Bowen Coking Coal Ltd (BCB)

Rating: Buy | Risk: High | Price Target: $0.04

4 December 2024

Operations performing well, now for a bounce in coal prices

Key Information	
Current Price ($ps)	0.01
12m Target Price ($ps)	0.04
52 Week Range ($ps)	0.01 - 0.11
Target Price Upside (%)	459.5%
TSR (%)	459.5%
Reporting Currency	AUD
Market Cap ($m)	70
Sector	Materials
Avg Daily Volume (m)	7.9
ASX 200 Weight (%)	0%

Fundamentals

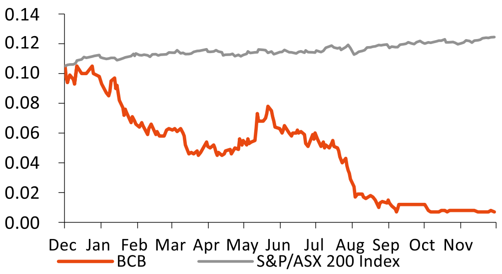
YE 30 Jun (AUD)	FY24A	FY25E	FY26E	FY27E
Sales ($m)	442	406	395	614
NPAT ($m)	(95)	6	32	58
EPS (cps)	(3.9)	0.1	0.3	0.5
EPS Growth (%)	56.9%	102.5%	215.1%	80.6%
DPS (cps) (AUD)	0.0	0.0	0.0	0.0
Franking (%)	0%	0%	0%	0%

Ratios

YE 30 Jun	FY24A	FY25E	FY26E	FY27E
P/E (x)	(1.4)	7.3	2.3	1.3
EV/EBITDA (x)	(1.1)	0.8	0.5	0.4
Div Yield (%)	0.0%	0.0%	0.0%	0.0%
Payout Ratio (%)	0.0%	0.0%	0.0%	0.0%

Price Performance

YE 30 Jun	1 Mth	2 Mth	3 Mth	1 Yr
Relative (%)	(16.5%)	(45.9%)	(53.1%)	(112.5%)
Absolute (%)	(12.5%)	(41.7%)	(46.2%)	(93.3%)
Benchmark (%)	4.0%	4.2%	6.9%	19.2%



Price performance indexed to 100 *Source: FactSet*

Major Shareholders	
Crocodile Capital Partners GmbH	9.7%
Kirmar GmbH	6.2%
Regal Funds Management Pty Ltd.	6.0%
LATIMORE MATTHEW	5.3%
Ilwella Pty Ltd.	4.8%

Andrew Hines | **Head of Research**
+61 3 9268 1178
andrew.hines@shawandpartners.com.au

Peter Kormendy | **Senior Research Analyst**
+61 3 9268 1099
Peter.Kormendy@shawandpartners.com.au

Dorab Postmaster | **Analyst**
+61 8 9263 5211
Dorab.Postmaster@shawandpartners.com.au

Event

The December quarter should be a solid operational quarter for Bowen Coking Coal as it continues to mine coal from the Ellensfield South pit and has commenced first coal production from Plumtree North. The coal price remains subdued with HCC coking coal at US$205/t, but we are heading into a seasonally strong period for coal prices. The HCC benchmark averaged US$344/t in MarQ-23 and US$312/t in MarQ-24. A US$25/t improvement in the coal price impacts our valuation by A$0.01ps and EBITDA by ~A$50m.

Highlights

- We remain bullish on the outlook for coking coal. Global steel production is continuing to grow in-line with global GDP and is particularly fast growing in the developing world (e.g. India). Indian steel production is expected to grow from 140Mt is 2023 to ~226Mt in 2030. This will require an additional 60Mt of coking coal. Additional demand from India is likely to see coking coal markets remain supply constrained with prices elevated.
- Bowen is highly leveraged to improvements in the coal market. A US$25/t change in the coking coal price impacts our valuation by A$0.01ps and EBITDA by ~A$50m.
- We forecast a coking coal price of ~US$260/t in 2025 and then modest declines to our long-term sustainable price of US$220/t by 2028. However, we consider this a conservative outlook given the strong demand outlook and constrained supply.
- Bowen's operational performance has significantly improved with mining rates from June to September averaging 311ktpm, which is above the target rate of 250ktpm. Likewise, the feed to the CHPP is above target and averaging 255ktpm.
- Bowen has announced a 3Mt increase in the Reserve at the Isaac Pit, which is located just north of the Burton CHPP. This is material because the coal is high quality coking coal and production from this pit will allow Bowen to increase pricing by blending.
- Cash flow has been constrained due to lower-than-expected coal prices in 2Q24 and low shipment levels due to rail availability. At 30-Sep Bowen had 172kt of product coal in stockpiles waiting to be railed to port. Rail constraints remain an issue that Bowen is closely managing, although rail availability has improved since the difficult month in July 2023. Bowen is targeting around 450kt/mth of shipments.
- The focus on Ellensfield South has delivered cost benefits with the strip ratio at the Burton complex significantly reducing from 15.1:1 (BCM/t) at the start of FY24, to ~6.4:1 in SepQ24. This strip ratio is expected to be relatively stable through FY25 with the strip at Ellensfield South dropping below 3:1 but offset by new higher strip production from Plumtree.
- Bowen is guiding to 1.6-1.9Mt of coal sales in FY25 (Shawf 1.8Mt) at a unit cost of A$145-165/t (excluding royalties), well down on A$185/t in FY24 and in-line with Shaw forecasts.
- Bowen has identified a range of cost reduction initiatives which in total are estimated to deliver reductions of $15-$21/t. Some of these have already been completed and provide benefits early in FY25. Bowen is guiding to FOB costs reducing from A$193/t at the start of FY25 to A$140/t by the end of the year.
- Bowen recently completed a $70m equity raise at $0.09ps which also included a partial debt-to-equity conversion by the major lender Taurus. The funds will be used to develop the Plumtree mine, prepay port and rail capacity and provide working capital. Plumtree will replace production from Ellensfield South in mid-2025.
- Bowen has restructured its debt with Taurus and New Hope to remove near-term balance sheet and cash flow pressure. Bowen will not need to make debt repayments until March 2025. Post the equity raise, total debt stands at A$125m with net debt of A$70m.

Recommendation

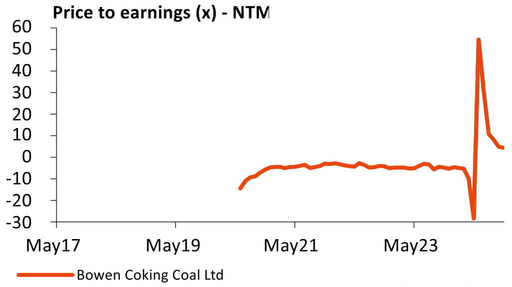
We retain our BUY recommendation and price target of A$0.04ps.

Bowen Coking Coal Ltd
Materials
Materials
FactSet: BCB-AU / Bloomberg: BCB AU

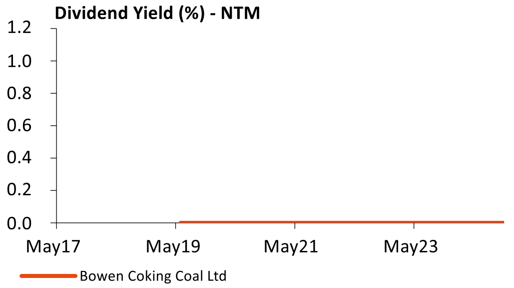
Key Items	Data
Recommendation	BUY
Risk	HIGH
Price ($ps)	0.01
Target Price ($ps)	0.04
52 Week Range ($ps)	0.01 - 0.11
Shares on Issue (m)	10,000
Market Cap ($m)	70
Enterprise Value ($m)	39
TSR (%)	459.5%

Company Description

Bowen Coking Coal Ltd is a coking coal producer based in the Bowen Basin in Queensland. Bowen has refurbished the first module of the 5.5mtpa Burton coal wash plant and is washing coal from Broadmeadow East and Ellensfield South.



