AUSTRALIAN RESEARCH INDEPENDENT INVESTMENT RESEARCH

Bowen Coking Coal Ltd

November 2021



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Note: This report is based on information provided by the Issuer as at 8 November 2021

Investment Profile Share Price (\$) as at 8 November 0.16 2021 **Issue Capital:** 1302.6 Ordinary Shares (M) Listed Options (M) 55.7 Unlisted Options (M) Performance Shares 20.0 Fully Diluted (M) 1378.3 Market Capitalisation Ords (M) \$220.5 0.042-0.22 12 month L/H (\$)

Board and Management

Directors:

Nick Jorss – Executive Chairman

Gerhard Redelinghuys – Managing Director and CEO Neville Sneddon – Non–Executive Director Matt Latimore - Non-Executive Director

Duncan Cornish - Company Secretary Daryl Edwards – CFO

Major Shareholders at 20 September 2021

Directors	31.2%
Ilwellia	8.6%
Crocodile Capital	6.8%
Others	53.4%

Share Price Performance



ACQUISITIONS ARE A LOW COST PATH TO PRODUCTION

Bowen Coking Coal Ltd will have acquired an impressive portfolio of assets in Queensland, Australia, capable of delivering coal into the currently very buoyant market from as early as the March Quarter 2022, and ramping up to over 4mtpa of saleable product, with over 90% of revenue from steel making coal initially, and 70% longer term.

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KEY POINTS

Share price strength driven by a mix of value adding acquisitions and coal market strength– The three main value driving announcements were the Production Targets for Broadmeadow East and Isaac River of 28 July 2021, Bluff preferred bidder status on 30 July 2021, and Acquisition of Burton and Lenton on 4 August 2021, including production schedules, capital and operating costs. These releases coincided with the recent strongly positive share price performance.

More optimisation to come - While providing a clear basis for an informed valuation of Bowen, the mining schedules in these documents were initial Scoping Studies, and there is potential for additional optimisation.

Coal prices are well above expectations – Despite the environmental narrative that coal is dead, its death has been greatly exaggerated so far. If the world continues its strong recovery out of COVID, prices are likely to continue to surprise to the upside compared to consensus expectations significant falls.

Risks to coal industry from Climate Change policy– Until there is massive investment in new steelmaking capacity that doesn't use coal, coal using steelmaking must continue. On the International Energy Authority's roadmap to net zero, the steel industry is still expected to consume 540Mtpa of coking coal by 2050, so on that forecast, which represents a realistic worst case for coking coal, Bowen will have a market to contest for a period well beyond its reserve life. We believe Australia will continue to be a highly competitive place to produce coal.

Future drivers of the Bowen share price:

- Start of production in the March 2022 quarter is likely to be a crystalizing event that will focus the market on the cash flow potential of the coal prices at the time.
- We expect coal prices to remain above consensus while the post COVID recovery continues, and above consensus in the longer term. We use 5 year historical averages.
- Cash generation will depend on of initial production volumes. Stronger rampup would be a positive.
- The company has provided a schedule of approximate production guidance which has Burton producing in FY23. We assume a start in FY25. We will upgrade our earnings if the company delivers on that time table. With Burton in production, we forecast NPAT of A\$0.06/sh putting Bowen on a PER of 2.7x.

VALUATION

Our base case valuation assumes no further share issuance other than conversion of existing options and the share issues to pay for Burton and Bluff acquisitions. Debt is expected to provide the balance of funding to get Bluff and Broadmeadow into production. Our base case price scenario generated a valuation of A\$0.37/sh. On consensus expectations the valuation falls to A\$0.16/sh, suggesting the market is factoring in consensus, so any outcome better than consensus will see the share price rise. Current spot prices are unlikely to be sustained long term, but an additional year at these prices adds around A\$0.16-0.20/sh to our valuation. Bowen's valuation is highly sensitive to coal prices, particularly longer term perceptions. We expect the risk bias is that longer term prices will above those expectations.

OVERVIEW – COAL IN A WORLD HEADING FOR NET ZERO

FUNDAMENTALS OF INVESTING IN A COAL PRODUCER

- As an investment, Bowen is a coking coal producer, with 90% of its revenue coming from steelmaking coal initially, and 70% on our assumptions longer term.
- Resetting the world manufacturing base to one that produces net zero carbon emissions will require a massive investment in plant and equipment, from wind turbines to hydrogen from water hydrolyzers, to ammonia plants to provide fuel for shipping, and all this will need steel, so we expect the growth in steel demand will be faster than real global GDP over the next 20 years as a result.
- Blast furnace steel produced using coal will still be operating in 2050 according to the International Energy Agency, but with carbon capture, and those furnaces will need supply. Australia is likely to remain a globally competitive coal supplier and will have a role to play over that period.
- In a world where the mining majors are largely exiting the coal industry, and where larger companies are shedding smaller operations or those approaching end of life, Bowen is one of the few entities acquiring these assets and is doing so at low acquisition and start-up costs.
- The barriers to commencing coal production are now largely regulatory, and not related to the provision of expensive infrastructure. During the commodity boom of the 2002-2010 period, infrastructure was major the constraint to coal project development, and considerable additional port and rail capacity was installed, funded by take or pay contracts signed by miners. A number of those miners have not built the intended projects, or are now producing at less than intended rates, but are still paying for the unused rail and port capacity. It would be a benefit to those miners if Bowen started production and shouldered some of that take or pay obligation.
- The supply of capital to build large new coal mines and expensive long-term infrastructure has been reduced by the rise of green credentialled investment funds, but also by an increasing number of general funds that must defend their ESG credentials to their trustees and members. This means a restriction on the availability of debt and equity capital, and a reluctance by the larger, cashed up mining companies to participate in the sector
- While there will always be sources of capital prepared to invest in the coal industry, the pool of available funds is significantly less than has been the case historically. That lack of capital means that if the coal market does need new supply, either because demand (ie steel or energy) continues to grow, or supply contracts as old mines close, then the new capacity is likely to be added more slowly than in the past, meaning the opportunity of above trend prices and earnings from time to time is highly likely.
- As a commodity, coal is very hard to store, because it is very bulky for its value, and it chemically deteriorates over time. That means the coal supply chain inventories are generally the minimum required to allow the supply chain to function, and any volatility in demand or supply can cause considerable stress in the supply chain. In a world of annually or quarterly contracted prices, this stress can be smoothed out, but in a spot market, very significant price volatility can result. Structurally, the lack of supply investment, combined with continuing demand for steel, is likely to bias the volatile price movements to the upside over the medium term, particularly if there is any delay in implementing the strategies proposed by the International Energy Agency (IEA).

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IEA IRON AND STEEL TECHNOLOGY ROADMAP TO 2050

A VERY QUICK INTRODUCTION TO STEELMAKING

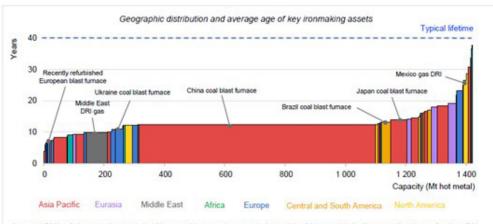
The role of coal is steel making is threefold. It provides energy, which other sources could do, but it also provides porosity in the blast furnace which allows the heating gas to circulate through the iron ore burden, without which a blast furnace of today's size would not function, and finally it provides carbon. Iron ore is iron oxide, and the oxygen has to be removed to make steel. Coal is a reductant that removes the oxygen, making carbon dioxide. Steel is an alloy of iron and carbon. There is established technology to make steel using methane as the energy source and as reductant, and hydrogen could be used in place of methane, but is not commercially established technology.

- While a number of established steel makers in developed countries talking about moving to more scrap, but that just pushes the pressure to build more blast furnaces onto the emerging countries as total steel demand will continue to require steel from iron ore. Europe might look good, but China, India and others will have to make up the difference, so globally, scrap is not a solution.
- The IEA Roadmap is a well thought plan for how the steel industry could evolve to net zero carbon emissions by 2050, reflecting the practical timelines for the rollout of new technologies and operating practices to achieve that aim. It's Sustainable Development Scenario also probably represents a best case, for carbon reduction and the worst possible case for coal miners, but even that case still has consumption in 2050 of 540Mtpa of coking coal.

CARBON CAPTURE IS THE NEXT STEP FOR MOST, NOT CLOSURE

Over 80% of the existing stock of blast furnace capacity is under 15 years old and has another 25 years of life at least (Figure 1). Because the capital costs have been spent, any pressure to de-carbonize is likely to result in carbon capture being added, rather than closure of the plant, so the capacity will remain a customer of the coal miners.

Figure 1 Average age of existing blast furnace capacity by region

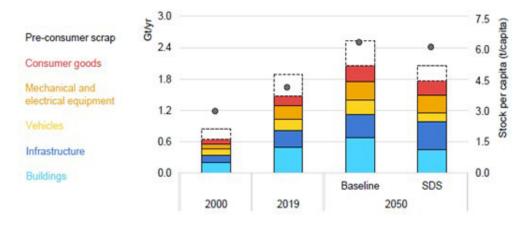


Around 50% of the existing stock of ironmaking equipment is based in China, with India contributing a further 5%. The current stock is quite young, with a global average age of 13 to 14 years for blast furnaces and DRI furnaces.

Source: IEA Iron and Steel Technology Roadmap – Towards more sustainable Steelmaking 8 October 2021 https://www.iea.org/reports/iron-and-steel-technology-roadmap

IEA FORECAST: DEMAND FOR STEEL IS EXPECTED TO DOUBLE

Figure 2 End use demand for steel in 2050 assuming policy settings pre COP26 (Baseline) and under a Sustainable Development Scenario (SDS), and showing the industry sectors where the steel is consumed



Source: IEA Iron and Steel Technology Roadmap – Towards more sustainable Steelmaking 8 October 2021 https://www.iea.org/reports/iron-and-steeltechnology-roadmap

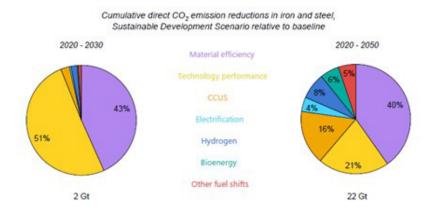
Steel end use demand is expected to grow from 1500Mt in 2019 to 2100Mt in 2050 on the business as usual baseline assumptions, an increase of 40%. The sources of demand are detailed in Figure 2. End use demand is the steel that actually reaches the customer and excludes the steel that becomes scrap in the manufacturing process, which is represented by the dotted boxes in Fig 2.

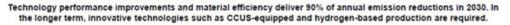
Under the Sustainable Development Scenario (SDS), demand of forecast to grow 10% from 2019 to 2050. Note the large increase in infrastructure, part due to general growth, but part also related to the large rollout required in relation to new energy supply infrastructure.

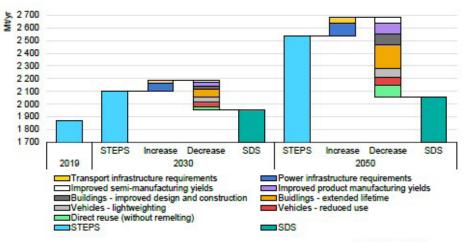
IEA FORECASTS LITTLE CHANGE TO 2030

- In the period to 2030, the difference between the business at current policy settings (STEPS) and the sustainable development scenario (SDS) is almost entirely about the steel demand side, driven by policies that are outside the steel industry and relate to design and end use that increase the useful life of products, such as increasing building life, and increasing efficiency of manufacturing processes by reducing steel waste and increasing energy use efficiency.
- If the world can achieve the SDS outcome, 2030 end use steel demand is only slightly higher than 2019, but still supplied by largely the same steel making capacity as today. The big changes on the steel supply side take place after 2030, and the biggest of those is expected to be carbon capture retrofits on existing capacity, which has the potential to sustain coal demand long term.

Figure 3 Sources of reduction in end demand for steel by 2030 and 2050, with almost all the savings being on the demand side up to 2030, with supply side changes starting to take effect after 2030







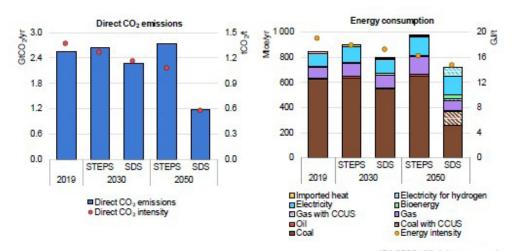
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Notes: STEPS - Stated Policies Scenario, SDS - Sustainable Development Scenario. "Demand" here equates to global crude steel production rather than end-use demand alone, in order to include the impact of reducing pre-consumer scrap on required production levels.

Source: IEA Iron and Steel Technology Roadmap – Towards more sustainable Steelmaking 8 October 2021 https://www.iea.org/reports/iron-and steeltechnology-roadmap

IEA COKING COAL DEMAND FLAT TO 2030, FLAT TO DOWN BY 2050 TO ACHIEVE NET ZERO CARBON EMISSIONS

Figure 4 Coal demand in 2030 and 2050 under the IEA's two scenarios



IEA 2020. All rights reserved.

Notes: STEPS - Stated Policies Scenario, SDS - Sustainable Development Scenario. The CO₂ and energy intensities are stated on a sectoral basis (including finishing processes, ferroalloy production and other ancillary processes). See Box 1.3 in Chapter 1 for a detailed explanation of the analytical boundaries used in this analysis. Source: IEA Iron and Steel Technology Roadmap – Towards more sustainable Steelmaking 8 October 2021 https://www.iea.org/reports/iron-and-steeltechnology-roadmap

 Coal consumed for steel making was around 900Mt in 2019, and under the IEA business as usual scenario (STEPS) is largely unchanged in 2050. Under the Sustainable Development Scenario (SDS), coal consumption is reduced to around 540Mtpa (down 40%).

INVESTMENT IN COKING COAL MINES TO CONTINUE PAST 2050

- These scenarios assume continued production of coal for steelmaking to continue past 2050, which means that investment in coal mines will have to continue past 2050 also. Coal mines have finite lives, and the current generation will have to be replaced. By 2050, the total volume will be down on 2019, but investment in coal supply will still be required.
- If for some reason the rollout of alternative steelmaking technologies is accelerated, there may be less demand by 2050, but the IEA paper considers the issues of new technologies like hydrogen reduction and does not expect it will be sufficiently developed to influence the market by 2030.
- In the context of Bowen Coking Coal, both scenarios mean that it will have a market it will be able to contest for longer than its current reserve base can supply.

IEA SCENARIOS ARE VERY BEARISH COMPARED TO INDUSTRY

- The demand forecast commentary on p11 of this report sees continuing demand growth for both thermal and coking coal. These forecasts are based on the new power station or steelmaking capacity either under construction or expected to start construction.
- The COP26 summit appeared to take a stand against coal, and China has said it will not provide any financial support for coal power station construction outside China. However, all the capacity of concern is in emerging nations, and so whether those as yet uncommitted plants get built or not depends on how quickly the Rich Nations roll out incentives to go green.
- Availability of electricity is an important political issue in emerging nations because electricity availability drives local manufacturing and that drives job creation. Industry is still best served by large power stations, rather than distributed and intermittent solar and wind arrays, even with batteries.
- The bottom line is that coal fired power stations and steel from blast furnaces are sought after commodities for emerging nations, and converting both those sources of carbon to alternative technologies will require a policy and funding effort that the world has yet to see materialise. Until that effort actually turns up, the process of switching off the existing demand for coal will not have started.

