

Metro Mining (MMI)

Rating: Buy | Risk: High | Price Target: \$0.07

22 April 2024

Bauxite Market Tightness – price up 20%

Key Information

Current Price (\$ps)	0.04
12m Target Price (\$ps)	0.07
52 Week Range (\$ps)	0.02 - 0.05
Target Price Upside (%)	59.3%
TSR (%)	59.3%
Reporting Currency	AUD
Market Cap (\$m)	196
Sector	Materials
Avg Daily Volume (m)	4.7
ASX 200 Weight (%)	0%

Fundamentals

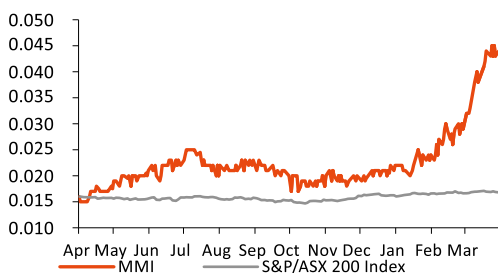
YE 31 Dec (AUD)	FY23A	FY24E	FY25E	FY26E
Sales (\$m)	236	330	395	417
NPAT (\$m)	(13)	52	91	100
EPS (cps)	(0.3)	1.2	2.1	2.3
EPS Growth (%)	77.3%	486.0%	74.3%	9.7%
DPS (cps) (AUD)	0.0	0.0	1.0	1.0
Franking (%)	0%	0%	0%	100%

Ratios

YE 31 Dec	FY23A	FY24E	FY25E	FY26E
P/E (x)	(6.8)	3.6	2.1	1.9
EV/EBITDA (x)	13.6	2.7	1.9	1.8
Div Yield (%)	0.0%	0.0%	23.3%	23.3%
Payout Ratio (%)	0.0%	0.0%	48.1%	43.9%

Price Performance

YE 31 Dec	1 Mth	2 Mth	3 Mth	1 Yr
Relative (%)	47.2%	78.0%	90.9%	163.5%
Absolute (%)	48.3%	79.2%	95.5%	168.8%
Benchmark (%)	1.1%	1.2%	4.6%	5.3%



Major Shareholders

Greenstone Resources LLP	24.0%
Balanced Property Pty Ltd.	9.5%

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 bauxite market has tightened due to strong Chinese import demand and bauxite export bans from Indonesia. Metro Mining is reporting that the bauxite price has increased 20% in this quarter compared to 4Q23. We expect to see the bauxite price continue to climb due to strong Chinese demand and constrained supply. Metro Mining has expanded the capacity of its Bauxite Hills operation from 4Mt to 7Mt. In our view, the market is still focused on the past three difficult years for the company and is under-estimating how de-risked Metro Mining now is, and the extent of the upside. The main remaining concern is the company's balance sheet, but strong cash flow should allow for rapid debt reduction and that is likely to be a strong driver of share price appreciation.

Highlights

- China is the largest importer of bauxite (~142Mt in 2023), with imports expected to grow a further ~40Mt over the next decade due to growth in alumina refining capacity and decline in Chinese domestic production. The same dynamic which impacted iron ore in the period from 2005-15 is now impacting bauxite – Chinese demand has overwhelmed the country's ability to supply itself from domestic sources.
- In 2022 there were three major exporters of bauxite to China: Guinea (~80Mt), Indonesia (~20Mt) and Australia (~30Mt). In January 2014 Indonesia banned the export of all low value commodities, a policy designed to encourage downstream processing investment. In Jan 2017, the government granted a five-year exemption to nickel and bauxite exporters to continue to until 11 January 2022. The exemption was repealed for nickel in 2019 and bauxite in June 2023. In 2023, Indonesian exports dropped to 8Mt, and this has gone to zero in 2024.
- Guinea is under-going a period of political turmoil. In September 2021 the President of Guinea, Alpha Conde was captured by the country's armed forces in a coup d'état. The head of the military junta, Colonel Mamady Doumbouya has promised to return the country to democracy within three years – but Guinea remains suspended from the Economic Community of West African States (ECOWAS). Chinese money has paid for most of Guinea's bauxite development, and production does not appear to be at risk, but it remains uncertain how much additional investment China will want to make into a country in turmoil. It is also likely that the easiest and cheapest bauxite deposits in Guinea have already been exploited. Further growth in Guinean exports may provide higher cost support for landed prices in China.
- There is also downside risk to Australia's bauxite exports with Rio Tinto planning to close the 11Mtpa Gove operation in N.T. later this decade and needing to make decisions around further investment at Weipa to maintain production capacity.
- Metro Mining has expanded capacity at the Bauxite Hills Mine from 4.0 to 7.0Mt and is guiding to 6.3-6.8Mt of production in 2024.
- CEO Simon Wensley has leveraged his extensive experience at Rio Tinto and the alumina/bauxite industry to significantly improve Metro's operations. Equipment reliability, operational resilience and risk management have all significantly improved. Metro was reliably operating at >6Mtpa operating rates for Oct/Nov 2023 before being impacted by Cyclone Jasper.
- Investors remain concerned about Metro Mining's relatively large debt position of approximately A\$100m if the Nebari royalty is considered as debt. However, if our 2024 forecasts are correct then investors can expect a material increase in cash flow, and the Metro share price, which will give the company significant flexibility to restructure the debt and royalty later in 2024.

Recommendation

Metro Mining is one of our top picks for 2024 and we maintain our BUY recommendation and price target of 7c, which is set at a 50% discount to our DCF valuation.

