



17 February 2022

South32 Limited  
(Incorporated in Australia under the *Corporations Act 2001* (Cth))  
(ACN 093 732 597)  
ASX / LSE / JSE Share Code: S32 ADR: SOUHY  
ISIN: AU000000S320  
south32.net

## 2022 HALF YEAR FINANCIAL RESULTS PRESENTATION

**South32 Limited (ASX, LSE, JSE: S32; ADR: SOUHY) (South32)** will hold a conference call at 8.30am Australian Western Standard Time to discuss the attached 2022 half year financial results presentation materials, the details of which are as follows:

### Conference ID:

Please pre-register for this call at [link](#).

A presentation is attached. Following the conference call a recording will be available on the South32 website (<https://www.south32.net/investors-media/investor-centre/financial-operational-results>).

Separately a video presentation by South32 Chief Executive Officer, Graham Kerr, will be made available on the South32 website (<https://www.south32.net/investors-media/investor-centre/financial-operational-results>).

### About us

South32 is a globally diversified mining and metals company. Our purpose is to make a difference by developing natural resources, improving people's lives now and for generations to come. We are trusted by our owners and partners to realise the potential of their resources. We produce bauxite, alumina, aluminium, metallurgical coal, manganese, nickel, silver, lead and zinc at our operations in Australia, Southern Africa and South America. With a focus on growing our base metals exposure, we also have two development options in North America and several partnerships with junior explorers around the world.

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Further information on South32 can be found at [www.south32.net](http://www.south32.net).

Approved for release by Graham Kerr, Chief Executive Officer  
JSE Sponsor: UBS South Africa (Pty) Ltd  
17 February 2022

# 2022 HALF YEAR FINANCIAL RESULTS

17 February 2022



# IMPORTANT NOTICES



This presentation should be read in conjunction with the “Financial Results and Outlook – half year ended 31 December 2021” announcement released on 17 February 2022, which is available on South32’s website ([www.south32.net](http://www.south32.net)).

Figures in italics indicate that an adjustment has been made since the figures were previously reported.

## **FORWARD-LOOKING STATEMENTS**

This presentation contains forward-looking statements, including statements about trends in commodity prices and currency exchange rates; demand for commodities; production forecasts; plans, strategies and objectives of management; capital costs and scheduling; operating costs; anticipated productive lives of projects, mines and facilities; and provisions and contingent liabilities. These forward-looking statements reflect expectations at the date of this presentation, however they are not guarantees or predictions of future performance or statements of fact. They involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this presentation. Readers are cautioned not to put undue reliance on forward-looking statements. South32 makes no representation, assurance or guarantee as to the accuracy or likelihood of fulfilment of any forward-looking statement or any outcomes expressed or implied in any forward-looking statement. Except as required by applicable laws or regulations, the South32 Group does not undertake to publicly update or review any forward-looking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance. South32 cautions against reliance on any forward-looking statements or guidance, particularly in light of the current economic climate and the significant volatility, uncertainty and disruption arising in connection with COVID-19. The denotation “e” refers to an estimate or forecast year.

## **NON-IFRS FINANCIAL INFORMATION**

This presentation includes certain non-IFRS financial measures, including Underlying earnings, Underlying EBIT and Underlying EBITDA, Underlying revenue, Underlying net finance costs, Underlying depreciation and amortisation, Underlying operating costs, Underlying income tax expense, Underlying royalty related tax expense, Basic Underlying earnings per share, Underlying effective tax rate, Underlying EBIT margin, Underlying EBITDA margin, Underlying return on capital, Free cash flow, net debt, net operating assets and ROIC. These measures are used internally by management to assess the performance of our business, make decisions on the allocation of our resources and assess operational management. Non-IFRS measures have not been subject to audit or review and should not be considered as an indication of or alternative to an IFRS measure of profitability, financial performance or liquidity.

## **NO OFFER OF SECURITIES**

Nothing in this presentation should be read or understood as an offer or recommendation to buy or sell South32 securities, or be treated or relied upon as a recommendation or advice by South32.

## **RELIANCE ON THIRD PARTY INFORMATION**

Any information contained in this presentation that has been derived from publicly available sources (or views based on such information) has not been independently verified. The South32 Group does not make any representation or warranty about the accuracy, completeness or reliability of the information. This presentation should not be relied upon as a recommendation or forecast by South32.

## **NO FINANCIAL OR INVESTMENT ADVICE – SOUTH AFRICA**

South32 does not provide any financial or investment 'advice' as that term is defined in the South African Financial Advisory and Intermediary Services Act, 37 of 2002.

## **MINERAL RESOURCES AND RESERVES**

Information in this presentation that relates to Ore Reserve or Mineral Resource estimates was declared as part of South32’s annual Resource and Reserve declaration in the FY21 Annual Report ([www.south32.net](http://www.south32.net)) issued on 3 September 2021 and prepared by Competent Persons in accordance with the requirements of the JORC Code. South32 confirms that it is not aware of any new information or data that materially affects the information included in the original announcements. All material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. South32 confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

Refer to market release “South32 to acquire a 45% interest in the Sierra Gorda copper mine” dated 14 October 2021. The estimates indicated in the original announcement are qualifying foreign estimates and are not reported in accordance with the JORC Code. A Competent Person has not done sufficient work to classify foreign estimates as Mineral Resources or Ore Reserves in accordance with the JORC Code. It is uncertain that following evaluation and/or further work that the foreign estimates will be reported as Mineral Resources or Ore Reserves in accordance with the JORC Code.