Source: FactSet



Source: FactSet

Financial Year End: 30 June

Investment Summary (AUD)	FY23A	FY24A	FY25E	FY26E	FY27E
EPS (Reported) (cps)	**(8.9)**	**(3.9)**	**0.1**	**0.3**	**0.5**
EPS (Underlying) (cps)	**(8.9)**	**(3.9)**	**0.1**	**0.3**	**0.5**
EPS (Underlying) Growth (%)	nm	56.9%	102.5%	215.1%	80.6%
PE (Underlying) (x)	**(1.7)**	**(1.4)**	**7.3**	**2.3**	**1.3**
EV / EBIT (x)	**(0.3)**	**(0.6)**	**2.2**	**0.9**	**0.6**
EV / EBITDA (x)	**(0.3)**	**(1.1)**	**0.8**	**0.5**	**0.4**
DPS (cps) (AUD)	0.0	0.0	0.0	0.0	0.0
Dividend Yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Franking (%)	0%	0%	0%	0%	0%
Payout Ratio (%)	0.0%	0.0%	0.0%	0.0%	0.0%

Profit and Loss (AUD) (m)	FY23A	FY24A	FY25E	FY26E	FY27E
Sales	204	442	406	395	614
Sales Growth (%)	*1,623.8%*	*116.1%*	*(8.2%)*	*(2.6%)*	*55.3%*
Other Operating Income	6	8	6	6	9
EBITDA	**(139)**	**(37)**	**49**	**73**	**109**
EBITDA Margin (%)	*(67.9%)*	*(8.3%)*	*12.2%*	*18.4%*	*17.8%*
Depreciation & Amortisation	(13)	(32)	(32)	(29)	(40)
EBIT	**(151.8)**	**(68.8)**	**17.7**	**44.1**	**69.1**
EBIT Margin (%)	*(74.2%)*	*(15.6%)*	*4.4%*	*11.2%*	*11.3%*
Net Interest	(11)	(29)	(11)	(9)	(6)
Pretax Profit	(163)	(95)	6	35	63
Tax	0	0	0	0	0
Tax Rate (%)	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
NPAT Underlying	**(163)**	**(95)**	**6**	**32**	**58**
Significant Items	0	0	0	0	0
NPAT Reported	**(163)**	**(95)**	**6**	**32**	**58**

Cashflow (AUD) (m)	FY23A	FY24A	FY25E	FY26E	FY27E
EBIT	(152)	(69)	18	44	69
Payments to Suppliers	(287)	(466)	(362)	(328)	(514)
Receipts from Customers	185	467	406	395	614
Tax Paid	0	0	0	0	0
Change in Working Capital	0	0	(12)	(7)	18
Depreciation & Amortisation	13	32	32	29	40
Other	(16)	(38)	(37)	(32)	(37)
Operating Cashflow	**(105)**	**(5)**	**27**	**57**	**120**
Capex	(67)	(81)	(77)	(22)	(2)
Acquisitions and Investments	(1)	(0)	(0)	(0)	(0)
Disposal of Fixed Assets/Investments	0	0	0	0	0
Other	(33)	2	25	0	0
Investing Cashflow	**(100)**	**(79)**	**(52)**	**(22)**	**(2)**
Equity Raised / Bought Back	126	57	54	0	0
Dividends Paid	0	0	0	0	0
Change in Debt	56	(2)	(30)	(30)	(30)
Other	(0)	(2)	(2)	0	0
Financing Cashflow	**182**	**54**	**22**	**(30)**	**(30)**
Exchange Rate Effect	0	3	2	0	0
Net Change in Cash	**(24)**	**(27)**	**(2)**	**5**	**88**

Balance Sheet (AUD) (m)	FY23A	FY24A	FY25E	FY26E	FY27E
Cash	49	22	18	23	112
Accounts Receivable	37	22	20	19	30
Inventory	60	27	25	24	38
Other Current Assets	4	5	5	5	5
PPE	171	181	227	220	182
Total Assets	**321**	**257**	**294**	**292**	**366**
Accounts Payable	121	96	81	73	115
Short Term Debt	131	50	0	0	0
Long Term Debt	28	109	129	99	69
Total Liabilities	**373**	**326**	**278**	**240**	**252**

Ratios	FY23A	FY24A	FY25E	FY26E	FY27E
ROE (%)	(275.0%)	(425.9%)	16.1%	37.1%	44.0%
Gearing (%)	75.8%	93.3%	61.1%	42.4%	(36.9%)
Net Debt / EBITDA (x)	(0.8)	(3.7)	2.2	1.0	(0.4)

FY25 Outlook

Bowen recently released guidance for FY25 and expects to ship 1.6-1.9Mt of coal at an FOB cash cost of A$145-165/t (excluding royalties).

Our full year shipment forecast of 1.81Mt is within the guidance range.

Our current cost assumption of A$155/t (excluding royalties sits in the middle of the cost guidance range.

Figure 3: FY25 guidance

FY25 Plan from ongoing operations[1]

Item	Unit	FY25 Plan	FY24 Actual
Managed ROM coal production	Mt	2.7 – 3.0	2.5
Managed Coal Sales	Mt	1.6 – 1.9	1.5
Unit costs (FOB)^	A$/t	145 – 165	185
Capital Expenditure	$m	65 – 85	90

Commentary

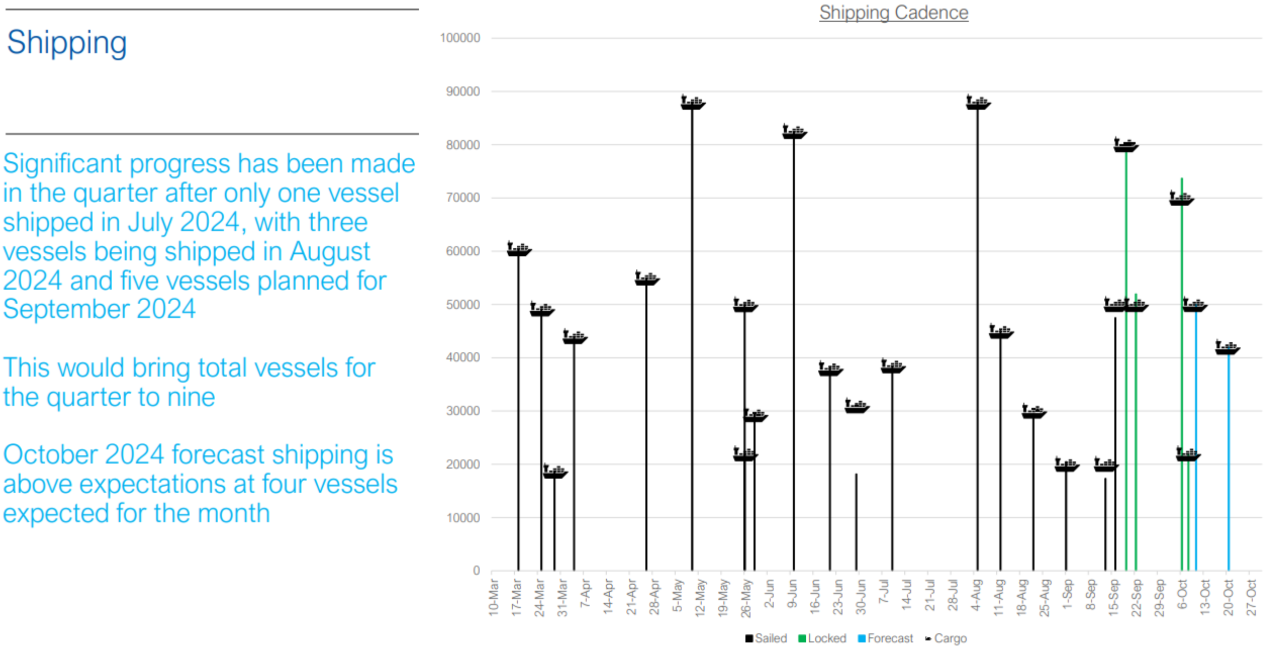
- BCB has planned for a long-term Burton Complex FOB cost^ of A$145/t - $155/t (ex royalties) from FY26 reflecting the transition to steady state operations in mining areas with lower stripping ratios
- FY25 Plan excludes Bluff and Broadmeadow East mines that have transitioned into care and maintenance and corporate overheads
- ~80% of the $65m - $85m capital expenditure estimate for FY25 relates to the Plumtree North boxcut costs up to 4Q 2025
- Targeted long-term strip ratio of 7:1 at the Burton Complex
- Assumes current short-term sourcing of Rail and Port access continues

Source: Bowen ASX release 19Sep24

Shipping cadence has been an issue for with only shipment made in July. We would normally expect 3-4 shipments per month. The good news is that the cadence has picked up in September and October, but shipping remains one of the key risks we will be monitoring. The chart below was released in early October but we understand the final shipment has shifted into November.

Bowen is targeting shipments of about 450kt per month. There is currently 172kt of coal on the product stockpile and so working capital could be released if Bowen can make extra shipments (ahead of production) through FY25. We have not included that in our forecasts.