VALUATION

VALUATION SUMMARY

- We have valued the mines and overheads on the basis Net Present Value of their cash flows at our Base Case assumptions, and adjusted for balance sheet cash, debt and tax losses. The share issue announced on 11 November in included in our valuation.
- Our Base Case commodity assumptions use the average consensus forecast to December 2023, then the average coal prices over the last five years as our long term estimate. Consensus is calculated by Consensus Economics.

Table 1 Valuation scenarios: Our base case is A\$0.37/share

	Consensus Oct 2021	Forward Curve 4/11/21	Base Case	Spot 4/11/21
Broadmeadow	38.3	68.9	68.0	334.7
Burton Lenton	108.6	312.0	281.7	1395.8
Hillalong	0.0	44.6	50.7	571.1
Isaac River	9.6	20.1	34.0	270.7
Bluff	40.4	25.7	54.8	292.5
Exploration	10.0	10.0	10.0	10.0
Corporate Overhead	-13.7	-13.7	-14.5	-13.4
Tax Benefit	0.0	0.0	0.0	0.0
Cash on hand	41.7	41.6	46.1	85.9
Debt	-15.1	-15.1	-25.1	-15.1
Net Working Capital	3.1	3.1	2.0	8.9
Valuation A\$M	223.0	497.2	507.5	2941.1
Post Acquisition Shares M	1379	1379	1379	1379
Valuation A\$/sh	0.16	0.36	0.37	2.13

Source: IIR estimates

- The current Bowen share price is trading close to the A\$0.16/sh valuation based on consensus commodity prices. We see this as a downside case, because the long term prices in this scenario are lower than the average prices of the last 5 years, a period negatively impacted by COVID, and the cessation of exports to China.
- Running our valuation model on the forward curve prices for Hard Coking Coal and Thermal coal generate a valuation of A\$0.36/sh, very similar to our Base Case of A\$0.37/sh.
- If the valuation model is run at spot prices of 4 November 2021, we get a valuation of A\$2.13/sh. We do not see this as a realistic scenario, but we do believe that the real value of Bowen lies between the consensus case and the spot.

Table 2 Impact of using spot prices compared to our Base Case: Each year at current spot adds ~A\$0.16-0.20/sh to our Base Case valuation

	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26	Jun-27
Base Case						
NPAT A\$M	23.1	29.6	23.3	61.8	82.2	71.0
NPAT A\$/sh	0.016	0.021	0.016	0.043	0.057	0.050
Free Cash Flow A\$M	-20.8	14.7	-15.3	65.3	93.3	81.9
Year End Cash A\$M	46.1	50.7	55.2	123.0	210.3	286.2
Current Spot						
NPAT A\$M	55.9	191.9	233.5	364.9	388.2	363.0
NPAT A\$/sh	0.042	0.143	0.174	0.272	0.290	0.271
Free Cash Flow A\$M	28.6	211.0	206.0	391.0	399.7	370.3
Year End Cash A\$M	75.7	286.8	512.5	906.0	1299.7	1664.1
Cumulative Improvement	t by Year					
Increase A\$M	29.7	236.0	457.3	783.0	1089.4	1377.8
Increase A\$/sh	0.022	0.171	0.327	0.546	0.759	0.961

Source: IIR estimates

The table above shows the cumulative difference in cash on hand at the end of each year for our Base Case and the spot case. Each year of high prices adds between A\$0.16/sh and A\$0.20/sh. Even if prices come off now, we would expect a price spike like the current one will happen one or more times in the next five years.

SENSITIVITY

Table 3 Impact of increases in various coal prices and the currency

Impact on NPV	A\$M	A\$/sh
Hard Coking Coal +US\$10/t	96.6	0.073
LVPCI Coal + US\$10/t	51.8	0.039
Thermal Coal +US\$10/t	70.8	0.054
AUSUSD + 0.01	-31.8	-0.024

Source: IIR estimates

• A change in all the coal prices of US\$10/t changes the valuation by A\$0.166/sh.

SELECTION OF COMMODITY PRICES: BASE CASE

Normally we would use the consensus commodity forecasts of a large number of commodity experts as collated by Consensus Economics. However, in the case of coal, the forecasters have done a poor job of predicting the currently very tight market, and we have limited confidence in the appropriateness of the consensus, given it is below the five years average of the various coal prices in the period to June 2021.

Table 4 Consensus and futures coal prices – The Bowen share price is likely to appreciate if the actual coal price exceeds current
consensus at any time

US\$/t FOB	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
Consensus										
HCC	171.1	275.7	247.7	222.7	193.6	187.7	172.9	164.1	159.0	159.0
PCI	128.3	206.8	185.8	167.0	145.2	140.8	129.7	123.1	119.3	119.3
Thermal	110.0	110.0	112.1	117.7	121.5	121.5	116.4	98.1	92.3	98.8
Forward Cu	irve 4 Nov	ember 202 [°]	1							
HCC	310.0	355.0	285.0	227.0	197.0	171.0	170.0	170.0	170.0	170.0
PCI	232.5	266.3	213.8	170.3	147.8	128.3	127.5	127.5	127.5	127.5
Thermal	177.6	153.1	138.5	123.4	116.1	111.9	108.3	103.8	103.8	104.1
Average of	last 5 yea	rs								
HCC	173.0	173.2	173.4	173.6	173.9	174.1	174.3	174.5	174.7	175.0
PCI	124.0	124.2	124.3	124.5	124.6	124.8	124.9	125.1	125.2	125.4
Thermal	86.0	86.1	86.2	86.3	86.4	86.5	86.6	86.8	86.9	87.0

Source: Consensus Economics, HCC forward curve from SGX (Singapore), Thermal from ICE (London)

- We use consensus estimates for the period between now and December 2023, then revert to the five year average in real terms. The current Hard Coking Coal spot price is around US\$370/t FOB vs the December quarter consensus of US\$159/t at the end of December 2023 and US\$156/t long term.
- Our forecasts assume 0.8%pa coal price inflation, compared to 1.2% cost inflation. The cost inflation is the difference between the Australian Federal Government 10 year Bond Rate and the 10 year Indexed Bond Rate, and represents the future inflation rate forecast by the Bond Market in aggregate over the next 10 years.
- In Bowen's case, the coal prices from 3-10 years out largely determine the value of the company, while the cash flow in CY22 and CY23 determine the pace of development and level of debt.

FUNDING: OUR RAMP UP ASSUMES NO ADDITIONAL EQUITY

- On model cash flows are based on the production schedules provides by Bowen for Broadmeadow, Isaac River and Burton, and our estimates for Bluff, but we have delayed the start of expenditure on Burton and Isaac River until Broadmeadow and Bluff are in solidly positive cash flow.
- Bowen has a currently undrawn A\$15M facility from M Resources, which we expect will finance the restart of Bluff and probably Broadmeadow East. On top of that we assume an additional A\$10M is borrowed. The cash flow from the first two mines should fund the

start of Isaac River, and these three mines should fund most of the initial capex required for Burton. We assume A\$18M in new debt to fund Burton. The actual funding will depend on the level of coal prices during those early years.

Broadmeadow East may operate at a faster rate of 1Mtpa of product, rather than the 0.8Mtpa in the presentation of 12 November 2021. We believe this because the original Broadmeadow East acquisition release of 24 June 2020 mentioned the purchase includes the right to process 1Mpta at Burton, and the subsequent Fitzroy release of 1 September 2021 included 1mtpa ROM capacity allocation at Carborough Downs. Additional production would generate additional cash.

OTHER MODELLING ASSUMPTIONS

- Our financial model is based on the production profiles contained in the "Production Targets for Broadmeadow East and Isaac River" dated 28 July 2021, "Transformational Acquisition of the Burton Mine and Lenton Project" dated 4 August 2021 and "Option for Bowen Coking Coal to acquire Bluff PCI Mine" dated 29 October 2021. The production profiles contained in these documents are the work of the Competent Persons who complied these reports for Reserve reporting, and they may not represent the company's actual development plans.
- The discount rate used is 7.9% (see Table 28).
- In the Table 2, the valuations are for the assets in A\$M are at 30 June 2022, and the number of shares used as the divisor is post issue shares at the end of August 2021, plus the estimated or actual shares issued in the 11 November 2021 issue and to purchase Burton/Lenton and Bluff.

VALUATION OF OTHER PROJECTS A\$6-24M - BASE CASE A\$10M

- The other projects are Cooroorah, Comet Ridge, Lilyvale and Mackenzie, which with part of Hillalong (ie Mt Hillalong) comprise the original Asset Package purchased by the company.
- The price paid by the company for that Asset Package was 141.7M shares and A\$0.35M cash. The issue price of the shares was A\$0.023/sh valuing the entire package at A\$3.6M.
- On 11 October 2017, when trading resumed post completion of the acquisition and related rights issue, Bowen had 469.5M shares on issue at a share price of A\$0.023/sh and A\$4.45M in cash, giving an enterprise value for the Asset Package of A\$6.3M. On this basis, we have set A\$6M as the lower end of our valuation range for these assets.
- Since then, the Cooroorah project Resource has grown to 177Mt, and Isaac River was acquired, so it is difficult to split out the valuations attributed to these assets by the market. However, Cooroorah is clearly more valuable now than at the time of acquisition. Also, coal prices are considerable higher, which would also have the effect of increasing the value of the Asset Package. The total Resource of the Assets is 242Mt (Cooroorah 177Mt, Comet Ridge 60Mt and Lilyvale 5Mt). At a conservative A\$0.10/t valuation, we have set the upper end of our valuation range at A\$24M.
- Our base case valuation of Bowen assumes these exploration assets are worth A\$10M, ie toward the lower end of the range. We value Hillalong Open Pit separately, but almost all the planned production in our modelling comes from Hillalong East, which was purchased from Rio Tinto in 2018. The Hillalong in the original package is Mt Hillalong, the down dip extension most likely to be mined by underground methods.

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COMMODITY REVIEW

COAL FUTURES PRICES AT HIGHER LEVELS DESPITE PULLBACK

- In Figures 5 and 6 below, the blue line is the price futures contract for coal delivery in December 2021, the orange for delivery in December 2021, grey in December 2023, yellow in December 2024, and green in December 2025.
- While all the futures prices have pulled back dramatically since mid-September, one important message is that longer term futures prices are substantially higher they were prior to April 2021. We have chosen the December 2025 contract, but using any contract after from 2023 onwards would tell the same story. The Hard Coking Coal long term price is up US\$12/t and the thermal price is up US\$21/t from March 2021 to November 2021

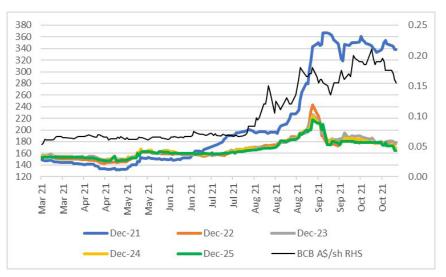
- Based on the sensitivities in Table 3, the change in long term coking coal price adds A\$0.13/sh and the change in thermal coal adds A\$0.11/sh to the value of Bowen, for a total of A\$0.24/sh. PCI prices are assumed to have moved with Hard Coking Coal in this calculation.
- Another important message is the even though the Hard Coking Coal forward prices have fallen, the nearer term December contract remains stubbornly high (Fig 5). If the near month continues to stay this high as the company moves into production in 2022, the cash generating will be significant.

Table 5 Long term futures prices have shifted upwards

	Mar-21	Nov-21	Change	Valuation A\$/sh
Hard Coking Coal	153	165	12	0.13
Thermal	83	104	21	0.11

Source: December 2025 futures contract at the dates specified

Figure 5 Bowen share price vs various Hard Coking Coal futures contracts from Dec 2021 to Dec 2025



Source: Hard Coking Coal prices from SGX Singapore, Bowen share prices from ASX

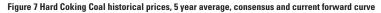
- The Bowen share price chart made its initial up-kick on the announcements of the scoping study results for Broadmeadow and Isaac River on 28 July 2021, and the acquisition of Burton/Lenton on 4 August 2021.
- Thereafter, the Bowen share price appears to have been driven by the coal price increases, particularly in increases in the later year futures prices, when its mines will be in production. Those later year forward contract prices have really only reacted strongly from July 2021 in thermal, and August 2021 for Hard Coking Coal, suggesting the forward markets are forming the view that the current shortage in supply may have a structural element.

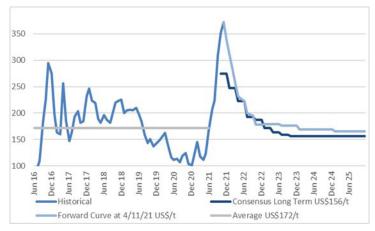




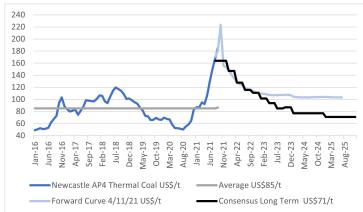
Source: Coal prices from International Commodity Exchange and share prices from ASX:

As highlighted in the figure below, the use of a 5 year average of US\$172/t FOB looks reasonable compared to long term consensus of US\$156Mt and the futures market of US\$165/t, bearing in mind the long term futures contracts were over US\$200/t in September 2021.





Source: St Louis Federal Reserve, Barchart, Freight Investor Services





Source: St Louis Federal Reserve, Mundi, Barchart

- Typically, after a price slump, the period of high prices is sustained for a considerable period of time. Post the GFC in 2009, premium hard coking coal prices enjoyed a period from 2010 to mid 2012 above US\$200/t, and post the slump in 2016, coal prices traded around US\$200/t for 3 years to the start of the recent slump.
- This suggests that the spot Hard Coking Coal price could remain above US\$200/t for two to three years.
- For thermal coal, the comparison between historical prices, the five year average, consensus and the current forward curve shows a large premium of futures over consensus and the five year average. Again we believe consensus at US\$71/t is too low, and prefer the average of US\$85/t, even though it is below the futures long term price of U\$103/t (Fig 8).

CORONADO COMMENTARY ON THE CURRENT COKING COAL MARKET

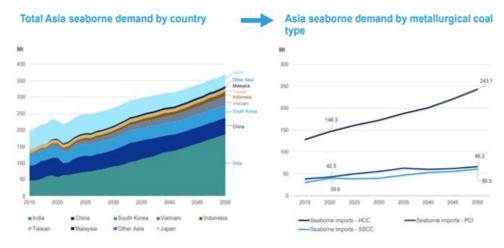
- Coronado Global produces coking coal in both Australia and the USA at a rate of around 18Mtpa.
- In its market outlook of 10 August 2021, Coronado states that coking coal prices were being driven by strong steel production and restricted supply. Steel demand strength is being driven by Governments around the world using infrastructure investment as stimulus to recover from the COVID 19 downturn.
- In its forecast, China and India were expected to lead world growth with 2021 and 2022 respective years growth expected to be 9.0% and 5.1% for India and 8.0% and 5.4% for China.
- Coronado believes the restrictions on coal imports into China will continue for at least the remainder of 2021, with India providing the strongest growth market for Australian coal.