Production Targets cautionary statement: The information in this presentation that refers to Production Target and forecast financial information is based on the original announcement “Hermosa Project Update” released on 17 January 2022 and is available to view at [www.south32.net](http://www.south32.net). The Mineral Resources underpinning the Production Target have been prepared by a Competent Person in accordance with the JORC Code. All material assumptions on which the Production Target and forecast financial information is based is provided in the “Hermosa Project Update” announcement released on 17 January 2022. There is low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target will be realised. The potential quantity and grade of the Exploration Target is conceptual in nature. In respect of Exploration Targets used in the Production Target, there has been insufficient exploration to determine a Mineral Resource and there is no certainty that further exploration work will result in the determination of Mineral Resources or that the Production Target itself will be realised. The stated Production Target is based on South32’s current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.

Clark Deposit scoping study cautionary statement: The scoping study referred to in this presentation is based on the original announcement “Hermosa Project Update” released on 17 January 2022 and is available to view on [www.south32.net](http://www.south32.net). South32 confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement.

**We have taken significant steps to reshape our portfolio for a low carbon future**

**Adding copper exposure with Sierra Gorda<sup>1</sup>**

**Agreed to increase our share of green aluminium production at Mozal Aluminium<sup>2</sup> and Brazil Aluminium<sup>3</sup>**

**Completed the Taylor Deposit PFS, confirming its potential to be a low cost operation in the first quartile of the industry's cost curve<sup>4</sup>**

**Divested South Africa Energy Coal and TEMCO, and agreed to sell Metalloys<sup>(a)</sup>**

Notes:

a. Subject to the satisfaction of conditions.

# H1 FY22 FINANCIAL SCORECARD

**Portfolio improvements and strong commodity prices have translated into record earnings and higher shareholder returns**

Net Profit after Tax ↑US\$979M to

**US\$1,032M**

Underlying Earnings ↑US\$868M to

**US\$1,004M**

Underlying EBITDA ↑138% to

**US\$1.9B**

Underlying EPS ↑671% to

**21.6 US cents per share**

Free cash flow<sup>(a)</sup> ↑401% to

**US\$942M**

H1 FY22 Ordinary Dividends ↑521% to

**8.7 US cents per share**

H1 FY22 Shareholder returns<sup>(b)</sup>

**US\$465M**

Capital management program ↑US\$110M to

**US\$302M remaining**

Net cash at 31 December 2021

**US\$975M**

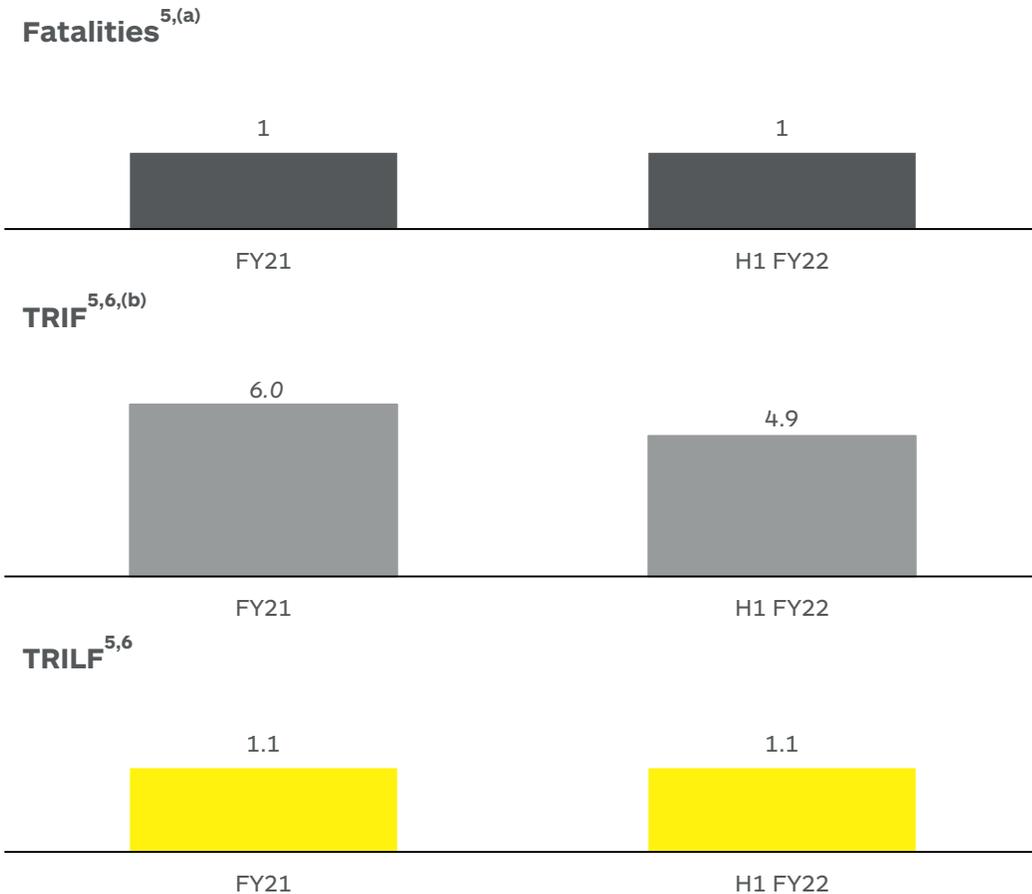


Notes:

- a. Free cash flow from operations including net distributions from our manganese equity accounted investments (EAI).
- b. In respect of the December 2021 half year. Includes fully franked dividends (interim ordinary US\$405M) and on-market share buy-back of US\$60M.

