

MMI AU

2 August 2017

Last price: A\$0.17  
Target price: A\$0.42

### Price Target: A\$0.42/share

The investment case for Metro is simple, ultra-low risk and potentially high returning. The company is fully financed and has begun construction of the 6Mtpa bauxite mine, Bauxite Hills. Located in the world class Weipa bauxite region in Cape York, Australia, the mine is due to come on stream in Q2/2018. At the bottom of the second quartile of the cost curve, Metro will export a DSO product over a 17 year life of mine. Our NAV of the fully funded company is A\$0.42; equivalent to 147% upside from the current share price. Key points:

### Substantially de-risked project

Following the recent capital raises of approximately A\$40 million debt and A\$38 million equity, the construction of the mine is fully funded through to first production of 2Mtpa (A\$35.8 million capex) and subsequent A\$36.7 million expansion to 6Mtpa. Metro will mine DSO which will be transported onto a barge using a new barge loading facility which is currently being constructed. It is then transhipped to ocean going vessels and loaded using cranes and grabs. There are few operations in mining that could be easier to ramp up.

### Simple low cost mining

First production is due in Q2 2018 after the next rainy season. Mining of the 92.2Mt reserve is as simple as it gets; firstly removing the 0.5m overburden and then mining the 1.75m bauxite horizon. The product is then screened and loaded on a barge. Life of mine cash costs are A\$23/t, including total royalties, which at current bauxite pricing delivers a c.38% margin. This also implies that the mine will sit near the bottom of the second quartile of the cost curve on a CFR basis delivered into China. Whilst contractor mining was assumed in the BFS, following the recent capital raise Metro is exploring an owner operator model which we estimate to be accretive to NPV, and funded with the current cash balance. We have not included this potential upside in our numbers at this stage.

### Sought after product

We note that the neighbouring Amrun bauxite project was one of only three projects to which Rio Tinto has recently allocated capital. Clearly, they recognise that China is running out of decent quality bauxite and Australia is literally the first port of call. Metro has secured a 7Mt over four years' foundation off-take agreement with Xinfu, China's second largest private bauxite importer.

### Proven "fit for purpose" management team

Metro's management team is highly experienced including Simon Finnis (CEO), 30yrs experience, having recently overseen construction of the US\$650 million Grand Côte mineral sands operation in Senegal. GM of operations, Charles Easton, had five years at Weipa. Norman Ting was the former marketing manager for Comalco (Rio Tinto Alcan) Bauxite and has 30 years' experience in the bauxite industry.

### A Cash Cow in Queensland

We would expect Metro, like all high margin single mine companies, to become a cash dispensing machine fairly early on in its profile. Estimated project free cashflow of c.A\$18 million for June YE 2019 will be used in part to fund the expansion to 6Mtpa. EBITDA is forecast to grow from A\$1.6 million in the 2018 financial year to A\$65.9 million in 2021 delivering a steady state free cashflow of A\$50 million plus.

### Private Equity Style Returns

We believe the current NAV is A\$0.42/share rising to A\$0.56/share in 2020. Our forward looking EV/EBITDA profile moves from 108.2x in the 2018 financial year (capturing just the start of production) to 3.8x two years later. The market normally attributes high single digit multiples to stable cash flows so we believe a near term price target of A\$0.42 is justifiable.

### Analyst: David Butler

#### Summary

Last price (A\$):	0.17
Target price (A\$):	0.42
Projected return (%)	147%

#### Project Details

Project name	Bauxite Hills
Commodity	Bauxite
Production (Mtpa)	2.0 -> 6.0
Tamesis NPV <sub>10%</sub> (A\$m)	525

#### Share Data

Shares o/s (mm)	1,286*
52 week high/low (A\$)	0.185/0.096
3-mth avg. daily vol (mm)	0.78
3-mth avg. daily vol (A\$)	0.12
Market cap (A\$m)	205
Net cash/(debt)* (A\$m)	33
Enterprise value (A\$m)	172

\*post tranche 2 equity raise

June Year End

Financial Data	2018	2019	2020
Revenue (A\$m)	31	110	171
EBITDA (A\$m)	2	22	45
Net income (A\$m)	(7)	12	33
EPS (A\$ ¢/share)	(0.54)	0.91	2.55
P/E (x)	-	18.7	6.7
EV/EBITDA (x)	108.2	7.8	3.8

### Share Price Performance



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## Company Summary

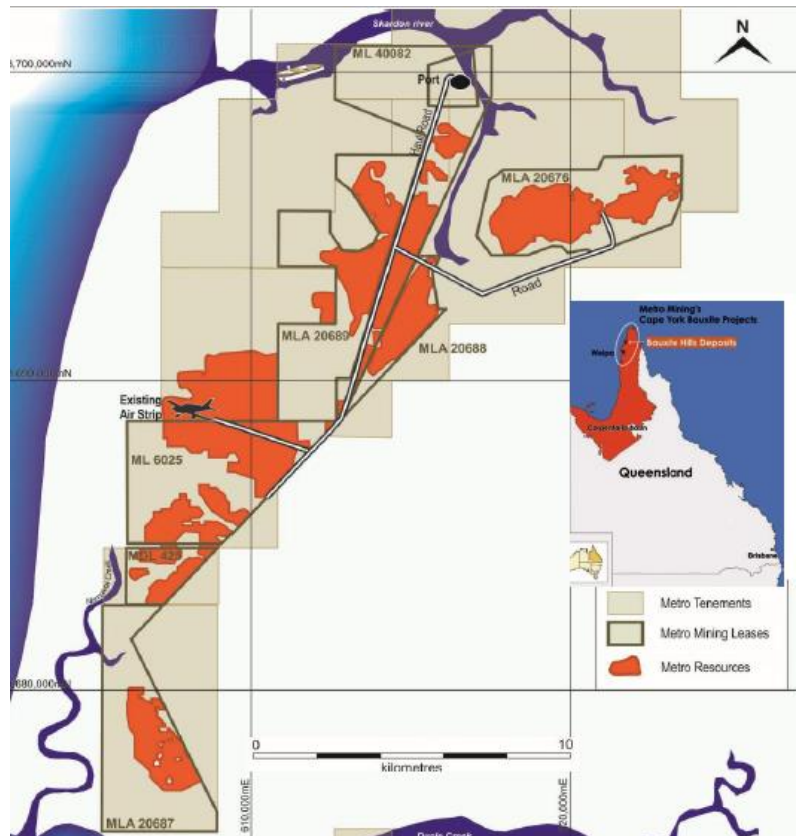
### Overview

The Bauxite Hills project is c.95km north of Weipa in Northern Queensland, on the west side of Cape York and consists of a number of bauxite plateaus located next to the Skardon River. The region is renowned for its export-grade bauxite, an aluminium ore.

Figure 1 – Location Map and Key Project Information

Key Statistics	
Ownership	Metro (100%)
Commodity	Bauxite
Product Type	DSO
Reserves	92.2Mt
Resources	144.8Mt
Status	In construction
BFS Highlights	
Construction	H2/2017
Production	April 2018
Start-up Production	2Mtpa
Steady state Production	6Mtpa
Pre-production Capex*	A\$35.8m
Expansion Capex*	A\$36.7m
Costs (LoM average)	A\$16.4/t on site A\$23.0/t +royalty
Mine Life	17 years (initial)

\*Assumes contractor mining



Source: Metro Mining

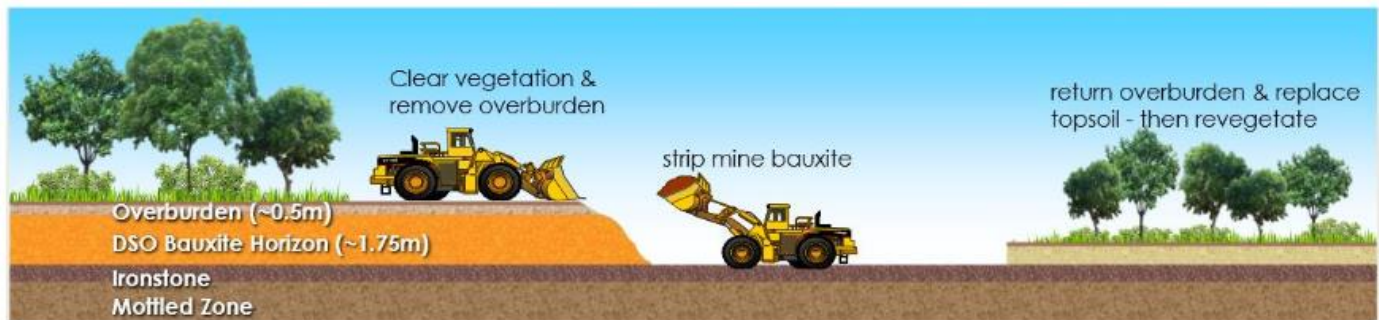
Metro acquired the Bauxite Hills project in 2014 through a merger with Cape Alumina, and completed a pre-feasibility study in February 2015. After completing the acquisition of neighbouring deposits owned by Gulf Alumina in early 2017, a bankable feasibility study was completed by MEC Mining in March 2017. Pre-construction work has already commenced on site and first production is expected in Q2/2018.

### Project Highlights

Bauxite Hills' reserves support an initial 17 year mine life producing export-quality DSO bauxite. Production is expected to commence in Q2/2018 at an initial run rate of 2Mtpa which will ramp up to 6Mtpa over the first four years. The operation itself is fairly straightforward: free-dig bauxite is mined by front end loaders and hauled by truck to port infrastructure.