Coronado also expects contract negotiations for the 2022 year will start in the second half of 2021, and expects "materially higher prices that those negotiated in 2021".

Whitehaven commentary on the coking coal market

 Asian coking coal demand is expected to rise as Asian GDP grows and economies maintain or increase their steel intensity (ie tonnes steel per unit of GDP growth) Note that India, not China, is the dominant source of demand growth.

Figure 9 Seaborne coking coal demand by country and by coking coal type

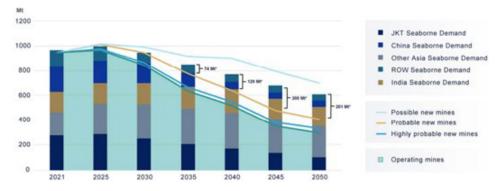


Source: Forecasts by Wood Mackenzie July 2021, from Whitehaven Coal presentation 26 August 2021

Commentary on the current thermal coal market

- The Chinese hydropower industry is experiencing growing pains as strong demand causes power shortages in China. Not only is this creating problems for heavy industry, but is also putting increasing pressure on fossil fuel markets.
- China's hydroelectric power industry provides 17% of total power generated, but smaller hydroelectric plants have been forced to close due to low rainfall and dry rivers. Total power generation fell by 2% year on year between January and August.
- This comes amid unprecedented demand, as the economic recovery boosts industrial activity, the auto sector turns to electrification and rural households convert to electric heating. Power consumption in the first seven months of 2021 was up 15% year on year.

Whitehaven commentary on long term thermal coal market outlook Figure 10 Emerging supply gap in thermal seaborne coal



Source: Forecasts by Wood Mackenzie July 2021, from Whitehaven Coal presentation 26 August 2021

- In the forecasts, Global seaborne supply meets demand only once the mines classified as "Highly Probable plus Probable plus Possible" have been built and bought on line. Bringing these mines on will require new investment. Failure to invest will cause shortages.
- Even in an environment of declining demand, shortages are possible, and in the absence of support from capital markets, shortages become likely.
- The above analysis appears to assume that the current market is in balance, and that shortages will emerge between now and 2025. However the current prices tell us that the shortages are here now.

Whitehaven believes that there will be a trend over the longer term towards high Specific Energy coals (ie Australian, not Indonesian) as the surviving power stations are the more efficient, lower CO2 emitting HELE coal power plants.

HISTORY OF BOWEN COAL

- On 24 April 2017, Cabral Resources announced the acquisition of 100% of Bowen Coking Coal Pty Ltd (BCC) from Cape Coal. Upon completion of the transaction, Cabral was renamed Bowen Coking Coal Limited.
- At the time, BCC held joint venture interests in coking coal exploration and development projects in the northern and central Bowen Basin in Queensland including
 - 15% joint venture interest in the Lilyvale Project,
 - 5% joint venture interest in the Mackenzie Project,
 - an Option Agreement with Australian Pacific Coal Limited (ASX: AQC) to acquire the Mt Hillalong and Cooroorah Projects, and
 - an Option Agreement to acquire Comet Ridge Project from Acacia Coal Limited (ASX:AJC).
- On 2 May 2017, BCC exercised its option to purchase Comet Ridge for A\$0.35M and 17,391,304 shares, escrowed to 28 September 2018. At the time of the transaction, the total value of the purchase was A\$0.75M.
- On 1 September 2017, BCC exercised its option with AQC to purchase Mt Hillalong (EPC 1824) and Cooroorah (MDL 453), which required the issue of 54,347,826 in Bowen shares to an AQC subsidiary. The value of those shares at the time of issue was A\$1.25M.
- With the acquisition of BCC approved by Cabral shareholders, Cape Coal executives Gerhard Redelinghuys and James Agenbag joined the Cabral/Bowen board on 27 September 2017.
- On 28 September 2017, the acquisition of BCC was completed with the issue of 96 million shares (escrowed to 28 September 2019), and the issue of shares pursuant to the various asset acquisitions.
- On 4 December 2017. Bowen acquired Isaac River Coking Coal project from Vale controlled Aquilla Coal Pty Ltd for A\$0.2M.
- On 15 February 2018, Bowen paid Cape Coal 30 million shares for the right to buy Hillalong East (EPC 2141) and Carborough (EPC 1860) from Rio Tinto Exploration. Hillalong East is adjacent to and up dip from Bowen's Mt Hillalong Project. The acquisition from Rio Tinto required the payment to Rio of A\$0.1M cash, which was completed on 11 May 2018, with future payments of A\$1M in cash or shares at Bowen's election on grant of a mining lease, and payment of a 1.25% royalty on gross FOB sales. Rio had the right to buy back 51% at fair market value on completion of a Feasibility Study. On 4 September 2019, the buy back option was terminated for A\$0.1M, the royalty increased to 1.5%, and Rio was granted the right to receive 25% of any consideration received by Bowen upon the disposal or transfer of Carborough (EPC 1860) capped at A\$1M.
- On 21 May 2018, Comet Ridge (MLA 700005) was to be sold to Adamelia Group controlled Springsure Creek Coal Pty Ltd, but this agreement was terminated on 16 October 2018 due to failure to agree key commercial terms. The proposed acquisition price was A\$0.1M and a 1.25% net revenue royalty (ie free on rail) on the first 2.8Mt of saleable coal production. If no royalty is received within four years, Bowen was to have the option to buy back Comet Ridge for the exploration expenditure incurred, and Springsure was to grant Bowen 350Ktpa of priority access to its loading infrastructure. BCB was to retain a right to buy all Comet Ridge output for blending or trading purposes. While this transaction did not occur, it is an interesting insight to Bowen management's determination to extract value. The bulk of the value would have been in the royalty, and if that was not forthcoming, then the fall back would have allowed Bowen a low cost mine development opportunity.
- Between February 2019 and September 2019, Bowen's share price rose from A\$0.02/sh to A\$0.088/sh. The period started with the Cooroorah Resource upgrade to 158Mt on 12 February 2019, but was dominated with news from Isaac River (67% Resource increase 23 August 2019).
- On 7 October 2019, Bowen announced that Sumitomo Corporation subsidiary SACP Exploration would farm into the combined Hillalong project. Phase 1 would cost A\$2.5M and earn 10%, and Phase 2 would cost A\$5M and earn an additional 10%. This agreement was signed on 18 November 2019. Phase 1 was completed on 4 May 2020, and Sumitomo moved to 10% interest.

- On 21 November 2019, a marketing agreement with M Resources was announced and was finalised on 23 March 2020. The transaction provides a financing facility of A\$15M (interest rate 9%pa) for the development of Isaac River or any other Bowen projects. M Resources' Matt Latimore joined the Board of Bowen on 17 June 2020, following Bowen shareholder approval of the marketing agreement.
- On 24 June 2020, Bowen announced the acquisition of Broadmeadow East (ML 70257) for A\$1M plus a royalty of A\$1/t capped at A\$1.5M from Peabody (Burton Coal) Pty Ltd. The acquisition was completed on 30 September 2020.
- On 30 July 2021, Bowen was named as the preferred bidder for the Bluff Operation.
- On 4 August 2021, a binding term sheet for the acquisition of the Burton Mine and Lenton Project was announced. Bowen is to acquire a 90% interest in the assets from the New Hope Group for A\$20M upfront (of which A\$10M can be in Bowen shares at Bowen's election), plus milestone payments of up to A\$7.5M and a coal price sensitive royalty structure that will cost between A\$16M and A\$70M depending on the price of Premium Low Volatile Hard Coking Coal.
- On 1 September 2021, an in principle agreement was announced with coal producer Fitzroy that allows the transfer of 1Mtpa of Dalrymple Bay Coal Terminal port access to Bowen, and giving Bowen's Broadmeadow East project access to 1Mtpa of Carborough Downs coal processing, rail and port capacity in 2022, and first right of refusal on 1Mtpa of the same capacity from 2023 onwards. The agreement also allows Bowen to extend Broadmeadow East to the south into Fitzroy's adjacent tenement. The effect of this if completed will be to allow Broadmeadow East to start production in six months (ie March 2022) with minimal pre-production capital spending.
- Bluff was acquired in an option deal that was announced on 26 October 2021 and completed on 9 November 2021. Bowen paid a net A\$4.75M in shares, and is responsible for security bonds for rail and port capacity and an environmental bond, all totaling A\$9.4M. The vendor has a royalty which steps up at higher coal prices.

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FINANCIALS

Table 6 Profit and Loss

A\$M	Jun-21	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Revenue	0.0	119.7	312.4	341.5	529.0	538.7
Operating Costs	0.0	-88.8	-258.4	-294.1	-420.5	-401.8
Corporate OH	-3.1	-2.5	-2.0	-2.0	-2.0	-2.1
Exploration	0.0	0.0	0.0	0.0	0.0	0.0
Costs	-3.1	-91.3	-260.4	-296.1	-422.5	-403.9
EBITDA	-3.1	28.4	52.0	45.4	106.5	134.8
D&A	0.0	-2.6	-8.3	-10.3	-15.8	-16.1
EBIT	-3.2	25.8	43.7	35.1	90.7	118.7
Interest Costs	0.0	-1.1	-1.4	-1.9	-2.4	-1.2
PBT	-3.2	24.7	42.3	33.2	88.3	117.5
Tax Expense	1.0	-1.6	-12.7	-10.0	-26.5	-35.2
NPAT	-2.3	23.1	29.6	23.3	61.8	82.2
Shares on Issue	978	1379	1379	1400	1434	1434
Diluted Shares on Issue	1054	1434	1434	1434	1434	1434

Source: IIR estimates

Table 7 Sources of Earnings Before Interest and Tax

EBIT	Jun-21	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Burton/Lenton	0.0	0.0	0.0	9.9	37.0	88.3
Broadmeadow East	0.0	9.3	29.1	12.8	18.2	17.7
Hillalong	0.0	0.0	0.0	0.0	0.0	0.0
Isaac River	0.0	0.0	-0.6	3.6	10.2	8.8
Bluff	0.0	19.1	17.2	10.8	27.3	6.0
Corporate	-3.1	-2.5	-2.0	-2.0	-2.0	-2.1
Total	-3.1	25.8	43.7	35.1	90.7	118.7

Source: IIR estimates

The product mix includes Hard Coking Coal selling at around a 15% discount to the Premium Hard Coking Coal Benchmar. We believe PCI will be priced at the LVPCI Benchmark, and Thermal Coal is likely to be priced at the Newcastle (NEWC or AP4) Benchmark.

Volumes	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Coal Sales (Kt)					
HCC	80	347	449	1019	1577
SHCC	0	115	235	237	141
LVPCI	392	1031	1049	1078	177
Thermal	54	239	287	743	1305
Total	526	1732	2021	3076	3200
Benchmark Coal P	rices US\$/t				
HCC	235	171	177	182	183
SHCC	188	137	142	146	147
LVPCI	176	128	128	130	131
SSCC	164	120	111	110	111
Thermal	115	107	92	90	91
AUDUSD	0.76	0.75	0.75	0.75	0.75

Source: IIR estimates

At consensus the average long term thermal coal price of US\$71/t and a long term AUDUSD of 0.747, the resultant A\$95/t selling price is loss making for these mines. If Thermal Coal prices did in fact fall to that level, we expect Bowen would try to push more product into lower yielding but higher margin products. At the five year average, Bowen would break even on thermal sales.

Table 9 Cash Flow

A\$M	Jun-21	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Receipts From Customers	0.0	106.7	291.3	338.3	508.5	537.6
Payments to Suppliers	-2.7	-81.0	-247.2	-287.9	-418.5	-405.5
Cash Flow from Operations	-2.7	25.7	44.1	50.5	90.0	132.1
Interest Received	0.0	0.0	0.4	0.3	0.4	1.0
Financing Costs	0.0	-1.1	-1.8	-2.2	-2.7	-2.2
Taxes Paid	0.0	0.0	-1.6	-12.7	-10.0	-26.5
Net Cash from Operations	-2.7	24.6	41.1	35.9	77.7	104.5
PP&E	0.0	-22.2	-18.0	-50.3	-11.4	-11.1
Exploration	-3.1	0.0	0.0	0.0	0.0	0.0
Mine Development	0.0	-0.4	-0.9	-0.9	-0.9	-0.1
Acquisitions	0.0	-22.8	-7.5	0.0	0.0	0.0
Investing Activity	-3.4	-45.4	-26.4	-51.2	-12.4	-11.1
Issue of Equity	6.9	38.9	0.0	1.8	8.5	0.0
Net Borrowings	0.0	25.0	-10.0	18.0	-6.0	-6.0
Financing Activity	6.7	63.9	-10.0	19.8	2.5	-6.0
Net Increase in Cash	0.6	43.1	4.7	4.5	67.8	87.3
YE Cash on Hand	3.0	46.1	50.7	55.2	123.0	210.3

Source: IIR estimates

- The equity issued in FY22 comprises the two recently completed raisings, and the payment of 50% of the \$20M Burton/Lenton acquisition, as well as the \$4.75M for the Bluff acquisition.
- The debt raised comprised the existing and as yet undrawn A\$15M facility from M Resources or some other source, as well as an additional A\$10M draw against the Bluff restart. In our model, that is repaid by December 2022, due to the strong coal prices.
- Subject to the levels of coal prices in FY22 and FY23, we have assumed A\$18M of debt drawn to finance Burton working capital. This facility is unnecessary on our Base Case coal prices but would be needed if low coal prices were assumed.