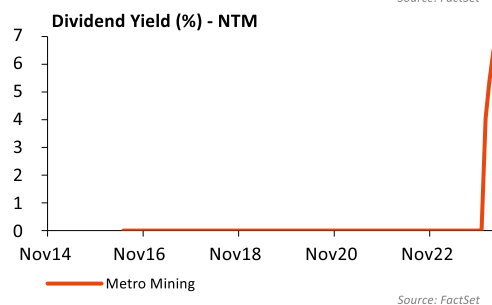
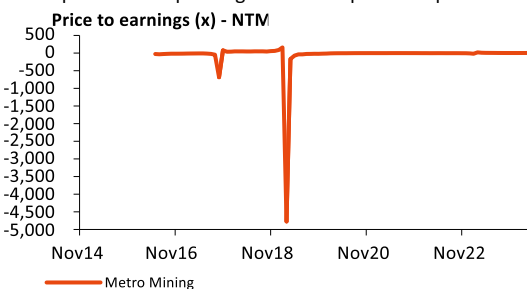
**Metro Mining
Materials**

FactSet: MMI-AU / Bloomberg: MMI AU

Key Items	Data
Recommendation	BUY
Risk	HIGH
Price (\$ps)	0.04
Target Price (\$ps)	0.07
52 Week Range (\$ps)	0.02 - 0.05
Shares on Issue (m)	4,556
Market Cap (\$m)	196
Enterprise Value (\$m)	296
TSR (%)	59.3%
Valuation per share (cps) (AUD)	0.14
Valuation (\$m)	655.59

Company Description

Metro Mining operates the Bauxite Hills operation in Far North Queensland and exports bauxite to customers in China. The company commenced operations in 2018 and is in the process of expanding from 3.5Mtpa to 7Mtpa.



Financial Year End: 31 December

Investment Summary (AUD)	FY22A	FY23A	FY24E	FY25E	FY26E
EPS (Reported) (cps)	(1.4)	(0.3)	1.2	2.1	2.3
EPS (Underlying) (cps)	(1.4)	(0.3)	1.2	2.1	2.3
EPS (Underlying) Growth (%)	71.7%	77.3%	486.0%	74.3%	9.7%
PE (Underlying) (x)	(1.0)	(6.8)	3.6	2.1	1.9
EV / EBIT (x)	(8.1)	58.4	3.5	2.3	2.2
EV / EBITDA (x)	(13.1)	13.6	2.7	1.9	1.8
DPS (cps) (AUD)	0.0	0.0	0.0	1.0	1.0
Dividend Yield (%)	0.0%	0.0%	0.0%	23.3%	23.3%
Franking (%)	0%	0%	0%	0%	100%
Payout Ratio (%)	0.0%	0.0%	0.0%	48.1%	43.9%
Free Cash Flow Yield (%)	(7.8%)	(0.2%)	44.5%	72.3%	69.6%
Profit and Loss (AUD) (m)	FY22A	FY23A	FY24E	FY25E	FY26E
Sales	178	236	330	395	417
Sales Growth (%)	11.1%	32.6%	39.9%	19.7%	5.6%
Other Operating Income	1	0	0	0	0
EBITDA	(23)	22	111	157	160
EBITDA Margin (%)	(12.7%)	9.2%	33.5%	39.7%	38.5%
Depreciation & Amortisation	(14)	(17)	(26)	(28)	(28)
EBIT	(36.6)	5.1	84.5	128.7	132.4
EBIT Margin (%)	(20.6%)	2.2%	25.6%	32.6%	31.7%
Net Interest	(14)	(19)	(14)	(6)	2
Pretax Profit	(50)	(13)	70	123	135
Tax	0	0	(18)	(32)	(35)
Tax Rate (%)	0.0%	0.0%	(26.0%)	(26.0%)	(26.0%)
NPAT Underlying	(50)	(13)	52	91	100
Significant Items	0	0	0	0	0
NPAT Reported	(50)	(13)	52	91	100
Cashflow (AUD) (m)	FY22A	FY23A	FY24E	FY25E	FY26E
EBIT	(37)	5	85	129	132
Tax Paid	0	0	0	(18)	(32)
Net Interest	0	0	0	2	4
Change in Working Capital	0	0	(4)	(1)	1
Depreciation & Amortisation	14	17	26	28	28
Operating Cashflow	(1)	12	107	139	134
Capex	(3)	(12)	(22)	(2)	(2)
Acquisitions and Investments	0	0	0	0	0
Disposal of Fixed Assets/Investments	0	0	0	0	0
Other	(4)	(13)	(1)	(1)	(1)
Investing Cashflow	(7)	(25)	(23)	(3)	(3)
Free Cashflow	(4)	(0)	84	136	131
Equity Raised / Bought Back	20	0	0	0	0
Dividends Paid	0	0	0	0	(44)
Change in Debt	9	39	(33)	(46)	0
Other	(21)	(15)	(15)	(8)	(2)
Financing Cashflow	8	24	(48)	(54)	(46)
Net Change in Cash	(0)	12	36	82	85
Balance Sheet (AUD) (m)	FY22A	FY23A	FY24E	FY25E	FY26E
Cash	12	17	53	135	220
Accounts Receivable	4	9	12	15	16
Inventory	3	3	5	5	6
Other Current Assets	4	6	6	6	6
PPE	79	87	84	59	34
Total Assets	130	157	195	255	316
Accounts Payable	28	24	25	27	29
Short Term Debt	36	33	46	0	0
Long Term Debt	3	46	0	0	0
Total Liabilities	99	156	141	111	116
Ratios	FY22A	FY23A	FY24E	FY25E	FY26E
ROE (%)	(164.5%)	(93.3%)	144.7%	84.5%	55.1%
Gearing (%)	58.0%	86.2%	(12.9%)	(768.5%)	1,914.4%
Net Debt / EBITDA (x)	(1.2)	2.8	(0.1)	(0.9)	(1.4)

Bauxite

Bauxite is a naturally occurring material which is predominantly used as a feedstock for the manufacture of alumina, which in turn is predominantly used to produce aluminium. It takes around 5t of bauxite to produce 2t of alumina to produce 1t of aluminium.