At the port, the bauxite ore will be screened to a maximum size of 100mm and loaded onto barges. Tugs will tow the barges down the Skardon River and the ore will be transhipped to freighters at a point beyond the river mouth. One quirk of the location is the seasonality of the weather. During the wet season (January to March), all mining ceases with operations resuming in April.

Figure 2 – Simple mining method



Source: Metro Mining

## Geology and Mineralisation

The deposit is a lateritic bauxite forming part of the Weipa plateau. The deposit typically consists of a single layer of bauxite, 0.5m – 3m thick, underlain by a kaolin clay and ironstone. Bauxite occurs naturally over the majority of the plateau areas, is pisolithic in form and is generally only covered by a small layer of soil overburden. Most of the bauxite is loose and free flowing, suitable for free digging and DSO operation. It is expected that any cemented bauxite will break up as it is handled by the mining fleet or through screening. Any oversized material will be collected at the port and will be campaign crushed if economic to do so. Otherwise the oversize will be back-loaded to the mining areas.

## Reserves and Resources

As part of the BFS, MEC calculated a Proven and Probable reserve of 92.2Mt at 49.4% total  $\text{Al}_2\text{O}_3$  and 13.2% silica. The reserves are reported on a 10% moisture basis to reflect the run of mine marketable product tonnes. Bauxite Hills also reports a resource of 144.8Mt at 49.2%  $\text{Al}_2\text{O}_3$  and 13.9% silica.

Figure 3 – Metro Mining Reserves and Resources

Reserves	Wet Tonnes (Mt)	$\text{Al}_2\text{O}_3$ (%)	$\text{SiO}_2$ (%)
Proven	48.3	49.8	12.0
Probable	43.9	49.0	14.6
<b>Total</b>	<b>92.2</b>	<b>49.4</b>	<b>13.2</b>

Resources	Dry Tonnes (Mt)	$\text{Al}_2\text{O}_3$ (%)	$\text{SiO}_2$ (%)
Measured	54.7	50.0	11.9
Indicated	66.4	49.2	14.7
Inferred	23.7	47.4	16.0
<b>Total</b>	<b>144.8</b>	<b>49.2</b>	<b>13.9</b>

Source: Metro Mining

## Regional Consolidation: Gulf Alumina Acquisition

Metro acquired the neighbouring tenements at Bauxite Hills through a A\$50 million takeover of privately held Gulf Alumina in February 2017. Having previously acquired 39% of Gulf Alumina in a previous takeover attempt, the acquisition process was disrupted by Moly Mines (MOL:ASX) – which at the time was suspended from the ASX. The bid by Chinese-controlled Moly was controversial as its major shareholder, Hanlong Mining, had a former managing director jailed in Australia for insider trading in connection with Hanlong's failed bid for Sundance Resources.

This was resolved in November 2016 when the ASX ruled that it would not allow Moly to resume trading.

The Gulf acquisition effectively doubled the resource base of the company:

Figure 4 – Pre-acquisition resource statement

Reserves	Dry DSO Tonnes (Mt)	Al <sub>2</sub> O <sub>3</sub> (%)	SiO <sub>2</sub> (%)	Available Al <sub>2</sub> O <sub>3</sub> % (THA)	Reactive SiO <sub>2</sub> (%)
Metro Reserves	48.2	50.5	11.2	38.4	6.4
Gulf Reserves	48.4	49.4	14.7	40.3	6.1
<b>Total</b>	<b>96.5</b>	<b>49.9</b>	<b>12.9</b>	<b>39.4</b>	<b>6.3</b>

Source: Metro Mining

Additionally, the acquisition included critical infrastructure for the Bauxite Hills project, including airstrip, haul roads and port location, previously used by a kaolin mine.

## Bankable Feasibility Study

The BFS, released by Metro in March 2017, outlines a A\$601 million (US\$451 million) NPV at a 10% discount rate. Initial capital expenditure was estimated at A\$35.8 million over a 5 month construction period. Additionally, there is estimated expansion capital of A\$36.7 million in years two and three, expanding capacity through integrated truck dumps and screens, upgraded haul roads and transshipment upgrades.

Figure 5 – BFS Key Results and Assumptions

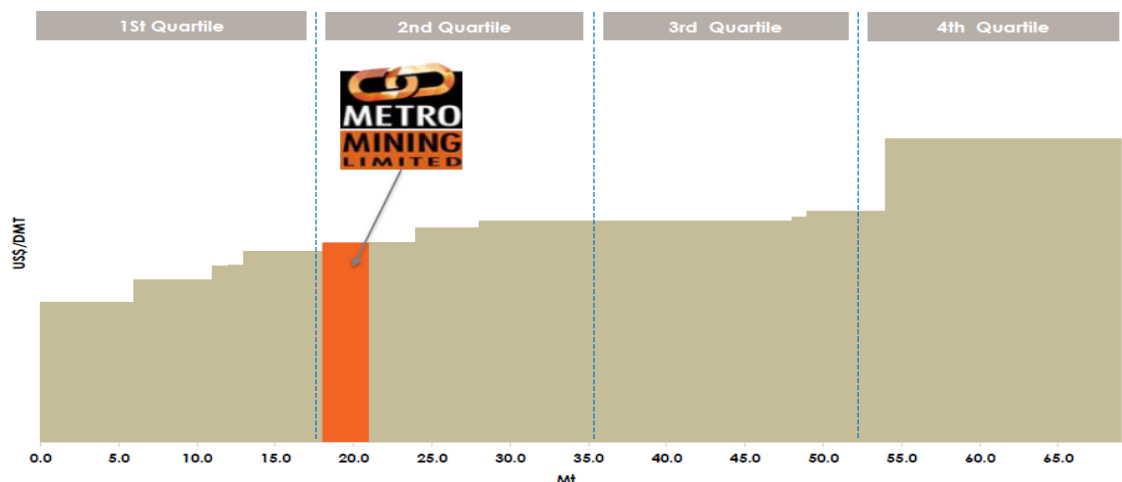
Description	Result	Assumption	Result
NPV (10%)	A\$601m	Annual Production Rate (Steady State)	6Mtpa
IRR	81%	LOM Production	92.2Mt
Payback Period of Initial Capital	1.7 years	Mine Life	17 years
LOM revenue	A\$5.6b	Bauxite Price	US\$36.36-53.88/t
LOM EBITDA	A\$2.5b	Exchange Rate (AUD/USD)	0.75
LOM Average Annual EBITDA	A\$145m	Discount Rate	10%
LOM on-site Average Opex	A\$16.42/t	Initial Capital Expenditure*	A\$35.8m
LOM Average Opex including Royalty	A\$23.00/t	LOM Average Operating Margin	A\$26.69/t

\*Assumes contractor mining

Source: Metro Mining

Costs are expected to be competitive due to the straightforward free-dig DSO haul and barge operation and the transportation advantage to China from the north of Australia. Metro forecasts the Bauxite Hills mine to be towards the front of the second quartile of the cost curve on a seaborne value-in-use adjusted basis:

Figure 6 – China Seaborne Bauxite Supply Cost Curve 2019 – Value-in-use Adjusted (US\$/Dmt CFR)



Source: CM Group, Metro Mining

## Off-take Agreements

Metro has announced two off-take agreements with bauxite importers in Shandong Province, China. The first is a binding take or pay off-take with Xinfu Group, China's second largest private bauxite importer, for 7Mt of bauxite, or approximately 50% of the first 4 years' production. Pricing has been agreed through an established alumina index and shipping rates and product specifications are agreed in advance.

A letter of intent has been received by Shandong Lubei Enterprise Group General Company ("Lubei"), where Lubei has indicated that they would take 0.5-1.0Mtpa bauxite for a minimum of three years under a market-linked pricing structure. The letter is currently non-binding; binding terms and conditions are being negotiated.

## Licensing and Permitting

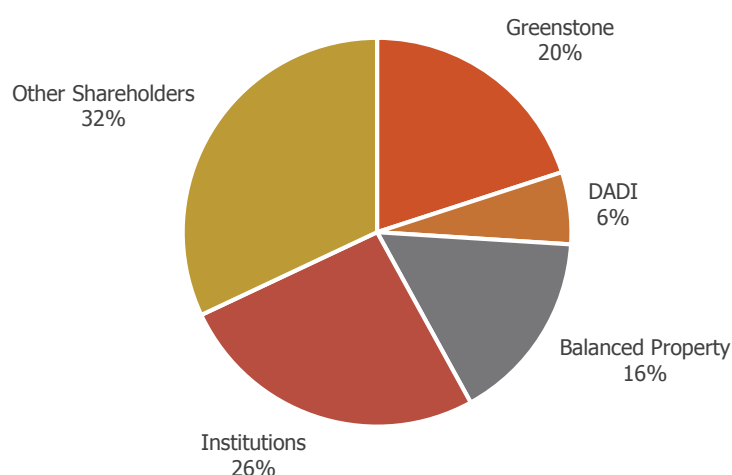
The final environmental approvals for Bauxite Hills were received in June 2017 from the Australian Federal Government. This followed receipt of the Queensland State Government approvals earlier that month. The approvals allow for production of 10Mtpa, well above forecast steady state production of 6Mtpa. Previously, the company had received approvals from the Queensland Department of Environment and Heritage for the Skardon River Project in December 2016 and Commonwealth Environmental Approval in September 2016.