Figure 4: Shipping cadence

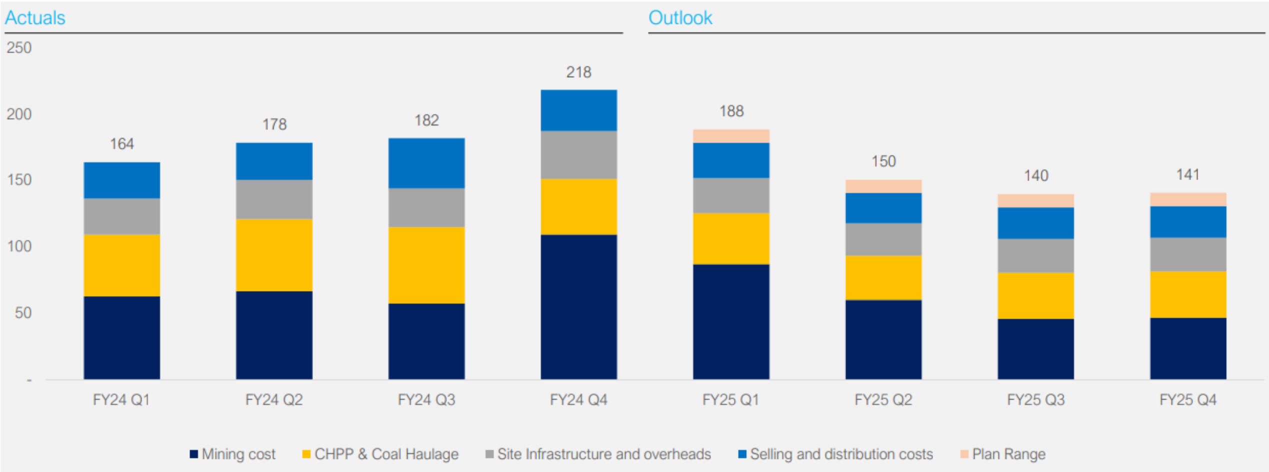


Source: Bowen ASX release 19Sep24

Costs in the back end of FY24 were elevated due to one-off costs associated with the closure of the Broadmeadow East mine. Bowen has provided guidance that Q1 in FY25 will remain slightly elevated, but that costs should drop to A$140-150/t for the rest of the year.

Actual costs in FY25 Q1 were $193/t, so slightly ahead of the $188/t forecast. This was mainly due to higher than expected demurrage costs of $4.68/t related to the poor rail performance.

Figure 5: Burton Complex FOB cash cost (ex-royalty, A$/t)



Source: Bowen ASX release 19Sep24

Bowen has identified a range of cost reduction initiatives which in aggregate could reduce costs by A$15-21/t. Some of these initiatives have already been completed, but some won't materialise until FY26.

Figure 6: Burton Complex FOB cash cost (ex-royalty, A$/t)

Opportunity	Status	Annual saving per annum	Saving per tonne
Standard haul trucks	complete	$6m	$3-$4
Direct ROM haulage	underway	$4m	$2-$3
Rejects crusher	commissioning FY2025 Q1	$4.5m	$2-$3
Automated bin loading	project phase from FY2025 Q3	$2m	$1
Mobile equipment changeout	from FY2025 Q2	$0.5m	$0.25
Haul road maintenance	from FY2025 Q2	$6m	$3-$4
Overhead reduction	in process	$2m	$1
Connection to State grid power	planning FY2026	$4-$6m	$3-$4
Total		$28-33m	$15-$21

Source: Bowen ASX release 19Sep24

Figure 7: Bowen quarterly production and cash flow – fiscal year quarters

Bowen quarterly financials	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25f	3Q25f	4Q25f	1Q26f	2Q26f	3Q26f	4Q26f
ROM production (kt)												
Bluff	153	193	0	0	0	0	0	0	0	0	0	0
Burton Complex	488	592	617	820	769	688	688	688	688	688	688	688
Total	**640**	**785**	**617**	**820**	**769**	**688**	**688**	**688**	**688**	**688**	**688**	**688**
Saleable coal Production (kt)												
Bluff	125	114	85	0	0	0	0	0	0	0	0	0
Burton Complex	420	365	378	458	444	454	454	454	454	454	454	454
Total	**545**	**505**	**457**	**425**	**444**	**454**	**454**	**454**	**454**	**454**	**454**	**454**
Shipments (kt)												
Coking Coal (kt)	0	99	202	254	249	263	263	263	259	259	259	259
PCI Coal (kt)	301	168	102	0	0	0	0	0	0	0	0	0
Thermal Coal (kt)	254	238	153	171	166	197	197	197	194	194	194	194
Total	**555**	**505**	**457**	**425**	**415**	**460**	**460**	**460**	**454**	**454**	**454**	**454**
Coal price (US$/t)												
Benchmark HCC (US$/t)	260	335	312	247	215	220	280	260	240	240	300	260
Benchmark 6,000 Newc (US$/t)	147	136	127	136	140	145	160	130	130	130	120	120
AUD/USD	0.65	0.68	0.66	0.66	0.67	0.68	0.66	0.68	0.68	0.70	0.70	0.70
Bowen Achieved Sales Price (US$/t)												
Bluff	173	184										
Burton Complex	121	146	182	150	145	143	175	156	152	152	176	157
Average (US$/t)	**132**	**158**	**176**	**150**	**145**	**143**	**175**	**156**	**152**	**152**	**176**	**157**
Average (A$/t)	**202**	**234**	**268**	**228**	**216**	**211**	**265**	**230**	**223**	**216**	**251**	**225**
Operating Costs (A$/t of sales)												
Bluff	372	288	0	0	0	0	0	0	0	0	0	0
Burton Complex	152	254	242	242	226	196	185	185	176	176	176	176
Average (A$/t)	**199**	**265**	**189**	**242**	**226**	**196**	**185**	**185**	**176**	**176**	**176**	**176**
P&L (A$m)												
Revenue	112	118	124	97	90	97	122	106	101	98	114	102
Operating Costs	111	134	88	103	94	90	85	85	80	80	80	80
Other costs	5	5	20	5	5	5	5	5	5	5	5	5
EBITDA	**-3**	**-21**	**17**	**-11**	**-9**	**2**	**32**	**16**	**16**	**13**	**29**	**17**
Cashflow (A$m)												
Revenue	112	118	124	97	90	97	122	106	101	98	114	102
Operating Costs	-111	-134	-88	-103	-94	-90	-85	-85	-80	-80	-80	-80
Deferred royalty payments				-8	-6	-4	0	0	0	0	0	0
Other costs	-5	-5	-20	-5	-5	-5	-5	-5	-5	-5	-5	-5
Operating cash flow	**6**	**14**	**-8**	**-18**	**-22**	**-2**	**32**	**16**	**16**	**13**	**29**	**17**
Investing Cashflow	**-15**	**-40**	**-31**	**6**	**7**	**-8**	**-30**	**-30**	**-3**	**-3**	**-3**	**-3**
Debt repayments	0	0	0	0	-9	0	-12	-4	-4	-4	-9	-9
Other financing cashflow	4	52	0	0	10	60	0	0	0	0	0	0
Free cash flow	**-5**	**25**	**-39**	**-12**	**-15**	**50**	**-10**	**-19**	**9**	**6**	**17**	**5**
Cash at period end	**44**	**70**	**35**	**22**	**6**	**56**	**46**	**27**	**36**	**42**	**59**	**64**

Source: Company reports, Shaw and Partners forecasts

Figure 8: Bowen Coking Coal P&L

Profit & Loss (A$m)	2021	2022	2023	2024	2025f	2026f	2027f	2028f	2029f	2030f
ROM Coal production (kt)										
Bluff	0	0	482	346	0	0	0	0	0	0
Burton Lenton	0	0	1,177	2,517	2,833	2,750	4,300	4,300	4,300	4,300
Total ROM production	**0**	**0**	**1,659**	**2,863**	**2,833**	**2,750**	**4,300**	**4,300**	**4,300**	**4,300**
Metallurgical Coal sales (kt)	0	0	283	1,125	1,037	1,037	1,597	1,597	1,597	1,597
Thermal Coal sales (kt)	0	0	478	816	757	778	1,198	1,198	1,198	1,198
Total Coal Sales (kt)	**0**	**0**	**761**	**1,942**	**1,795**	**1,815**	**2,795**	**2,795**	**2,795**	**2,795**
Benchmark HCC coal (US$/t)	136	406	280	288	244	260	265	245	244	249
Thermal Coal (US$/t)	85	233	313	136	144	125	115	112	115	117
Bowen average price (A$/t)			269	228	231	229	220	206	206	211
Bowen average cash cost (A$/t)			321	183	166	145	150	153	156	159
Bowen average margin (A$/t)			-52	44	65	84	70	53	50	51
Revenue	**0**	**12**	**204**	**442**	**414**	**415**	**614**	**574**	**576**	**589**
Operating costs	0	-20	-244	-356	-297	-263	-419	-428	-436	-445
Royalties	0	0	-42	-66	-57	-57	-84	-81	-72	-74
Admin & other expenses	-3	-9	-57	-56	-2	-2	-2	-2	-2	-2
Total costs	**-3**	**-29**	**-343**	**-479**	**-356**	**-322**	**-505**	**-510**	**-510**	**-521**
EBITDA	**-3**	**-17**	**-139**	**-37**	**58**	**93**	**109**	**64**	**66**	**67**
Depreciation & Amortisation	0	-1	-13	-32	-34	-35	-40	-40	-40	-40
EBIT	**-3**	**-18**	**-152**	**-69**	**24**	**58**	**69**	**24**	**26**	**27**
Net Finance Expense	0	-1	-11	-29	-17	-13	-10	-5	-1	2
Profit before tax	**-3**	**-18**	**-163**	**-95**	**7**	**45**	**59**	**19**	**25**	**29**
Income tax (expense)/benefit	0	0	0	0	0	0	0	0	-7	-9
Minorities	0	0	0	0	0	4	5	2	2	2
Reported NPAT	**-3**	**-18**	**-163**	**-95**	**7**	**40**	**54**	**17**	**16**	**18**

