite Costs		
Rail	AUD/t Prod	18.0
Port	AUD/t Prod	6.0
Other Offsite Costs	AUD/t Prod	8.6
Average Yield		
CHPP	%	75

	Bypass[3]	%	-

Notes:
1. *Coal Prices in USD*
2. *All costs in Australian Dollars*
3. *No Bypass assumed at Middlemount*

The pit limits are shown in ***Appendix C***.

Mine Design

The following outlines the mine design aspects of Middlemount operations.

- The geotechnical design criteria that are applied at Middlemount can be summarised as follows:
- A 35° degree slope for the ~~lowwall~~low wall in weathered Permian and Tertiary/Cenozoic sands;
- Individual 50° degree batter slopes for highwalls, sidewalls and endwalls in weathered Permian and tertiary/Cenozoic sands. 10m berms are included every 12m vertically to give an overall slope angle of approximately 35°;
- 25m berm for the highwalls and on top of the fresh Permian. On some endwalls a 50m haul bench is included;
- Individual 70° slope for the highwalls, sidewalls and endwalls in fresh Permian;
- Above the cast blasting zone 25m berms are included approximately 50m vertically to give an overall angle of 55°; and
- A 25m berm is included on top of the cast blasting horizon.

RPM considers the geotechnical parameters applied to pit designs are suitable and reasonable for the rock types identified. Overburden is hauled to a combination of in-pit and out of pit dumps. At Middlemount the upper tertiary material is excavated and hauled to the out of pit East dump. The East dump is beyond the extent of the Jellinbah thrust fault in the east and does not sterilize any future coal occurrence.

Haul routes from the excavation faces to the east dumps are also shorter than the alternatives which are to the top of the inpit dumps on the western side of the lease.

The Permian waste that is cast blast and dozer pushed from either above the Pisces or Middlemount seams forms the base of the inpit dump in the previously mined out strip. The balance of the Permian waste excavated from the strips and blocks to uncover the coal seams is hauled to the in pit dumping levels using the cast/dozer push waste levels as the base of the in pit dump profile.

Middlemount does have to manage surface water associated with Roper creek, which has branches flowing along the western and eastern boundary of the deposit, with the western branch then flowing to the east along the southern boundary of the deposit. It would appear that appropriate diversions/levees have been put in place to control surface water associated with this creek system. RPM considers the surface mining water management to be suitable for the operations. RPM did not review the flood control management systems.

Mine Schedule

The existing operation is producing at an annual mining rate of approximately 5.4Mtpa ROM coal which will produce about 4.2Mt per annum of product coal. Coal is being mined from the Middlemount seam, the Tralee seam where it exists greater than 0.3m thick and the basal Pisces seam.

The LOM plan for Middlemount is to continue at a ROM production level of 5.4Mtpa with a progressively increasing strip ratio as the mining sequence progresses down dip from lower strip ratio strips and blocks to higher strips and blocks within the central part of the pit to the Yarrabee fault. The pit will then advance along strike to the north and south which will average the stripping ratio in the deeper sections of the mine. The addition of the north western extension area to the plan provides an additional mining area and assists in averaging the stripping ratio.

The Middlemount production schedule is shown in **Table 10.~~-~~22** with the product and yield results shown in ~~Graph~~**Figure 10.~~9~~ 12**

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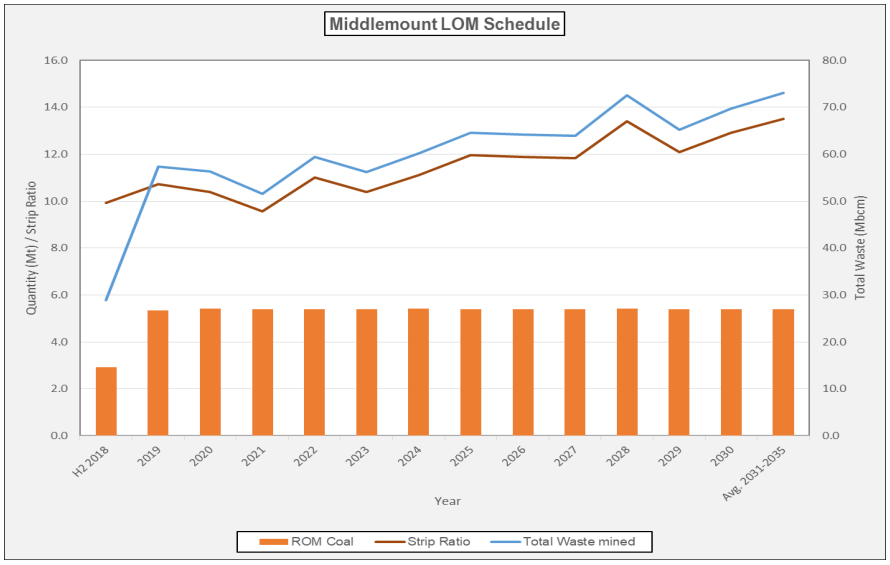
Table 10.-22 Middlemount Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2037	Total LOM
OC Mining																	
ROM Coal	**Mt**	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	2.8	**100.4**
Prime Waste Mined	**Mt**	28.9	57.3	56.4	51.6	59.4	56.2	60.2	64.6	64.2	63.9	72.5	65.2	69.7	73.0	30.9	**1,197.0**
Rehandle Waste	**Mt**																
Total Waste mined	**Mbcm**	28.9	57.3	56.4	51.6	59.4	56.2	60.2	64.6	64.2	63.9	72.5	65.2	69.7	73.0	30.9	**1,197.0**
Prime Strip Ratio	**bcm/ROM t**	9.9	10.7	10.4	9.6	11.0	10.4	11.1	12.0	11.9	11.8	13.4	12.1	12.9	13.5	10.9	
Total Strip Ratio	**bcm/ROM t**	9.9	10.7	10.4	9.6	11.0	10.4	11.1	12.0	11.9	11.8	13.4	12.1	12.9	13.5	10.9	**11.9**
CHPP																	
Coal Processed	**Mt**	2.7	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	2.8	**100.2**
Plant Yield	**%**	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1	77.0	**75.8**
Bypass	**Mt**																**0.0**
Coal Product	**Mt**	2.1	4.1	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0	3.8	4.0	4.1	4.1	2.2	**76.0**
Effective Yield	**%**	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1	77.0	**75.8**
Product Type																	
PCI Coal	**Mt**	0.8	1.7	1.5	1.4	1.6	1.9	1.6	1.7	1.7	1.9	1.5	1.8	1.7	1.7	0.8	**31.3**
Coking Coal	**Mt**	1.3	2.4	2.7	2.7	2.5	2.3	2.5	2.3	2.3	2.1	2.3	2.2	2.4	2.4	1.3	**44.7**

GraphFigure 10.9 -12 Middlemount Schedule Summary



11. Processing and Blending

11.1 Blend Strategy

Due to the number of pits, product types and required product specification of its customers, the Company has the ability to blend ROM coal and washed coal to optimise products and revenue. The concept of a blend strategy is to shift the coal supply philosophy from operational constraints to be driven by customer demand. This strategy facilitates blending high and low quality coals from the various Company mines within each operation required to meet some standard product specifications.

The concepts of a companywide blend strategy are sound but may be difficult to translate into real outcomes for the project and further planning is warranted.

11.2 Coal Processing Overview

CHPP are typically separated into four functional areas; 1) ROM coal receival, 2) beneficiation or washing, 3) reject disposal and 4) product coal stockpiling and train loading.