# SAFETY PERFORMANCE

The most important commitment we make at South32 is that everyone goes home safe and well



- In November 2021 we tragically lost one of our colleagues, Mr Desmin Mienies, a contractor with Elektra Mining, who was fatally injured while undertaking electrical work at our Wessels mine at South Africa Manganese
- We have completed an investigation and are sharing learnings across the business
- TRIF declined 18% from our adjusted FY21<sup>(b)</sup> baseline, with improved outcomes at Illawarra Metallurgical Coal, Australia Manganese and Cerro Matoso
- We have partnered with a leading safety consultant to identify actions to achieve a step-change in our safety performance

Notes:

a. Incidents are included where South32 controls the work location or controls the work activity.

b. To set our TRIF target for FY22, we have adjusted the baseline to account for the removal of South Africa Energy Coal and TEMCO from the portfolio.

# OUR RESPONSE TO COVID-19

**We remain committed to three key areas that have guided our response since the beginning of the pandemic**



**KEEPING OUR PEOPLE  
SAFE AND WELL**



**MAINTAINING SAFE AND  
RELIABLE OPERATIONS**



**SUPPORTING OUR  
COMMUNITIES**

## Sustainable development is at the heart of our purpose

Our approach to sustainability focuses on five interconnected pillars with areas that are material to our business and our stakeholders, and which support the United Nations Sustainable Development Goals



### H1 FY22 milestones

- Finished the diagnostic phase of our Safety System of Work project
- Completed a review of sexual harassment risks and identified actions to be implemented by the end of FY22
- Allocated US\$8M<sup>(a)</sup> to community investment
- Progressed development of our approach to Indigenous and Tribal Peoples' Cultural Heritage, for our operations outside Australia
- Continued work to set contextual water targets for Illawarra Metallurgical Coal and South Africa Manganese in FY22
- Executed our decarbonisation milestones to plan
- Advanced resilience assessments of our operations to potential physical climate impacts
- Invested further to reshape our portfolio towards the metals critical for a low carbon future
- Incorporated linkages in our long term remuneration to support achievement of our climate change goals
- Embedded sustainability-linked features into our US\$1.4B revolving credit facility refinancing with measures tied to reducing greenhouse gas emissions, and improving energy and water efficiency

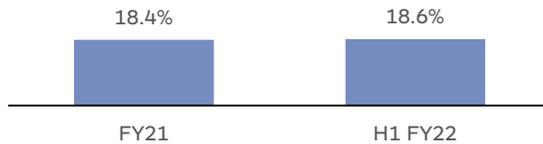
Notes:

a. H1 FY22 community investment figure is unaudited.

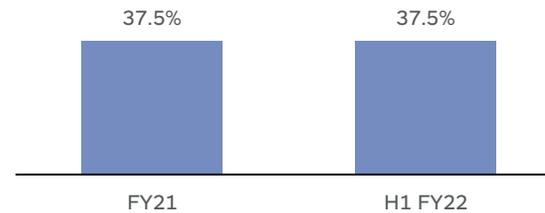
# INCLUSION AND DIVERSITY PROGRESS

**Building on work completed in H2 FY21, our inclusion and diversity action plan focuses on embedding our values and inclusive behaviours to drive a step change in our people's experience of our culture**

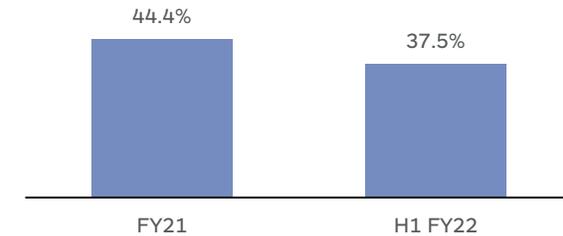
**Percentage of total employees who are women**



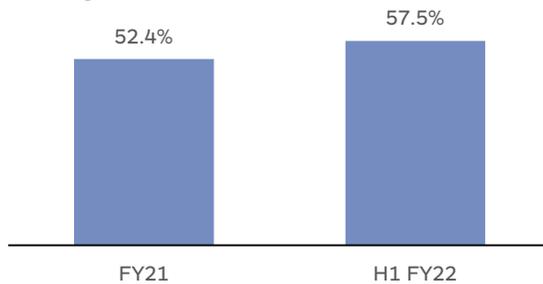
**Women on our Board**



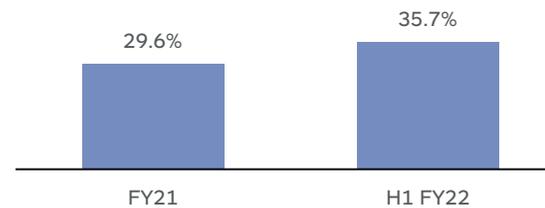
**Women on our Lead Team**



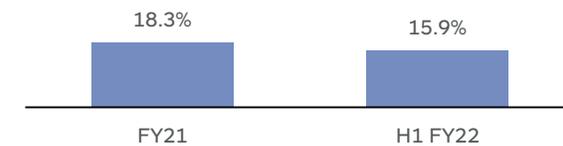
**Black People<sup>7</sup> in our South African management team**