Source: Company reports, Shaw and Partners analysis

Figure 9: Bowen Coking Coal Cashflow

CASH FLOW (AS$m)	2021	2022	2023	2024	2025f	2026f	2027f	2028f	2029f	2030f
Operating activities										
Receipts from customers	0	0	185	467	414	415	614	574	576	589
Payments to suppliers and employe	-3	-19	-287	-466	-362	-328	-514	-519	-518	-530
Income taxes paid	0	0	0	0	0	0	0	0	0	-7
Working capital movement	0	0	0	0	-13	-4	22	5	0	1
Net cash flow from operating activities	**-3**	**-19**	**-105**	**-5**	**28**	**75**	**121**	**64**	**65**	**63**
Investing activities										
Payments for PPE	0	0	-67	-81	-77	-12	-2	-2	-2	-2
Other investing cash flow	-3	-32	-33	2	25	0	0	0	0	0
Net cash flow from investing activities	**-3**	**-33**	**-100**	**-79**	**-52**	**-12**	**-2**	**-2**	**-2**	**-2**
Free cash flow	**-6**	**-52**	**-206**	**-84**	**-24**	**63**	**118**	**61**	**62**	**61**
Financing activities										
Net proceeds from issue of shares	7	67	126	57	54	0	0	0	0	0
Proceeds from borrowings	0	20	72	0	0	0	0	0	0	0
Repayments of borrowings	0	0	-16	-2	-25	-26	-30	-30	-48	0
Dividends paid	0	0	0	0	0	0	0	0	0	0
Other	0	34	0	-2	-2	0	0	0	0	0
Net cash flow from financing activities	**7**	**121**	**182**	**54**	**27**	**-26**	**-30**	**-30**	**-48**	**0**
Net increase/(decrease) in cash	1	70	-24	-30	3	37	88	31	15	61

Source: Company reports, Shaw and Partners analysis

Equity Raise

Bowen recently completed a A$70m equity raise in the form of a 2.66-for-1 pro-rata renounceable entitlement offer at A$0.009ps. Every 2 new shares were accompanied by 1 free unlisted option with an exercise price of A$0.009ps and expiring in six months.

The offer was partially underwritten by major shareholders Crocodile, debt provider Taurus (which also partially converted debt to equity) and Square Resources, which has also signed an exclusive marketing agreement with Bowen.

The primary use of the funds raised are for the development of the Plumtree mine, which will replace production from Ellensfield South in mid-2025.

Some of the funds will also be used for Port Prepayments and Rail Guarantees, which will assist in managing the logistics of shipping coal to port. This has been a constraint in previous quarters, particularly in the month of July 2024.

We had already factored in a A$70m equity raise at 1cps, so there was minimal impact on our forecasts. The dilution was slightly higher than expected due to the 1 for 2 option issue which we assume will exercised and we fully dilute for

Figure 1: Equity raise – Sources and Uses

Sources	$m
Entitlement Offer	$70.0m
Cash Balance (30 June 2024)	$21.7m
Total sources	**$91.7m**

Uses	$m
Plumtree Capex (net of revenue)	$43.5m
Port Prepayments and Rail Guarantees	$10.0m
Working Capital and Cash to balance sheet (liquidity)	$33.2m
Transaction costs	$5.0m
Total uses	**$91.7m**

Source: Bowen ASX release 7 October 2024

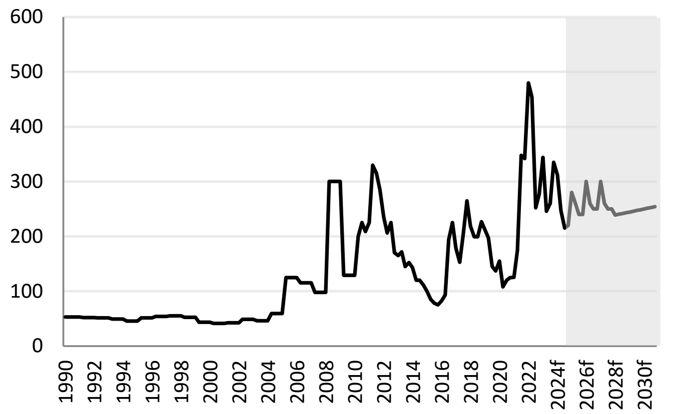
Coking coal price history and outlook

The trading dynamics of premium hard coking coal have changed enormously over the past 20 years due to the emergence of Chinese demand, and the breakdown in the contract negotiation process. Prior to 2005, the price was relatively stable at around US$50/t, but in today's market prices can move sharply due to changes in China policy setting, supply disruptions due to weather or geopolitical events like the Russia invasion of Ukraine.

Prior to 2010, coking coal prices were set by quarterly contract negotiations between the sellers (BHP and Teck) and the customers (Japanese and Korean steel mills). Whilst quarterly contracts still exist, the bulk of sales are now tied to a daily price index formulated by Platts.

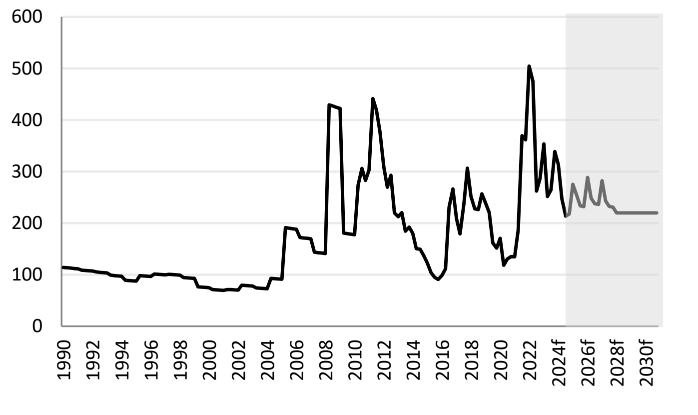
The coking coal price spiked to ~US$500/t post the Russian invasion of Ukraine but traded as low as US$75/t in early 2016 due to oversupply and weak demand in China.

Figure 10: Premium HCC price (US$/t)



Source: Metal Bulletin, Factset, Shaw and Partners analysis

Figure 11: Premium HCC price (US$/t real 2024$)



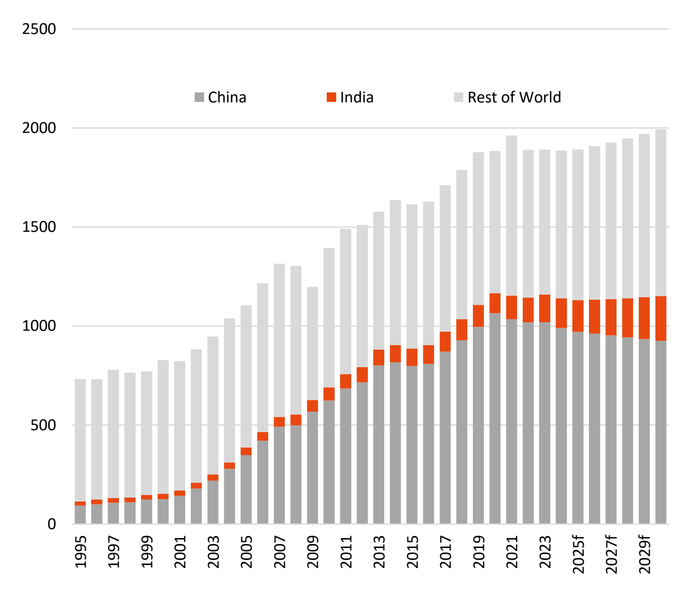
Source: Metal Bulletin, Factset, Shaw and Partners analysis

We expect demand for coking coal exports to grow from 322Mt in 2023 to 351Mt in 2030 which is driven by steady demand in the traditional markets of Japan, Korea and Taiwan, a decline in Chinese demand, and strong growth in India.