- ROM coal receival – ROM coal from the open cut or underground coal faces is trucked or conveyed to the ROM coal receival area where it is crushed to a maximum size (typical <50mm) that enables it to be efficiently washed (based on testwork completed). ROM coal can also be stockpiled in this area prior to crushing to assist with wash scheduling, blending or when the CHPP is down for maintenance. After crushing, coal is then either stockpiled and later reclaimed, or fed directly into the Plant for washing.
- Beneficiation or Washing – Washing or beneficiation is the separating of the coal from the waste products (rejects). Once fed into the Plant, the coal is separated into various size fractions which are each washed using different types of separating equipment.
- Reject disposal - The coarse and fine waste, or reject, can be disposed of together or more commonly disposed separately with coarse reject being trucked to the waste dumps (to be disposed of with the overburden from the mine) and fine reject, or tailings, being pumped to a tailing storage facility.
- Product coal stockpiling and Train Loadout – washed coal (commonly called product coal, saleable coal or marketable coal) is stockpiled into separate stockpiles depending on its quality. It is then loaded onto trains for railing to the port. Blending can occur on the product stockpiles when two or more separate coal products are combined to meet a particular market specification.

Bypass coal is ROM coal that does not require washing to meet the marketing specification. After extraction, ROM coal is crushed, bypass coal is placed directly onto the product coal stockpile.

11.3 HVO

HVO site infrastructure, consisting of two coal preparation plants and two coal loading points, is in reasonable condition however much of the equipment requires ongoing maintenance due to its age. RPM is aware that significant sustaining CAPEX has been provisioned as part of the ongoing maintenance to minimise downtime and ensure utilisation is consistent with the planned production. These costs have been included in the cost forecast in ***Section 14***.

HVO Coal Handling and Preparation Plants (CHPP)

HVO utilises two wash plants in the HVO north area, as shown in ***Figure C-1***. The plants are considered to be well maintained and are capable of typical industry benchmark utilisation of 7,200 hours per year, however ongoing maintenance is required. Debottlenecking of plant circuits where necessary and with a consistent feed of coals to not overload any part of the processing circuit, should enable a total throughput of 21Mtpa, which is in excess of the current mine target of 20.6Mtpa ROM Coal and the potential to produce up to 16Mtpa of Product. The design capacity of the CHPPs is based on 7000 operating hours per year. RPM notes that it is the product type, quality and quantities including the distribution of the size fractions in the feed that will dictate the ultimate capacity of the plants during the mine life. The combined HVO CHPP facilities have a capacity to produce approximately 16Mtpa products currently with 20-25% SSCC and the balance being a range of low to high ash thermal coals.

Hunter Valley CHPP

The Hunter Valley CHPP (HVCPP) is located in the central eastern portion of HVO north and has a ROM coal throughput capacity of approximately 2,500tph or approximately 17Mtpa ROM. The utilisation of the plant in 2015 was less than 80% based on potential throughput and typical 7,000 operating hours per year, however has an upside of 7,200 operating hours per year. The HVCPP was commissioned in 1982 and has development consent to process 20Mtpa ROM coal. The flowsheet for the HVCPP is shown in ***Figure 11-1*** with the plant producing up to three thermal coal products.

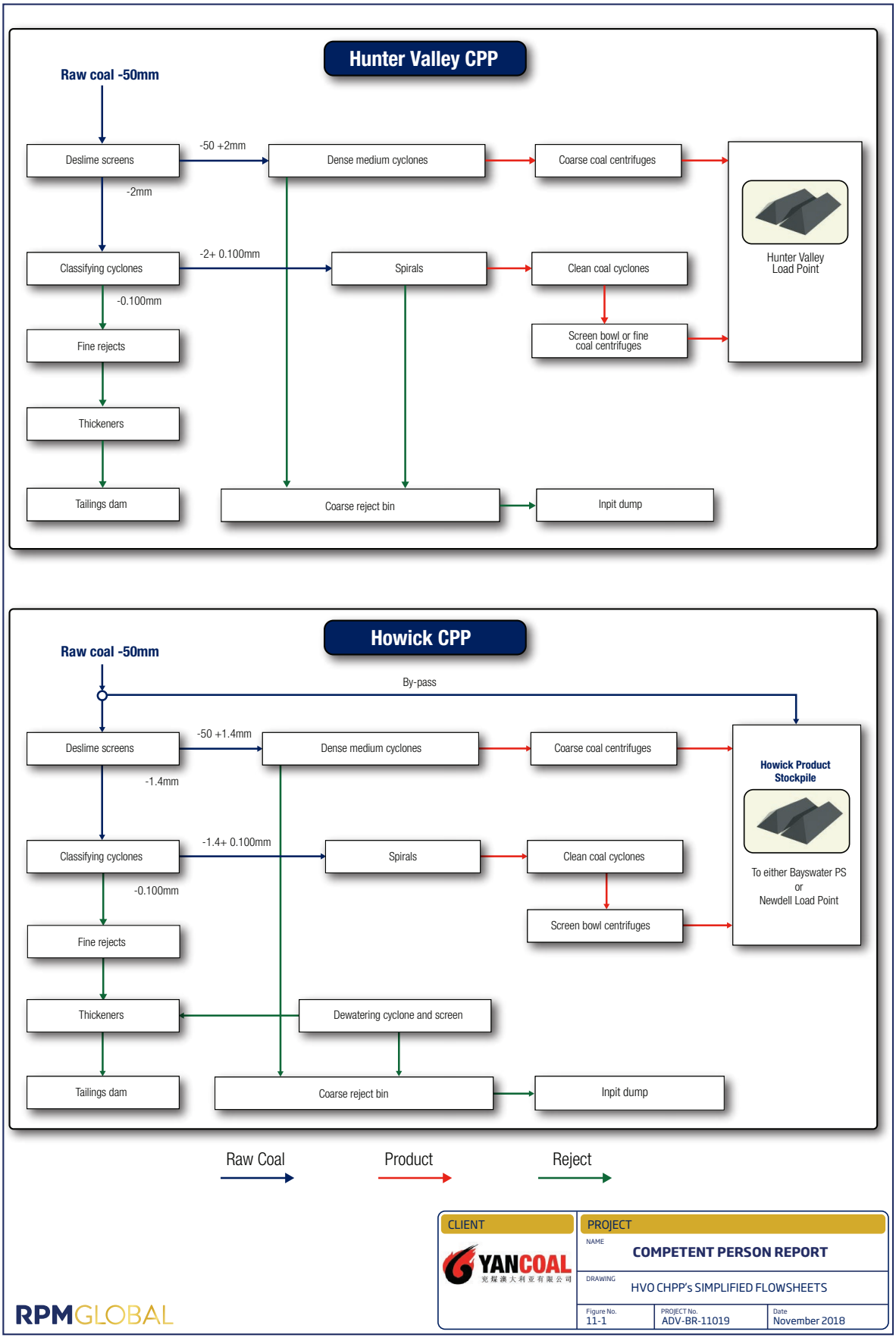
Howick CHPP

The Howick CHPP (HCPP) is located in the northern part of the lease and has a ROM coal capacity of 450tph or approximately 3.2Mtpa. The HCPP was originally designed and constructed to supply product thermal coal to the adjacent Bayswater Power Station however that is no longer serviced with all coal exported. The HCPP was commissioned in 1982 and has consent to process 6Mtpa of ROM coal with a flowsheet as shown in Figure 10-1.

RPM Comments

RPM notes that:

- The SSCC products from HVO have better fluidity than those produced at the MTW operation. However, the CHPP has to wash the ROM coals very hard and at a low S.G. of 1.3 to get the right SSCC properties for sale.
- There are some clayey seams and interburden materials that can cause loss of yield and higher ash thermal coals at HVO.
- HVO undertakes regular integrity inspections to keep the CHPP infrastructure in good working order and this was evidenced during the brief HVO site visit.
- Due to the sticky nature of some ROM coals (like the Bowfield seam) HVO typically schedule feed to the CHPP without allowing the coals to 'age' on the stockpile.
- The HVCPP can bypass raw coal to Product Coal stockpiles however no bypass is assumed as part of the LOM plan presented in ***Section 9*** and ***Section 10***. RPM considers this to be an upside to the project value and OPEX.
- Both CHPP's have product samplers however no ROM coal or reject samplers. Mass balance checks across the CHPP facility, for reconciliations and for plant optimisation, are completed by manual sampling.
- RPM considers this to be a shortfall in the ability to actively control the feed and wash settings on a real time basis and could be a contributing factor to the poor outcomes of the reconciliation.
- Product coal sampling is used to fine tune blending onto trains and onto PWCS and NCIG port stockpiles. Final blending and sampling is always done at the ports – which have incoming sampling and sampling on the outgoing ship loading streams.
- Typical in-pit coal inventory is around 1Mt ROM.