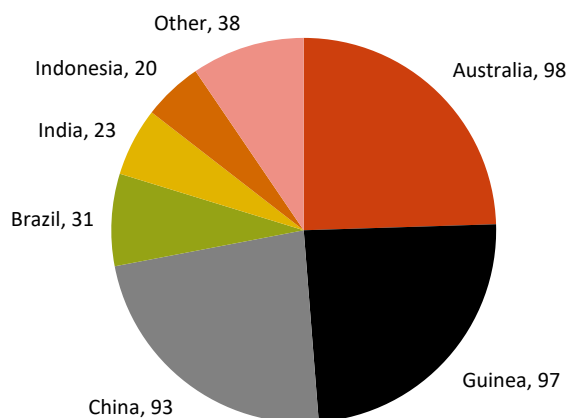
Bauxite is classified according to its intended commercial application; metallurgical, cement, fertiliser, abrasive, chemical or refractory. The vast majority (~85%) of bauxite mined globally is classified as metallurgical and is converted to alumina (Al₂O₃) for the production of aluminium metal.

The quality of bauxite as a feedstock for alumina production is determined largely by its grade (% alumina) and by amount of impurities, particularly reactive silica. Higher amounts of reactive silica require increased consumption of caustic in the refining process and significantly add to alumina refining costs.

The global bauxite market

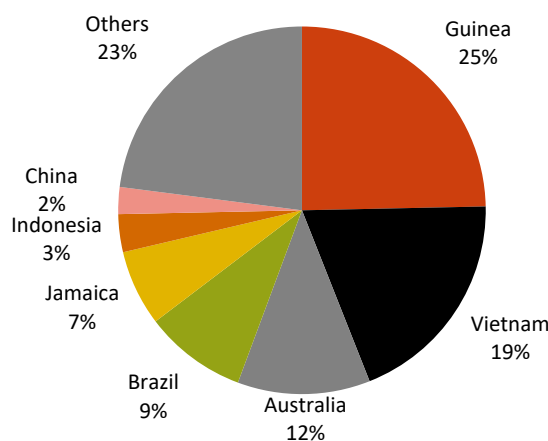
Global bauxite production in 2023 was approximately 400Mt. Australia was the world's largest bauxite producer at 98Mt, followed by Guinea at 97Mt and China at 93Mt.

Figure 1: 2023 Bauxite production (mt)



Source: US Geological Survey – Mineral Commodity Summaries 2024

Figure 2: 2023 World bauxite reserves (% of total)



Source: US Geological Survey – Mineral Commodity Summaries 2024

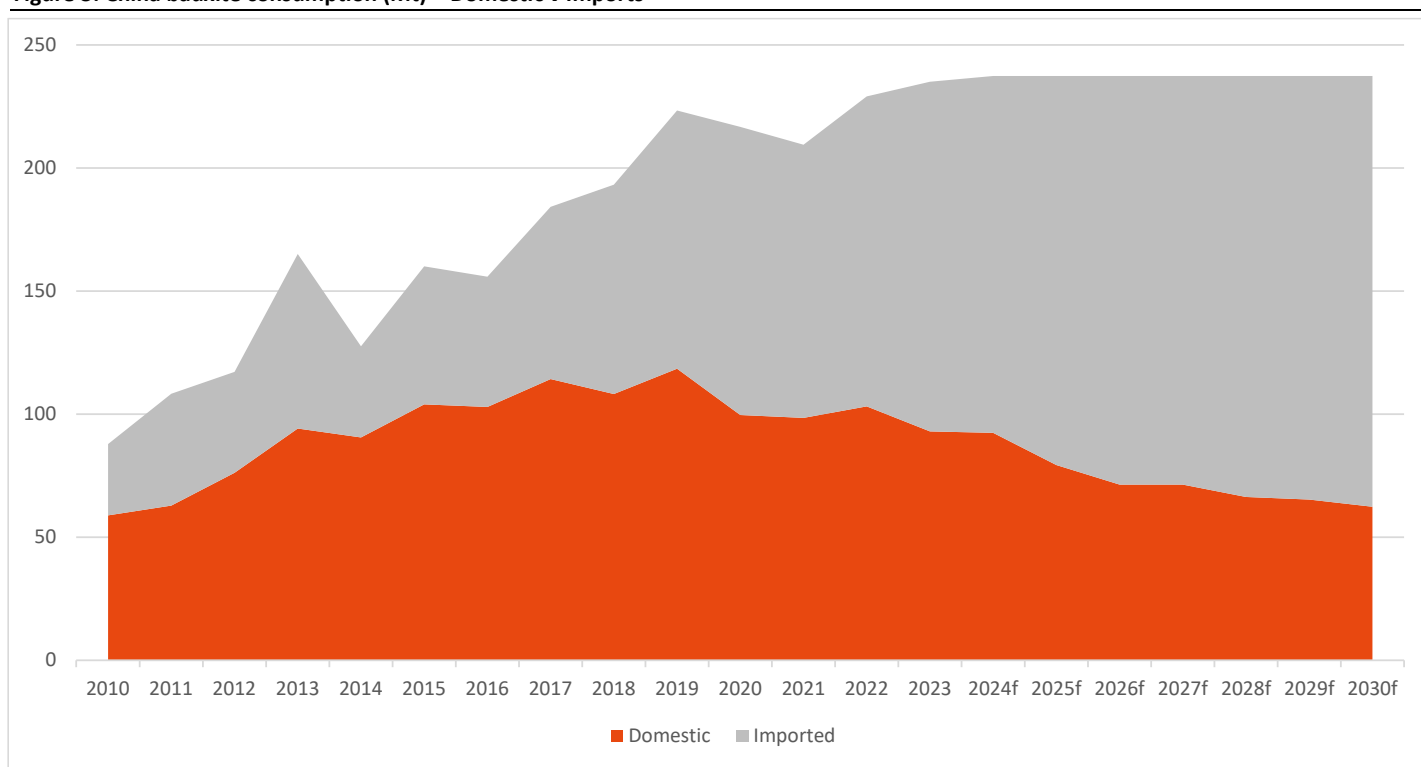
The aluminium, alumina and bauxite industries have been through substantial change in the past 20 years as a result of five major trends:

1. **The disaggregation of the industry:** The value chain from bauxite to alumina to aluminium has become increasingly disaggregated with 3rd party sales of bauxite and alumina to Chinese and other customers. Historically, the industry was largely integrated with companies such as Rio Tinto, Alcoa and Norsk Hydro producing aluminium from their own sourced bauxite and alumina. As a result, the prices of bauxite and alumina now trade on their own supply/demand fundamentals.
2. **The emergence and subsequent decline of China bauxite production:** China is a major consumer and producer of bauxite, alumina and aluminium. China ramped-up domestic bauxite production to support downstream alumina and aluminium production from the early 2000. By 2019 China was the world's largest producer of bauxite. However, it has begun to exhaust its reserves of quality bauxite, much the same way as it did with iron ore in the 2000's. As a result, China domestic production has been in decline since 2019, a trend which is expected to continue.
3. **Increased demand by China for imported bauxite:** Chinese alumina refineries have begun to source bauxite from outside China due to declining quality and quantity of domestic production. Chinese domestic production is expected to continue to decline, and China will become further reliant on imports.

4. **The emergence of Guinea as a major bauxite producer:** The growth in Guinean exports has been phenomenal in the past decade due to Chinese investment. In 2017, a consortium of Chinese companies ‘lent’ the Guinean government US\$20b for infrastructure projects in return for bauxite concessions. The shipping cost to transport bauxite from West Africa is approximately US\$25/t and so this forms a significant proportion of the landed cost of bauxite in China.

Historically there have been three major exporters of bauxite to China; Guinea, Indonesia and Australia. In January 2014 Indonesia banned the export of all low value commodities, a policy designed to encourage downstream processing investment. In Jan 2017, the government granted a five-year exemption to nickel and bauxite exporters to continue to until 11 January 2022. The exemption was repealed for nickel in 2019, and bauxite in mid-2023.

Figure 3: China bauxite consumption (Mt) – Domestic v Imports

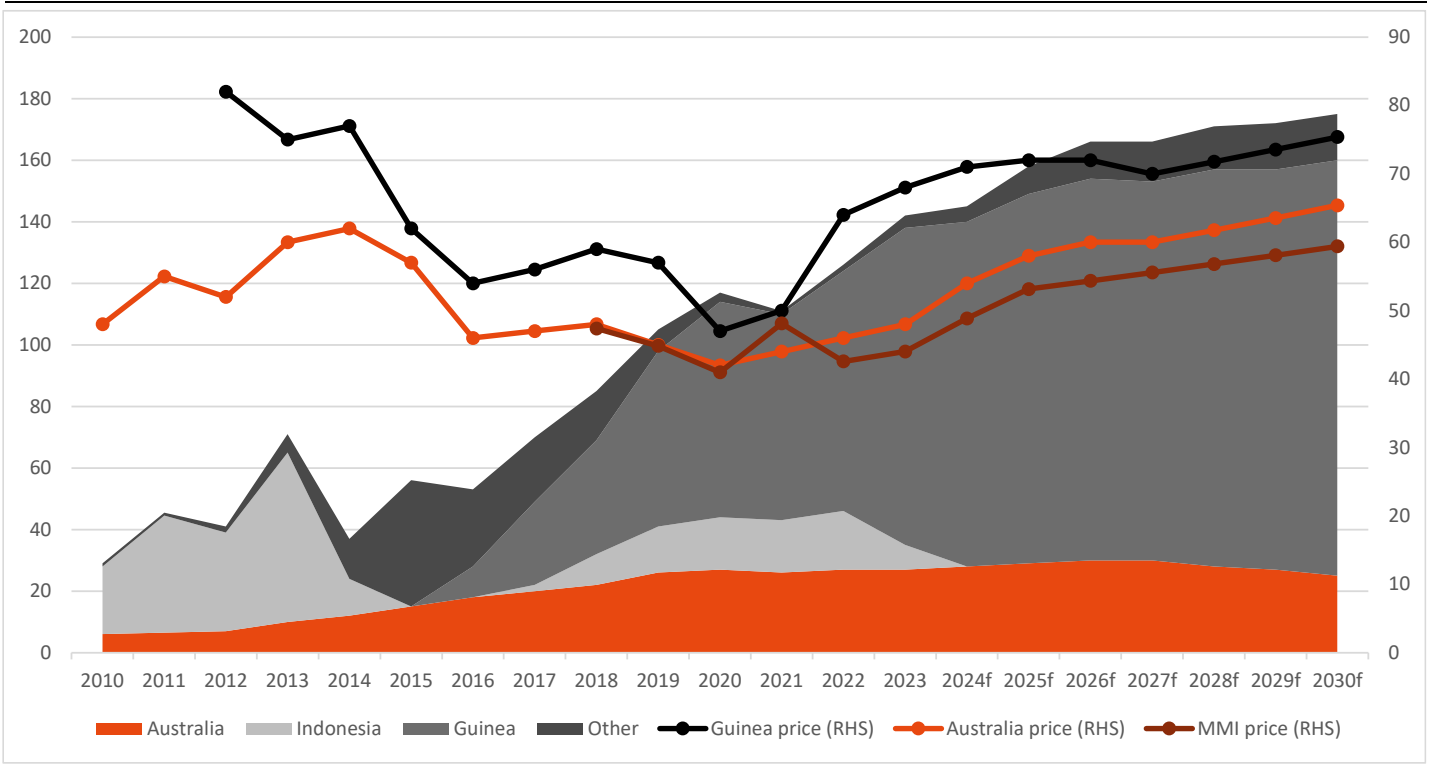


Source: Alumina Ltd Mar 2023 presentation, CM Group, Shaw and Partners forecasts

In our view, the price of bauxite is likely to continue to strengthen for the following reasons:

1. Continued growth in seaborne demand from China. Overall demand from China is likely to plateau due to the country’s cap on aluminium capacity, but continued decline in domestic production will see increasing reliance on imported bauxite.
2. The bans on Indonesia exports leave Guinea and Australia as the only main sources of seaborne supply for China.
3. It is likely that the easiest bauxite deposits in Guinea have already been exploited. Future growth is likely to come from higher cost developments further from the coast. Guinea is the marginal producer and so sets the landed cost of bauxite into China.
4. The sustainability of Australian supply is uncertain given the imminent closure of the 11Mtpa Gove operation in the Northern Territory. Rio Tinto has already closed the alumina refinery at Gove and is intending to close the bauxite mine before the end of the decade. Rio Tinto will also face a decision in coming years on whether to maintain production at Weipa through an expansion at South of Embley. Rio Tinto may decide to reduce its overall output to align with its domestic requirements.

Figure 4: China bauxite imports (Mt) & bauxite price (US\$/dmt)

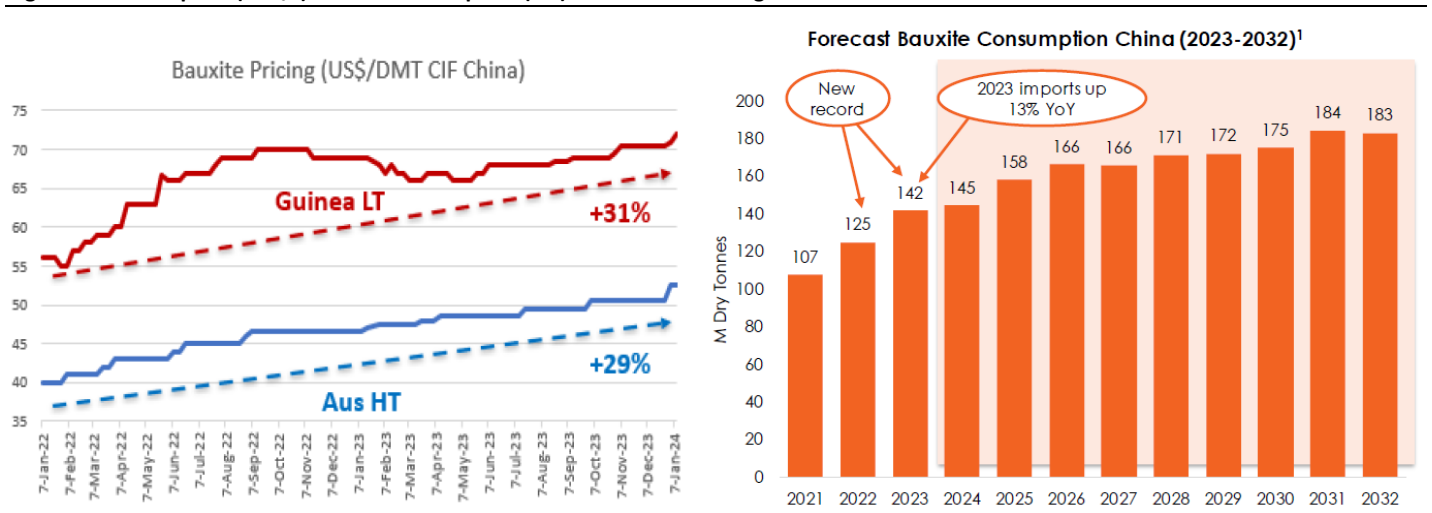


Source: Alumina Ltd Mar 2023 presentation, CM Group, Shaw and Partners forecasts

- The price of bauxite from Guinea has historically traded at a ~US\$10/t premium to Australian bauxite due to its higher grade and lower reactive silica. The price of Guinean bauxite has recently broken away from the Australian price and is now trading at a US\$20/t premium. We expect that premium to narrow with the Australian price lifting towards the Guinean price.