India became the world's largest importer of coking coal in 2021 (73Mt) and we expect Indian import demand to grow to ~120Mt of imports (34% of world total) by 2030. India is the world's fastest growing steel producer and is reliant on imported coking coal.

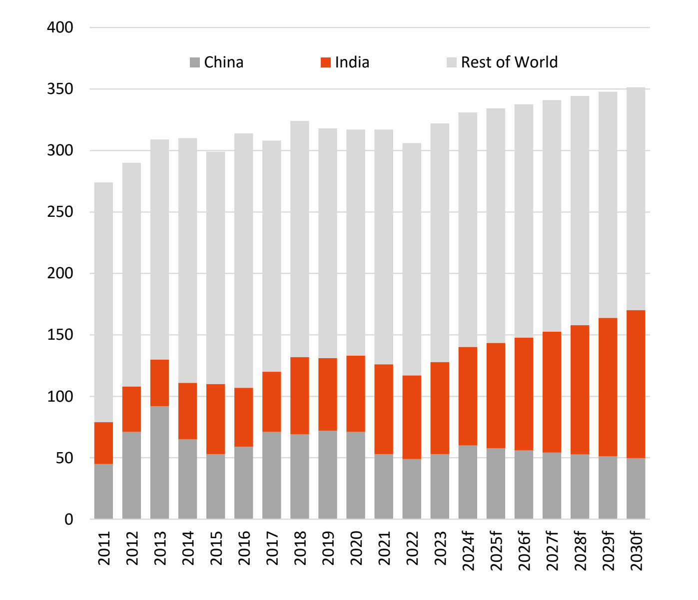
China, on the other hand, is expected to reduce its demand for imported coking coal as steel production plateaus, and steel production shifts to recycled steel scrap.

Figure 12: Global Steel Production (Mt)



Source: Metal Bulletin, Factset, Shaw and Partners analysis

Figure 13: Global Coking Coal demand (Mt)



Source: Metal Bulletin, Factset, Shaw and Partners analysis

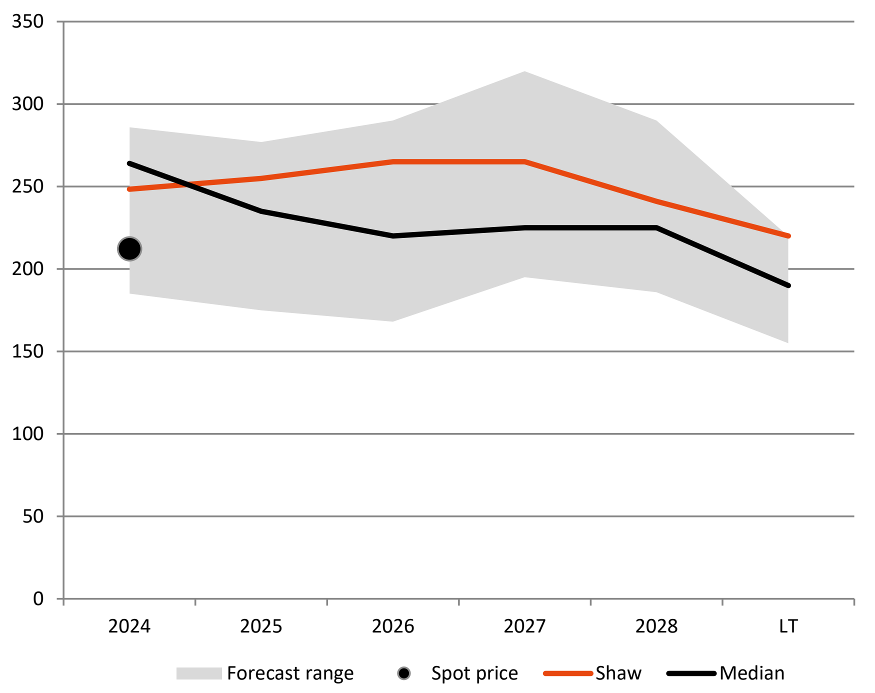
KPMG collects and publishes a regular quarterly update of consensus coking coal price forecasts. The long-term price ranges from US$155/t to US$220/t, with the median at US$190/t (US$ real 2024). The forecast range for 2025 is from U$175/t to US$277/t. These forecasts were collected in August 2024.

Figure 14: Premium Hard Coking Coal (US$/t)

Contributor	2024	2025	2026	2027	2028	LT
1	263	225	200			
2	254	198				
3	275	275	231	225	225	200
4	281	235	200			180
5	259	277	220			209
6	264	228	208			
7	264	265				200
8	266	245	229	225	238	200
9	276	260	238	220	200	170
10	245	230	220			190
11	243	206	170			
12	263	250	225	225	225	189
13	286	263	285	320	290	
14	273	228	208	195	186	170
15	264	253	200			200
16	217	196	168			
17	185	175	180			172
18	265	200	290			155
Shaw	**248**	**255**	**265**	**265**	**241**	**220**
Low	**185**	**175**	**168**	**195**	**186**	**155**
High	**286**	**277**	**290**	**320**	**290**	**220**
Average	**257**	**235**	**220**	**239**	**229**	**189**
Median	**264**	**235**	**220**	**225**	**225**	**190**

Source: KPMG, Shaw and Partners

Figure 15: Premium Hard Coking Coal (US$/t)