Hunter Valley CPP
Raw coal -50mm
Deslime screens
-50 +2mm
Dense medium cyclones
Coarse coal centrifuges
-2mm
Classifying cyclones
-2+ 0.100mm
Spirals
Clean coal cyclones
-0.100mm
Fine rejects
Screen bowl or fine coal centrifuges
Hunter Valley Load Point
Thickeners
Tailings dam
Coarse reject bin
Inpit dump
Howick CPP
Raw coal -50mm
By-pass
Deslime screens
-50 +1.4mm
Dense medium cyclones
Coarse coal centrifuges
-1.4mm
Howick Product Stockpile
Classifying cyclones
-1.4+ 0.100mm
Spirals
Clean coal cyclones
-0.100mm
To either Bayswater PS or Newdell Load Point
Fine rejects
Screen bowl centrifuges
Thickeners
Dewatering cyclone and screen
Tailings dam
Coarse reject bin
Inpit dump
Raw Coal
Product
Reject
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
HVO CHPP's SIMPLIFIED FLOWSHEETS
Figure No. 11-1
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Coal Yield

The coal yield from the HVCCP in 2015 was 77% and the plant processed 92% of the total coal washed at HVO with a combined yield from both plants of 76% with the decrease due to the small contribution from the Howick CHPP with yield of 67% (***Table 11-1***) During 2016 this yield stayed consistent at 76% with a total throughput of approximately 18Mt of ROM coal, however decreased slightly to 75% in 2017 (versus 69% planned). The actual distribution of these coals to the individual plants is not provided in the data, however the current plan is for a maximum of 20.6Mtpa of ROM coal feed, as such a similar Yield is forecast.

RPM notes that the HVCCP and HCPP both process coal from the Cheshunt Pits, West, Wilton and GRS (completed) Pits with markedly different yield outcomes. The majority of the coal being delivered to the HCPP is from the Foybrook Formation coal seams although raw ash from all seams appears variable within each pit. There is no apparent explanation to the lower yields obtained at the HCPP apart from a slightly lower efficiency. Coal from the top of the seam sections may be diverted to the HCPP with higher dilution included.

Table 11-1 HVO Plant Yields (2015)

Pit	HVCPP			HCPP		
	Feed (kt)	Product (kt)	Yield (%)	Feed (kt)	Product (kt)	Yield (%)
Cheshunt1	4,469.7	3,493.0	78.1%	3.1	2.1	68.1%
Cheshunt2	3,227.1	2,403.9	74.5%	5.4	3.1	56.8%
Cheshunt Deep	224.9	174.4	77.5%			
Riverview North	583.1	433.9	74.4%			
Riverview West	2,440.3	1,805.0	74.0%			
West Pit	1,748.2	1,415.0	80.9%	889.1	604.5	68.0%
Wilton	466.0	381.2	81.8%	279.3	171.6	61.4%
Glider Pit	298.5	242.6	81.3%	20.4	10.7	52.5%
GRS	179.7	131.1	73.0%			
Total	**13,637.6**	**10,479.0**	**76.8%**	**1,197.3**	**791.9**	**66.1%**

The Company's models forecast that there will be a gradual trend for decreasing yield over time (average 74% in the first 10 years to average 68% in the last 10 years. This is primarily due to the change in the mix of the seams being mined. RPM is aware these yields were forecast to be conservative to account for the age of the equipment.

RPM notes that the high total yields currently being achieved at HVO are not consistent with the raw data in the coal quality ROM models. RPM has taken a conservative approach and reduced the yields by 3% partly in consideration to provide a balance between the actual results and yield model outcomes. RPM notes these higher yields could be related to the mining method being utilised to minimise dilution and lower ROM coal ash content. This is evidenced by the performance in 2017 with 69% planned versus the actual of 75% however this is forecast to increase to 71% in 2018.

Product Coal Handling

There are two train loading points at HVO, the Hunter Valley Rail Loading Point and the Newdell Rail Loading Point, as shown in ***Figure 11-1***. An 8km long cable belt conveyor connects the HVCPP with the Hunter Valley Rail Loading Point while the HCPP Product Coals are trucked to the Newdell Rail Loading Point as the volumes are typically low at up to 3Mtpa. Overflow from the Hunter Valley Loadout point can be sent to the Newdell loading point via a transfer conveyor, which also facilitates blending for product specifications.

Product coals of the different product types are segregated onto Product Coal stockpiles at each loading point and thereafter kept separate. Product coal is blended from the required stockpiles to meet specific customer and marketing requirements. Most blending is done off Product Coal stockpiles and onto trains. Product coal is typically campaign railed to either PWCS or NCIG to build shipments at the ship terminal. HVO has a large number of stockpile machines (Stackers/ Reclaimers) that are aging and that could be suffering from the early stages of structural fatigue. Unfortunately, little information has been provided for review on this matter. Structural integrity assessments have been provided for review on this matter and include the stockpile

machines, however that information is more than 4 years old (prepared in 2012) and does not provide any clarification on the likelihood of an HVO stockpile machine failure or the costs associated with a major rebuild of one or more of these machines to significantly extend their service lives. Due to this, additional CAPEX has been included as a contingency.

The number of products produced by HVO adds complexity to the coal supply chain network in that additional Product Coal stockpile capacity is required both at the mine and at the port to allow shipments to be campaigned to specific customer requirements. The Company's proposed introduction of the Hunter Blend Strategy will likely place even more pressure on HVO mining operations, wash plant performance, coal loss minimisation, ROM, raw and Product Coal stockpile capacity, train management and port operations in an attempt to realise incremental improvements to efficiencies, with further works to be undertaken to confirm the assumed improvements. RPM highlights that the LOM plan does not include these assumed improvements.

11.4 MTW

A regional road (Putty Road) separates the WML and MTO operations. An overpass was constructed to facilitate haul truck access between the sites when the operations were combined in the early 2000's. An additional overpass has been completed to enable overburden to be dumped in the mined out voids of MTO with waste from WML pits.

MTW consists of two coal wash plants and two rail loading points which are connected via a series of conveyors throughout the site.

While RPM has not been provided with a detailed plant and equipment list, maintenance records, utilisation records, or any other information to allow for a thorough assessment of the serviceability of coal handling plant and equipment, wash plants, RPM has completed a review of the forecast costs, historical production records and maintenance requirements. In addition, during the site visit RPM completed a high-level review of the equipment in operation and considered, while ongoing maintenance is required, the forecast costs outlined in ***Section 13*** and the onsite infrastructure is suitable to support the forecast production.