Table 10 Capital expenditures

A\$M	Jun-21	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Burton/Lenton	0.0	0.0	0.0	52.2	13.5	11.3
Broadmeadow East	0.0	5.0	3.0	0.0	0.0	0.0
Hillalong	0.0	0.0	0.0	0.0	0.0	0.0
Isaac River	0.0	0.0	17.0	0.0	0.0	0.0
Bluff	0.0	17.6	-1.1	-1.1	-1.1	-0.1
Total	0.0	22.6	18.9	51.2	12.4	11.1

Source: IIR estimates

Table 11 Run of Mine coal production by operation

'000 tonnes	Jun-21	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Coal Processed (ROM	l kt)					
Broadmeadow	0	200	846	750	820	800
Burton Lenton	0	0	0	400	2400	3600
Hillalong	0	0	0	0	0	0
Burton CHPP	0	200	846	1150	3220	4400
Isaac River	0	0	250	510	505	670
Bluff	0	450	1100	1050	1100	100
Total	0	650	2196	2710	4825	5170
Source: IIR estimates						

Table 12 Balance Sheet

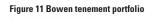
A\$M	Jun-21	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Cash	3.0	46.1	50.7	55.2	123.0	210.3
Receivables	0.2	13.1	34.2	37.4	58.0	59.0
Inventories	0.0	7.5	21.4	24.3	34.7	33.2
Prepaid Costs	0.0	0.0	0.0	0.0	0.0	0.0
Current Tax Assets	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
Total Current Assets	3.2	66.7	106.4	116.9	215.7	302.5
Financial Assets	0.0	0.0	0.0	0.0	0.0	0.0
PP&E	0.0	42.3	59.5	99.5	95.1	90.1
Expln & Mine Devt	12.6	12.5	13.4	14.3	15.2	15.3
Deferred Tax Asset	0.0	1.0	1.0	1.0	1.0	1.0
Total Non Current Assets	13.1	33.5	44.1	85.0	81.5	76.5
Total Assets	16.3	122.9	180.7	232.2	327.5	409.3
Trade Payables	0.9	18.7	45.8	56.9	71.3	68.2
Prepaid Revenue	0.0	0.0	0.0	0.0	0.0	0.0
Borrowings	0.1	25.1	15.1	33.1	27.1	21.1
Current Tax Liabilities	0.0	1.6	12.7	10.0	26.5	35.2
Deferred Tax Liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Provisions	0.2	0.0	0.0	0.0	0.0	0.0
Total Liabilities	1.3	45.5	73.7	100.1	125.0	124.7
Net Assets	14.9	77.4	107.1	132.1	202.4	284.1
Issued Capital	63.9	102.8	102.8	104.5	113.0	113.0
Reserves	0.8	0.8	0.8	0.8	0.8	0.8
Retained Profits	-49.7	-26.7	3.0	26.2	88.1	170.3
Shareholder Equity	14.9	76.9	106.5	131.5	201.9	284.1

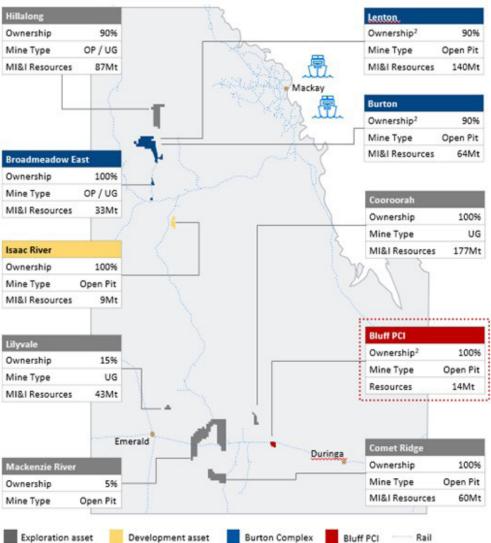
Source: IIR estimates

The high cash levels at June 2022 are a function of the operating cash flow in the six months to June 2022, where Bluff and Broadmeadow produce an operating cash flow of \$24M. This is due to the high coal prices, and assuming a solid initial operating performance. The A\$25M of debt is required to start the two mines and pay for environmental deposits, in order to start production.

On consensus assumptions, our assumed total debt peaks at June 2024 at A\$33M, at a debt/equity ratio of 25%. That calculation does not net the cash off against the debt. At higher coal prices, the retained equity is higher, and cash is higher, resulting in a much stronger balance sheet.

PROJECTS





Source: BCB release Acquisition of option to purchase Bluff 26 October 2020

- Bowen has a large portfolio of projects in likely order of commencement of production:
 - Broadmeadow East 100%
 - Bluff 100%
 - Burton Downs/Lenton 90%
 - Isaac River 100%
 - Hillalong (90% with Sumitomo earning in to take Bowen to 80%)
 - Cooroorah 100%
 - Comet Ridge 100%
 - Lilyvale 15% (with Stanmore Coal)
 - McKenzie 5% (With Stanmore Coal)

Resources and Reserves

Table 13 Resources and Reserves Summary – All projects

Resources		Proj	ject		Bowen Share
Mine	Measured	Indicated	Inferred	Total	Total
Burton	36	18	11	64	58
Lenton	60	50	30	140	126
Subtotal	96	68	41	204	184
Broadmeadow East	7	4	23	34	34
Hillalong		47	40	87	70
Total (Burton CHPP)	103	119	104	325	287
Bluff	0	11.2	2.3	13.5	13.5
Isaac River	22.0	2.5	0.4	8.7	8.7
Cooroorah		96	81	177	177
Comet Ridge	8	9	43	60	60
Lilyvale			33	33	5
Total All Projects	132	238	264	617	551
Reserves	Proven	Probable		Total	Total
Burton	14.0	2.0		16.0	14.4
Lenton	11.0	3.0		14.0	12.6
Total	25.0	5.0		30.0	27.0
Mine Plan				Total	Total
Broadmeadow East				5.0	5.0
Isaac River				2.7	2.7
Bluff				5.5	5.5
Total				13.2	13.2

Source: BCB releases: Burton/Lenton on 4 August 2021, Isaac River and Broadmeadow East on 28 July 2021, Cooroorah on 12 February 2019, Comet Ridge and Lilyvale from Prospectus issued on 3 August 2017, Bluff on 26 October 2021.

- Burton, Lenton, Broadmeadow East, and Hillalong have been grouped together because they are feed sources for the Burton Coal Handling and Processing Plant and will use the related infrastructure as a channel to market.
- The others will seek to negotiate processing deals with existing Coal Handling and Preparation Plants. Bowen has an arrangement with Fitzroy's Carborough Downs CHPP for 1Mtpa subject to available capacity, and this is currently intended as a channel to market for Broadmeadow East until the Burton plant is back in operation. Once Broadmeadow starts going to Burton, the Fitzroy 1mtpa, if still available, could be used for Isaac River.
- Bluff was being processed through the Cook Colliery CHPP when operated by Carabella in 2020, and Bowen has an agreement to do the same.

Required development approvals

- Broadmeadow East Requires an Environmental Application Amendment which has been lodged with the statutory response time by the end of September 2021, but no update at time of writing.
- Bluff is approved for mining up to 1.8Mtpa. Transfer of ownership will have to be approved. The company is finalising access to rail and port capacity, and will need a permit for road transport to Cook for 1.2Mtpa.
- Isaac River requires a Mining Lease and associated EA.
- Burton has a Mining Lease, but requires a Final Void Assessment, which is likely to take six months to obtain.
- Lenton fully approved except for EPBC approval, which is a Federal approval, related mainly to water and matters of environmental significance.

Coal product specifications

Table 14 Coal product specification

	Broadn	neadow	Isaac R.	Burton	Bluff	Hillalong	Cooroorah
	Low Yield	High Yield		Lenton			
Coal Product	нсс	HCC	нсс	HCC	LVPCI	HCC	HCC
Ash	7.5%	9.2%	8-10%	7.8-9.0%	10.0%	8.5%	3.4%
CSN	7.50	4.50	4-7.50	5-7.5		7-7.5	8
Fluidity ddpm	50	35		20-300		361	
RV max	1.13	1.13		1.1-1.22		0.99	1.57
Volatile Matter	24.2%	23.1%		22-25%		28.8%	18.5%
Fixed Carbon				64.5-67.5%			76.7%
Total Sulphur				0.37-0.42%		0.4%	0.43%
Phosphorus	0.1%	0.1%		0.0%		0.0%	0.02%
Energy kcal/kg adb							
Yield	37.0%	58.0%	45-60%	30-36%		66.0%	40-45%
Coal Product	Thermal	Thermal	PCI	Thermal	LVPCI	Thermal	PCI
Ash	16.6%	17.5%	10.5%	15.5-17.5%	8-9%	16.5%	9.7%
Volatile Matter	21.2%	21.2%		18.5-22.5%	13-14%	24.3%	17.1%
Fixed Carbon				59.8-62.3%	75-77%		72%
Total Sulphur	0.4%	0.4%		0.38-0.4%	<0.65%	0.3%	0.38%
Energy kcal/kg adb	6703	6596		6175-6210	7750-7850	6730	7600
Ash Fusion Temp C	1358	1362					
Yield	40%	28%	10-35%	17-46%	84%	21%	45-50%

Source: BCB releases. Broadmeadow East 12 September 2021 Tables 4 and 5, Isaac River 12 September 2019, Burton Lenton 4 August 2021 p27, Bluff 26 October 2021 Table 8.1, Hillalong 28 August 2020 p2, Cooroorah 3 April 2019 p4. HCC= Hard Coking Coal

- Our modelling assumes Hard Coking Coal price discounts for Burton/Lenton, Broadmeadow, Isaac River and Hillalong of 15% to the benchmark Premium Hard Coking Coal.
- Selling prices for Thermal Coal are a no discount to the Newcastle Index, with higher calorific value being offset by higher than specification ash. PCI is priced at benchmark, which we assume to be around 67% of the Premium Hard Coking Coal price.

Table 15 Operating summary

	Broad- meadow	Isaac River	Burton	Lenton	Bluff
Life of Mine yrs	5-7	4-5	10-11	9-11	4-6
Production ROM Mtpa	.0.8-1.1	0.405	2.0	1.8	1.1
Strip Ratio (incl Auger) BCM:t	7.0	8.6	6.7	7.5	5.5
Coal Yield	69%	81%	53%	76%	84%
Prodn Saleable Coal Mtpa	0.55-0.83	0.32-0.49	1.1	1.4	0.9
Cost A\$/t FOB excl royalties	100-110	113-122	100-114		120-137
Initial Capex A\$M	6-8	14-17	39.0	27.5	7.8

Sources: BCB releases for Broadmeadow East and Isaac River on 28 July 2021, Burton Lenton on 4 August 2021, and Bluff 26 October 2021

 Our valuation model assumes costs towards the top end of the cost range excluding Bluff, where we assume a 3.5 year life and a cost of A\$120/t FOB before royalties.

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Table 16 Summary of near to production assets

Project	Burton	Lenton	Broad- meadow	Isaac River	Bluff	Hillalong
Bowen Interest	90.0%	90.0%	100.0%	100.0%	100.0%	90% to 80%
Other Owners	Formosa Plastic	Formosa Plastic				Sumitomo earning anothe 10% for A\$5N
Obligations	Royalty on BCB's 90% share of A\$0.55/t capped at \$16M, A\$1.65/t in each quarter (see Lenton)	where HCC over US\$160/t capped at \$24M, and A\$3.30/t for prices over US\$190/t capped at A\$30M.	Land compensation A\$0.5M, Royalty A\$1/t capped at A\$1.5M	Land Compensation, haul road maintenance	1Royalty A\$2/t <u\$120 cap<br="" t="">at A\$10, A\$5/t >U\$\$150, A\$5/t >U\$200/t</u\$120>	1.5% revenue royalty + A\$1N on granted mining lease to Rio Tinto Exploration
Location	120Km WSW of MacKay Old. Ellensfield South (ES) Plum Tree (PN) & Isaac deposits 5-7Km south of Burton Plant	120Km WSW of MacKay Qld. 7-8Km west of Burton Wash Plant	25Km NE of Moranbah and 20Km south of Burton Wash Plant, and adjacent to Broadlea and Broadmeadow West Pits	27Km east of Moranbah and south of the Goonyella tail corridor, making access to Burton Wash Plant impractical	20Km east of the town of Blackwater and south of the Goonyella rail corridor, making access to Burton Wash Plant impractical	5km east of Glenden
Tenements	ML 70109, 70260	ML 70337, ML700053, ML700054,	ML 70257	MDL 444, EPC830	ML 80194	EPC 1824, EPC 2141
Seams	Leichardt and Vermont	Burton Rider, Leichardt and Vermont	Leichardt	Leichardt and Vermont	Pollux	Elphinstone and Hynds
Coking Yield 9.8% ash	39%	30%	40-45% at CSN 4	49%		
Low Volatile PCI 10.5% ash				32%	84%	
Thermal Yield 14% ash	26%	45%	20% with 29ML/kg			
Thermal Coal Energy kcal/kg	6175-6210	6175-6210	6500			
Coal Processing	Burton Coal Handling Plant 5.5Mtpa ROM capacity	Burton Coal Handling Plant 5.5Mtpa ROM capacity	Tolling at Isaac Plains or Carborough Downs initially, then Burton	Carborough Downs Wash Plant	Cook Colliery Wash Plant	Potentially Burton Plant
Loadout	Trucked 36Km on haul road to Mallawa Loadout	Trucked 36Km on haul road to Mallawa Loadout	Trucked 36Km on haul road to Mallawa Loadout	Carborough Downs	Cook Colliery	
Rail Corridor	Goonyella Line 150Km	Goonyella Line 150Km	Goonyella Line 150Km	Goonyella Line 150Km	Blackwater Line 260Km	
Port	Dalrymple Bay	Dalrymple Bay	Dalrymple Bay	Dalrymple Bay	Gladstone	
Mine Type	Open Pit	Open Pit	Open Pit	Open Pit	Open Pit	Open Pit
As at:	2-Aug-21	2-Aug-21	24-Jun-20	23-Aug-19	29 Oct 2021	9-Jun-20
Resource Mt	64	140	33	8.7	13.5	43
Reserve OC Mt	16	14			5.5	
Life	10-12 years	9-11 years	5-7 years	4-5 years	5 years	
Strip Ratio BCM:t	6.7	7.5	7.0	8.6	12.8	
ROM Mtpa	2.0	1.8	0.8-1.1	0.4-0.6	1.1	
Yield	53%	76%	69%	81%	84%	
Product Mtpa	1.1	1.4	0.55-0.83	0.32-0.6	0.9	
OpEx A\$/t FOB	100-114	100-110	113-122	120-137		
Capex A\$M	39.05	6-8	14-17	7.8		

Source: BCB releases

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BROADMEADOW EAST PROJECT

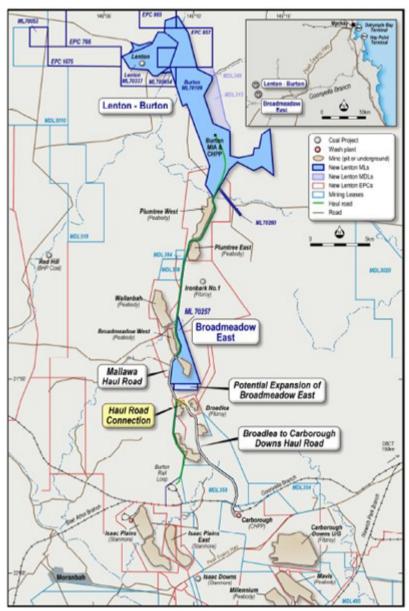
Summary

Broadmeadow East is likely to be one of the first two projects in Bowen's portfolio to commence production. Timing depends on receipt of final regulatory approvals, which are expected in the September 2021 quarter. While funding has to be formally arranged, the A\$15M facility on offer from M Resources will more than cover the expected A\$6-8M initial capex. If approvals are received as expected, and if the Fitzroy Agreement is concluded, Broadmeadow East could be in production in the June 2022 quarter.