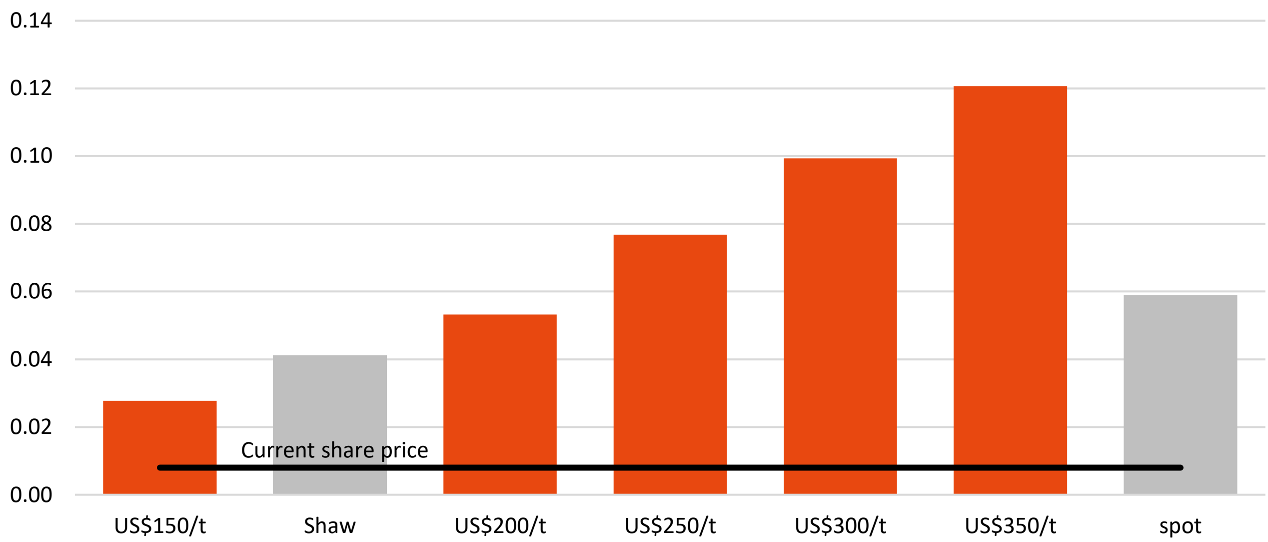


Source: KPMG, Shaw and Partners

Bowen Sensitivity to coal prices

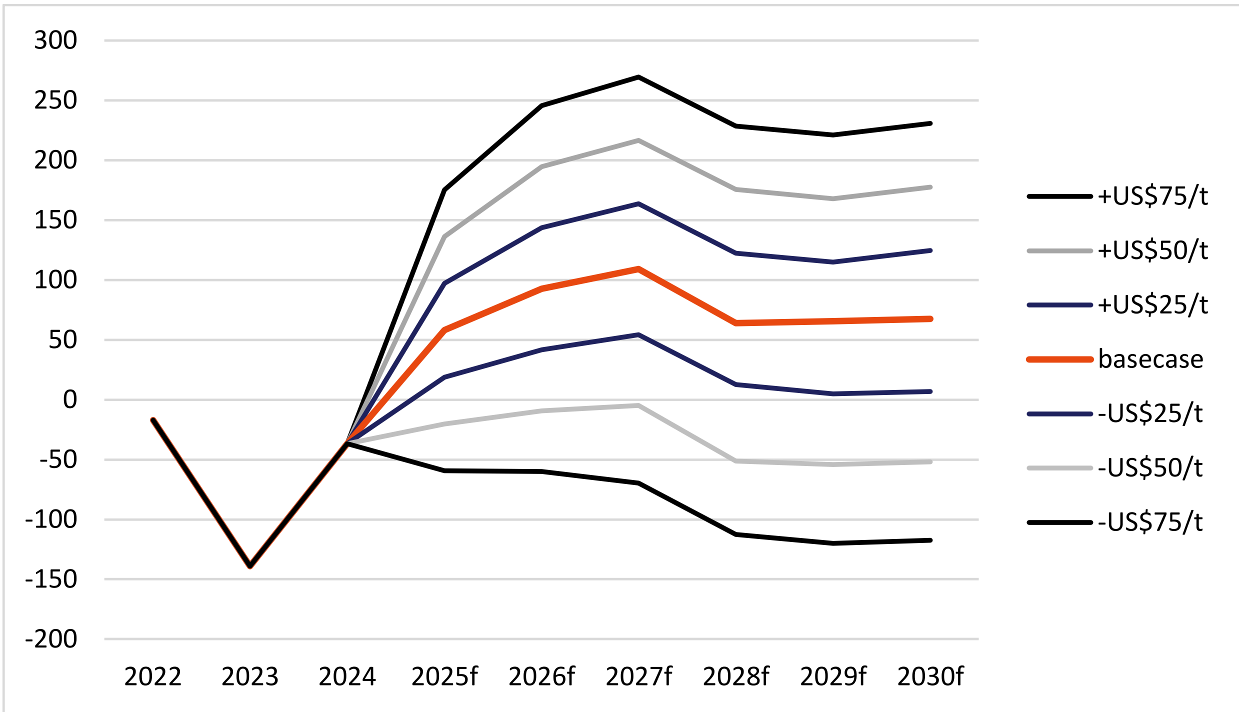
Bowen is a leveraged exposure to an expected improvement in coal prices. On our analysis, every US$25/t change in the coal price add A$0.01ps to our Bowen valuation and about A$50m to EBITDA.

Figure 16: Bowen Coking Coal valuation sensitivity to coking coal price (A$ps v US$/t)



Source: Company reports, Shaw and Partners analysis

Figure 17: Bowen EBITDA sensitivity to coal price changes (A$m v US$/t)



Source: Company reports, Shaw and Partners analysis

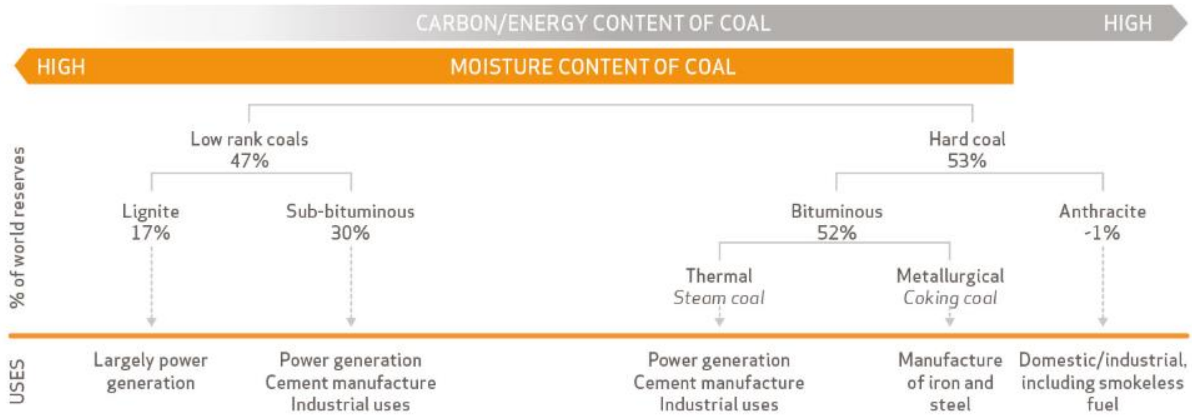
What is coking coal

Coking coal, also known as metallurgical coal, is used in the production of iron and steel. At this stage there is no commercial substitute for the use of coking coal, and so whilst demand for thermal coal is expected to fall due to decarbonisation of power generation, demand for coking coal is likely to continue to rise with growth in global steel production. Around 1 billion tonnes of metallurgical coal are used in global steel production, which accounts for around 15% of total coal consumption worldwide.

Coal is an abundant resource and there are recoverable reserves in almost every country worldwide. The largest reserves are in the US, China, Russia and Australia. China is the world's largest producer of coal (thermal and coking) and Australia is the largest coking coal exporter with 2023 exports of around 173Mt accounting for 54% of global exports.

Coal is classified by its physical and chemical properties and is referred to as the 'rank' of the coal. The ranks of coals, from those with the least carbon to those with the most carbon, are lignite, sub-bituminous, bituminous and anthracite (figure 6).

Figure 18: Types of coal



Source: World Coal Association

Coking coals have high carbon or energy levels, low moisture contents and low impurities such as ash, sulphur and phosphorous. Coking coals are split into three main categories;

- **Hard coking coal (HCC)** - a necessary input in the production of strong coke. When heated in a coke oven (which has an absence of oxygen), hard coking coal will swell to form coke.
- **Pulverised Coal Injection coal (PCI)** - coal used for its heat value and injected directly into blast furnaces as a supplementary fuel, which reduces the amount of coke required and therefore costs.
- **Semi-soft coking coal (SSCC)** - used in the coke blend along with hard coking coal, but results in a low coke quality and more impurities. Semi-soft coking coal can also be sold as thermal coal.

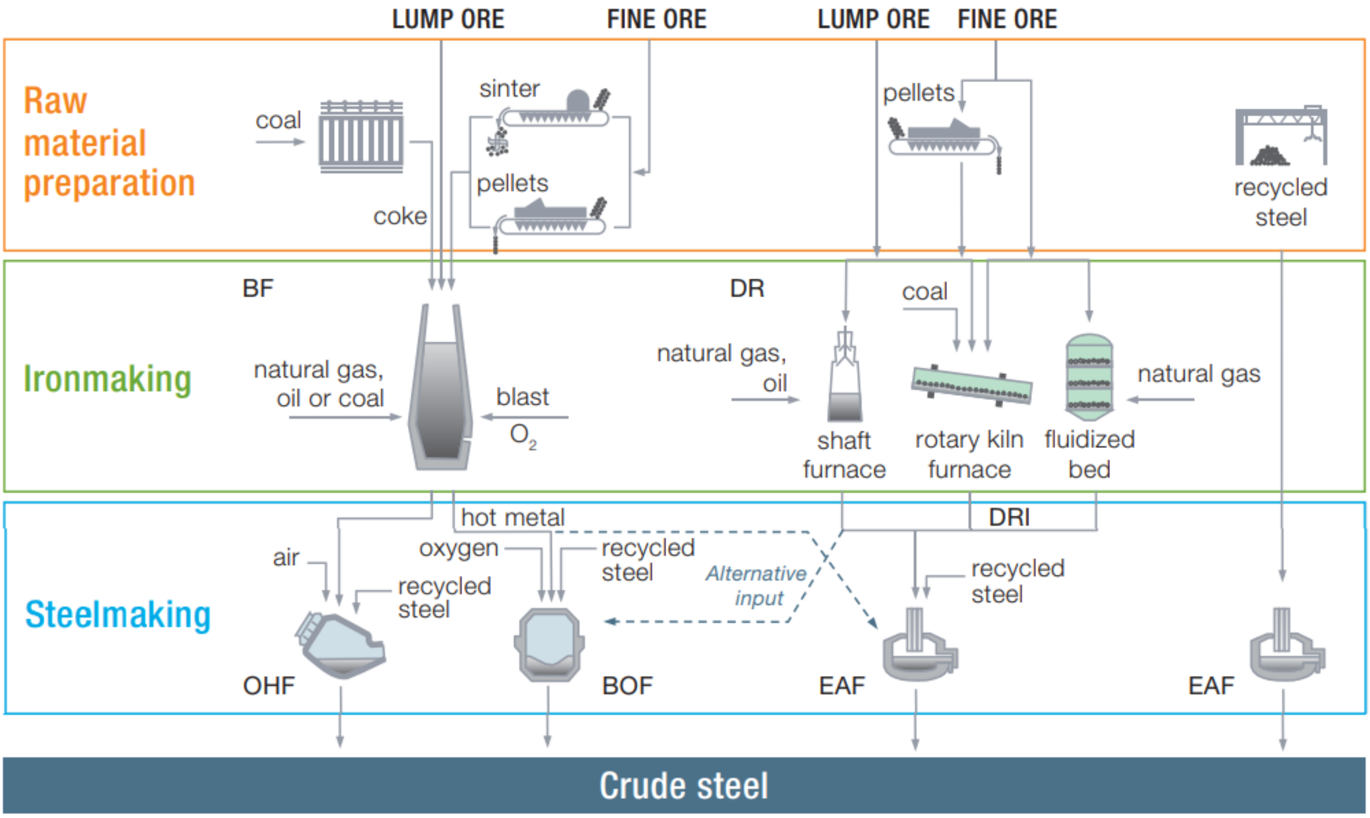
There are three different technologies in use for the production of iron and steel;