**Women in senior leadership<sup>8</sup>**



**Women in operational leadership<sup>9</sup>**



# OUR H1 FY22 PROGRESS ADDRESSING CLIMATE CHANGE

**We have incorporated linkages in our long term remuneration to support delivery of our climate change goals**

## Decarbonising our operations

### **We advanced decarbonisation activities designed to address our largest exposures**

- Completed a PFS for the conversion of the first coal-fired boiler at Worsley Alumina and progressed study work for the mud-washing efficiency project
- Approved investment in AP3XLE at Hillside Aluminium and progressed study work for options to secure green electricity
- Progressed a pilot plant trial of CSIRO's VAMMIT technology at Illawarra Metallurgical Coal

## Reshaping our portfolio

### **We took significant steps to increase our exposure to the metals critical for a low carbon future**

- Announced acquisition of a 45% interest in the Sierra Gorda copper mine<sup>1</sup>
- Committed to expand our green aluminium capacity by ~100%
- Completed the zinc-lead-silver Taylor Deposit PFS using low carbon design principles

## Partnering with others

### **We established new partnerships for collective action on climate change**

- Joined Responsible Steel, a global multi-stakeholder standard and certification initiative for the steel sector
- Entered into a sustainability-linked partnership with one of our major freight suppliers for caustic soda to Worsley Alumina
- Secured a US\$1.4B sustainability-linked revolving credit facility

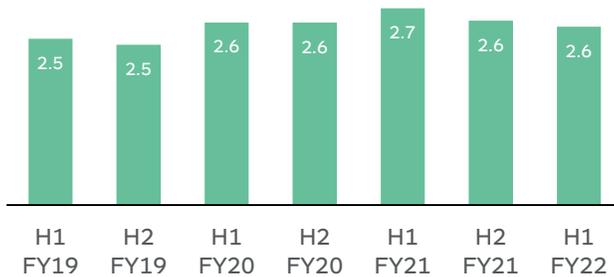


FINANCIAL RESULTS

# PRODUCTION RESULTS

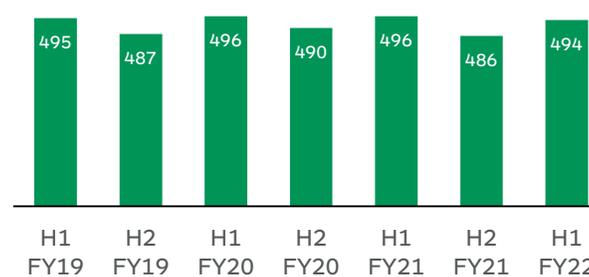
**We remain focused on production stability and optimising our operations**

**Alumina (Mt)**



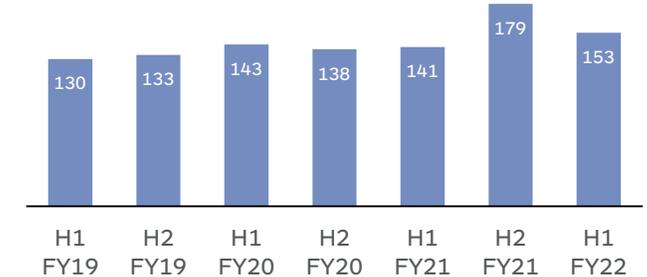
Worsley Alumina continues to operate above nameplate capacity, while Brazil Alumina recovered from the bauxite unloader outage and achieved record production in Q2 FY22

**Aluminium (kt)**



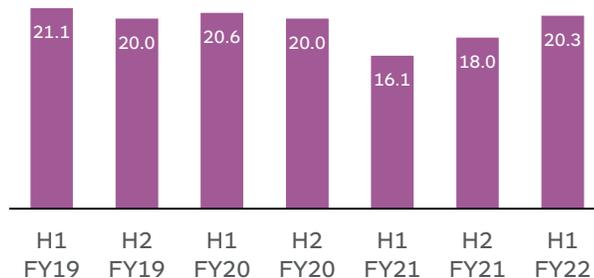
Both smelters continue to test their maximum technical capacity, despite the impact of increased load-shedding

**Zinc equivalent<sup>11</sup> (kt)**



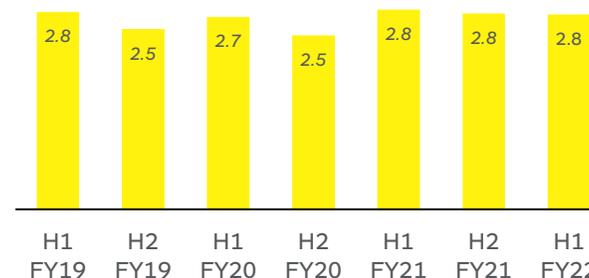
Continued strong underground performance at Cannington with higher grades in accordance with the mine plan