Coal Preparation Plants

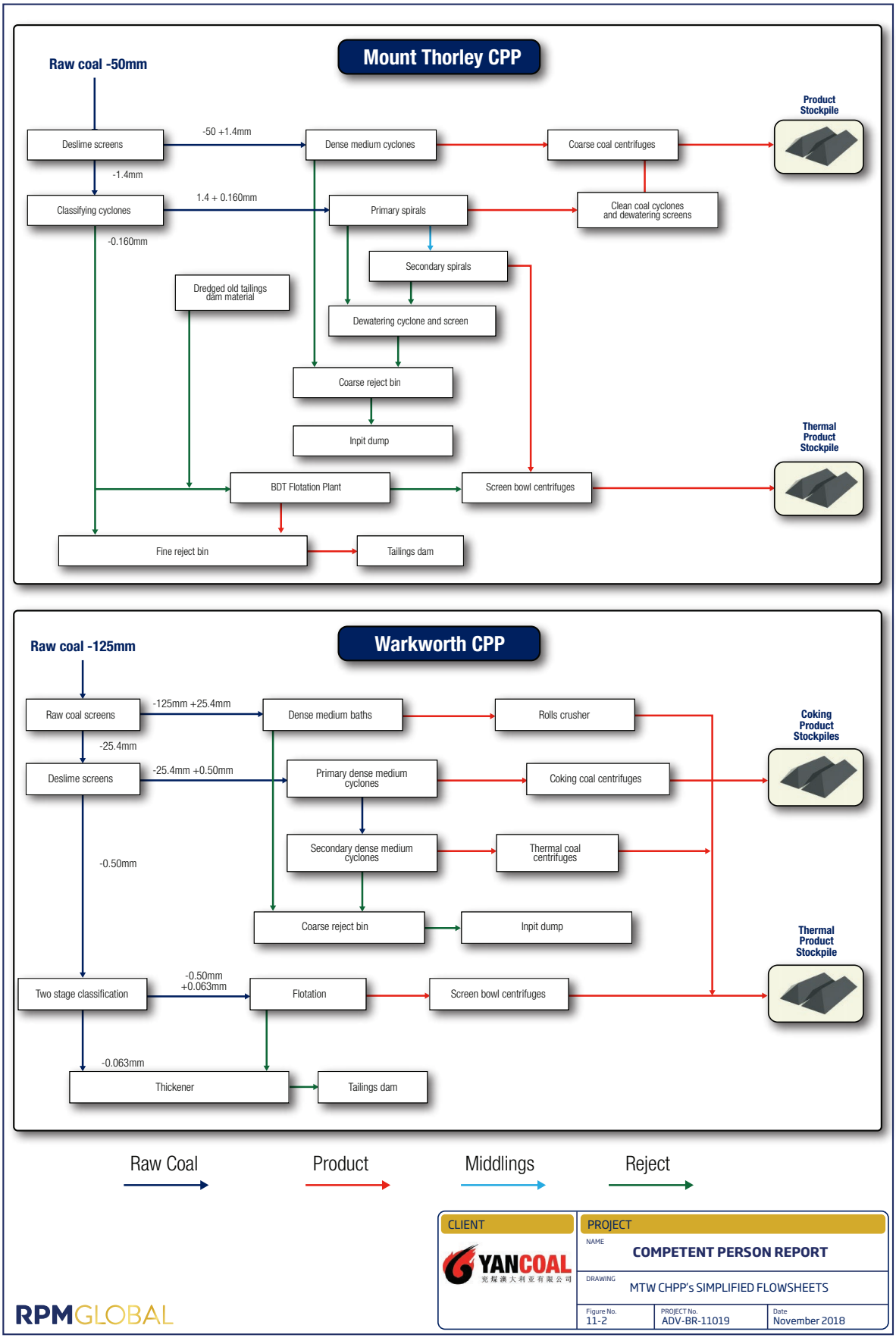
The CHPP facilities at MTW are well-established and capable of processing up to 18Mtpa ROM Coal feed. While the infrastructure is quite old, it appears to be reasonably well maintained which is required and forecast to continue. There are two CHPP's at MTW (Warkworth CHPP and Mt Thorley CHPP) which have a combined capacity of 18.6Mtpa ROM Coal feed to produce between 12Mtpa to 13Mtpa products. These CHPP's produce a number of products which comprise a range of thermal coals and a single semi-soft coking coal via a flowsheet as shown in ***Figure 11-2***.

Coal Yield

The average product yield for the MTW is forecast to be LOM 69.6%. This varies year-on-year from 67.8% to 70.0% and is in-line with recent yield performance by MTW as shown in ***Table 11-2***. This annual variation is mainly due to the differing proportions of coal seams that are produced at MTW each year. RPM highlights that the MTW Blakefield seam is 'clayey' and thus somewhat more difficult to beneficiate relative to the other seams. Most of the other MTW seams are easier to wash without loss of yield and/or reduction in Product Coal quality.

Table 11-2 Historical MTW Yield Performance

Year	2013	2014	2015	2016	2017
Yield	67.2%	68.4%	67.7%	68.0%	67.0


Mount Thorley CPP
Raw coal -50mm
Deslime screens
-50 +1.4mm
Dense medium cyclones
Coarse coal centrifuges
Product Stockpile
-1.4mm
Classifying cyclones
1.4 + 0.160mm
Primary spirals
Clean coal cyclones and dewatering screens
-0.160mm
Secondary spirals
Dredged old tailings dam material
Dewatering cyclone and screen
Coarse reject bin
Inpit dump
Thermal Product Stockpile
BDT Flotation Plant
Screen bowl centrifuges
Fine reject bin
Tailings dam
Warkworth CPP
Raw coal -125mm
Raw coal screens
-125mm +25.4mm
Dense medium baths
Rolls crusher
Coking Product Stockpiles
-25.4mm
Deslime screens
-25.4mm +0.50mm
Primary dense medium cyclones
Coking coal centrifuges
Secondary dense medium cyclones
Thermal coal centrifuges
-0.50mm
Coarse reject bin
Inpit dump
Thermal Product Stockpile
Two stage classification
-0.50mm +0.063mm
Flotation
Screen bowl centrifuges
-0.063mm
Thickener
Tailings dam
Raw Coal
Product
Middlings
Reject
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW CHPP's SIMPLIFIED FLOWSHEETS
Figure No. 11-2
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Coal Product

Both MTW CHPP facilities produce a split of approximately 80% thermal and 20% SSCC products. RPM notes that while there is little detail to support the product split; considers that the overall mix seems reasonable for similar mines in MTW part of the Hunter Region and the historical production. The thermal coals are of varying ash levels allowing the operation to maximise revenue through blending.

MTW in-pit coal inventory is typically 1Mt which allows for the management of the delivery to the CHPP of coal types to suit the product blending strategy in the short and medium term.

Coal Handling

The MTW blending strategy typically starts in the pit with various seams delivered to the ROM coal stockpiles and washed one seam at a time in campaigns to maximise yields and throughput. Some seam blending partners are identified (those seams with similar wash characteristics) that are blended onto raw coal stockpiles ahead of washing.

MTW has a large number of stockpile machines (Stackers/Reclaimers) that are aging and that could be suffering from the early stages of structural fatigue. Structural integrity assessments have been provided for review on this matter and include the stockpile machines, however that information is more than 4 years old (prepared in 2012) and does not provide any clarification on the likelihood of a MTW stockpile machine failure, or the costs associated with a major rebuild of one or more of these machines to significantly extend their service lives. Due to this, additional CAPEX has been included as a contingency.

The MTW operations rely upon blending onto trains and at the port to achieve the required product coal quality for each shipment.

The Company's site management have confirmed that near term future MTW CHPP tailings will be impounded in the Loders Pit where mining will be completed in 2019. Half of the Loders Pit final void will also be used for overburden waste placement and other half for tailings emplacement.

There are two Train Load Outs (LTO) on the Mount Thorley rail loop with a combined capacity of up to 19Mtpa in railings. The two TLO bins are located close enough together such that a train can be loaded from Mount Thorley and Warkworth TLO bins at the same time, which helps with blending and doubles the speed of train loading.

11.5 Moolarben

Coal Preparation Plant (CHPP)

The Moolarben CHPP was designed as a 1,800tph, two module plant (2 x 900tph throughput) able to be operated in single or two product mode. The CHPP processes include two stage dense medium cyclones (DMC) for the -50mm to +1.8mm sized coal, two stage spirals for the -1.8mm to +0.1mm sized coal and two stage froth flotation for the -0.1mm sized coal.