Following the acquisition of Gulf Alumina, the company has consolidated the Native Title agreements that were previously in place at both Bauxite Hills and Gulf's Skardon River project. The new agreement has continued the company's strong relations with the Ankamuthi People, Traditional Owners and OMAC, the trustee owner of the land. The company has a Cultural Heritage Plan and rehabilitation plan in place. In a positive for community relations, Metro expects in the longer term to employ 200 people with a 30% indigenous target.

## Shareholders

Metro has a strong mix of private equity and institutional investors on its register. Greenstone (20% shareholder) is a specialist mining private equity fund who typically take strategic long-term positions in mining projects. Another cornerstone investor, Balanced Property (16%), has been a shareholder since 2014. DADI (6%) is China's largest coal industry engineering group. Prominent mining funds including Blackrock and Colonial First State Investments are included amongst the institutional investors.

Figure 7 – Metro Mining Shareholders



Source: Metro Mining

## Management

In our view, Metro's management is well suited to develop and operate the Bauxite Hills mine. The board and management have collectively been involved in the development and operation of over 30 mines globally. Key individuals are:

Figure 8 – Key Management

Management	Biography
<b>Simon Finnis</b> (MD & CEO)	<ul style="list-style-type: none"> <li>• Joined Metro as CEO in 2015</li> <li>• Mining executive with 30+ years' experience</li> <li>• Former CEO of Grande Cote Mineral Sands operations in Senegal and responsible for \$650m greenfield project development</li> </ul>
<b>Scott Waddell</b> (CFO & Company Secretary)	<ul style="list-style-type: none"> <li>• Past senior roles with Anglo American and Rio Tinto Alcan</li> <li>• Senior roles with Metro since 2010</li> <li>• CPA with extensive experience in global bauxite and alumina</li> </ul>
<b>Charles Easton</b> (GM, Bauxite Hills Mine)	<ul style="list-style-type: none"> <li>• Geologist with 30+ years' experience</li> <li>• Previous GM at Theiss</li> <li>• 5 years at Weipa managing mine planning and refinery performance</li> </ul>
<b>Mike O'Brien</b> (Project Manager)	<ul style="list-style-type: none"> <li>• Mining engineer with 40+ years' experience</li> <li>• 25+ years senior management experience with Anglo American and Shell</li> </ul>
<b>Duane Woodbury</b> (Finance and Business Development)	<ul style="list-style-type: none"> <li>• 20+ years' experience in banking and finance</li> <li>• Senior roles with Macquarie and CFO of Kingsgate (KCN:ASX)</li> <li>• Significant equity and debt capital raising experience</li> </ul>
<b>Norman Ting</b> (GM, Marketing)	<ul style="list-style-type: none"> <li>• 30+ years bauxite industry and marketing experience</li> <li>• Former Chairman of Traxys China and senior executive of WOGEN UK, HK and China</li> <li>• Former Marketing Manager for Comalco (Rio Tinto Alcan)</li> </ul>
<b>Colleen Fish</b> (Environmental Manager)	<ul style="list-style-type: none"> <li>• Environmental scientist with 25+ years' experience</li> <li>• Former environmental manager for Peabody Coal (BTU:NYSE) in Queensland</li> </ul>

Source: Metro Mining

## Valuation

### Overview – Initiating with a Target Price of A\$0.42/share

We value Metro Mining using a sum of the parts (SotP) valuation, combining a discounted cashflow (DCF) valuation of the Bauxite Hills project, cash (including the net proceeds of the cash from the recent debt and equity financing), debt, and the present value of Metro's corporate costs and SG&A. Our assumptions are primarily in line with the company's BFS; key changes are primarily due to foreign exchange rates. We are using a discount rate of 10% which is in line with our estimated cost of Metro's debt.

Figure 9 – Metro Mining Valuation

Metro Mining Valuation	Ownership	NPV (A\$m)	Multiple (x)	NAV (A\$/sh)
Bauxite Hills	100%	525	1.0	0.41
Cash	100%	73	1.0	0.06
Debt	100%	(40)	1.0	(0.03)
SG&A & central	100%	17.4	1.0	(0.01)
<b>Total</b>		<b>541</b>		<b>0.42</b>

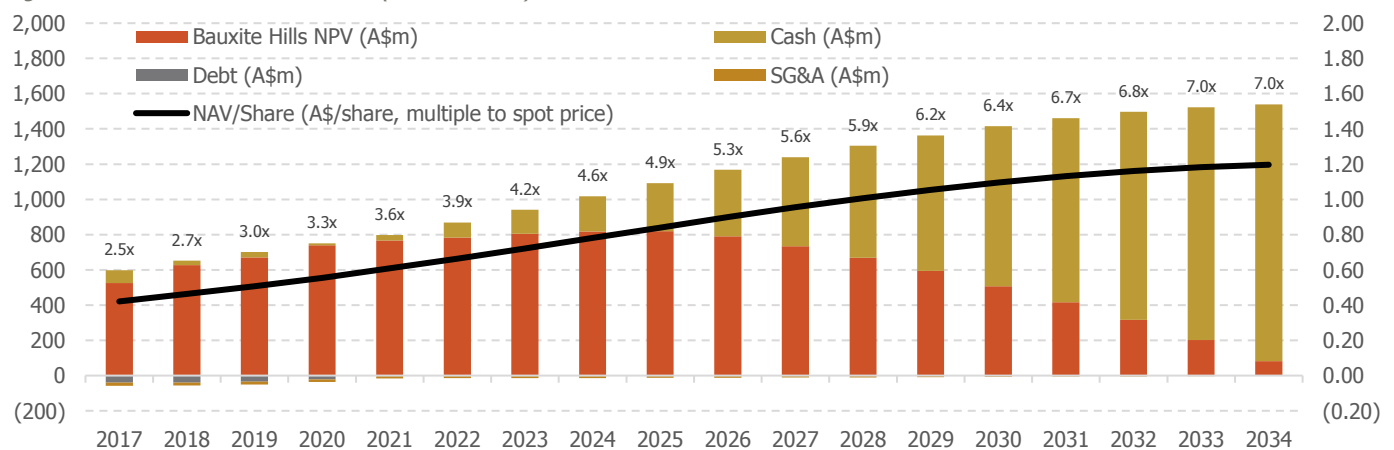
Source: Tamesis

Following the close of the second tranche of the A\$38 million equity raise we forecast Metro will have 1,271 million shares outstanding. On a per share basis, our NAV of A\$541 million equates to A\$0.42/share, a 148% premium to the current share price of A\$0.17/share.

### Net Asset Value Progression

Over time, we would expect the Metro NAV and NAV/share to increase as the capital is spent and the company moves into a cash generation phase. Our forecast is for the NAV/share to move to A\$0.47/share by June 2018 and A\$0.51/share by June 2019, a 2.7x and 3.0x multiple of the current Metro share price.

Figure 10 – Metro Production Schedule (June Year End)



Source: Tamesis

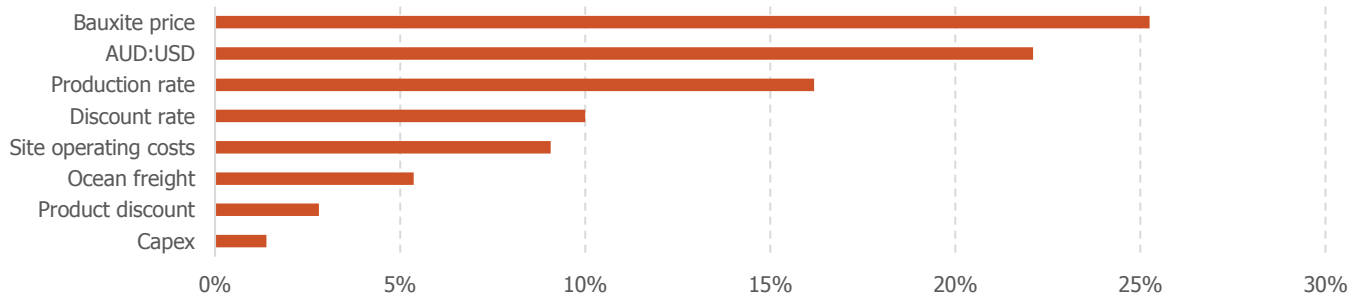
The rate of NAV appreciation is fairly consistent over the life of the project, with a CAGR of 9.8% to 2021 and 8.8% to 2026. This appears attractive given the minimal risk of dilution from this point in time, the current price discount to NAV, and the near term profitability of the company.

### Sensitivity

We have varied a number of our input parameters by 10% to see the effect on the base case NPV at Bauxite Hills. Naturally the change in bauxite price has the largest impact, followed by the Australian dollar exchange rate as nearly all on-site costs are in Australian dollars whilst revenue is in US dollars. The next most sensitive impact is the rate of production.

Naturally the 10% change in discount rate has an equivalent effect on NPV, whilst site operating costs, ocean freight, product discount and capex all are relatively less sensitive.