Location

Broadmeadow East is covered by ML 70257 and is located about 25km northeast of the township of Moranbah, within the Central Bowen Basin in Queensland. It is around 15Km by existing haul road north of the Carborough Downs Coal Handling and Processing Plant, where its production will go initially, and around 20Km south of Bowen's Burton Coal Handling and Processing Plant, which will be the longer term processing solution. Coal from Burton is trucked 36Km south past Broadmeadow East to the Burton rail loop marked in Fig 12.





Source: BCB release 1 September 2021

Acquisition detail

Cash consideration of A\$1M paid 30 September 2020;

- Royalty payable of \$1/t on all coal produced and sold from ML 70257, to a maximum of 1.5Mt, ie A\$1.5M;
- Assumption of environmental rehabilitation obligations; and
- \$500,000 cash consideration for land access compensation, payable only upon site works commencing or the renewal of the ML, whichever occurs first.
- As part of the original transaction, the Company had secured access to the New Lenton Joint Venture CHPP and associated Train Load Out. Bowen now own those assets. This has been augmented by a Heads of Agreement with Fitzroy to use 1Mtpa of Carborough Downs processing and loadout capacity, subject to the formal completion of that agreement.

Fitzroy infrastructure agreement (1 September 2021)

Conditions Precedent:

- Bowen completes the acquisition of New Hope's stake in the New Lenton Joint Venture.
- The Parties obtain approval from the New Lenton Joint Venture.
- The parties entering into formal transaction documents, including tolling and access agreements.

Fitzroy will provide Bowen:

- Access to its infrastructure at the neighbouring Broadlea Mine.
- Access to the Broadlea haul road and Broadlea bridge to cross the Goonyella rail line.
- Short term access to the Carborough Downs CHPP of between 0.75Mt and 1Mt in 2022, including Port and Rail Access and CHPP Services.
- Subject to availability, a first right to a further 1Mtpa access to CHPP services from 2023 onwards.
- The permanent transfer of 1Mtpa Port capacity at DBCT.
- Access to an area abutting the open pit of the Broadmeadow East project which could potentially provide an extension to the Broadmeadow East open pit, subject to a royalty.

Bowen will provide to Fitzroy:

- Access of up to 1Mtpa on the Mallawa Haul Road.
- Access to surplus capacity at the Kerlong accommodation village, Burton office and storage area.
- Subject to availability, access to water from the Teviot dam or water stored in old voids.
- Access to telecommunication infrastructure.
- A right to mine under the Mallawa Haul Road without causing any subsidence. Bowen will be remunerated with a royalty for every tonne mined from that area to match the royalty agreement on the Broadmeadow East extension.

Geology

- The Project area lies within the Permo-Triassic Bowen Basin. Coal seams occur within the Rangal Coal Measures and underlying Fort Cooper Coal Measures which are Late Permian in age.
- At Broadmeadow East, the only economic seams occur in the Rangal Coal Measures which overlie the Fort Cooper Coal Measures. The Rangal Coal Measures are approximately 90m thick and contain five seams in descending order: the Burton Rider seam, the Leichhardt seam, the Upper Vermont seam, the Middle Vermont seam and the Lower Vermont seam. Only the Leichhardt seam is currently determined to be commercially viable in the Broadmeadow East area. The seams all crop in an elongated strip, broadly striking north northwest
- The coal resources of the Project are found within the Leichhardt seam of the Rangal Coal Measures ("RCM"). The seam subcrops in the central part of the Mining Lease and generally dips at 8-10 degrees to the east. It is very consistent in thickness (3.5m to 4.2m) with limited structural features. Base of weathering is generally between 13m and 21m with some areas as shallow as 10m, which typically favours low strip ratio, open cut mining.

LIMN simulation shows an average of 40-45% yield for the primary coking product for a nominal 9.8% ash and with a Crucible Swelling Number ("CSN") of 4, and up to 20% yield for the secondary thermal product for a nominal 14% ash product with a specific energy of 29 MJ/kg on an air dried basis.

Table 17 Broadmeadow East Resources

Depth	Seam	Measured	Indicated	Inferred	Total
<100m	Leichardt	6.4	1.9	3.0	11.3
>100m	Leichardt	0.1	2.2	20.0	22.3
	Total	6.5	4.1	23.0	33.6

Source: BCB release 28 July 2021

Table 18 Broadmeadow East financial model (100% BCB)

Broadmeadow East	LOM	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Physicals						
Overburden K BCM	0	1500	5265	5630	5585	5625
OP Production ROM Kt	34040	200	735	655	715	675
Auger Mining ROM Kt	4320	0	111	95	105	125
Coal Mined ROM Kt	756	200	846	750	820	800
Coal Processed ROM Kt	5076	200	846	750	820	800
Product Mt	5076	134	586	520	560	555
HCC	3483	80	347	305	330	330
Thermal	2061	54	239	215	230	225
Costs						
Cash Cost A\$/t product	111	110	103	114	111	114
Total Cash Cost A\$M	387	14.7	60.5	59.0	62.2	63.1
Revenue						
Sales Clean Mt	1421	134	586	520	560	555
НСС	0	80	347	305	330	330
Thermal	2061	54	239	215	230	225
Benchmark Prices US\$/t						
НСС		229	180	172	182	183
Thermal		112	114	93	90	91
Realised Prices US\$/t						
НСС		191	153	145	154	156
Thermal		119	115	93	90	91
AUDUSD		0.76	0.75	0.75	0.75	0.75
Revenue A\$M						
НСС	0	20.2	70.9	59.1	67.9	68.4
Thermal	427	8.5	36.5	26.6	27.7	27.3
Total	183	28.7	107.4	85.7	95.6	95.7
Royalty A\$M	610	4.4	16.5	12.7	13.9	13.7
Financials A\$M						
Revenue	0.0	28.7	107.4	85.7	95.6	95.7
Cost	610.3	-19.2	-77.0	-71.8	-76.1	-76.8
EBITDA	-476.6	9.6	30.4	14.0	19.5	19.0
D&A	133.7	-0.3	-1.3	-1.2	-1.3	-1.3
EBIT	-8.0	9.3	29.1	12.8	18.2	17.7
Тах	125.7	-2.8	-8.7	-3.8	-5.5	-5.3
NPAT	-37.7	6.5	20.3	8.9	12.8	12.4
Capex A\$M	0.0	5.0	3.0	0.0	0.0	0.0
Free Cash Flow After Tax	8.0	1.8	18.7	10.1	14.0	13.7
Post Tax NPV		68.0	54.0	47.9	37.3	26.1

Source: BCB release 28 July 2021, IIR estimates

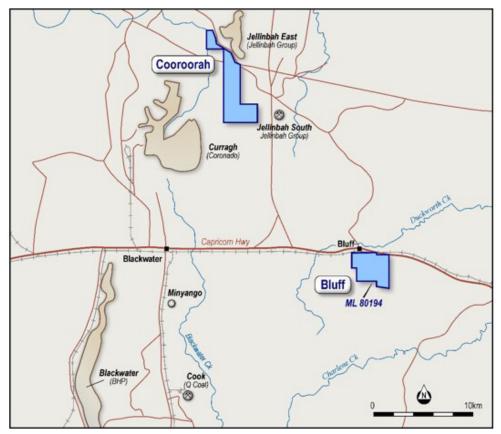
BLUFF

Summary

Bluff is the most production ready asset in Bowen's portfolio and is likely to be a critical source of short term operating cash flow. The company estimates the capital required to commence operations is A\$7.825M, plus infrastructure and rehabilitation security bonds totaling A\$9.9M, a total of A\$17.7M. Production is expected to start in the March quarter 2022. In our view, company is likely to borrow around \$10M for the security deposits and fund the balance from cash resources.

Location

Figure 13 Bluff location in central Queensland



Source: BCB presentation on acquisition of option to purchase Bluff 26 October 2021

 Bluff is located 20Km east of the town of Blackwater, on the existing rail line 260Km to the Port of Gladstone.

Acquisition detail

- On 23 May 2021. Bowen was chosen as the Preferred Bidder for the Bluff asset, and entered into a term sheet with Carabella Resources Pty Ltd (receivers and managers appointed/Controller appointed/In liquidation) pursuant to which it has paid a \$250,000 deposit.
- On 26 October 2021, Bowen announced that it had acquired an option to purchase Bluff for A\$5M, less the deposit of \$0.25M. Bowen exercised the option in early November 2021, paying the A\$4.75M by issuing 27.9M Bowen shares.
- As part of the acquisition, Bowen must pay a royalty which varies with the coking coal price:
 - A\$2/t on all sales if the Premium Hard Coking Coal price is greater than US\$120/t capped at A\$10M, plus
 - A\$5/t on all coal sales if the Premium Hard Coking Coal price is greater than US\$150/t, plus
 - A\$5/t on all coal sales if the Premium Hard Coking Coal price is greater than US\$200/t



Project history

- The Bluff PCI Mine assets include a granted mining lease (ML80194) and approved Environmental Authority to mine up to 1.8Mtpa of high quality Ultra Low Volatile PCI coal, by open pit from the Aries, Castor, Pollux and Orion seams of the Rangal Coal Measures
- Coal production commenced in Q1 2019 and 1.4Mt was mined up to closure in November 2020.
- Mine output was hauled by road trucks to the nearby Cook Colliery, where it was washed and loaded under a toll washing agreement. Product coal was railed to the RG Tanna coal terminal at the Port of Gladstone, from where it was exported to Asia, to Japanese and Korean steelmakers. Bowen has an agreement to process coal through Cook Colliery.
- Shortly after operations commenced, metallurgical coal prices fell and the previous owners went into voluntary administration in November 2020.
- The Mine acquisition also includes ownership of 1931 ha of grazing land (426 ha within the Mining Lease) on two adjacent Grazing Homestead Perpetual leases.

Operating cost depends on mine life

Table 19 Bluff can operate for 3-4years at A\$120/t FOB cost or 5-6 years at A\$137/t FOB cost

	Low cost short Life at US\$115/t	High cost long life at US\$115/t	High cost long life at US\$150/t
Waste MBCM	36.7	70.2	70.2 (p16)
LOM ROM Mt Mtpa	3.8	5.5	5.5 (p16)
Recovery	87%	87%	87%(p16)
LOM Product Mt	3.2	4.6	4.6 (p16)
Assumptions			
Scenario Price US\$/t (release p11)	115	115	150
AUDUSD (release p11)	0.75	0.75	0.75
Sale Price A\$/t	153	153	200
Vendor Royalty Tranche 1 A\$/t (release p2)	2	2	2
Vendor Royalty Tranche 2 A\$/t (release p2)	0	0	5
State Royalty %	12.5%	12.5%	12.5%
Operating Costs A\$/t saleable FOB (release p17)	120	137	137
Sustaining A\$/t Release p16)	1	1	1
LOM P&L A\$M			
Revenue	483	706	921
State Royalty	-60	-88	-115
Vendor Royalty	-6	-9	-32
Costs to FOB	-378	-631	-631
EBITDA	38	-22	143
Sustaining Capex	-3	-5	-5
Acquisition Payment	-5	-5	-5
Pre Tax Cash Flow	30	-32	133

Source: BCB release 30 July 2021, where a page reference to the release is indicated, and the rest of the table is estimated by IIR

- The Bluff mine plan provided by Bowen in the Option announcement on 26 October 2021 provided a detailed mine plan to produce 4.5Mt over 5 years at a cost of A\$137/t. This is one of two scenarios assessed by Bowen, and maximises value at high prices (ie current prices). However, at the 5 year average price we are assuming for our more conservative valuation, the high cost longer life scenario loses money (Life of Mine EBITDA -A\$22M).
- We have used the pieces of detail in the announcement to estimate the lower cost shorter life scenario. Specifically, we have had to estimate the ROM coal production and waste movement, using the unit operating costs provided on page 17 to reconcile back to the cost if A\$120/t FOB excluding royalties provided by Bowen. This lower cost scenario provides a positive cash flow under our Base Case price assumption.
- If the PCI coal price remains high enough to justify the longer mine life, then the company can choose to push back additional overburden and extend the mine life. On our assumptions, the extra 1.45Mt of saleable coal comes at a marginal cost of A\$174/t (or US\$130/t FOB excluding royalties at an AUDUSD rate of 0.75).

- Fastmarkets' index for PCI, low-vol, FOB DBCT (ie Queensland ports) was \$280.74 per dmt on 15 October 2021. Source: https://www.fastmarkets.com/article/4012010/cokingcoal-daily-pci-prices-up-in-cfr-fob-market-amid-supply-tightness
- The limit on production rate is the 1.2Mtpa ROM limit of trucking on the road to Cook Colliery coal handling and process plant. The mine has approval to produce up to 1.8Mtpa ROM.

Geology

Table 20 Bluff Resources in 2013– Mineable Reserves were 11Mt, from which 1.4Mt has been mined

Depth	Measured Mt	Indicated Mt	Inferred Mt	Total Mt
<100m	0	2.64	0.12	2.76
100-150m	0	2.96	0.32	3.28
150-200m	0	3.29	0.65	3.94
200-250m	0	2.43	1.24	3.67
Total	0	11.3	2.3	13.6

Source: BCB release 26 October 2021

Table 21 Bluff financial model (100% BCB)

Bluff	LOM	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Physicals						
Overburden K BCM	36700	6300	12300	10200	7900	0
Coal Mined ROM Kt	3800	450	1100	1050	1100	100
Coal Processed ROM Kt	3800	450	1100	1050	1100	100
Yield	0.0%	87.0%	86.0%	84.0%	83.0%	83.0%
LVPCI Product Mt	3216	392	946	883	913	83
Operating Cost						
Cash Cost A\$/t Product	122.03	140.71	128.03	123.54	111.14	69.47
Total Cash Cost A\$M	392	55	121	109	101	6
Revenue						
Sales LVPCI Mt	3216	392	946	883	913	83
Benchmark Prices US\$/t	0	176	128	128	130	131
AUDUSD	0.00	0.76	0.75	0.75	0.75	0.75
Realised Prices US\$/t	0	175	135	126	130	131
Revenue A\$M	581.7	91.0	170.0	147.8	158.5	14.5
Royalties and Levies						
State Royalty A\$M	87.3	13.6	25.5	22.2	23.8	2.2
Vendor Royalty A\$M	2.4	0.9	0.5	0.5	0.5	0.0
Financials						
Revenue	581.7	91.0	170.0	147.8	158.5	14.5
Cost	-482.3	-69.6	-147.2	-131.7	-125.8	-8.0
EBITDA	99.4	21.4	22.8	16.1	32.7	6.5
D&A	-19.0	-2.3	-5.6	-5.2	-5.4	-0.5
EBIT	80.4	19.1	17.2	10.8	27.3	6.0
Tax	-24.1	-5.7	-5.2	-3.3	-8.2	-1.8
NPAT	56.3	13.3	12.1	7.6	19.1	4.2
Sustaining Capex A\$M	3.2	0.4	0.9	0.9	0.9	0.1
Salvage Value A\$M	0.0	0.0	0.0	0.0	0.0	0.0
Rehabilitation A\$M	3.2	9.4	-2.0	-1.9	-2.1	-0.2
Pre Prodn Capex A\$M	7.8	7.8	0.0	0.0	0.0	0.0
		-				
Free Cash Pre tax	85.2	3.8	23.9	17.1	33.8	6.6
Pre Tax NPV		70.7	51.5	38.1	6.5	0.0
Free Cash Flow After Tax	61.0	-2.0	18.7	13.9	25.6	4.8
Post Tax NPV		54.8	39.7	28.7	4.7	0.0

Source: BCB release 26 October 2021, IIR estimates

The negative capex for rehabilitation is due to the payment of the \$9.4M deposit as a capital item. The operating costs include a charge for rehabilitation, and as that rehabilitation is spent, the deposit is assumed to be drawn down, hence the negative rehabilitation charge in the capital spending.