Both modules were designed to operate for over 7,300 hours per year (approximately 83% overall utilisation including maintenance allowance) to achieve a 13Mt coal feed per annum rate. RPM understands that at the time of commissioning that the second product mode was not configured as a result of the selected mining practice at the time and to achieve this capability at some later stage a reconfiguration of the DMC and spirals circuits would be required. In RPM experience the decision to modify the coal processing strategy would require detailed study and is largely driven by the ROM coal characteristics producing favourable product splits and a market being available for the products produced. Additionally such a change can result in reduced overall feed throughput which would also have to be considered for such a change. There are two Open Cut ROM coal receival feeders that can operate at a peak rate of 2,500tph which provides ample throughput to maintain CHPP feed. Coal hopper and surge bin capacity of 1,800 tonnes allows for storage of approximately 1 hours processing to assist with management of any ROM coal receival system delays.

Coal from underground mining is placed on a 100kt ROM stockpile and bypasses the CHPP being crushed and conveyed straight to an UG product coal stockpile. The UG coal handling system is similar to the OC and has a throughput of 2,500tph for an annual rate of up to 8Mt ROM pa, sufficient for the UG mining output.

Coal Yield

The average washed product yield for the Moolarben CHPP is forecast to be LOM 77% with the overall yield including bypass coal approximately 82%. The washed product only yield varies year-on-year from 73% to 78% with annual variation mainly due to the differing proportions of coal seams that are produced from the Open Cut operations each year while overall yield ranges between 76% and 88% with varying quantities of bypass coal associated with ramp up and down of underground mine output. RPM has not up to this point had access to significant historical plant performance data however understand the scheduled performance is largely in line with the outcome of the 2015-2016 years with a Plant yield of 77% being achieved in 2016 and 76% in 2017.

The site has developed a detailed coal washability database with the assistance of a specialist coal quality consultancy to improve the coal product yield and quality for future mining areas. This has resulted in a modest forecast improvement in CHPP yield. The validation of the model is being completed using large diameter borehole cores which is standard practice for the type of modelling undertaken.

Coal Product

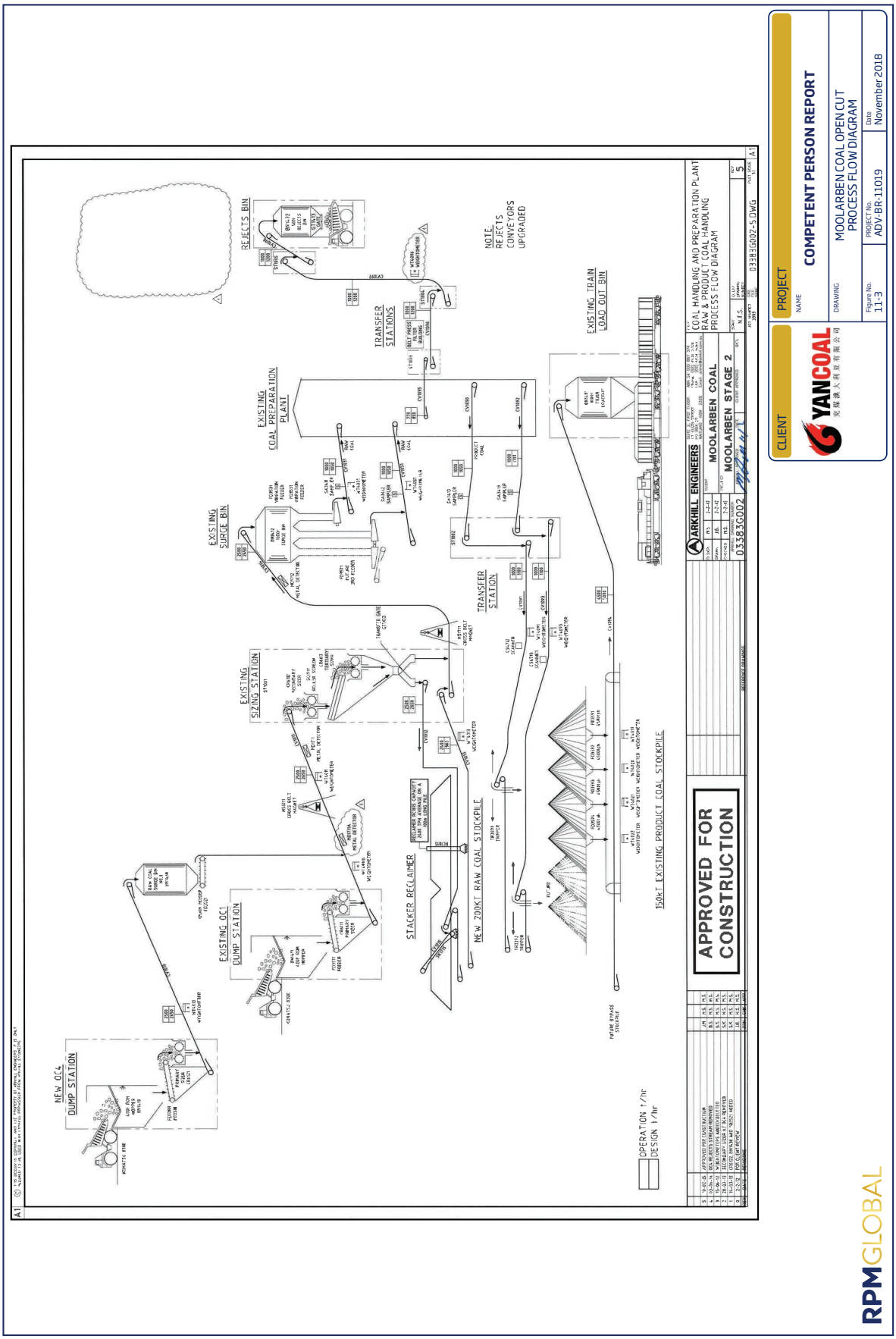
The CHPP facilities thermal coal products only with product ash categories of 16%, 18%, 22% and 28%. The proportion of each product in the LOM plan is summarised below in **Table 11-3**.

In-pit coal inventory is typically 1Mt which allows for the management of the delivery to the CHPP of coal types to suit the product blending strategy in the short and medium term.

Table 11-3 LOM Product Coal Split *(1)*

	Product Ash Category (%)			Total Product
Product	16	18	22/28	
LOM Total Product (Mt)	61.7	95.3	97.8	254.8

(1) Source: Moolarben 2017 Life of Mine Plan.pdf, Tables 1-2 & 1-3.