Figure 11 – Bauxite Hills NPV Sensitivities

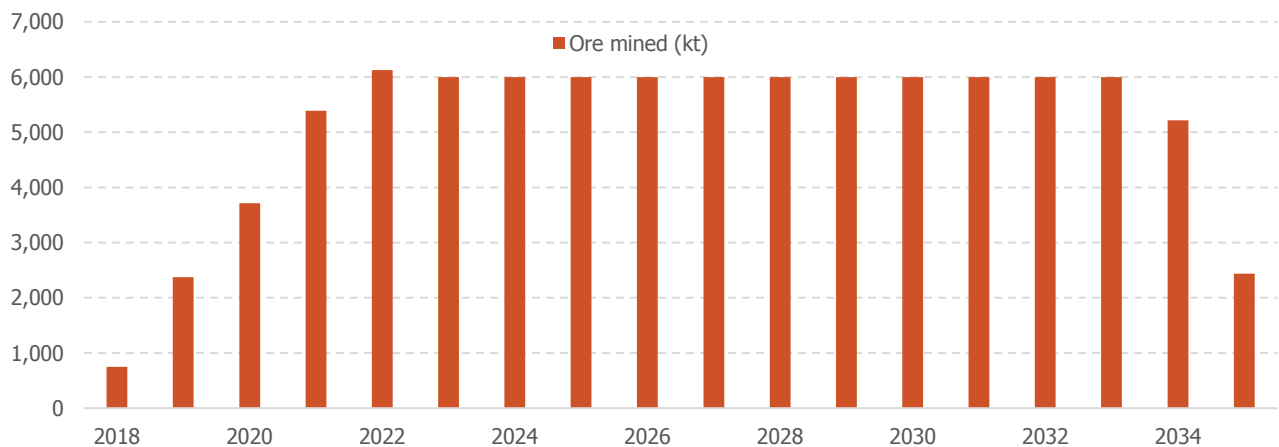


Source: Tamesis

## Production

Metro's production is forecast to increase to a run rate of 6Mtpa by the 2022 financial year. This will require the second tranche of expansion capital to upgrade the onshore facilities and barge capacity, this can be funded through cash flow. We note that Metro has environmental permitting to increase production to 10Mtpa and that the inferred resources are not included in the mine plan, so there is potential both to bring reserves already in the mine plan forward and to add new tonnes and mine life extension.

Figure 12 – Metro Production Schedule (June Year End)



Source: Tamesis

## Revenue

Revenue naturally increases with production volumes, and we are assuming an increasing net bauxite price received reflecting price forecasts from CBIX, a "value in use" CFR reference price for a standard gibbsitic bauxite (5% reacting silica, 10% moisture, 50% reacting alumina). We have adjusted this reference price down by 10% to account for an expected product quality discount against this reference price in line with the assumptions set out in the company's BFS.

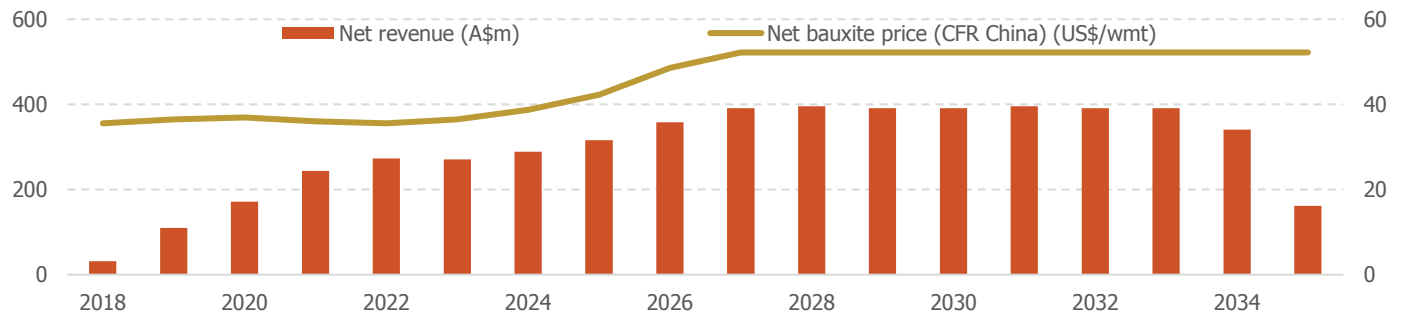
Figure 13 – Bauxite Price Deck

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Bauxite Reference Price (US\$/t)	40	39	42	40	40	39	42	44	50	58
Discount	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Metro Realised Price (US\$/t)	36	35	38	36	36	35	38	40	45	52
FX (AUD/USD)	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Metro Realised Price (A\$/t)	45	44	47	45	45	44	47	50	56	65

Source: Tamesis

We note that the current spot price of bauxite is currently trading at c.US\$48/t according to the same CBIX reference index so there is potential upside to our commodity price forecasts if market conditions remain.

Figure 14 – Revenue and bauxite price

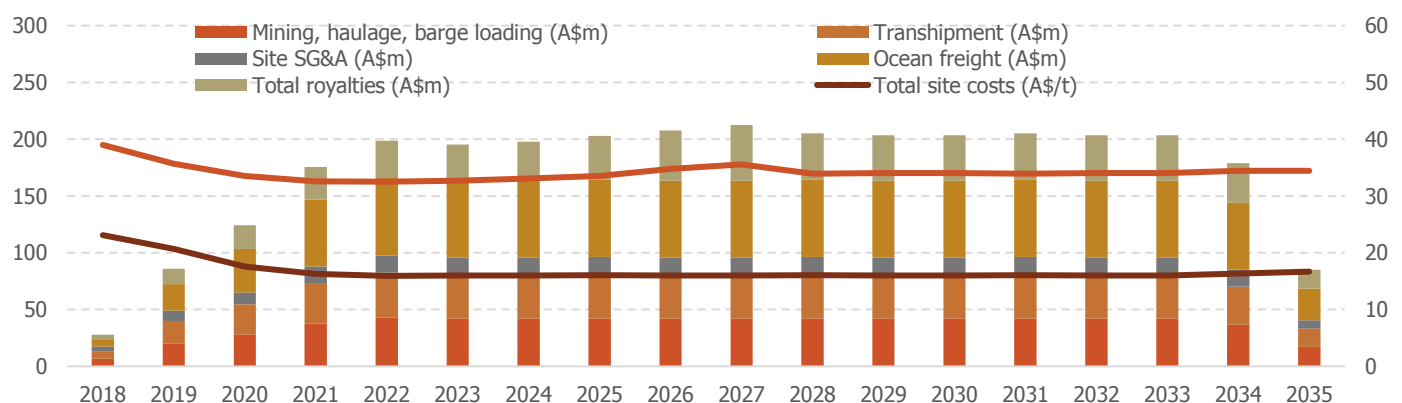


Source: Tamesis

## Operating Costs

Operating costs are dominated by on-site costs, transshipping, royalties and ocean freight. On a unit basis, we are expecting costs to remain fairly constant over the life of mine.

Figure 15 – Operating costs

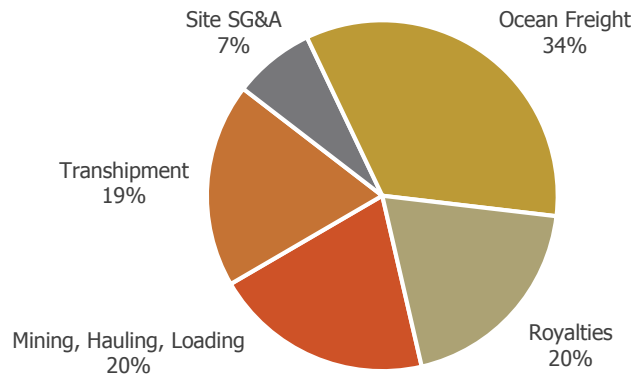


Source: Tamesis

Interestingly, ocean freight is the single greatest expense, totalling 34% of operating costs. This underlines the structural competitive advantage Metro has over other mines which have longer shipping distances, in particular the emerging Guinean projects which would be worse off if global shipping rates were to rise from current lows.

On-site mining, hauling and loading, transshipping and royalties are all approximately 20% of operating costs.

Figure 16 – Operating cost split



Source: Tamesis

## Capital Costs

Capital expenditure is naturally weighted towards the beginning of the mine life, with expansion capital of A\$35.8 million in the 2018 financial year and US\$36.7 million in 2020. We are assuming sustaining capital of A\$1.3 million at steady state production and an environmental bond of A\$6 million taken in two tranches and returned at the end of the mine life.

## Funding

Metro is fully financed to 6Mtpa through a combination of debt and equity fundraising, and cash flow from initial operations.

### Debt

In June, Metro announced that Sprott Private Resource Lending and Ingatus (a related party to major shareholder Balanced Property) had agreed to provide debt finance facilities of approximately A\$40 million. The proceeds are to be used towards capital expenditure, working capital purposes and repayment of a A\$15 million short term facility through Namrog Pty Ltd (also a related party to Balanced Property).

The key terms of the debt are as follows:

- Tenor of approximately 3 years
- Attractive annual interest rate – we estimate 10%
- No principal amortisation before January 2019 and A\$20 million payment at end of loan
- No commitment fees
- No hedging requirements
- Low level of cash reserving and no mandatory cash sweep
- Low number of Metro options (number not yet disclosed) with strike price to reflect 25% premium to Metro share price

### Equity

In addition, Metro has raised a total of A\$38 million in new equity over two tranches. The first tranche raised A\$33.9 million for 251 new shares which utilised the company's placement capacity. The remaining A\$4.1 million has been subscribed for and will be issued subject to shareholder approval at a General Meeting scheduled for late August 2017. Positively, the equity placement was heavily oversubscribed, with participation from both existing key shareholders and new institutions.