- **Integrated steel mills** based on the blast furnace (BF) and basic oxygen furnace (BOF), which uses raw materials including iron ore, coal, limestone and recycled steel. On average, this route uses 1,370 kg of iron ore, 780 kg of metallurgical coal, 270 kg of limestone, and 125 kg of recycled steel to produce 1,000 kg of crude steel. Approximately 70% of world steel is produced in integrated steel mills, although this is heavily weighted towards China.
- **Electric arc furnaces (EAF)** use recycled steel and electricity to convert steel scrap into steel products. About 30% of world steel is produced in EAF's although the

proportion is much higher in developed economies with a well-established steel scrap cycle.

- **Direct reduced iron (DRI)** converts iron ore into iron metal without the need for coking coal. This technology has proven difficult to commercialise in significant scale and very little steel is produced with this technology. BHP's Hot Briquetted Iron plant (HBI) and Rio Tinto's HiSmelt were examples of the DRI process.

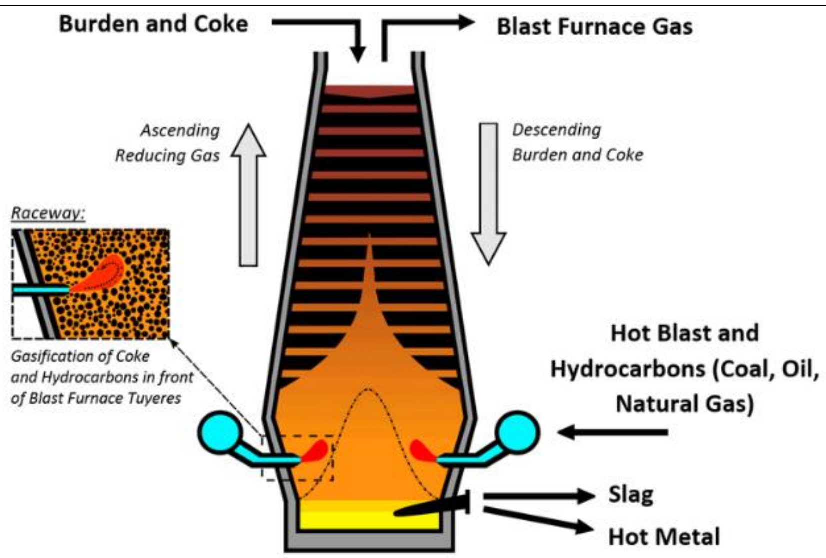
Figure 19: Steel making production routes



Source: World Steel Association

Coke is produced by heating coking coal in a coke oven in the absence of oxygen. Coke is then charged into a blast furnace to provide fuel and to convert iron ore into liquid iron.

Figure 20: Blast furnace schematic



Source: World Steel Association

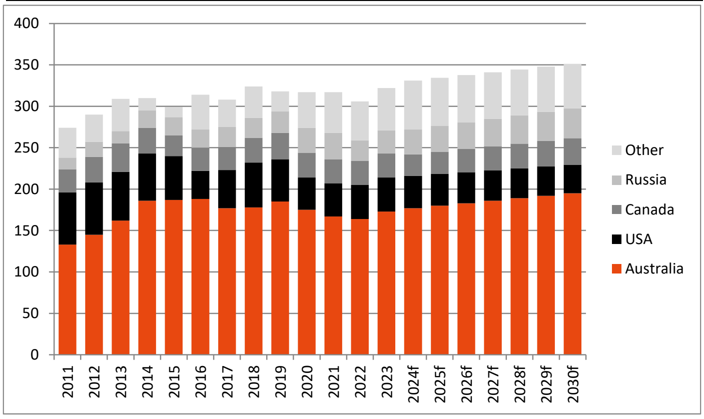
Coke provides three important functions in a blast furnace;

- provides a source of energy,
- acts as a reducing agent for the iron ore - combining with the oxygen to convert Fe_2O_3 (hematite) and Fe_3O_4 (magnetite) to liquid iron and CO2,
- provides permeability to the blast furnace burden – larger blast furnaces require stronger coke in furnace to prevent the furnace from clogging up.

Whilst a strong coke is essential for a blast furnace to operate efficiently, it is relatively expensive and so furnaces will also use pulverized coal injection (PCI) coal to satisfy the first two functions above. PCI coals are generally cheaper and do not require a coke oven. Steel manufacturers also use a proportion of semi-soft coking coal in the coke mix to reduce overall costs.

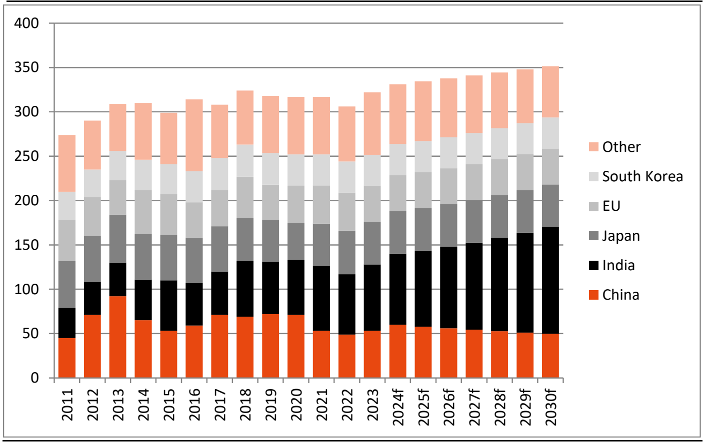
Of the 173Mt of metallurgical coal that was exported from Australia in 2023, around 117Mt was hard coking coal, 34Mt was PCI (pulverized injection coal) and 22Mt was semi-soft coal.

Figure 21: Global coking coal exports (Mt)



Source: Industry.gov.au/REQ, Shaw and Partners analysis

Figure 22: Global coking coal imports (Mt)



Source: Industry.gov.au/REQ, Shaw and Partners analysis

Australia's domination of coking coal exports is predicated on four major factors;

- **Coal quality**. Hard coking coal from Queensland's Bowen Basin is generally considered the best in the world and many benchmark prices for coking coal are based on Australian coals.
- **Proximity to markets**. Transportation costs form a significant portion of the landed cost of coal and so Australia's proximity to the key Asian markets of Japan, Korea, Taiwan and China provides a logistical advantage.
- **Growth** in the key Asian markets of Japan, Korea, India and China.
- **Customer equity in Australian mines**. Asian customers are often equity participants in Australian mines. Indeed, investment from Japanese customers was an important part of the process in opening up the Bowen Basin.

Key risks

- Commodity prices are driven by global growth and the market's expectation of growth. In the current geo-political climate there are numerous risks to global growth expectations. Issues such as rising interest rates, the Russia/Ukraine war, supply chain issues and global trade imbalances have the potential to change global growth projections.

- The coal market is severely impacted by largely unpredictable movements in Chinese policy settings. Coal prices may be adversely impacted if China implements policies that reduce its reliance on seaborne coal.

- Forecasting future commodity prices and operating costs has considerable uncertainty. Our forecasts may prove to be too optimistic on both. If coal prices continue to reduce and/or Bowen Coking Coal's costs increase faster than we expect then our cash flow forecasts will be too high.

- Climate change is requiring a de-carbonisation of global energy production. Bowen Coking Coal is largely a coking coal producer so is less impacted than thermal coal mines, but all coal producers are under increased scrutiny and regulatory approvals may be harder to achieve than expected.

- Smaller companies carry more significant 'key personnel' risk than larger organisations. If senior management depart the company then it could delay projects or exacerbate operational risks.

- Bowen Coking Coal is operating in a region that is exposed to cyclone activity. Disruption to mining, rail and/or port operations is possible during the Queensland cyclone season.