Notes from previous owner

- An assessment of historical data available for Carabella's EPC 2121 (Bluff) indicated that there was an extension of the Jellinbah fault system through the tenement, which created the prospect of bringing seams close to the surface. Carabella identified the Bluff deposit using geophysical surveys and scout drilling in the area during the first half of 2012.
- Just prior to being taken over, Carabella Resources Limited reported Reserves for Bluff of 11Mt mineable and 9.0Mt marketable (release 31 January 2014), implying a recovery of 82%, which is consistent with the 85% indicated in the Concept Study of 16 May 2013 and the 84% in Bowen's release of 26 October 2021.
- There was an exploration target in 2013 of an additional 5-33Mt of underground potential.

BURTON MINE AND LENTON PROJECT

Summary

- The Burton Coal Handling and Preparation Plant (CHPP) comprises two modules with a combined capacity of 5.5Mtpa, with a replacement value of A\$300M. This plant and related train loading infrastructure will form the core production assets for Bowen in the short to medium term, providing infrastructure and channel to market for coal from Burton, Lenton, Broadmeadow East, Hillalong and possibly Carborough.
- The initial capital to restart mining operations from one of the two CHPP modules is A\$39.0M, with the cost of refurbishing the second module of A\$18M plus additional security deposits and infrastructure of A\$9.5M totalling A\$66.5M for a complete restart (BCB release 4 August 2021 p6)
- The company's indicative timetable has the first coal from Burton from January 2023, and Lenton around October 2024. In the financial model used in this report, we assume Burton construction starts in mid 2023 and first production in Mid 2024. We have delayed the project start to allow cash build from Broadmeadow East, Bluff and Isaac River.
- Bowen has flexibility when it comes to funding the restart of Burton. The coal price might provide all the capital. Otherwise, if equity and debt markets are supportive, it will be able to raise the capital and start the refurbishment earlier. However, if capital markets are not supportive, Bowen can develop Broadmeadow and Bluff from existing cash and credit lines, and delay further developments until sufficient cash flow has been accumulated.
- The pace of capital accumulation to fund development will be determined by coal price levels.

Location (refer Figure 12)

- The CHPP is located approximately 20km north of Broadmeadow East. The Coal Handling and Preparation Plant is currently on care and maintenance, however the re-commissioning process is well understood. The Train Load Out is 36Km by truck south of the CHPP, and links into the Goonyella to Hay Point railway line, about 200 km by rail from the Dalrymple Bay Coal Terminal.
- Both the Burton CHPP and Train Load Out are owned by the New Lenton Joint Venture (Previously New Hope Corporation Ltd, becoming Bowen 90% & Formosa Plastics Corporation 10%). These assets are being acquired from Peabody along with adjoining mining leases and associated infrastructure as part of the proposed development of their New Lenton Project.
- Peabody retains access rights to the CHPP and Train Load Out.

Acquisition detail

- On 4 August 2021, Bowen announced the agreement to purchase the New Hope Group's 90% interest in the New Lenton Joint Venture, which owns 100% of the Burton and Lenton operations for A\$20M (50% payable in shares), up to A\$7.5M in milestone payments, and royalties comprising:
 - A\$0.55/t capped at \$16M,
 - A\$1.65/t in each quarter where HCC over US\$160/t capped at \$24M, and



- A\$3.30/t for prices over US\$190/t capped at A\$30M
- Previously, the New Lenton Joint Venture (then 90% New Hope Group, 10% Formosa Plastics) had purchased the Burton operation from Peabody for A\$14.4M on 27 November 2017. The Joint Venture had owned Lenton for some time.

Table 22 Burton/Lenton Financial model (100% basis of which BCB share is 90%)

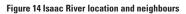
Deuter // antar 1000/	1.014	I 22	J 22	Jun 24	J 25	I 00
Burton/Lenton 100%	LOM	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Physicals	220000	0	0	0150	10000	22100
Overburden K BCM	238800	0	0	6150	16900	23100
OP Production ROM Kt	32900	0	0	400	2400	3600
High Wall Mining ROM Kt	840	0	0	0	0	0
Coal Mined ROM Kt Coal Processed ROM Kt	33740	0	0	400	2400	3600
Yield	33740	0	U	400	2400	3600
HCC		0.0%	0.0%	40.0%	31.9%	31.9%
Thermal		0.0%	0.0%	20.0%	23.8%	33.3%
Product Clean Mt	21307	0.0 %	0.0 %	20.0 %	1335	2350
HCC	11164	0	0	160	765	1150
Thermal	10144	0	0	80	570	1200
Operating Costs	10144	0	0	00	570	1200
Total Cash Cost A\$/t clean	102	107	107	93	105	89
Total Cash Cost A\$M	2164	0.0	0.0	22.3	140.2	210.0
Revenue	2107	0.0	0.0	22.0	170.2	210.0
Sales Clean Mt	21307	0	0	240	1335	2350
HCC	11164	0	0	160	765	1150
Thermal	10144	0	0	80	570	1200
Benchmark Prices US\$/t	IUTT	0	Ū	00	0/0	1200
HCC		235	171	177	182	183
Thermal		115	107	92	90	91
Realised Prices US\$/t						
НСС		191	139	147	148	149
Thermal		115	107	90	90	91
AUDUSD		0.76	0.75	0.75	0.75	0.75
Revenue A\$M						
HCC	2283	0.0	0.0	31.4	150.9	228.8
Thermal	1265	0.0	0.0	9.6	68.6	145.7
Other (CHPP Profit on Broadmeadow)	24	0.0	0.0	0.0	3.1	4.0
Total	3572	0.0	0.0	41.0	222.7	378.5
Royalty A\$M		0.0	0.0	0.0	0.0	0.0
HCC	342	0.0	0.0	4.7	22.6	34.3
Thermal	158	0.0	0.0	1.2	8.6	18.2
New Hope	61	0.0	0.0	0.5	2.9	5.2
Financials						
Revenue	3572.1	0.0	0.0	41.0	222.7	378.5
Cost	-2727.2	0.0	0.0	-28.7	-174.4	-267.8
EBITDA	844.9	0.0	0.0	12.3	48.2	110.7
D&A	-113.9	0.0	0.0	-1.3	-7.1	-12.6
EBIT	731.1	0.0	0.0	11.0	41.1	98.1
Tax	-219.3	0.0	0.0	-3.3	-12.3	-29.4
NPAT	511.7	0.0	0.0	7.7	28.8	68.7
Capex A%M	85.5	0.0	0.0	58.0	15.0	12.5
Free Cash Flow After Tax	540.1	0.0	0.0	-49.1	20.9	68.7
Post Tax NPV		313.0	331.4	408.2	418.1	381.3

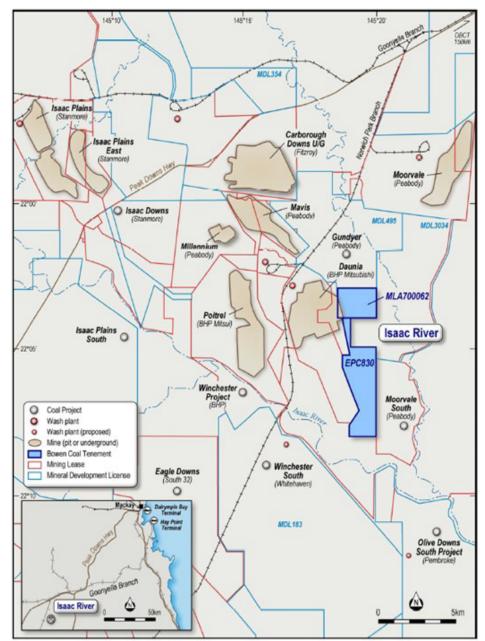
Source: BCB release 4 August 2021, IIR estimates

ISAAC RIVER PROJECT

Location

- Located immediately east of BHP Mitsubishi Alliance Daunia Mine and immediately south of Peabody's Moorvale West and Gundyer Projects.
- The most likely processing solution would be the Red Mountain Coal Handling and Preparation Plant serving Poitrel and Millennium, at a haul distance of 10.45Km. Daunia is closer but has no spare capacity. Carborough Downs (Fitzroy) has a processing arrangement with Bowen, but is a longer haul and that haul will have to cross the Peak Downs Highway.





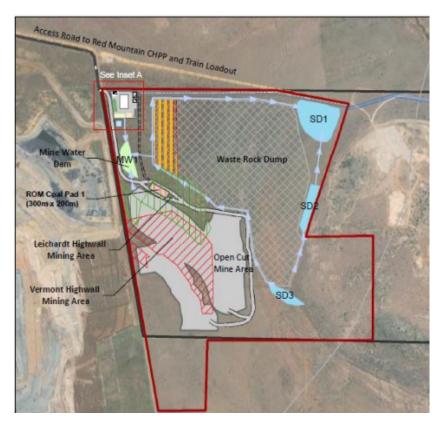
Source: BCB release 28 July 2021

Mine Plan

- In 2020, a two stage mine plan was envisaged, with Stage 1 of the project is focussed on mining the Leichhardt seam (Rangal Coal Measures) at between 25 and 142m deep, 2.5 to 5.5m thick with potential for Semi Soft Coking Coal and Semi Hard Coking Coking Coal and secondary thermal coal or a single PCI (Pulverised Coal Injection) product. Stage 2 was targeting the lower seams.
- The latest mine plan released 28 July 2021 mines 2.65Mt including 2.03Mt from the Leichardt and 0.63Mt from the Vermont, starting in the south-east corner of the proposed pit in Figure 15 and moving north-west in the Leichardt, then mining the Vermont.

- There will remain a gap between the Daunia pit visible in Figure 15 to the west and Isaac River which would be economic coal that be mined if an agreement could be reached between Bowen and the BHP Mitsubishi Joint Venture. We understand that BHP may be selling Daunia, and possibly the rest of its interest in the Joint Venture, so any agreement may have be with new owners.
- It is also not out of the question that the owners of Daunia may end up purchasing Isaac River as a way of extending Daunia's life.
- On 8 November 2021, Stanmore Resources (ASX:SMR) announced it was purchasing assets from BHP Mitsui including the Red Mountain processing plant. Given the connections between Bowen and Stanmore, there should be a processing deal for Isaac River in due course.

Figure 15 Proposed Stage 1 open pit



Source: BCB presentation 24 June 2020



Table 23 Isaac River financial model (100% BCB)

Isaac River	LOM	Jun-22	Jun-23	Jun-24	Jun-25	Jun-26
Physicals						
Overburden K BCM	0	0	3500	6195	5410	5430
OP Production ROM Kt	22860	0	250	510	505	395
High Wall Mining ROM Kt	1810	0	0	0	0	275
Coal Mined ROM Kt	1685	0	250	510	505	670
Coal Processed ROM Kt	3495	0	250	510	505	670
Yield						
HCC		0.0%	0.0%	0.0%	0.0%	31.6%
SHCC		0.0%	46.0%	46.2%	46.9%	21.1%
LVPCI		0.0%	34.0%	32.7%	32.7%	14.0%
Product Clean Mt	2	0	200	402	402	447
HCC	2491	0	0	0	0	212
SHCC	704	0	115	235	237	141
LVPCI	1057	0	85t	167	165	94
Operating Costs						
Total Cash Cost A\$/t clean	125	117	144	134	125	140
Total Cash Cost A\$M	986	0.0	28.8	53.9	50.2	62.7
Revenue						
Sales Clean Mt	0	0	200	402	402	447
HCC	2491	0	0	0	0	212
SHCC	704	0	115	235	237	141
LVPCI	1057	0	85	167	165	94
Benchmark Prices US\$/t						
HCC		235	180	172	182	183
SHCC		188	144	137	145	146
LVPCI		176	135	126	130	131
Realised Prices US\$/t						
НСС		200	153	146	154	156
SHCC		188	135	138	145	146
LVPCI		176	126	126	130	131
AUDUSD		0.75	0.75	0.75	0.75	0.75
Revenue A\$M						43.89
HCC	147	0.0	0.0	0.0	0.0	43.9
SHCC	257	0.0	20.7	43.2	45.9	27.5
LVPCI	372	0.0	14.3	28.0	28.6	16.4
Total	233	0.0	35.0	71.1	74.5	87.9
Royalty A\$M	862	0.0	5.3	10.9	11.4	13.4
Financials A\$M						
Revenue	168.3	0.0	35.0	71.1	74.5	87.9
Cost	581.7	0.0	-34.2	-64.8	-61.5	-76.1
EBITDA	-15.7	0.0	0.8	6.4	13.0	11.8
D&A	108.9	0.0	-1.4	-2.7	-2.7	-3.0
EBIT	-17.0	0.0	-0.6	3.6	10.2	8.8
Тах	75.4	0.0	0.2	-1.1	-3.1	-2.6
NPAT	-22.6	0.0	-0.4	2.5	7.2	6.1
Capex A\$M	0.0	0.0	17.0	0.0	0.0	0.0
Free Cash Flow After Tax	17.0	0.0	-16.0	5.3	9.9	9.2
Post Tax NPV		34.0	53.3	52.2	46.1	40.2

Source: BCB release 28 July 2021, IIR estimates

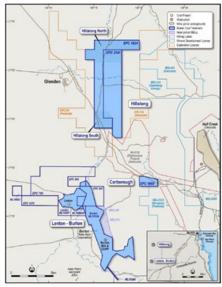
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HILLALONG PROJECT (BCB FARMING DOWNTO 80%)

Location

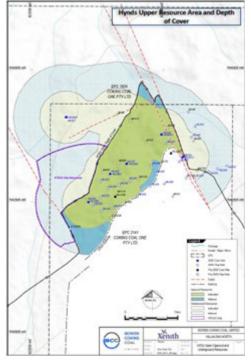
The Hillalong Coking Coal Project (EPC 1824 & EPC2141) is located in the northern Bowen Basin approximately 105 km west-southwest of Mackay, and within 15Km trucking distance to the Burton Coal Handling and Preparation Plant.