### Fundraising – Sources and Uses

The cash raised from the debt and equity fundraising will be used for the remaining costs to first production. A table of sources and uses from the July 2017 company presentation is below:

Figure 17 – Sources and uses of funds to first production

Sources	Amount (A\$m)	Uses	Amount (A\$m)
Equity Raising	38.0	Remaining Capital Costs (Including truck haulage fleet)	38.0
Debt Financing Package	40.0	Drilling (exploration and grade control)	4.0
Cash on hand (30-June 2017)	15.3	Financial Assurance & Environmental Costs	4.0
		Pre-production Costs	5.0
		Corporate Office	4.0
		Financing Costs (including 12 months' interest)	5.1
		Refinanced Short Term Loan Facility	15.0
		Working Capital & Liquidity Reserves	16.3
		Costs of the Equity Raising	1.9
<b>Total</b>	<b>93.3</b>	<b>Total</b>	<b>93.3</b>

Source: Metro Mining

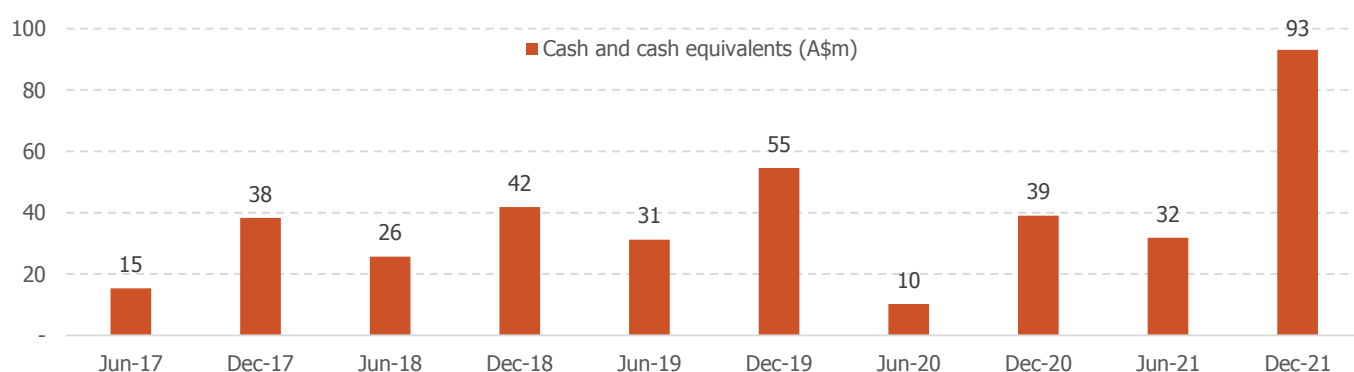
In the company's most recent presentation we note that Metro are assessing a hybrid owner mining/contracting model which would explain the difference between our capital expenditure estimate to first production (A\$35.8 million). We are not including this in our valuation at this stage but expect it to be accretive in NPV terms should the company choose to proceed.

The published uses of funds include full allowance for pre-production costs, drilling, corporate and finance costs, as well as working capital and liquidity requirements.

### Ongoing Cash Balance

This fundraising has left Metro with enough of a cash buffer in the near term, without taking into account any contingencies in the capital estimates, to be able to weather any delays or unforeseen issues. We highlight that the A\$38 million remaining capex budget includes a contingency of 10%, in addition to the A\$16.3 million liquidity and working capital reserves raised as part of the recent fundraising. This cash buffer is particularly attractive when compared to the modest capital required to first production of 2Mtpa and the subsequent expansion to 6Mtpa in 2020.

Figure 18 – Metro estimated cash balance



Source: Tamesis

## Financials

### Income Statement

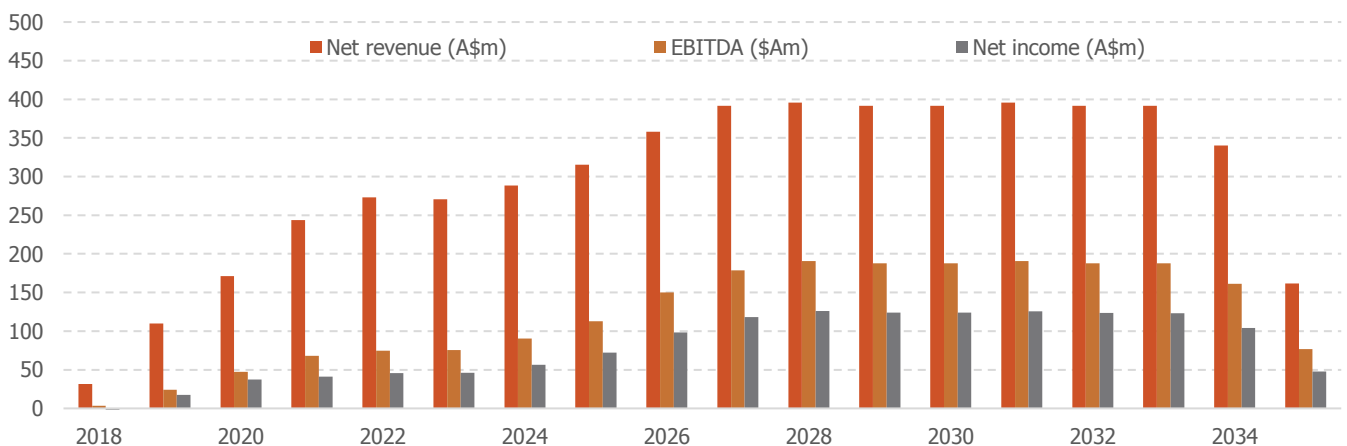
Figure 19 – Income Statement

June Year End		2018	2019	2020	2021	2022
Revenue	A\$m	31.5	109.8	171.4	243.5	273.2
COGS	A\$m	(24.1)	(72.5)	(103.5)	(146.7)	(166.5)
<b>Operating profit</b>	<b>A\$m</b>	<b>7.4</b>	<b>37.4</b>	<b>67.8</b>	<b>96.8</b>	<b>106.7</b>
Admin expenses	A\$m	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
Depreciation	A\$m	(5.2)	(6.5)	(7.5)	(9.4)	(9.5)
Royalties	A\$m	(3.8)	(13.4)	(20.7)	(28.9)	(32.2)
Other expenses	A\$m	-	-	-	-	-
<b>Profit before interest &amp; tax</b>	<b>A\$m</b>	<b>(3.6)</b>	<b>15.4</b>	<b>37.6</b>	<b>56.5</b>	<b>63.1</b>
Interest paid	A\$m	(3.3)	(3.9)	(2.9)	(0.2)	-
Interest received	A\$m	0.1	0.2	0.2	0.1	0.3
Corporate tax	A\$m	-	-	(2.2)	(17.5)	(19.5)
<b>Profit after tax</b>	<b>A\$m</b>	<b>(6.8)</b>	<b>11.7</b>	<b>32.7</b>	<b>38.9</b>	<b>43.9</b>
Non-controlling interests	A\$m	-	-	-	-	-
Foreign exchange	A\$m	-	-	-	-	-
<b>Net income</b>	<b>A\$m</b>	<b>(6.8)</b>	<b>11.7</b>	<b>32.7</b>	<b>38.9</b>	<b>43.9</b>
EBITDA	A\$m	1.6	22.0	45.2	65.9	72.5
Earnings per share	A\$ cents	(0.5)	0.9	2.5	3.0	3.4
Cash flow per share	A\$ cents	0.8	0.4	(1.6)	1.7	4.1

Source: Tamesis, Metro Mining

Revenues are first expected in the 2018 financial year and are expected to grow to A\$119.6 million in 2022, a CAGR of 72%. Additionally, EBITDA is forecast to grow from A\$2.9 million in 2018 to A\$83.4 million in 2022, a CAGR of 160%. Australian federal corporate tax of 30% will become payable in 2019 after a carried tax loss of approximately A\$50 million is covered.

Figure 20 – Net Revenue, EBITDA and Net Income



Source: Tamesis

## Cashflow Statement

Figure 21 – Cashflow Statement

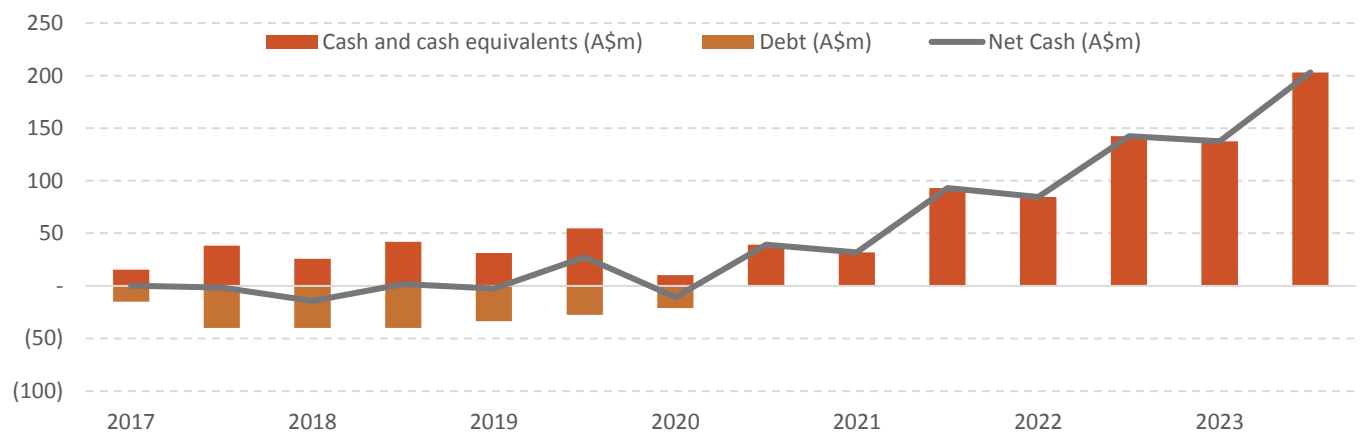
June Year End		2018	2019	2020	2021	2022
Profit / (loss)	A\$m	(3.6)	15.4	37.6	56.5	63.1
Depreciation	A\$m	5.2	6.5	7.5	9.4	9.5
Interest received	A\$m	0.1	0.2	0.2	0.1	0.3
Interest paid	A\$m	(3.3)	(3.9)	(2.9)	(0.2)	-
Foreign exchange	A\$m	-	-	-	-	-
Movement in working capital	A\$m	(10.1)	(5.5)	(7.9)	(4.3)	0.8
Corporate tax	A\$m	-	-	(2.2)	(17.5)	(19.5)
<b>Cash flow from operations</b>	<b>A\$m</b>	<b>(11.7)</b>	<b>12.8</b>	<b>32.3</b>	<b>44.0</b>	<b>54.1</b>
Capital expenditure (PP&E)	A\$m	(36.0)	(0.9)	(37.7)	(1.3)	(1.3)
Environmental bond	A\$m	(3.0)	-	(3.0)	-	-
<b>Cash flow from investing</b>	<b>A\$m</b>	<b>(39.0)</b>	<b>(0.9)</b>	<b>(40.7)</b>	<b>(1.3)</b>	<b>(1.3)</b>
Proceeds of equity offering	A\$m	36.1	-	-	-	-
Borrowings / (repayments)	A\$m	25.0	(6.3)	(12.6)	(21.1)	-
<b>Cash flow from financing</b>	<b>A\$m</b>	<b>61.1</b>	<b>(6.3)</b>	<b>(12.6)</b>	<b>(21.1)</b>	<b>-</b>
Net change in cash	A\$m	10.4	5.6	(21.0)	21.6	52.8
Cash balance	A\$m	25.7	31.2	10.2	31.8	84.7