**Nickel (kt)**



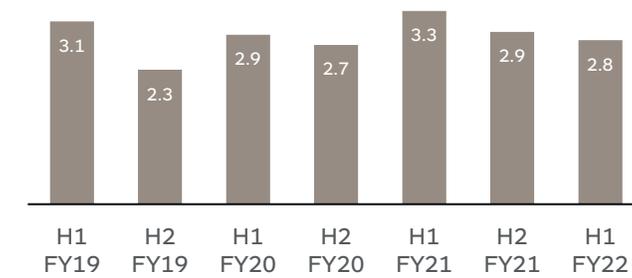
Higher volumes at Cerro Matoso following completion of a major plant refurbishment and additional higher-grade ore from the Q&P project

**Manganese ore<sup>10</sup> (Mwmt)**



Higher volumes of premium material at South Africa Manganese offset weather and COVID-19 disruptions at Australia Manganese

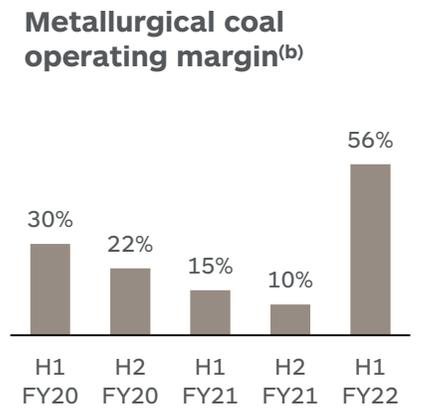
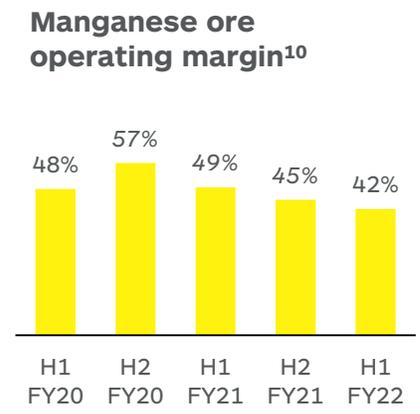
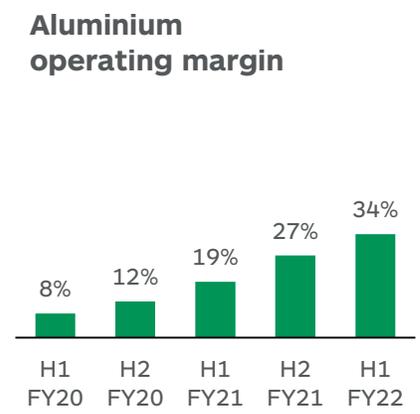
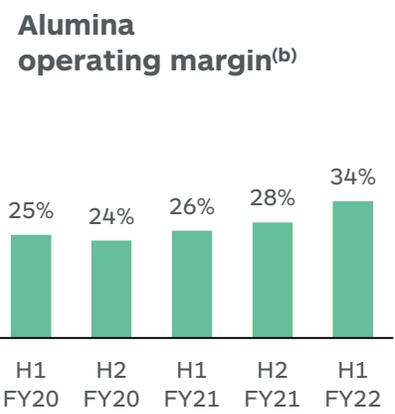
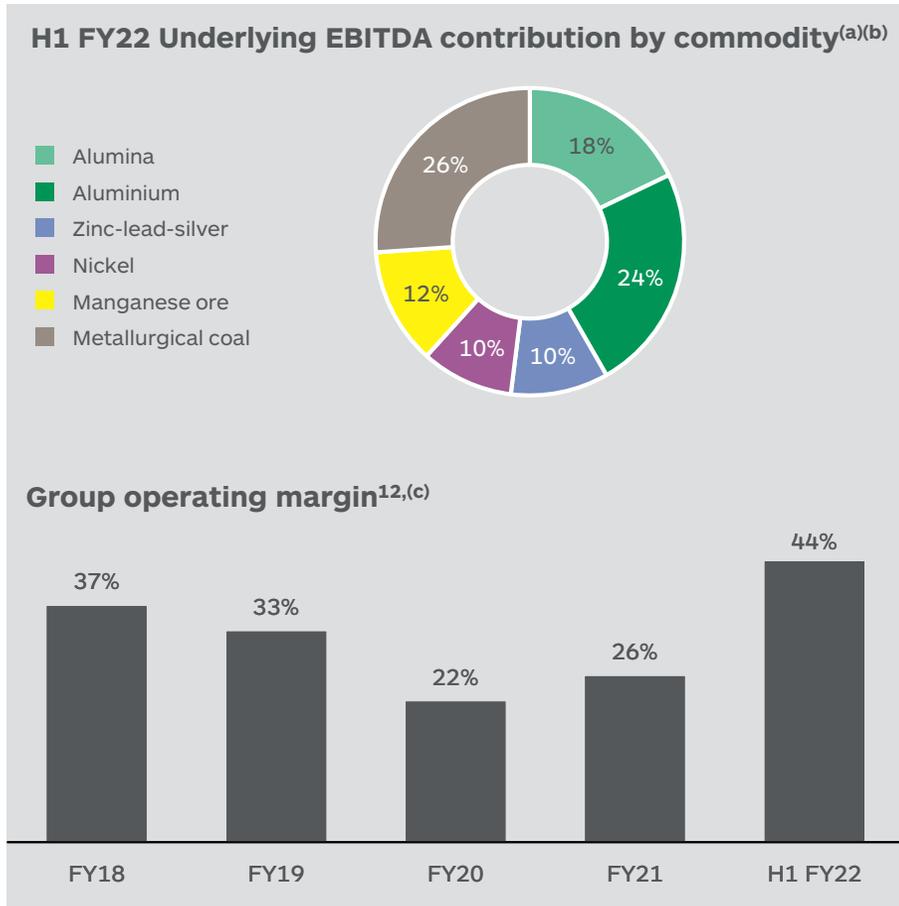
**Metallurgical coal (Mt)**