CLIENT
YANCOAL 兖煤澳大利亚有限公司

PROJECT
NAME
COMPETENT PERSON REPORT

DRAWING
MOOLARBEN COAL OPEN CUT PROCESS FLOW DIAGRAM

Figure No. 11-3
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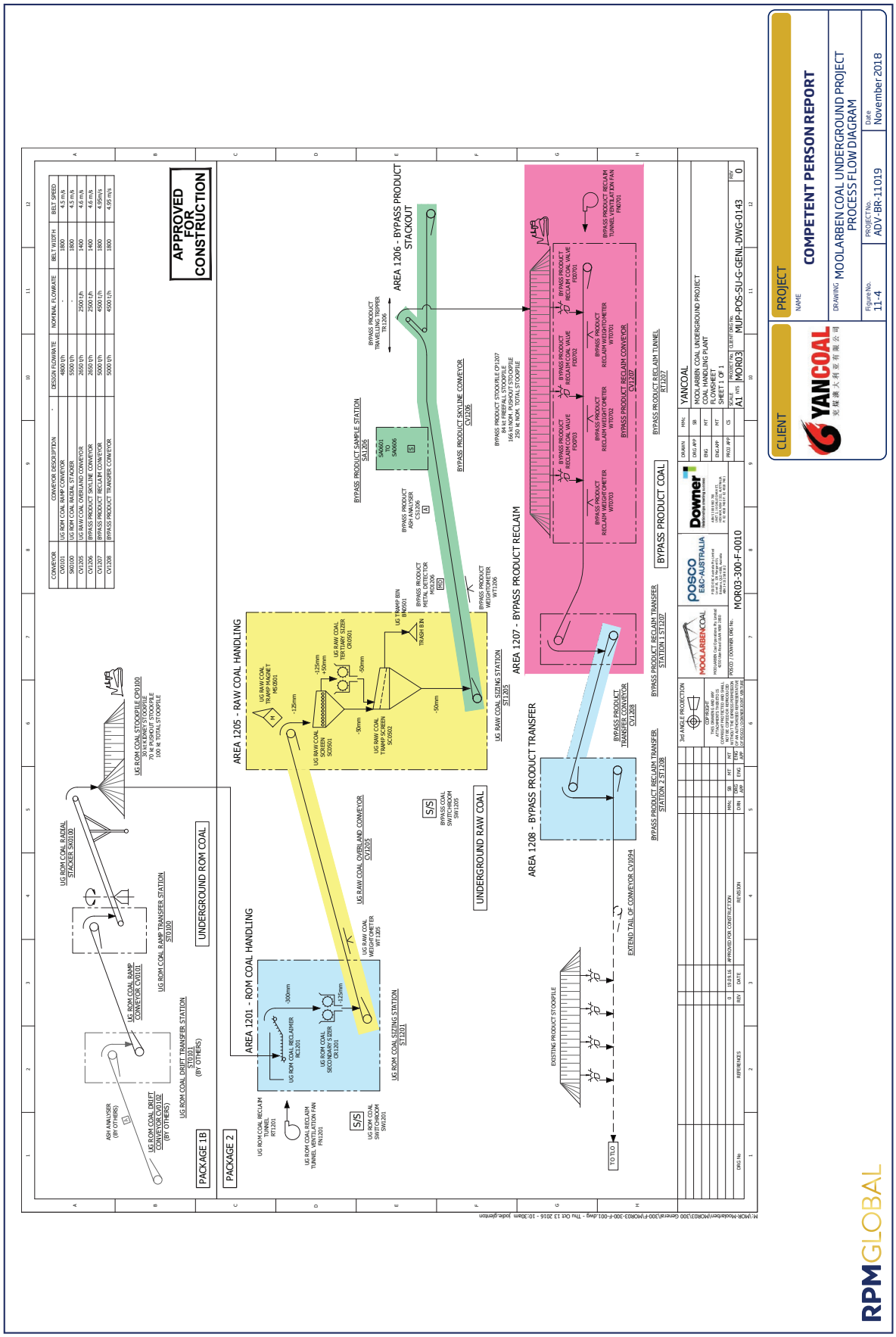
APPROVED FOR CONSTRUCTION
AREA 1205 - RAW COAL HANDLING
AREA 1201 - ROM COAL HANDLING
AREA 1206 - BYPASS PRODUCT STACKOUT
AREA 1207 - BYPASS PRODUCT RECLAIM
AREA 1208 - BYPASS PRODUCT TRANSFER
UNDERGROUND ROM COAL
UNDERGROUND RAW COAL
PACKAGE 1B
PACKAGE 2
BYPASS PRODUCT COAL
YANCOAL
MOOLARBEN COAL UNDERGROUND PROJECT
COAL HANDLING PLANT
FLOWSHEET
MUP-POS-SU-G-GENL-DWG-0143
MOR03-300-F-0010
CLIENT
PROJECT
COMPETENT PERSON REPORT
DRAWING MOOLARBEN COAL UNDERGROUND PROJECT PROCESS FLOW DIAGRAM
Figure No. 11-4
PROJECT No. ADV-BR-11019
Date November 2018

Coal Handling

The Moolarben blending strategy typically starts in the pit with various seams delivered to the ROM coal stockpiles and washed one seam at a time in a campaign to improve yields and throughputs. The Raw Coal stockpile and associated stacker reclaimer system allows for separate stacking and reclaiming of coal based on quality which provides sufficient flexibility to batch wash coal to meet coal product quality requirements.

Stockpile capacity for the end to end CHPP system is the equivalent of approximately 16 days production.

Table 11-4 Stockpile Capacity

Facility	Capacity (kt)	Days Production
OC1 ROM	200	8
OC4 ROM	120	5
ROM UG	100	6
Product	180	5
Prod. UG Bypass	250	14
Total	850	38

With the existing stockpile facilities available at maximum ROM and product coal production rates there is substantial capacity to maintain throughput during off site rail or port outages.

A single train loading bin and dedicated rail loop with a capacity of up to 18Mtpa in railings. Port allocation exists at both the PWCS Kooragang Coal Terminal (KCT) and the Newcastle Coal Infrastructure Group (NCIG) facilities.

The CHPP is relatively new, well-constructed and laid out and is expected to be able to deliver the sustained higher throughput rates outlined in the LOM plan with regularly completed maintenance and the continuation of typical industry operational standards.

11.6 Ashton

The Ashton CHPP consists of two modules. Module 1 was constructed in 2004 however is currently being dismantled. The mine plan is based on using the operating Module 2 which has a throughput capacity of 600 to 800 tpa subject to the nature of the ROM feed. The CHPP includes Dense Media Cyclones, spirals and flotation process which are all industry standard.

The plant is currently operating on a 5 day roster, which at the achieved throughput rates provides for sufficient operating time to wash the ROM coal from the underground project which has a peak rate of 3.4Mtpa. To achieve the LOM plan peak production rate of 6Mtpa which includes coal from both the underground and the South East Open Cut, Yancoal propose to operate the plant on a 24/7 roster system. An allowance in the financial model has also been made for an upgrade of the reject drain and rinse screen and dense medium cyclone circuit.

Ashton has been processing coal seams from the Foybrook coal measures since 2004 including the Pikes Gully seam through to the Upper Hebden seam. The Ashton CHPP washes to a 9.5% ash product which is based on analysis of value versus yield.

Stockpile capacity at Ashton is currently 250kt for the underground ROM coal and 400kt for product coal. The plant has a LOM yield of 56.8% and is forecast at 49.1% for 2018 based on the expected dilution due to seam thickness. This is in line with the 42% in 2017, which was caused by seam thickness variations at the commencement of a longwall panel. These seam thickness variations are expected to decrease based on increased geological knowledge from drilling.

11.7 Yarrabee

The Yarrabee CHPP was commissioned in 2009 to enable more ROM coal to be processed to produce a PCI coal product. The CHPP uses standard technology and liberates coal through sizing, gravity and flotation separation. After sizing, dense medium cyclones are used for processing the coarse material and spirals and flotation cell are used for the fine coal.

The CHPP was originally commissioned with a nameplate capacity of 350tph. Through debottlenecking improvements, the current throughput capacity is 450tph. Yarrabee commissioned a study to assess alternatives for increasing throughput at the site. The two options were to install a new module and achieve a rate of 700tph or to make further upgrades to the existing plant and achieve a rate of 585tpa. The option to modify the existing plant through upgrades has been selected as the basis for this plan.

Bypass coal is hauled to various bypass stockpiles located adjacent to YEN Pit or at the CHPP. Bypass coal is crushed at each bypass pad by a mobile crushing plant. Bypass product coal is then hauled 37km direct from the bypass pads to the Boonal rail siding. Washed coal is crushed at the main CHPP pad and fed directly into the CHPP feeder bin. Washed product is placed into stockpiles which are managed by dozers to maintain capacity. Product coal is also hauled by road train to the Boonal siding. The Boonal Load Out Facility is owned and operated by a Joint Venture between Yancoal and Jellinbah Coal Mine.

Potential bypass coal is identified in the geological model and confirmed through the application of appropriate loss and dilution assumptions to estimate the run of mine coal quality. If the quality of the coal meets the required product specification then the coal can be bypassed. Because of the campaign washing of coal on a seam by seam basis, data can be collected to correlate wash plant yield with ROM ash on a seam basis. This correlation allows prediction of actual CHPP yields for each seam and ply from each pit. This method has been used for the estimation of Marketable Reserves.

The Yarrabee CHPP operates on a six day, three panel roster with planned maintenance schedules on the down day.

The plant has a LOM yield of 76% and is forecast at 78.5% for 2018 resulting in an effective yield of 86.7%. This is in line with the 75% in 2017 and an effective yield of 83%.