Core drivers and catalyst

- Bowen Coking Coal Ltd is a coking coal exploration and development company based in the Bowen Basin in Queensland. The company's assets include Bluff (100%), Broadmeadow East (90%), Isaac River (100%), Lenton (90%), Burton (90%) Cooroorah (100%), Hillalong (85%) and Comet Ridge (100%). Bowen is also a joint venture partner with Stanmore Coal Limited in the Lilyvale (15% interest) and Mackenzie (5% interest) coking coal projects

- On 4 July 2022 Bowen announced the first shipment of metallurgical coal from the Bluff Project which moved the company into production for the first time. Bowen also acquired and is refurbishing the 5.5mtpa Burton coal handling and preparation plant (CHPP). Stage 1 is complete and provides 2.7mpta of was capacity and stage 2 is expected to be completed in 2025.

- There is a clear growth pathway to production of 4-5Mtpa over the next 2-3 years as the company develops the Ellensfield South and Lenton resources and there are growth opportunities at Hillalong.

- Coking coal is used in the steel-making process in blast furnaces and has very different demand dynamics to thermal coal which is used to generate electricity in coal-fired power stations. Global steel production is continuing to grow in-line with global GDP, and is particularly fast growing in the developing world (e.g. India). We forecast global coking coal seaborne trade to grow from 322Mt in 2023 to 351Mt in 2030.

ShawandPartners
Financial Services

Rating Classification

Buy	Expected to outperform the overall market
Hold	Expected to perform in line with the overall market
Sell	Expected to underperform the overall market
Not Rated	Shaw has issued a factual note on the company but does not have a recommendation

Risk Rating

High	Higher risk than the overall market – investors should be aware this stock may be speculative
Medium	Risk broadly in line with the overall market
Low	Lower risk than the overall market

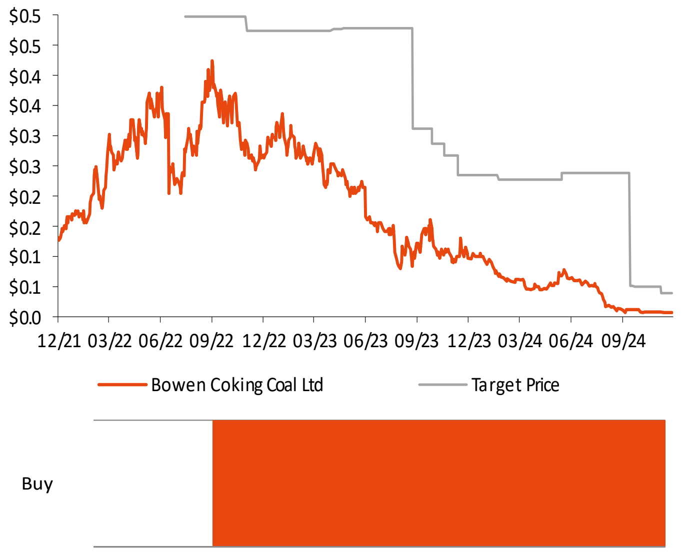
RISK STATEMENT: Where a company is designated as 'High' risk, this means that the analyst has determined that the risk profile for this company is significantly higher than for the market as a whole, and so may not suit all investors. Clients should make an assessment as to whether this stock and its potential price volatility is compatible with their financial objectives. Clients should discuss this stock with their Shaw adviser before making any investment decision.

Distribution of Investment Ratings

Rating	Count	Recommendation Universe
Buy	73	92%
Hold	6	8%
Sell	0	0%

History of Investment Rating and Target Price - Bowen Coking Coal Ltd

Date	Closing Price ($)	Target Price ($)	Rating
13-Nov-24	0.01	0.04	Buy
23-Sep-24	0.01	0.05	Buy
19-Sep-24	0.01	0.05	Buy
20-May-24	0.07	0.24	Buy
29-Jan-24	0.07	0.23	Buy
17-Nov-23	0.10	0.23	Buy
24-Oct-23	0.10	0.27	Buy
2-Oct-23	0.15	0.29	Buy
29-Aug-23	0.10	0.31	Buy
26-Apr-23	0.24	0.48	Buy
6-Apr-23	0.25	0.48	Buy
7-Nov-22	0.29	0.47	Buy
20-Jul-22	0.27	0.50	Buy



Disclaimer

Shaw and Partners Limited ABN 24 003 221 583 (“Shaw”) is a Participant of ASX Limited, Cboe Australia Pty Limited and holder of Australian Financial Services Licence number 236048.

ANALYST CERTIFICATION: The Research Analyst who prepared this report hereby certifies that the views expressed in this document accurately reflect the analyst's personal views about the Company and its financial products. Neither Shaw nor its Research Analysts received any direct financial or non-financial benefits from the company for the production of this document. However, Shaw Research Analysts may receive assistance from the company in preparing their research which can include attending site visits and/or meetings hosted by the company. In some instances the costs of such site visits or meetings may be met in part or in whole by the company if Shaw considers it is reasonable given the specific circumstances relating to the site visit or meeting. As at the date of this report, the Research Analyst does not hold, either directly or through a controlled entity, securities in the Company that is the subject of this report, or where they do hold securities those interests are not material. Shaw restricts Research Analysts from trading in securities outside of the ASX/S&P100 for which they write research. Other Shaw employees may hold interests in the company, but none of those interests are material.

DISCLAIMER: This report is published by Shaw to its clients by way of general, as opposed to personal, advice. This means it has been prepared for multiple distribution without consideration of your investment objectives, financial situation and needs (“Personal Circumstances”). Accordingly, the advice given is not a recommendation that a particular course of action is suitable for you and the advice is therefore not to be acted on as investment advice. You must assess whether or not the advice is appropriate for your Personal Circumstances before making any investment decisions. You can either make this assessment yourself, or if you require a personal recommendation, you can seek the assistance of your Shaw client adviser. This report is provided to you on the condition that it not be copied, either in whole or in part, distributed to or disclosed to any other person. If you are not the intended recipient, you should destroy the report and advise Shaw that you have done so. This report is published by Shaw in good faith based on the facts known to it at the time of its preparation and does not purport to contain all relevant information with respect to the financial products to which it relates. The research report is current as at the date of publication until it is replaced, updated or withdrawn. Although the report is based on information obtained from sources believed to be reliable, Shaw does not make any representation or warranty that it is accurate, complete or up to date and Shaw accepts no obligation to correct or update the information or opinions in it. If you rely on this report, you do so at your own risk. Any projections are indicative estimates only and may not be realised in the future. Such projections are contingent on matters outside the control of Shaw (including but not limited to market volatility, economic conditions and company-specific fundamentals) and therefore may not be realised in the future. Past performance is not a reliable indicator of future performance. Except to the extent that liability under any law cannot be excluded, Shaw disclaims liability for all loss or damage arising as a result of any opinion, advice, recommendation, representation or information expressly or impliedly published in or in relation to this report notwithstanding any error or omission including negligence.

Depending on the timing and size of your investment, your portfolio composition may differ to the model. Performance figures are derived from the inception date of the model and its investment transactions from that date, therefore the performance for your portfolio may be different. If you have any questions in connection with differences between your portfolio and the model, you should speak with your adviser.

For U.S. persons only: This research report is a product of Shaw and Partners Limited **under Marco Polo Securities 15a-6 chaperone service,** which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

Research reports are intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a-6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor. In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, Shaw and Partners Limited has entered into a chaperoning agreement with a U.S. registered broker-dealer, Marco Polo Securities Inc. ("Marco Polo"). Transactions in securities discussed in this research report should be affected through Marco Polo or another U.S. registered broker dealer.

DISCLOSURE: Shaw will charge commission in relation to client transactions in financial products and Shaw client advisers will receive a share of that commission. Shaw, its authorised representatives, its associates and their respective officers and employees may have earned previously or may in the future earn fees and commission from dealing in the Company's financial products. Shaw acted for the company in a corporate capacity within the past 12 months for which it received a fee.

Sydney | Head Office	**Melbourne**	**Brisbane**	**Adelaide**	**Canberra**	**Perth**	**Noosa**
Level 7, Chifley Tower	Level 36	Level 28	Level 25	Level 9	Level 47	Suite 11a Q Place
2 Chifley Square	120 Collins Street	111 Eagle Street	91 King William Street	5 Constitution Avenue	108 St Georges Terrace	2 Quamby Place
Sydney NSW 2000	Melbourne VIC 3000	Brisbane QLD 4000	Adelaide SA 5000	Canberra ACT 2601	Perth WA 6000	Noosa Heads QLD 4567
Telephone: +61 2 9238 1238	Telephone: +61 3 9268 1000	Telephone: +61 7 3036 2500	Telephone: +61 8 7109 6000	Telephone: +61 2 6113 5300	Telephone: +61 8 9263 5200	Telephone: +61 7 3036 2570
Toll Free: 1800 636 625	Toll Free: 1800 150 009	Toll Free: 1800 463 972	Toll Free: 1800 636 625	Toll Free: 1800 636 625	Toll Free: 1800 198 003	Toll Free: 1800 271 201