Volumes largely unchanged despite an extended longwall move and COVID-19 restrictions during H1 FY22

# H1 FY22 PERFORMANCE ANALYSIS

**A broad recovery in commodity prices and our high operating leverage translated into a record 44% operating margin**

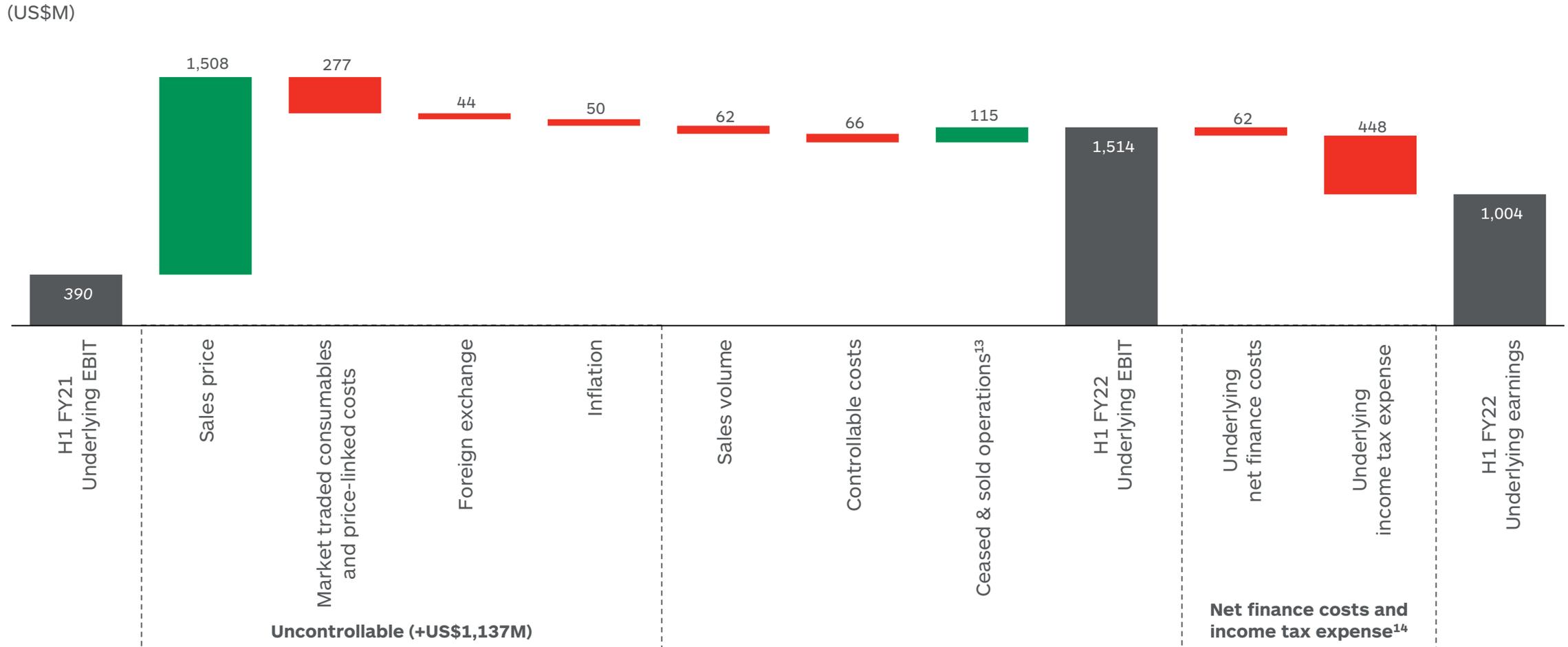


Notes:

- a. Presented on a proportionally consolidated basis and excludes manganese alloys, Hermosa, and Group and unallocated costs.
- b. Metallurgical coal comprises Illawarra Metallurgical Coal, including energy coal by-product volumes. The Brazil Aluminium smelter is included in the alumina operating margin.
- c. Group operating margin reflects our material EAI on a proportionally consolidated basis and an ownership interest of 54.6% for South Africa Manganese ore.