Figure 16 Hillalong tenements



Source: BCB presentation 23 August 2021

Figure 17 Hillalong North



Source: BCB presentation 24 June 2020

History

- Farm-In Agreement on the Hillalong Coking Coal Project ("Hillalong"), with SCAP Hillalong Pty Ltd, a wholly owned subsidiary of the Japanese Conglomerate, Sumitomo Corporation. was executed on 7 October 2019 following the previous signing of a Term Sheet.
- A summary of the key terms and conditions of the Farm-In Agreement are as follows:
- Sumitomo to fund \$2.5m of pre-defined exploration expenditure, being the entire phase 1 exploration program for both Hillalong North and Hillalong South, to earn an initial 10% interest in Hillalong (completed);
- Sumitomo has the right to then earn an additional 10% interest, post a further \$5m funding of agreed exploration and study activities at Hillalong (committed); and

SINDEPENDENT 31

- BCB and Sumitomo will form an unincorporated Joint Venture managed by BCB, post Sumitomo earning either the initial 10% or 20% interest.
- On 11 December 2020, Sumitomo committed to funding of Phase 2, and will spend A\$2.5 million to earn a further 5% interest ie to a total of 15%). The work program includes:
 - Four drill sites targeting the Rangal seams in the southern project area;
 - Seven drill sites targeting the Moranbah seams on the southern nose of the Hillalong anticline;
 - 37 kms of seismic survey covering the northern and southern project areas.

Geology

- The tenement comprises 31 sub-blocks (approximately 99km²) located to the west of the Mount Hillalong Anticline and is approximately 16 km northwest of the Hail Creek mine, owned by Glencore, Marubeni and Sumitomo. The tenement contains the Moranbah, Rangal and Fort Cooper Coal Measures commencing at surface.
- Two economic coal seams, Elphinstone and Hynds (Leichardt and Vermont equivalents) within the Rangal Coal Measures are currently being mined at nearby mines. Historical exploration by Rio Tinto proved the existence of these seams within the boundaries of the tenement with indicative coking coal qualities aligned with neighbouring mines.
- The reported Hillalong North Resource above 150m of 19.5Mt is open to the east and south-west. The seams in those area dip at 7-10 degrees to the north-northwest.
- Coal seams in the Hillalong South Deposit generally dip to the west at dips of 10-45 degrees. The 2019 drilling encountered a number of intersections between 116m and 167m depth, with seam widths around 5.6m (release 31 August 2021 p2). The implication is that there is potential for open pit coal in the South, at strip ratios of 10-14:1, vs sub 10:1 for the rest of Bowens portfolio.

Seam	Measured	Indicated	Inferred	Total
Elphinstone		4.0	4.5	8.5
Hynds Upper		9.1	1.9	11.0
Subtotal		13.1	6.4	19.5
Hynds Upper		7.7	15.9	23.7
Subtotal		7.7	15.9	23.7
Total		20.8	22.3	43.2
Elphinstone		14.3	11.0	25.3
Hynds Upper		6.5	4.0	10.5
Hynds Middle		5.0	3.0	8.0
Total		25.8	18.0	43.8
Combined		46.6	40.3	87.0
	Elphinstone Hynds Upper Subtotal Hynds Upper Subtotal Total Elphinstone Hynds Upper Hynds Middle Total	Elphinstone Hynds Upper Subtotal Hynds Upper Subtotal Total Elphinstone Hynds Upper Hynds Middle Total	Elphinstone4.0Hynds Upper9.1Subtotal13.1Hynds Upper7.7Subtotal7.7Total20.8ElphinstoneHynds Upper6.5Hynds Middle5.0Total25.8	Elphinstone 4.0 4.5 Hynds Upper 9.1 1.9 Subtotal 13.1 6.4 Hynds Upper 7.7 15.9 Subtotal 7.7 15.9 Total 20.8 22.3 Elphinstone 14.3 11.0 Hynds Upper 6.5 4.0 Hynds Middle 5.0 3.0 Total 25.8 18.0

Table 24 Hillalong Resources (100% Of project basis)

Source: BCB releases 5 March 2021, 31 August 2021

Table 25 Product Specifications

Hard Coking	Ash %	Yield %	CSN	Volatiles %	Phos %	Sulphur %	Fluidity ddpm	Rv/Max
Elphinstone	10.5%	84%	7.0	28.8%	0.003%	0.4%	348	0.95%
Hynds Upper	8.5%	66%	7.5	28.2%	0.043%	0.4%	361	0.99%
Thermal	Ash %	Yield %	CV Kcal/kg	Volatiles %	HGI	Sulphur %		
Hynds Upper	16.5%	21%	6730	24.3%	49	0.31%		

Source: BCB releases 5 March 2021

Some of the deposit has been heat effected by volcanics. Heating changes the coal driving off volatiles, typically lowering coal quality and commercial saleability. Sometimes the heat effect can be positive. The table below shows the very positive product specifications at around 80% yield for coal that is not heat effected. In a release of 24 August 2020, Bowen indicated that the heat effected coal tested to date could produce a 12.3% ash 7032kcal/kg coal that could be sold as a PCI product. Further assessment is required, but the company appears to be confident there is a solid case for a commercial operation.

QINDEPENDENT 32

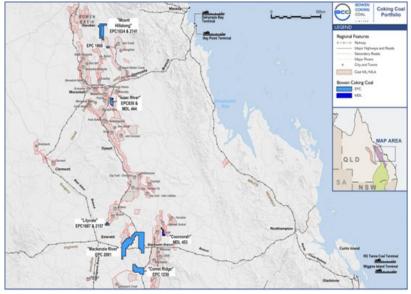
- In our financial model, we assume 15Mt (78% of the 19Mt Indicated Resource above 150m) of the for the North Mine at a Stripping Ratio of 7:1 (BCM:tonne). The strip ratio is close to the average of the depth to top of first seam divided by the first seam thickness, adjusted for relative density of waste vs coal for the reported drilling.
- For the South Mine we assume 10Mt (29% of the total Indicated Resource) at a stripping ratio of 10:1, based on the shallower intersections reported in drilling to date.

Table 26 Hillalong financial	model including Nort	th and South Mines (BCB	farming down to 80%)
iabio io initiatorig initiational	mouor moraamy nore		

Hillalong	LOM	Jun-30	Jun-31	Jun-32	Jun-33	Jun-34
Physicals						
Overburden K BCM	348500	10838	13303	15258	38080	38250
OP Production ROM Kt	41000	1275	1565	1795	4480	4500
Auger Mining ROM Kt	0	0	0	0	0	0
Coal Mined ROM Kt	41000	1275	1565	1795	4480	4500
Coal Processed ROM Kt	41000	1275	1565	1795	4480	4500
Yield						
НСС		57.1%	57.1%	57.1%	57.1%	57.1%
Thermal		27.4%	27.4%	27.4%	27.4%	27.4%
Product Clean Mt	34645	1077	1322	1517	3786	3803
НСС	23411	728	894	1025	2558	2570
Thermal	11234	349	429	492	1228	1233
Operating Costs						
Total Cash Cost A\$/t clean		137	138	140	142	143
Total Cash Cost A\$M	5085	147.5	182.9	212.4	536.2	545.0
Revenue						
Sales Clean Mt	34645	1077	1322	1517	3786	3803
HCC	23411	728	894	1025	2558	2570
Thermal	11234	349	429	492	1228	1233
Benchmark Prices US\$/t						
НСС		189	190	192	194	195
Thermal		94	95	95	96	97
Realised Prices US\$/t						
НСС		161	162	163	165	166
Thermal		94	95	95	96	97
AUDUSD		0.75	0.75	0.75	0.75	0.75
Revenue A\$M						
НСС	5258	156.1	192.9	223.1	561.1	568.2
Thermal	1476	43.8	54.1	62.6	157.5	159.4
Total	6734	199.9	247.0	285.8	718.6	727.6
Royalty A\$M	1074	31.9	39.4	45.6	114.6	116.1
Financials A\$M						
Revenue	6734	199.9	247.0	285.8	718.6	727.6
Cost	-6159	-179.3	-222.3	-258.0	-650.8	-661.1
EBITDA	575	20.5	24.8	27.8	67.8	66.5
D&A	-15	-0.5	-0.6	-0.7	-1.6	-1.6
EBIT	560	20.1	24.2	27.1	66.1	64.8
Тах	-168	-6.0	-7.3	-8.1	-19.8	-19.5
NPAT	392	14.1	16.9	19.0	46.3	45.4
Сарех	15	0.0	15.0	0.0	0.0	0.0
Free Cash Flow After Tax	392	14.5	2.5	19.6	47.9	47.0
Post Tax NPV		178.7	203.4	213.3	194.8	174.4

OTHER PROJECTS

Figure 18 Other projects are located in the Emerald region



Source: BCB presentation 13 March 2019

This report comments separately in Isaac River and Hillalong.

COOROORAH PROJECT (MDL 453 100% BCB)

Summary

- Cooroorah is potentially an underground mine with coal seam depths being between 240m and 540m below surface. These depths are greater than typical in Queensland, but these depths have been mined in the Wollongong region of New South Wales. The average seam thicknesses range from 2m in the Castor seam to 4m in the Mammoth seam.
- Metallurgical testing has indicated average yields of 73% to 90% achieving a washed product ash of 8-9%. There is potential for the Mammoth seam to produce a 3.5% ash, 8–9 CSN coking coal with secondary 10% ash 7560K/kcal/kg PCI for a combined lab yield of more than 90% (ad), which could sell at a premium to the current benchmark price.
- The Resources demonstrated so far include 60Mt in the Mammoth seam. There is no reserve nor mine plan at this stage. Assuming a 66% conversion of Mammoth to Reserves, there could be sufficient coal for a 4Mtpa longwall operation for 10 years.
- By their nature, development of an underground coal mine is both expensive and time consuming, making this a project to be developed once Bowen has a cash flow and a sufficiently strong balance sheet. As an example, Whitehaven's Narrabri Underground Mine started construction in 2008, commenced coal production in 2010, and reached full production at around 6Mtpa in 2012, four years after start of construction. The total capital cost was A\$335M.

Geology

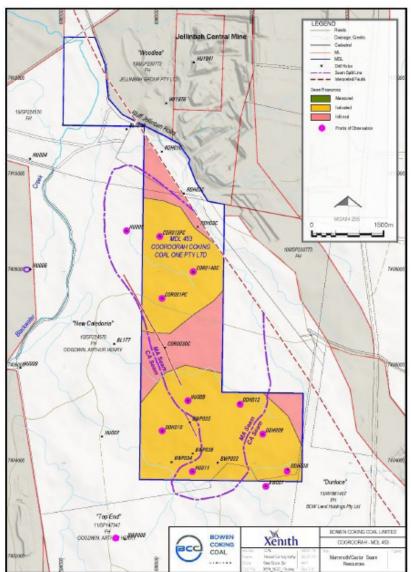
- Cooroorah is situated immediately adjacent to and south of the Jellenbah Coal Mine. It contains sediments from the late Permian Rangal Coal Measures and the Burngrove Formation and Early Triassic Rewan Formation.
- The main exploration target is the coal seams at depth. The main structural element is the Jellenbah Fault which runs northwest to southeast through the MDL and can give a maximum displacement of 600m. The dip of the strata is 3-5% on the southwest portion of the MDL. Dips become much steeper to 15% to the northeast on the northeastern side of the Jellenbah Fault.

Table 27 Cooroorah Resources

Seam	Measured	Indicated	Inferred	Total
Aries		4		4
Castor		15	4	19
Mammoth		38	22	60
Pollux		15	11	26
Pisces Upper		24	40	64
Pisces Upper/Lower			4	4
Total		96	81	177

Source: BCB release 3 April 2019

Figure 19 Cooroorah location immediately south of Jellenbah Open Pit Mine



Source: BCB release 12 February 2019

LILYVALE (EPC 2157 EPC 1687 15% BCB)

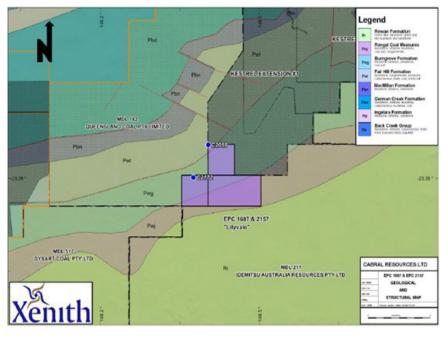
Summary

- Bowen owns a 15% interest in the Lilyvale tenements which currently have 33Mt of German Greek seam coal at a depth of between 335m and 425m (2017 prospectus expert report Table 1). This asset probably is better consolidated with surrounding assets to generate a Reserve sufficient to support an underground mine development.
- As majority owner, Stanmore is in the driver's seat, but Bowen's interest does provide significant intelligence on the prospectivity of the neighbourhood in the event any of the surrounding tenement owners decide to sell.

Geology

- The Lilyvale Project is situated to the east of the structural zone known as the Comet Platform. The project area contains Late Permian Rangal Coal Measures and the Burngrove Formation, At depth the Fairhill and German Creek Formations have been intersected by drilling, the main target being German Creek.
- Structurally there are no major geological structures identified. Sediments generally dip at low angles of 3-8 degrees to the east-southeast.
- Intersections of the German Creek Formation have included seams 2.4m thick, low in phosphorous and sulphur and yields around 85%. The coal has moderate CSN and fluidity and has potential to produce a blended coking coal.

Figure 20 Lilyvale geology and immediate neighbours



Source Prospectus September 2017

COMET RIDGE (EPC 1230 100% BCB)

Summary

In 2018, Bowen attempted to sell this tenement for A\$0.1M cash and a 1.25% net revenue royalty on the first 2.8Mt of saleable production, effectively capped at \$3M. The deal fell through, but it probably remains the clearest expression of Bowen's strategic thinking on this asset. At the time of the sale proposal, Bowen noted that neighbour Springsure Creek was better placed to develop Comet Ridge.

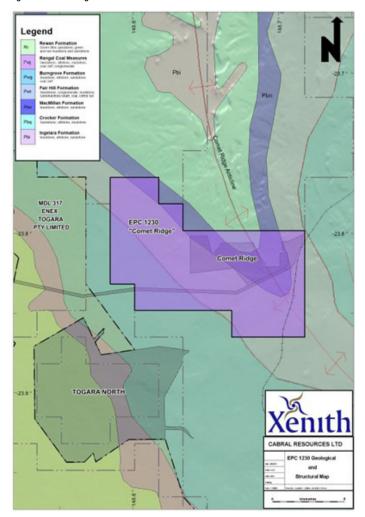
Geology

- EPC 1230 is located at the southern end of the Comet Ridge Anticline on the stable basement block known as the Comet Platform. Comet Ridge contains sediments from the Fair Hill and Burngrove Formations which are interpreted to be part of the Blackwater Group.
- Sediments deposited during the Permian and Early Triassic Periods have been weekly deformed and folded resulting in the Comet Ridge Anticline axis striking northwest to Southeast and plunging gently to the south. The limbs of the Anticline dip shallowly to



the east and west at an average 2-4 degrees. Other than the Anticline, there are no major identified structural features.