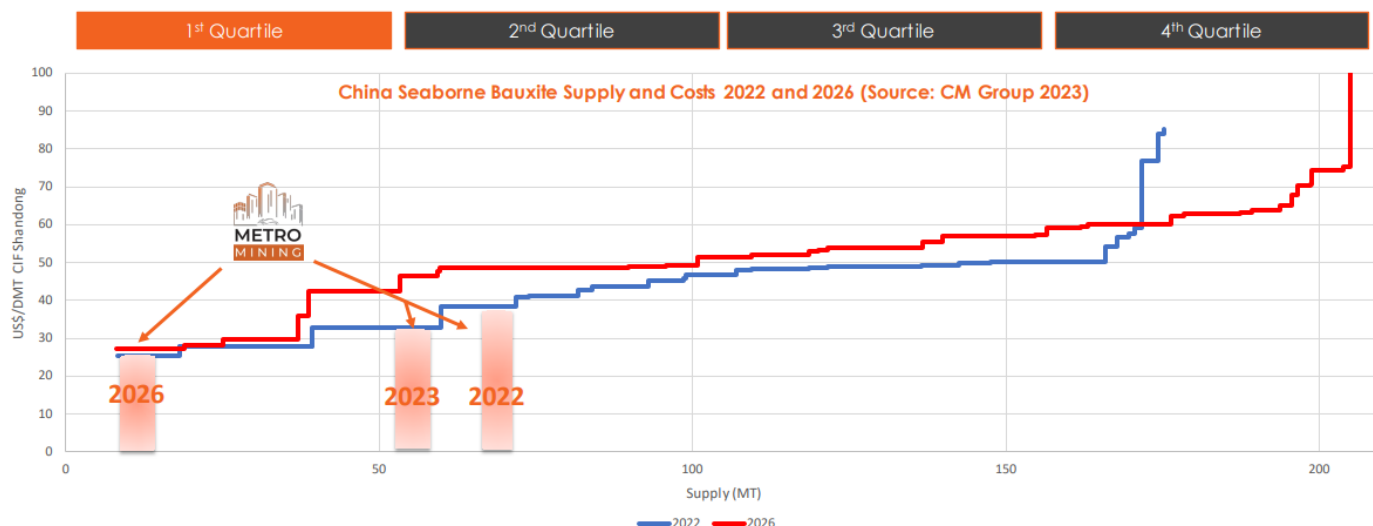
In the chart above we show an effective achieved bauxite price for Metro Mining trading below the Australian price. This is because in 2022 and 2023 Metro had some of its contracts at a fixed price, some linked to the alumina price and some linked to the bauxite index price. Metro bauxite is also a slightly lower quality than Rio Tinto's product and will trade at about a US\$3/t discount to the benchmark Australian price.

Figure 5: Bauxite price (US\$/t) and Chinese imports (Mt) from Metro Mining



Source: Metro Mining presentation Feb-24

Figure 6: China Seaborne bauxite cost curve (US\$/t)

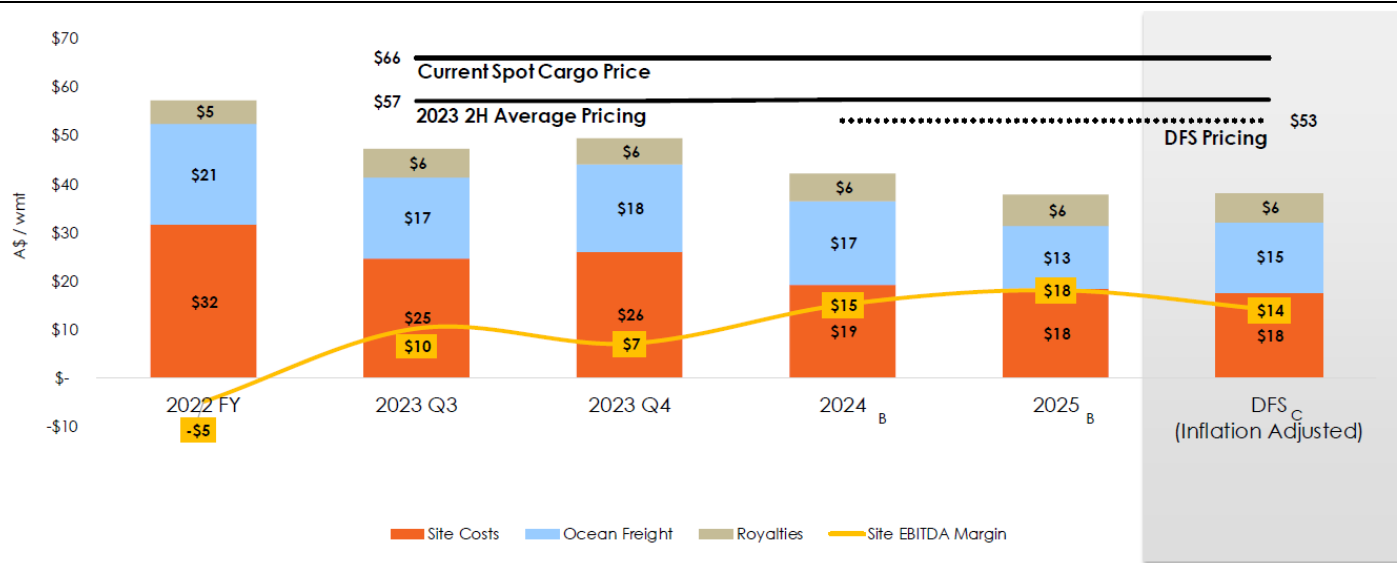


Source: CM Group and Metro Mining Ltd, Metro Mining presentation February 2024

Margins expanding as prices strengthen and unit costs reduce

Metro has two major components to its cost structure: site costs and freight costs. Site costs are made up of mining, trucking, processing and barging operations. It is very simple operation with free dig mining and the only processing being screening of the bauxite.

Figure 7: Metro Mining Costs and Margin



Source: Metro Mining presentation Feb-24

Mining costs have a relatively high fixed cost component and so like most bulk commodity businesses will benefit from economies of scale. Metro is expecting its site costs to reduce to around A\$19/t in CY24 and \$18/t in CY25.

One of the key improvements that Metro has implemented over the past two years is freight management. Metro’s cash flow was severely adversely impacted by rising freight costs in 2021 as global trade flows rebounded from Covid. Through a combination of a floating crane barge allowing the loading of cape size vessels, switching to a mix of fob and cif freight contracts, and locking in forward freight rates, Metro has reduced its freight costs from over A\$30/t in 2021 to around A\$17/t today.

Transshipping operations will now be conducted by the OFT Ikamba, a transhipper with ship-loading capacity of up to 8-9Mt. There will be some duplication of transshipping infrastructure in 2024 whilst the Ikamba ramps up and the existing floating barge continues to operate. This is positive in that it provides welcome redundancy, but it does mean freight

rates will remain slightly elevated in 2024. Metro expects rates to reduce to around A\$13/t in 2025.