Source: Tamesis, Metro Mining

We forecast the company to have negative A\$10.8 million cashflow from operations in the year to June 2018, primarily due to a working capital outflow of A\$10.5 million as the mine ramps up to first production. This, and the A\$36 million of capital expenditure will be funded by the net proceeds of the equity raising (c.A\$36.1m) and the net proceeds of the new A\$40 million Sprott and Ingatus facility after repaying the A\$15 million short term facility.

We expect repayments of the new debt facilities over the next three year and the company to be debt free by the 2021 financial year.

Figure 22 – Net Cash Position



Source: Tamesis

## Balance Sheet

*Figure 23 – Balance Sheet*

June Year End		2018	2019	2020	2021	2022
Cash and cash equivalents	A\$m	25.7	31.2	10.2	31.8	84.7
Trade and other receivables	A\$m	19.0	28.4	43.4	52.1	51.0
Other assets	A\$m	-	-	-	-	-
Total current assets	A\$m	44.7	59.6	53.6	84.0	135.7
Mining tenements & PP&E	A\$m	107.5	101.9	135.1	127.0	118.8
Other assets	A\$m	-	-	-	-	-
Total non-current assets	A\$m	107.5	101.9	135.1	127.0	118.8
<b>TOTAL ASSETS</b>	<b>A\$m</b>	<b>152.2</b>	<b>161.5</b>	<b>188.7</b>	<b>210.9</b>	<b>254.5</b>
Trade and other payables	A\$m	8.9	12.9	19.9	24.4	24.1
Current debt	A\$m	6.3	12.6	21.1	-	-
Total current liabilities	A\$m	15.2	25.5	41.0	24.4	24.1
Long term debt	A\$m	33.7	21.1	-	-	-
Total non-current liabilities	A\$m	33.7	21.1	-	-	-
<b>TOTAL LIABILITIES</b>	<b>A\$m</b>	<b>48.9</b>	<b>46.5</b>	<b>41.0</b>	<b>24.4</b>	<b>24.1</b>
<b>NET ASSETS</b>	<b>A\$m</b>	<b>103.3</b>	<b>115.0</b>	<b>147.7</b>	<b>186.6</b>	<b>230.4</b>
Contributed equity	A\$m	153.8	153.8	153.8	153.8	153.8
Reserves	A\$m	3.8	3.8	3.8	3.8	3.8
Accumulated profits / (losses)	A\$m	(49.6)	(37.9)	(5.2)	33.7	77.6
<b>TOTAL EQUITY</b>	<b>A\$m</b>	<b>108.0</b>	<b>119.7</b>	<b>152.4</b>	<b>191.3</b>	<b>235.1</b>

Source: Tamesis, Metro Mining

## Bauxite Market

### Introduction

Bauxite is the primary mineral for producing alumina, which is used to produce aluminium. Approximately 4 to 7 tonnes of bauxite are needed to produce two tonnes of alumina which can produce one tonne of aluminium. Bauxite is typically located close to the earth's surface formed by weathering aluminium rich rocks. Total world resources are c.29 billion tonnes, primarily in Guinea, Australia, Brazil, Vietnam and Jamaica.

### Mineralogy

The major minerals that occur in bauxite are Gibbsite ( $\text{Al}_2\text{OH}_3$ ), Boehmite ( $\gamma\text{-AlO(OH)}$ ), and Diaspore ( $\alpha\text{-AlO(OH)}$ ). There are many deleterious materials that can have an impact on pricing but the key impurity is the level of silica. In general, any silica that reacts in the refining process will cause increased consumption of caustic soda and equal losses of alumina in the refinery.

Gibbsite requires the lowest refining temperatures (c.150°C), Boehmite requires higher refining temperatures (c.240-260°C), whilst Diaspore required the highest refining temperatures (>260°C).

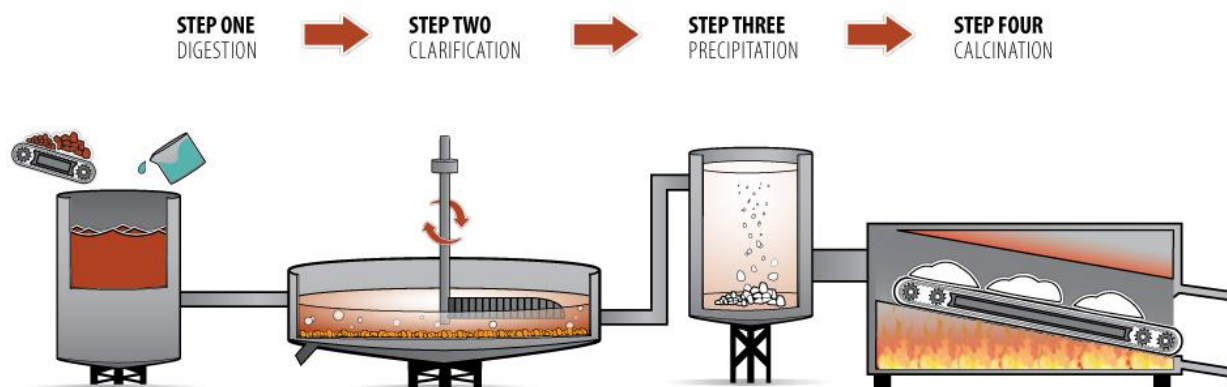
### Mining

Given the relatively low value of the ore, most production is near surface with low strip ratios. Most ore mined is suitable for DSO with little to no beneficiation. Any processing on site is typically limited to crushing, screening and washing to remove clay minerals. The mined out areas can then be backfilled with the removed overburden and re-vegetated.

### Ore Processing

The Bayer process is the most economic process of obtaining alumina oxide from bauxite, invented by Karl Josef Bayer in 1887. There are four main steps in this process: digestion, clarification, precipitation and calcination.

Figure 24 – Processing Alumina

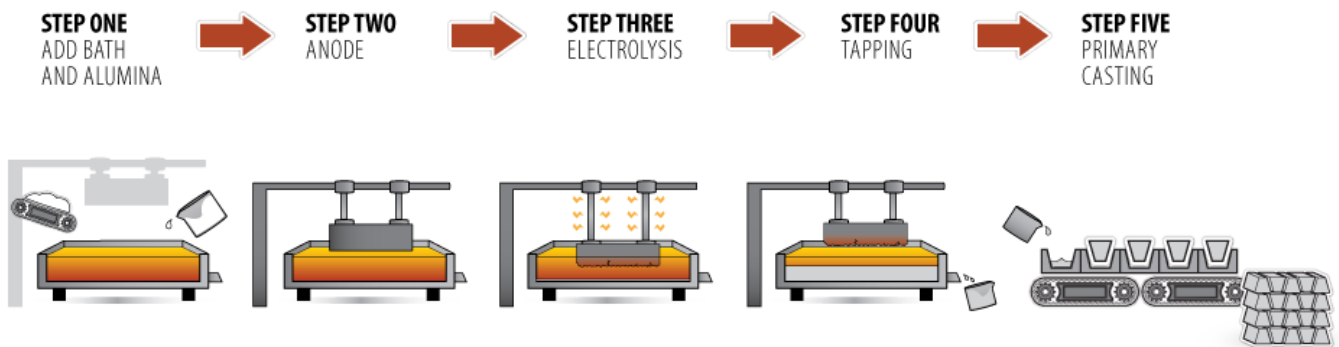


Source: Australian Aluminium Council

The key input drivers are bauxite, caustic soda and electricity. As discussed earlier, the gibbsite bauxite is preferred by refineries as it is able to be refined at lower temperatures than the other minerals.

The alumina is then processed into aluminium through smelting. The main method of smelting aluminium is the Hall-Héroult process and consists of five steps: adding bath and alumina; anode; electrolysis; tapping; and primary casting. Electricity is the key cost input, outside the alumina, so smelters are typically located in areas with reliable, low-cost electricity supply.