11.8 Stratford and Duralie

The Stratford CHPP is a two-stage plant processing coarse, fine & ultrafine coals to achieve specified coal quality and to maximise product yield. The CHPP is fed by Front End Loader (FEL) which feeds the nominated ROM coal blend from the stockpiles into the CHPP ROM Bin. The coal goes through the raw coal circuit which reduces the coal to a top size of 50mm before entering the plant. The coal is then separated into various size fractions by screening and by classification. The following systems are used in the nominated size fractions:

- Dense Medium Cyclones, 50 mm - 1.4 mm size fraction,
- Spirals, 1.4 mm +0.25 mm size fraction,
- Teetered Bed Separator, 1.4 mm - 0.25 mm size fraction and
- Flotation, < 0.25 mm size fraction.

The Stratford CHPP has excess capacity with low utilisation in the proposed life of mine plan. It is therefore not anticipated that plant upgrades will be required to achieve the proposed plan. The following points outline the development and improvements made to the Stratford CHPP:

- 1995 initial plant nameplate 350 tph
- 1996 Daniels Bath circuit installed to scalp rock out of the Avon pit feed. Nominal capacity increased to 500tph.
- 1997 First HBF and Jameson cells, TBS & Lime silo upgrade. Nominal feed rate to 550tph.
- 2003 Duralie mine started. Stratford main pit (Avon seam) completed. Due to the change in feed coal types (Duralie feeds had much less rock), the Daniels Bath circuit was no longer required and was removed. Nominal capacity reduced to 400tph.

- 2007 SMART cell installed as a secondary flotation machine.
- 2008 – Drum filter installed to filter product from the Smart Cell due to overloading of the original HBF.
- 2009 - 2010 Fines upgrade and new product stockpile expansion. Double pumping of co-disposal.
- 2011 Desliming screen and coarse coal centrifuge upgrade enabled 670tph on Duralie feed tonnes and 490tph on Stratford feed tonnes, Second HBF and Jameson cell upgrade. Drum filter removed.
- 2013 Raw coal crushing and screen tower upgrade

The plant has a LOM yield of 59.6% and is forecast at 59.4% for 2018. This is much lower than the 71% achieved in 2017. There are a large number of seams mined that have varying forecast yields, mining in 2017 was from a higher yielding seam. The development of the Avon North and Roseville West pits in 2018 will result in a reduction in the average annual yield at the site.

11.9 Austar

The Austar CHPP was designed, built and installed in the early 1960's and has undergone substantial modifications since this time. The CHPP is located to the north of Wollombi Rd near the village of Pelton.

The design feed rate of the plant is 600tph, however improvements have enabled the plant to operate at rates between 720 to 750tph which provides capacity to process 5Mt per annum. The Austar is a Heavy Medium plant with a fine coal spirals circuit. There are two heavy medium circuits which are set up to treat different size fractions:

- No.1 Circuit treats the 12mm to 1mm size fraction using dense medium cyclones (DMC),
- No.2 Circuit treats the 40mm to 12mm size fraction also using DMC and
- Fines (-1mm) are treated in the spirals circuit.

ROM coal is transported from the pit top to the CHPP via a 2.5km overland conveyor. After primary sizing ROM coal can either be fed directly into the CHPP or stored on the ROM stockpile. Washed coal is transported to the product stockpile via a skyline conveyor and tripper and deposited on the washed coal stockpile via the moving tripper.

Product coal is transferred via a reclaim tunnel and the reclaim conveyor which operates at a rate of 1,200tph. The reclaim conveyor transfers the product coal to a rail loadout bin which sits directly over the rail line adjacent to the CHPP.

The plant has a LOM yield of 84.2% and is forecast at 86.1% for 2018. This is lower than the 91% achieved in 2017 due to the planned dilution and mine methods.

11.10 Donaldson

Donaldson coal has historically been hauled via road train to the neighbouring Bloomfield Colliery where it was processed under a toll washing arrangement. The mine is currently under care and maintenance, however RPM understand that this is the proposed coal processing option for the mine in the future.

11.11 Middlemount

The Middlemount CHPP designed in 2007 and construction was completed in 2010. The plant has had modifications completed to aspects of the design in 2011 which were aimed at improving coking coal yields from the plant. The CHPP is a single stage plant with the ability to produce two products. The plant uses standard industry technologies which includes; dense medium cyclones, spirals and Jameson cell systems.

The Middlemount plant has a nominal throughput capacity of 700tph and operates 24 hours per day, 7 days a week. This is sufficient to process up to 5.4Mtpa of ROM coal feed. The Middlemount plant operates at high utilisations by industry standards.

All ROM coal is washed at Middlemount to produce PCI and semi hard coking products. Product coal is stored on two separate stockpiles with a combined capacity of 250kt.

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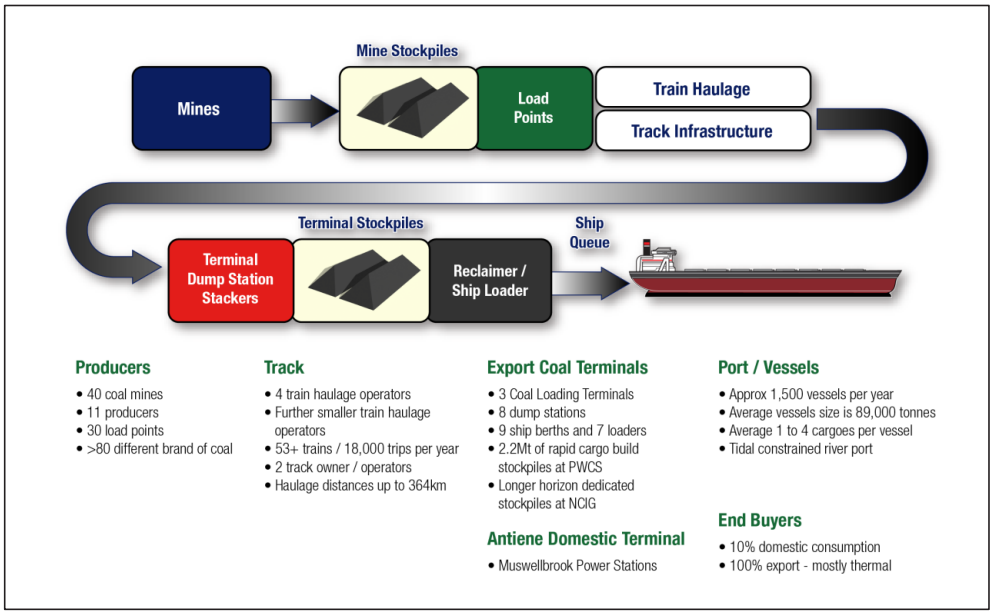
12. Railway and Port Infrastructure

Upon arrival at the various loading points within the Assets, the coal is transferred to coal trains for transport via railway to one of three terminals at the deepwater port in Newcastle, or one of three ports in Gladstone and Mackay in QLD.

The Newcastle terminals are operated by Port Waratah Coal Service ("PWCS") and Newcastle Coal Infrastructure Group ("NCIG") and service the Company as well as other coal producers in the region. The ports in Queensland include the Port of Gladstone, the Port of Abbott Point and the Port of Hay Point. The company exports via four separate coal terminals in Queensland

Both the rail networks and port facilities are operated by third parties and, as such, the Company has various contracts in place. The NSW network is a regulated network that is often referred to as the Hunter Valley Coal Chain ("HVCC") and requires no capital investment from the Company, instead the Company pays contracted rates. An overview of the HVCC as at 2012 is shown in ***Figure 12-1***. RPM highlights this figure shows the current total user of the network, not just the Company.

Figure 12-1 Overview of HVCC at as 2012.