Figure 21 Comet Ridge Tenement



Source: Prospectus September 2017

WEIGHTED AVERAGE COST OF CAPITAL

Table 28 Calculation of Weighted Average Cost of Capital 5.9% plus 2% pre production risk = 7.9%

Cost of Equity		Source
Beta Range	1.00	https://au.finance.yahoo.com/quote/Various
Risk free rate (Rf)	1.14%	https://www.rba.gov.au/statistics/tables/
Market Risk premium (Rm)	4.08%	http://www.market-risk-premia.com/au.html
Market premium (Rm)	5.27%	
Cost of Equity	5.27%	Ke = Rf + Beta(Rm - Rf)
Nominal WACC		
Cost of Equity Ke	5.3%	
Cost of Debt Kd	9.0%	Interest rate on loan from M Resources
Gearing D/(D+E)	60.0%	
Gearing E/(D+E)	40.0%	
Tax Rate	30.0%	
Weighted Average Cost of Capital (Ke)	5.89%	W = (Ke * (E/V)) + (Kd * (1-t)*(D/V))

Sources: As noted in table

Actual calculated beta is 0.54, which is very similar to Whitehaven Coal's beta of 0.57. If we used 0.54, the WACC would be 5.1%. By using the market Beta of 1.0, the WACC becomes 5.89%.

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An additional 2% has been added to reflect the risks associated with not being in production yet, giving a total WACC of 7.89%, which has been applied to all operations except Hillalong, where 15% was used. The higher Hillalong rate reflects the lack of operational detail available at this stage.

CORPORATE RELATIONSHIPS

M RESOURCES

- Owns14.2% including related party holdings of BCB on 7 September 2021.
- Owns 19.9% of Stanmore Coal, BCB's JV partner in Lilyvale and Mackenzie Joint Ventures.
- Owns 50% of Coal Marketing JV with BCB, which will provide BCB with an A\$15M finance facility, and have exclusive rights to market all BCB coal except for Hillalong where Sumitomo must be accommodated. This means that in Japan, the JV will not have exclusive marketing rights.

STANMORE COAL

- Majority joint venture partner in the Lilyvale and Mackenzie Ventures.
- Owner of the Red Mountain Coal Handling and Processing Plant near Isaac River.
- Bowen current Board members Nick Jorss and Neville Sneddon were previously Stanmore board members.

CAPITAL STRUCTURE

Table 29 Capital structure at 18 November 2021

	Million
Issued shares M	1302.62
Options M	55.70
Option 30 Sept 2024 (1)	25.00
Option 30 Aug 2024 (1)	9.00
Option 31 Aug 2024	21.00
Option 30 Sept 2023	0.70
Performance Rights M	20.00
Fully Diluted M	1344.32

Source: BCB releases Issue 10 November 2021, 1 September 2021, 5 August 2021 (Note 1. Subject to shareholder approval at the November 2021 AGM)

- Additional shares are likely to be issued to pay for A\$10M of the Burton/Lenton acquisition.
- Another 25M incentive options exercising at A\$0.25/sh by 30 September 2024 and 9M options will be issued subject to the annual general meeting on 30 November 2021.
- Bowen's capital structure is dominated by ordinary shares now the significant option blocks have been exercised. All outstanding options are currently in the money and likely to be exercised, and our modelling assumes that takes place.
- Board members own over 30% of the company and so have an alignment of interests with other shareholders.

Table 30 Major shareholders and total shares on issue at 20 September 2021

	Individual Holdings M	Combined Holdings M	Share%
Latimore Family ATF	154.3		
M Resources Pty Ltd	15.0		
Matthew Latimore	2.3	171.6	14.2%
Cape Coal Pty Ltd	119.8		
Gerhard Redelinghuys	7.3	127.1	10.5%
Illwelia Pty Ltd	104.5	104.5	8.6%
Crocodile Capital & Assoc	82.2	82.2	6.8%
Nick Jorss	66.0	66.0	5.4%
Subtotal	551.5	551.5	45.5%
Other Shareholders	660.7	660.7	54.5%
Issued Shares	1212.2	1212.2	100.0%

Sources: BCB substantial shareholders releases 7 September 2021, 2 September 2021, 13 December 2018

Table 31 History of share issuance starting with the first purchase of coal assets

Reason for Issuance	Date	Issue M	Raised A\$M	Issued M	Capital A\$M
Shares on issue 30 June 2017			127.3	42.1	
Bowen Consideration	28-Sep-17	70	1.6	197.3	43.7
AQC Hillalong	2-0ct-17	54.3	1.2	251.7	44.9
AJC Comet Range	28-Sep-17	17.4	0.4	269.1	45.3
Prospectus Issue	28-Sep-17	200.4	4.6	469.5	50
Acquisition of Hillalong East	11-May-18	30	0.5	499.5	49.8
Cash Placement (European Funds)	28-Sep-18	74.9	1.2	574.4	5
Cash Placement (to Jorss)	13-Dec-18	31.3	0.5	605.6	51.
Cash Placement	20-Mar-19	72.7	1.5	678.3	53.
Conversion of Class B Performance	9-Apr-19	13	0.2	691.3	53.
Exercise of options	20-May-19	0.1	0	691.4	53.
Placement	3-Jun-19	9.7	0.2	701.1	53.
Exercise of options	5-Jun-19	3.9	0.1	705	53.
Exercise of options	19-Jun-19	0.5	0	705.5	53.
Exercise of options	26-Jun-19	0.8	0	706.3	53.
Exercise of options	Jul-19	3.6	0.1	709.8	53.
Placement to Individual Investor	7-Aug-19	10	0.5	719.8	5
Exercise of options	7-Aug-19	0.6	0	720.4	5
Exercise of options	12-Aug-19	0.1	0	720.5	5
Conversion of Class A Performance	19-Aug-19	13	0	733.5	5
Exercise of options	19-Aug-19	0.4	0	733.9	5
Exercise of options	26-Aug-19	2.2	0	736.1	54.
Exercise of options	28-Aug-19	0.7	0	736.9	54.
Exercise of options	9-Sep-19	1.1	0	738	54.
Exercise of options	16-Sep-19	4.4	0.2	742.4	54.
Exercise of options	24-Sep-19	5	0.2	747.4	54.
Exercise of options	30-Sep-19	1.4	0.1	748.8	54.
Exercise of options	9-Oct-19	3.1	0.1	751.9	54.
Exercise of options	16-Oct-19	1.4	0.1	753.3	54.
Exercise of options	23-0ct-19	8.4	0.3	761.7	5
Exercise of options	30-Oct-19	39.8	1.4	801.5	56.
Exercise of options	1-Nov-19	2.2	0.1	803.8	56.
Broadmeadow Placement	3-Jul-20	45	2.3	848.8	58.
Cash Placement	9-Nov-20	60	3	908.8	61.
Exercise of options	12-Dec-20	30	0.9	938.8	62.
Exercise of options	1-Feb-21	4.2	0.0	943	62.
Conversion of Performance Rights	2-Mar-21	4	0.1	947	62.
Exercise of options	1-Apr-21	5	0.2	952	62.
Exercise of options	28-Apr-21	9	0.2	961	63.
Exercise of options	10-Jun-21	7	0.3	968	63.
Exercise of options	21-Jun-21	, 10.5	0.2	978.5	63.
Exercise of options	5-Aug-21	2.7	0.4	981.2	63.
Burton/Lenton Issue Tranche 1	10-Aug-21	149.3	10	1130.4	73.
Burton/Lenton Issue Tranche 2	30-Aug-21	81.8	5.5	1212.2	73.
Issued to 5 November 2021	JU-Aug-ZT	1084.9	5.5 38.1	1212.2	79.
Issue 9 November 2021	9-Nov-21	62.5	30.1 10	1274.7	
Bluff Purchase Payment	9-Nov-21 9-Nov-21	27.9	4.75	1274.7	84.
Burton/Lenton Purchase Payment Est	9-INOV-21 TBA	66.7	4.75	1302.6	84. 94.
Total	IDA	1241.9	62.9	1009.3	94.

Source: BCB 3A releases, annual reports for 2017, 2018, 2019, 2020, IIR estimates

Since the decision to acquire coal assets, Bowen has issued 1084.9M shares and those new shareholders dominate the share register, with the original Cabral share base amounting to 10.4% of the current company. That means that the share register is relatively new and fresh, and has come on board to own a coal company.

BOARD AND MANAGEMENT

Nick Jorss – Executive Chairman

- Nick Jorss was the founding Managing Director and a substantial shareholder of Stanmore Coal Ltd (via St Lucia). Nick served on Stanmore's Board from its formation in June 2008 through 26 November 2016. He has over 20 years' experience in investment banking, civil engineering, corporate finance and project management.
- Nick was instrumental in the success of Stanmore Coal Ltd. As the Founding Managing Director, Nick led Stanmore's growth from a coal exploration company to a profitable, mid-tier producer. In his prior roles in investment banking (as a director of Pacific Road Corporate Finance) he has been involved in leading advisory mandates with corporate, government and private equity clients across industry sectors ranging from resources to infrastructure.
- Prior to this Nick was an engineer with Baulderstone Hornibrook where he delivered significant infrastructure and resources projects over a period of approximately eight years.
- Nick is a founding shareholder and Director of St Lucia Resources, Kurilpa Uranium and Wingate Capital. He was previously a Director of Vantage Private Equity Growth, Vantage Asset Management and WICET Holdings Pty Ltd. During the past three years Nick has not served as a Director of any other ASX listed companies.
- Nick joined the Bowen Board on 13 December 2018.

Gerhard Redelinghuys – Managing Director and CEO

- Mr Redelinghuys is the Managing Director of Cape Coal and has 24 years experience in financial and project development within the mining sector. After studying finance at the University of Pretoria in South Africa, Gerhard joined Price Waterhouse Coopers, before commencing his employment with EXXARO Resources Ltd (former ISCOR and KUMBA Resources) in 1995. Since 1995 he has held various senior management positions in both open cut and underground mining operations in South Africa.
- He has held directorships in Australia, including the position of Managing Director of Exxaro Australia Pty Ltd. In addition to his business analysis experience, Gerhard has extensive experience in mining project acquisitions and deal making on an international level. Gerhard was the owner's representative on a multi-billion underground coal project in Queensland. In 2013, Gerhard became a graduate member of the Australian Institute of Company Directors.
- Gerhard joined the Bowen Board on 26 September 2017.

Neville Sneddon – Non-Executive Director

- A mining engineer with over 40 years' experience in most facets of the Queensland and NSW resource sectors, and as the recently retired Chairman of Stanmore Coal Ltd, Neville brings substantial Board and industry knowledge to BCB. He has developed and operated both underground and open cut mines working for Coal & Allied in the Hunter Valley and from 1997 worked in a senior role in the NSW Mines Inspectorate, covering operations in all forms of mining in the state.
- Moving to Queensland in 1999, Neville accepted the position of Chief Operating Officer with Shell Coal which was acquired by Anglo American's Australian coal operations the following year. Leaving as CEO in 2007, he held several Board positions with mining and infrastructure companies including Chairman of the operating company at Dalrymple Bay Coal Terminal near Mackay and Director of Port Waratah Coal Services, a major coal export facility at Newcastle.
- Neville has also been a member of the Boards of the Queensland, NSW and National Mining Councils. His expertise has been sought by several government committees such as the NSW Mine Subsidence Board, NSW Mines Rescue Board, Queensland Ministerial Coal Mine Safety Advisory Committee and the joint federal/ state advisory committee which is developing nationally consistent mining safety legislation. During the past three years, Neville served as the Non-Executive Chairman/Director of Stanmore Coal Limited

from 5 October 2009 to 31 March 2018. Neville is not a Director of any other listed companies.

Neville joined the Bowen Board on 13 December 2018.

Matthew Latimore – Non-Executive Director

- Mr Latimore is the founding Managing Director of M Resources, which specialises in marketing coking coal, including hard coking coal, semi hard coking coal, semi soft coking coal and PCI coals for steel manufacturing.
- Prior to establishing M Resources, Matt held the position of General Manager Sales and Marketing, for Wesfarmers Curragh mine and was responsible for global sales of Curragh metallurgical coal products to international steel mills and thermal coal to domestic and international power utilities, rail and port and quality and finance functions. Matt was a Director of Curragh Coal Sales.
- Prior to joining Wesfarmers in early 2001, Matt held various positions with Mitsui & Co (Australia) Pty Ltd.
- Matt joined the Bowen Board on 17 June 2020.

Duncan Cornish – Company Secretary

- Mr Cornish was the founding CFO and Company Secretary for both Stanmore Coal Ltd (ASX:SMR) and Cokal (ASX:CKA) and is a Chartered Accountant with significant experience as a public company CFO and Company Secretary, focused on finance, administration and governance roles.
- He has more than 20 years' experience in the accountancy profession both in England and Australia, mainly with the accountancy firms Ernst & Young and PricewaterhouseCoopers. He has extensive experience in all aspects of company financial reporting, corporate regulatory and governance areas, business acquisition and disposal due diligence, capital raising, company initial public offerings and company secretarial responsibilities, and has served as CFO and/or Company Secretary of several Australian and Canadian public companies.

Daryl Edwards – Chief Financial Officer

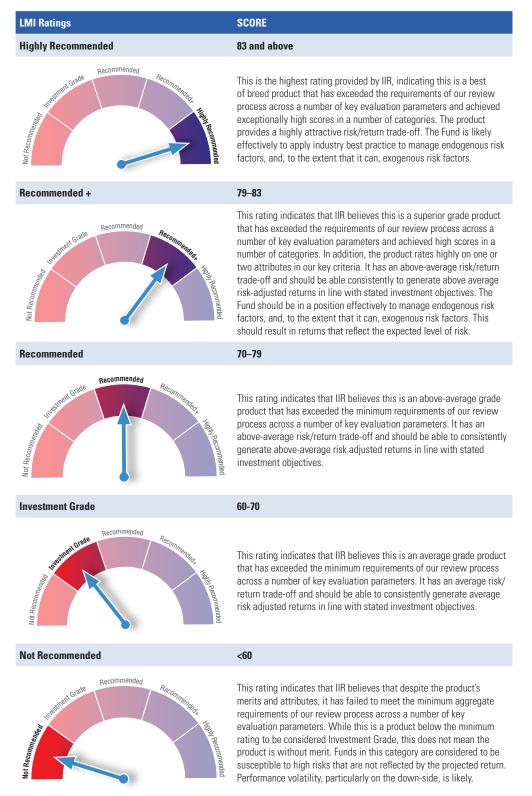
- Mr. Edwards is a Chartered Accountant with over 22 years' experience in the mining and manufacturing industries.
- He has held various executive positions including CEO of a private Australian coal explorer, Pioneer Coal, and CFO and Head of Corporate Development for Universal Coal plc (ASX:UNV) for over 7 years, where he managed the commercialisation of the 4Mpta Kangala Colliery and the 3.3Mtpa New Clydesdale Colliery.
- Previously, Daryl was CFO at Asenjo Energy, a Botswana-based coal exploration and development company, held privately by Aquila Resources, Sentula Mining and Jonah Capital.
- He joined the company on 2 February 2021.

Notes:

APPENDIX A – RATINGS PROCESS

Independent Investment Research Pty Ltd "IIR" rating system

IIR has developed a framework for rating investment product offerings in Australia. Our review process gives consideration to a broad number of qualitative and quantitative factors. Essentially, the evaluation process includes the following key factors: management and underlying portfolio construction; investment management, product structure, risk management, experience and performance; fees, risks and likely outcomes.



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