Figure 25 – Smelting Aluminium

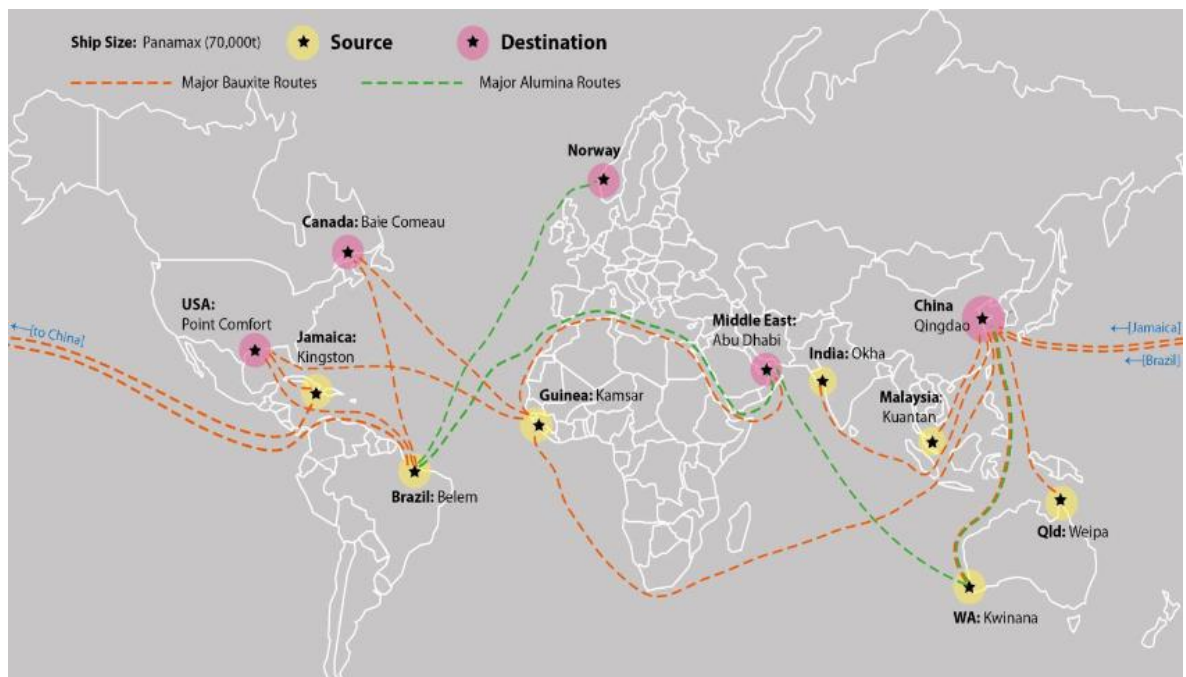


Source: Australian Aluminium Council

## Supply

The majority of world bauxite production is through integrated producers like Rusal, Rio Tinto, Alcoa, and Norsk Hydro. As a result, emerging Chinese production dominates the non-integrated seaborne bauxite trade. Demand, primarily from China, has been estimated to reach nearly 130Mtpa by 2026, growing at an average rate of 8% a year:

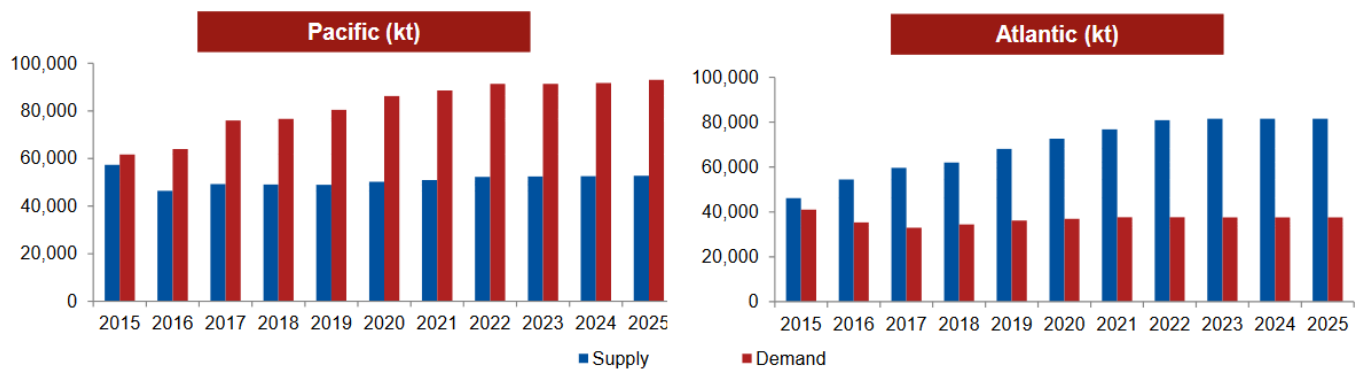
Figure 26 – Key bauxite/alumina freight routes



Source: Alumina Limited

Disruptions to supply, including the withdrawal of Indonesian from the export market (now relaxed but with very strict regulatory requirements) and the Malaysian moratorium on mining due to environmental damage have left Chinese refineries seeking alternative supply. This supply has come from Guinea or Brazil at higher freight costs, leaving a deficit in the Pacific region:

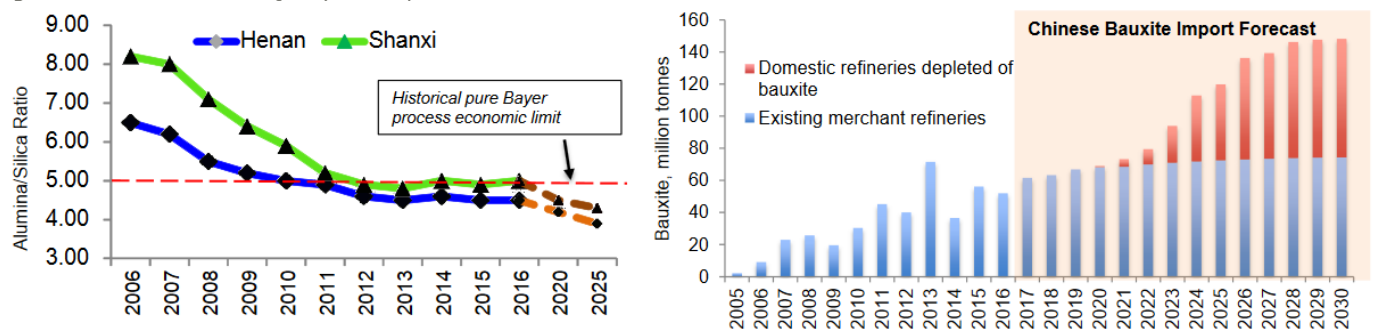
Figure 27 – Third party bauxite balance



Source: Alumina Limited

Chinese bauxite requirements are compounded by the declining quality of the domestic bauxite supplied to refineries. CM Group is predicting Aluminium-Silica ratios below what has been the historical Bayer process economic limit. As a result, it has been reported that key alumina refineries such as Shanxi and Henan are planning to relocate refining largely to coastal provinces. This deficit will have to be made up by imports.

Figure 28 – Chinese Bauxite Quality and Imports

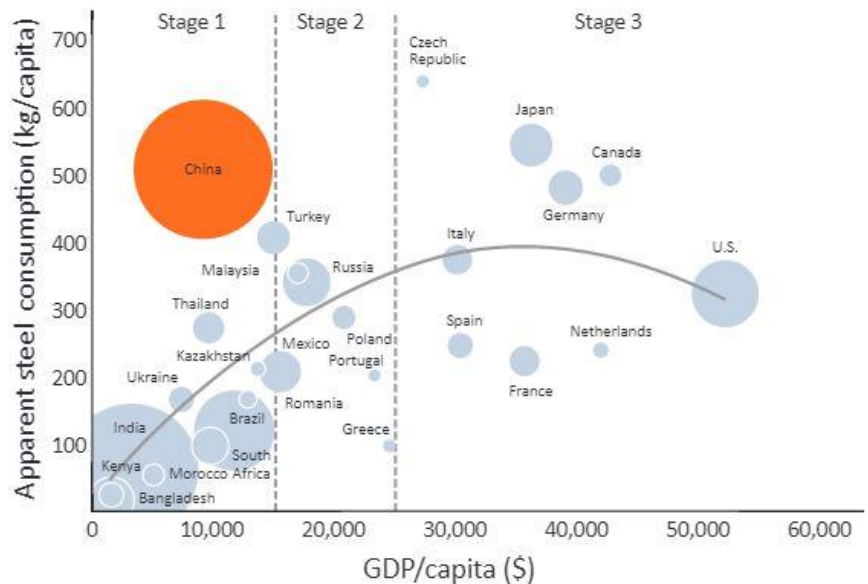


Source: CM Group, Alumina Limited

## Demand

Aluminium is typically a mid-to-late cycle commodity, integral to industrialisation, urban growth and technological advances. Countries with a high aluminium consumption typically have high GDP and well developed economies.