SOURCE: PROVIDED BY THE COMPANY

12.1 NSW Rail Supply Chain

The Company's supply chain is a sub-set of the broader rail and port network operating in NSW (***Figure 12-2***) which is a regulated network referred to as the Hunter Valley Coal Chain ("HVCC") which is managed by the Hunter valley Coal Chain Coordinator ("HVCCC"). The NSW mines use the HVCC rail network to transport products to the Port of Newcastle coal terminals PWCS and NCIG with the Company required to schedule coal transport, as do all other HVCC users.

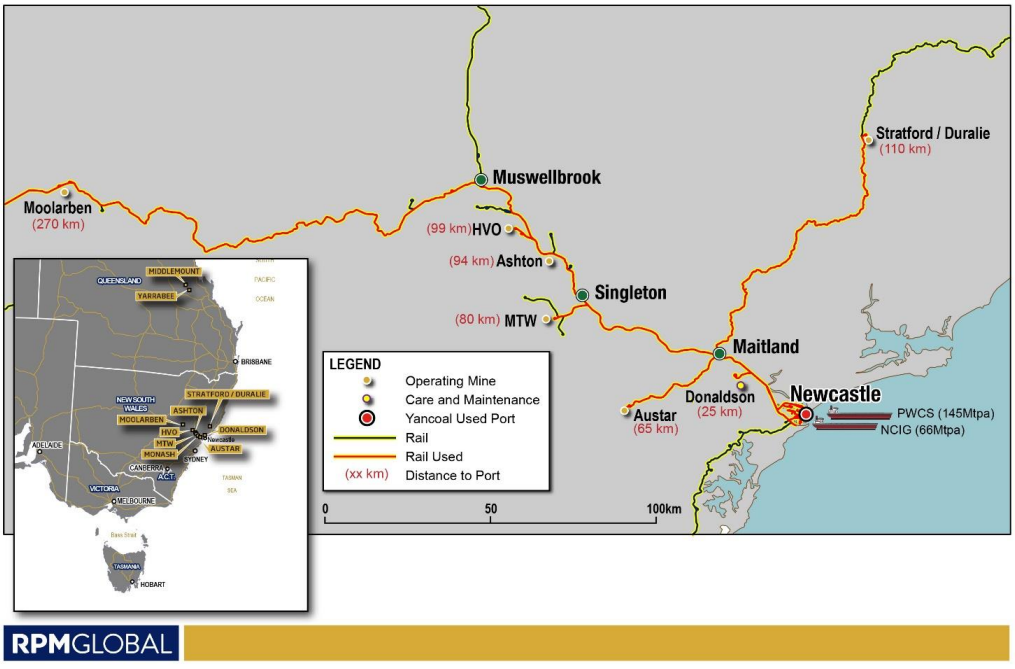
RPM notes that the Australian Rail Track Corporation ("ARTC") provides all below-rail access with capacity aligned to contracted port volumes for all HVCC users. The ARTC is a federal government owned corporation established in 1998 that manages the majority of the interstate rail network in Australia. The role of the ARTC is to operate and coordinate the operation of the national rail network and to ensure rail capacity will be sufficient to meet future growth demands. Importantly for the Company the ACCC restructured the access framework

for the Hunter Valley rail system that resulted in the ARTC contracting directly with coal producers for rail access for coordination with the HVCCC.

RPM is aware that ARTC has produced a 2017 to 2026 Hunter Valley Corridor Capacity Strategy report which outlines the necessary rail infrastructure requirements to meet the track capacity requirements of the coal industry over this period. The system improvements are proposed to be funded by access charges paid by the coal producers utilising the track as per current arrangements.

It is expected that below-rail capacity will lag port capacity in the HVCC until 2017 when a number of the key congestion projects are expected to be completed. Importantly, the corridor strategy also identifies the necessary rail network upgrades that would enable track system capacity to support the development of terminal 4 at PWCS by delivering system capacity of approximately 280-300Mtpa. RPM has not reviewed this strategy document and provides this information for reference only.

Figure 12-2 Assets Rail Network to Port of Newcastle



Rail Contracts

Through discussion RPM is aware the company has sufficient rail access and freight contracts to meet its current production requirements for each asset. RPM notes that as per industry standards renegotiations occur periodically, as such allotments for the LOM are expected to be available. Rail contracts are commercially sensitive and as per JORC Code clause 49 information regarding these contracts is not presented in this report.

12.2 NSW Port Facilities

Upon arrival at the Port of Newcastle, the products are exported via coal terminals PWCS and NCIG. Several producers utilise these terminals which have a total nameplate capacity of 211Mtpa after recent expansions. Similar to the rail supply chain, the port facilities are operated by a third party. Below is a brief summary of each of the terminals. RPM presents this for information purposes only.

PWCS

The PWCS terminal has a capacity of 145Mtpa and consists of two terminals, namely Carrington Terminal and Kooragang Terminal, as described below:

- Carrington Terminal – Commenced operation in 1976 and is located on 51Ha of land on the south side of Newcastle Harbor. Initially with 16mtpa of capacity it has been expanded to the current level of 25mtpa. Coal is transported by rail or road, with the vast majority by rail, to two offloading facilitates. Two ship loaders are in operation.
- Kooragang Terminal – Commenced operation in 1984 and is located on 265Ha on the North side of Newcastle Harbor. With an initial capacity of 15mtpa, it has been incrementally increased to the current capacity of 120mtpa. All coal is received via rail into four offloading facilities.

PCWS has a plan developed for an additional terminal (Terminal 4) to be constructed in stages according to demand. This terminal is yet to commence construction however technical studies are underway along with the governmental approval process. No timeline has been set for construction of the 120Mtpa capacity terminal due to recent decreases in commitments of throughput from various coal producers.

NCIG Terminal

The NCIG terminal commenced operation 2010 with an initial capacity of 30Mtpa, after further stages of expansion were completed resulting the current capacity of 66Mtpa. The terminal contains storage capacity of 5.7Mt, which is allocated based on proportion of the capacity allocation.

Port Contracts

Each coal producer is provided with a contracted port allocation which is the upper limited of export coal and are obliged to meet under a TPC. RPM is aware the Company does not necessarily follow these allocations per operation. Instead, the Company takes into consideration the NCIG port capacity allocation and splits that on a Product Coal optimisation basis between its operations. As with the rail allocation RPM is aware the company has sufficient rail allotments to meet its current and medium term production requirements. RPM notes that as per industry standards renegotiations occurs periodically, as such allotments for the LOM are expected to be available, further more as these contracts are commercially sensitive, as per JORC Code clause 49 information regarding these contracts is not presented in this report.

The current port capacity contracts do not reflect mine ownership, nor do these reflect the current ARTC rail allotment agreements for contracted volumes from each operation. Given the Company also holds the rail contracts which are in excess of current Assets product requirements, the mines are exposed to substantial TPC charges. RPM notes that these additional charges are INCLUDED in the OPEX as outlined in **Section 14**.

The Company holds the typical 10 year rolling TPC port contracts at both NCIG and PWCS. Whilst these long-term contracts act as security over the Assets operations they can also be problematic in terms of meeting, however not exceeding, contracted volumes. In fact, the Company has failed to export sufficient coal volumes to cover all of its NCIG and PWCS port contracts for at least the last 5 years. That would indicate that the Company has made a commercial decision to accept TPC charges for unused port capacity rather than not have that capacity in hand should it be required.

It is necessary for the Company to revise the allocations and assess the risk for TPC penalties. This is important as the NCIG port has a higher charge than PWCS however better cargo handling and blending facilities.

12.3 Hunter Region Infrastructure Comments

RPM is of the opinion that the current HVCC and contracts in place are sufficient to support the forecast production as reported in this Report. HVO expansion plans, in combination with a 12Mtpa MTW production volume, will require additional rail and port capacity that the Company does not currently have secured (other than that noted above). As with all 10 year evergreen rail and port capacity allocations it is possible to apply for additional train paths and port capacity on an annual basis. There is sufficient time for the Company to use the annual process to apply for increased allocations if it so desires and in the current market, there should be no