The mix of freight contracts shifted towards free-on-board (FOB) in 2024 and this complicates costs (and revenue) comparisons with prior periods. FOB sales are at a lower apparent price, but do not incur freight costs. In the table below we outline our cost forecasts and have shown an adjustment to normalise costs as if all sales are on a CIF basis.

Figure 8: Cost assumptions – Shaw and Partners’ assumptions

Cost assumptions	2020	2021	2022	2023	2024f	2025f	2026f	2027f	2028f	2029f	2030f
Mining cost (A\$m)	65	69	109	126	124	126	129	132	135	138	141
A\$/t	26	25	32	28	19	18	18	19	19	20	20
Ocean Freight (A\$m) (actual incurred)	42	97	68	51	43	49	64	65	66	68	69
Ocean Freight (A\$m) (CIF adjusted)	42	97	76	80	111	91	93	95	97	99	100
A\$/t (actual incurred)	17	35	20	11	7	7	9	9	9	10	10
A\$/t (CIF adjusted)	17	35	22	17	17	13	13	14	14	14	14
Royalties	12	11	17	26	41	49	50	52	53	54	55
- Cost/t (A\$/t)	5	4	5	6	6	7	7	7	8	8	8
Other costs of sales (A\$m)	2	2	2	2	3	3	3	3	3	3	3
- Cost/t (A\$/t)	1	1	0	0	0	0	0	0	0	0	0
Administration & other costs (A\$m)	5	6	7	9	10	11	11	11	11	12	12
- Cost/t (A\$/t)	2	2	2	2	2	2	2	2	2	2	2
Total Costs	126	184	202	215	220	239	257	263	269	274	280
- Cost/t (A\$/t)	51	66	59	47	34	34	37	38	38	39	40

Source: Company reports, Shaw and Partners forecasts

It is a similar issue for revenue comparisons with prior periods, and in the table below we show a normalisation for both revenue and costs as if all sales were on a cif basis.

In our modelling we assume:

- A modest increase in Metro’s achieved bauxite price in 2024 to A\$61/t cif and in 2025 to A\$62/t. Given the tightness in the market we think these assumptions are conservative.
- We align our cost assumptions with Metro’s guidance in 2024 and 2025.
- We set our CY24 volume of 6.5Mt at the midpoint of guidance and again believe this is conservative. Metro has set its guidance so that the bottom end is likely to be achieved by the end of November, and so provided operations in December are not cyclone affected again, the company could well ship more than guidance.

Figure 9: Metro Mining Financials

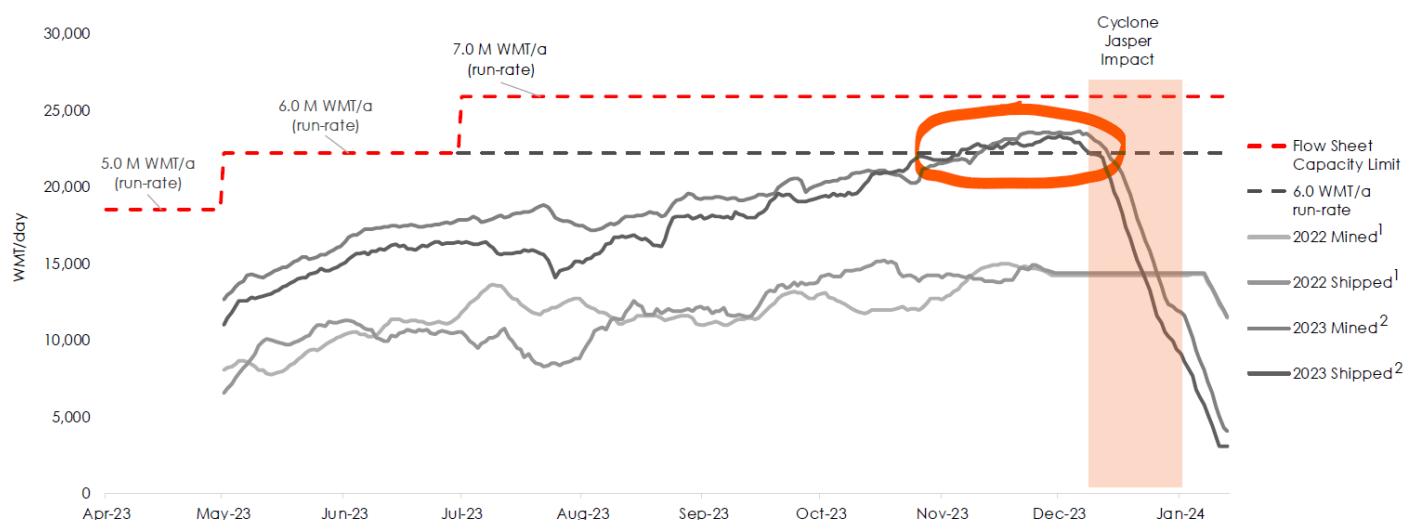
Profit & Loss (A\$m)	2019	2020	2021	2022	2023	2024f	2025f	2026f	2027f	2028f	2029f	2030f
Sales (kt)	3,504	2,481	2,798	3,432	4,567	6,500	7,000	7,000	7,000	7,000	7,000	7,000
% FoB	0%	0%	0%	13%	55%	62%	46%	31%	31%	31%	31%	31%
Revenue	199	128	160	178	236	332	395	417	427	436	446	456
per tonne (A\$/t)	57	52	57	52	52	51	56	60	61	62	64	65
Revenue (adj for CIF)	199	128	160	186	264	400	437	446	456	467	477	488
per tonne (A\$/t)	57	52	57	54	58	61	62	64	65	67	68	70
Other income	0	0	0	1	0	0	0	0	0	0	0	0
Operating expenses	-143	-108	-167	-178	-179	-169	-179	-196	-200	-204	-209	-213
Royalties	-20	-12	-11	-17	-26	-41	-49	-50	-52	-53	-54	-55
Admin & other expenses	-9	-5	-6	-6	-9	-10	-11	-11	-11	-11	-12	-12
Total costs	-172	-126	-184	-201	-214	-220	-239	-257	-263	-269	-274	-280
per tonne (A\$/t)	49	51	66	59	47	34	34	37	38	38	39	40
Non included freight costs	0	0	0	-8	-28	-68	-42	-29	-30	-30	-31	-32
Adjusted total cost (A\$/t)	49	51	66	61	53	44	40	41	42	43	44	45
EBITDA	27	2	-79	-23	22	112	157	160	164	168	172	176
Depreciation & Amortisation	-10	-10	-12	-14	-17	-26	-28	-28	-28	-28	-28	-28
EBIT	17	-8	-91	-37	5	86	129	132	136	140	144	148
Net Finance Expense	-11	-8	-5	-14	-19	-14	-6	2	7	13	16	19
Profit before tax	6	-15	-96	-50	-13	72	123	135	144	153	160	168
Income tax (expense)/benefit	-2	4	-9	0	0	-19	-32	-35	-37	-40	-42	-44
Reported NPAT	4	-11	-106	-50	-13	53	91	100	106	113	118	124