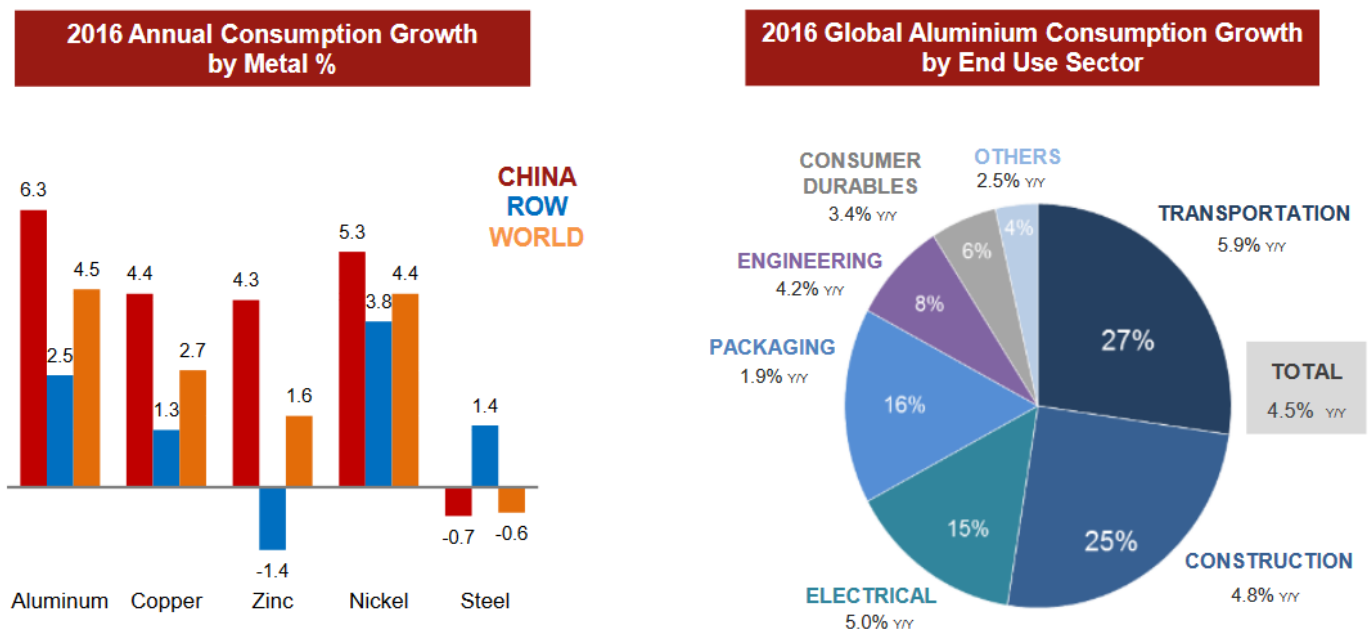
Figure 29 – Aluminium consumption per capita



Source: Cornerstone

Global aluminium demand remains strong, led by the transportation and construction sector.

Figure 30 – Aluminium consumption per capita



Source: Harbour Aluminium, Alumina Limited

## Metro Mining

As at 2-Aug-17

MMI  
ASX

Share Price (AUD) 0.17 Target Price (AUD/sh) 0.42

Model Derived:  
NAV (US\$m, 10%) 541.0

Ordinary Shares (M) 1286\*  
Market Cap (A\$m) 205\*  
Enterprise Value (A\$m) 172\*

\*post tranche 2

## Price Assumptions

(June Year end)

AUD:USD Exchange Rate 0.80 0.80 0.80 0.80 0.80

CBIX Reference Price (US\$/t) 39 42 40 40 39

Net Realised Price (A\$/t) 45 46 46 45 45

## FINANCIAL SUMMARY - A\$m

(June Year end)

	2018E	2019E	2020E	2021E	2022E
<b>Revenue</b>	<b>31.5</b>	<b>109.8</b>	<b>171.4</b>	<b>243.5</b>	<b>273.2</b>
EBITDA	1.6	22.0	45.2	65.9	72.5
Profit before Tax	(3.6)	15.4	37.6	56.5	63.1
<b>Net Income</b>	<b>(6.8)</b>	<b>11.7</b>	<b>32.7</b>	<b>38.9</b>	<b>43.9</b>

EPS (A\$ cents/sh) (0.54) 0.91 2.55 3.03 3.41

CFPS (A\$ cents/sh) 0.81 0.43 (1.64) 1.68 4.11

FCF yield (%) - 5% - 20% 24%

P/E - 18.7x 6.7x 5.6x 5.0x

EV/EBITDA 108.2x 7.8x 3.8x 2.6x 2.4x

## PROFIT AND LOSS STATEMENT - A\$m

(June Year end)

	2018E	2019E	2020E	2021E	2022E
<b>Revenue</b>	<b>31.5</b>	<b>109.8</b>	<b>171.4</b>	<b>243.5</b>	<b>273.2</b>
COGS	(24.1)	(72.5)	(103.5)	(146.7)	(166.5)
<b>Operating profit</b>	<b>7.4</b>	<b>37.4</b>	<b>67.8</b>	<b>96.8</b>	<b>106.7</b>
Admin	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
Depreciation	(5.2)	(6.5)	(7.5)	(9.4)	(9.5)
Royalties	(3.8)	(13.4)	(20.7)	(28.9)	(32.2)
<b>PBIT</b>	<b>(3.6)</b>	<b>15.4</b>	<b>37.6</b>	<b>56.5</b>	<b>63.1</b>
Interest	(3.2)	(3.7)	(2.7)	(0.1)	0.3
Tax	-	-	(2.2)	(17.5)	(19.5)
<b>Net income</b>	<b>(6.8)</b>	<b>11.7</b>	<b>32.7</b>	<b>38.9</b>	<b>43.9</b>
EBITDA	1.6	22.0	45.2	65.9	72.5

## VALUATION

A\$m

Bauxite Hills 525  
Cash 73  
Debt (40)  
SG&A (17)  
**TOTAL NAV** **541**

NPV per Share 0.42

## CASH FLOW ANALYSIS - A\$m

(June Year end)

	2018E	2019E	2020E	2021E	2022E
Profit / (loss) (A\$m)	(3.6)	15.4	37.6	56.5	63.1
Depreciation (A\$m)	5.2	6.5	7.5	9.4	9.5
Interest received (A\$m)	0.1	0.2	0.2	0.1	0.3
Interest paid (A\$m)	(3.3)	(3.9)	(2.9)	(0.2)	-
Foreign exchange (A\$m)	-	-	-	-	-
Movement in working capital (A\$m)	(10.1)	(5.5)	(7.9)	(4.3)	0.8
Corporate tax (A\$m)	-	-	(2.2)	(17.5)	(19.5)
<b>Cash flow from operations (A\$m)</b>	<b>(11.7)</b>	<b>12.8</b>	<b>32.3</b>	<b>44.0</b>	<b>54.1</b>
Capital expenditure (PP&E) (A\$m)	(36.0)	(0.9)	(37.7)	(1.3)	(1.3)
Environmental bond (A\$m)	(3.0)	-	(3.0)	-	-
<b>Cash flow from investing (A\$m)</b>	<b>(39.0)</b>	<b>(0.9)</b>	<b>(40.7)</b>	<b>(1.3)</b>	<b>(1.3)</b>
Proceeds of equity offering (A\$m)	36.1	-	-	-	-
Borrowings / (repayments) (A\$m)	25.0	(6.3)	(12.6)	(21.1)	-
<b>Cash flow from financing (A\$m)</b>	<b>61.1</b>	<b>(6.3)</b>	<b>(12.6)</b>	<b>(21.1)</b>	<b>-</b>
Net change in cash (A\$m)	10.4	5.6	(21.0)	21.6	52.8
<b>Cash balance (A\$m)</b>	<b>25.7</b>	<b>31.2</b>	<b>10.2</b>	<b>31.8</b>	<b>84.7</b>

## BALANCE SHEET ANALYSIS - A\$m

(June Year end)

	2018E	2019E	2020E	2021E	2022E
<b>Current Assets</b>					
Cash and Liquids	25.7	31.2	10.2	31.8	84.7
Inventory, Prepaid and Receivables	19.0	28.4	43.4	52.1	51.0
Other	-	0.0	0.0	0.0	0.0
<b>Non-Current Assets</b>					
Investments	0.0	1.0	2.0	3.0	4.0
Fixed Assets	107.5	101.9	135.1	127.0	118.8
Other	0.0	0.0	0.0	0.0	0.0
<b>Current Liabilities</b>					
Borrowings	6.3	12.6	21.1	0.0	0.0
Creditors	8.9	12.9	19.9	24.4	24.1
Other	0.0	1.0	2.0	3.0	4.0
<b>Non-Current Liabilities</b>					
Borrowings	33.7	21.1	0.0	0.0	0.0
Other	0.0	1.0	2.0	3.0	4.0
<b>Equity</b>	<b>108.0</b>	<b>119.7</b>	<b>152.4</b>	<b>191.3</b>	<b>235.1</b>
Net Cash/(Debt)	-14.3	-2.4	-10.8	31.8	84.7

## DIVISIONAL CASHFLOW - A\$m

	2018E	2019E	2020E	2021E	2022E
Bauxite Hills	(45.5)	17.6	(3.7)	44.7	54.5
<b>Total</b>	<b>(45.5)</b>	<b>17.6</b>	<b>(3.7)</b>	<b>44.7</b>	<b>54.5</b>

## BAUXITE PRODUCTION (kt)

	2018E	2019E	2020E	2021E	2022E
Bauxite Hills	750	2375	3713	5388	6125
<b>Total</b>	<b>750</b>	<b>2375</b>	<b>3713</b>	<b>5388</b>	<b>6125</b>
Operating margin (%)	11%	22%	28%	28%	27%
Total site costs (A\$/t)	23.1	20.7	17.6	16.3	15.9
Total operating costs (A\$/t)	39.0	35.7	33.5	32.6	32.5

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