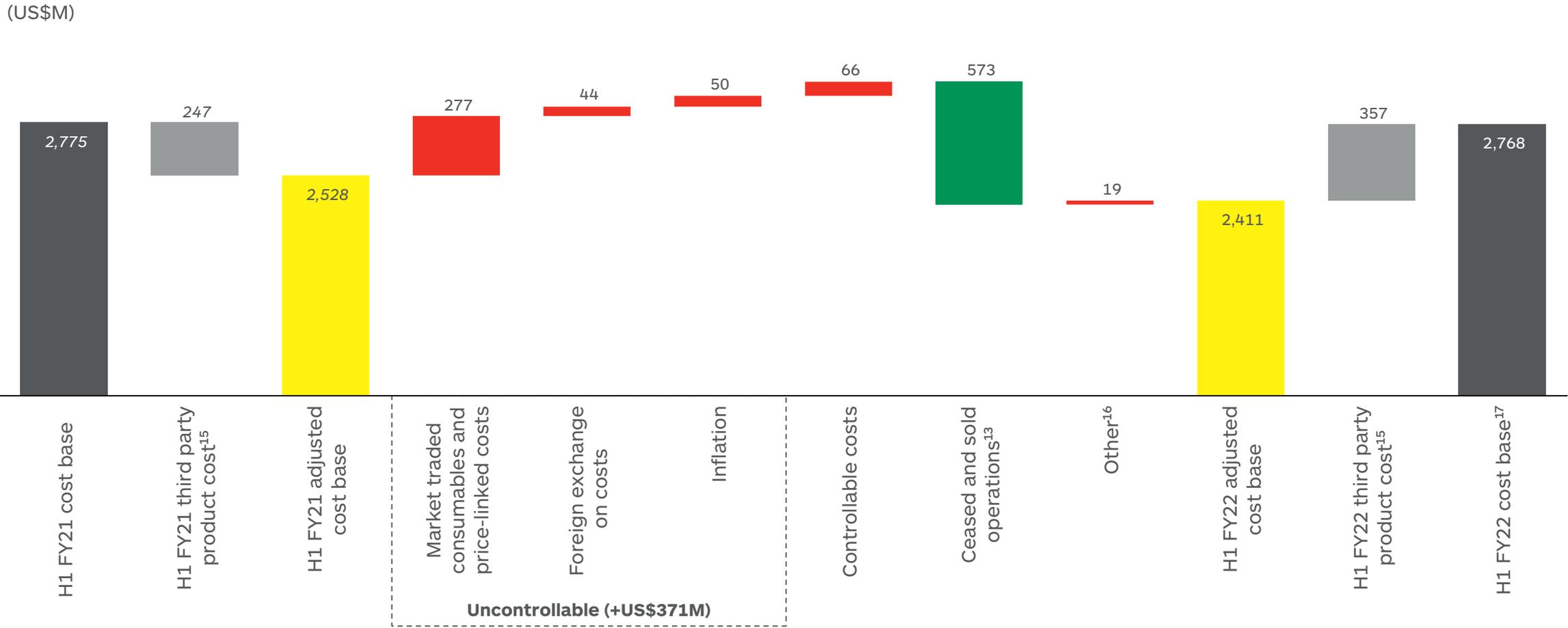
# EARNINGS ANALYSIS

**Record Underlying EBIT supported by a broad based recovery in commodity prices and our portfolio improvements**



# COST ANALYSIS

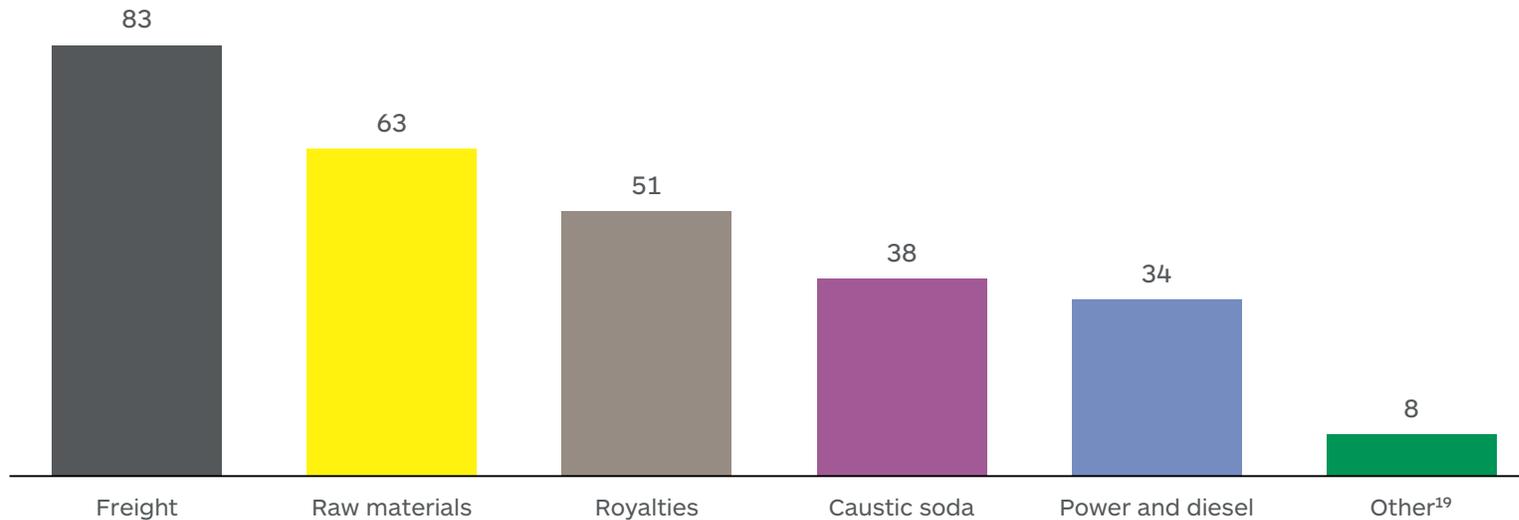
**We have exited lower margin, higher cost businesses**