Source: Company reports, Shaw and Partners forecasts

Operational improvement and resilience

CEO Simon Wensley has leveraged his extensive experience at Rio Tinto and the alumina/bauxite industry to significantly improve Metro's operations. Equipment reliability, operational resilience and risk management have all significantly improved. Metro was reliably operating at >6Mtpa operating rates for Oct/Nov 2023 before being impacted by Cyclone Jasper. We are confident in management forecasts of 6.3-6.8Mt of sales in CY24, and we forecast 6.5Mt. We assume a 7mtpa production rate from CY25.

Figure 10: Metro Mining operational performance - >6Mtpa achieved in Oct/Nov 2023



Source: Metro Mining presentation Feb-24

Balance Sheet is stretched – but manageable

The main push back from investors on Metro Mining is the level of debt.

Metro has three components to its debt position:

- Shareholder loans from lenders Ingotatus and Lambhill totalling A\$39m.
- A US\$30m facility with Nebari, and
- A US\$10.2m (A\$15.5m) loan from Nebari for a royalty of 1% to 31 March 2025 increasing to 2.2% from 1 April.

At current exchange rates that totals A\$101m, which is a large debt burden for a company with a market capitalisation of A\$132m to carry. However, if our 2024 forecasts are correct then investors can expect a material increase in cash flow, and the Metro share price, which will give the company significant flexibility to restructure the debt and royalty later in 2024.

Key risks

- The Chinese bauxite market is supplied by production from Guinea which is backed by Chinese investment. There is a risk that if Guinea continues to expand then MMI will not be able to sell its expanded production or be forced to discount the price.
- Metro Mining is expanding its operation from 3.5Mt to 7.0Mt. The mining and barging component of the expansion is straight-forward, but there are design and operating risks with the transshipping operations. The transhipper may not operate as expected.
- Metro operates in Far North Queensland and transshipping operations are weather dependent. Cyclonic activity or adverse wind conditions can prevent the barges from operating.

Core drivers and catalyst

- The bauxite market is well supported by strong demand growth from China as Chinese alumina refineries increasingly rely on imported bauxite as domestic production declines. Chinese production of bauxite peaked in 2018.
- Metro Mining's Bauxite Hills project is well placed to supply the growing Chinese market due to the proximity to markets. As a low value product, freight costs make up almost half the cost of delivering bauxite to China.
- Metro Mining is expanding production from 3.5Mtpa to 7.0Mtpa in CY24. This will result in a significant step-up in free cash flow generation due to higher production and the associated economies of scale reduction in unit costs.

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

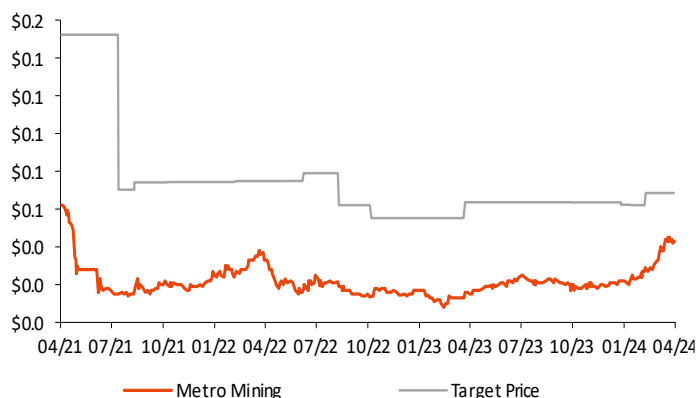
RISK STATEMENT: Where a company is designated as ‘High’ risk, this means that the analyst has determined that the risk profile for this company is significantly higher than for the market as a whole, and so may not suit all investors. Clients should make an assessment as to whether this stock and its 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	65	90%
Hold	6	8%
Sell	1	1%

History of Investment Rating and Target Price - Metro Mining

Date	Closing Price (\$)	Target Price (\$)	Rating
29-Feb-24	0.03	0.07	Buy
30-Jan-24	0.02	0.06	Buy
16-Jan-24	0.02	0.06	Buy
19-Oct-23	0.02	0.06	Buy
13-Apr-23	0.02	0.06	Buy
28-Oct-22	0.01	0.06	Buy
31-Aug-22	0.02	0.06	Buy
29-Jun-22	0.02	0.08	Buy
31-May-22	0.02	0.07	Buy
25-Feb-22	0.02	0.07	Buy
29-Oct-21	0.02	0.07	Buy
31-Aug-21	0.02	0.07	Buy
3-Aug-21	0.02	0.07	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.

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 20	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