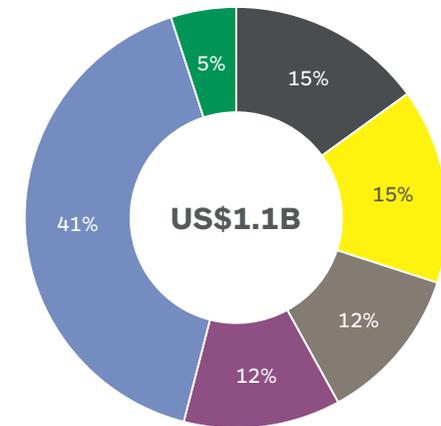
# MARKET TRADED CONSUMABLES AND PRICE-LINKED COSTS

**Inflation has been most acute in freight and smelter raw material markets, while higher prices increased royalty payments**

**HoH increase of US\$277M in market traded consumables and price-linked costs<sup>18</sup>**  
(US\$M)



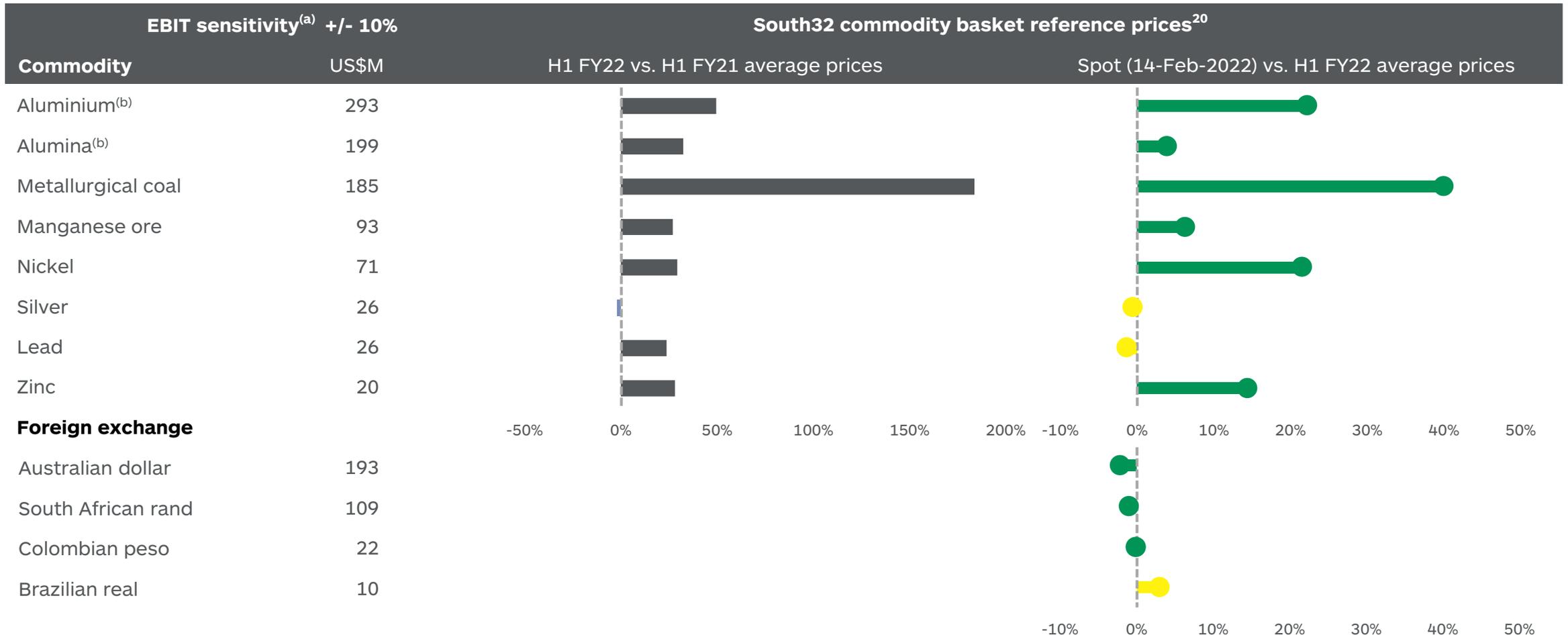
**H1 FY22 total expenditure<sup>19</sup>**



# COMMODITY PRICE AND FOREIGN EXCHANGE ANALYSIS



**Tight supply and disruption to energy markets, coupled with strong customer demand continues to support prices across our portfolio**

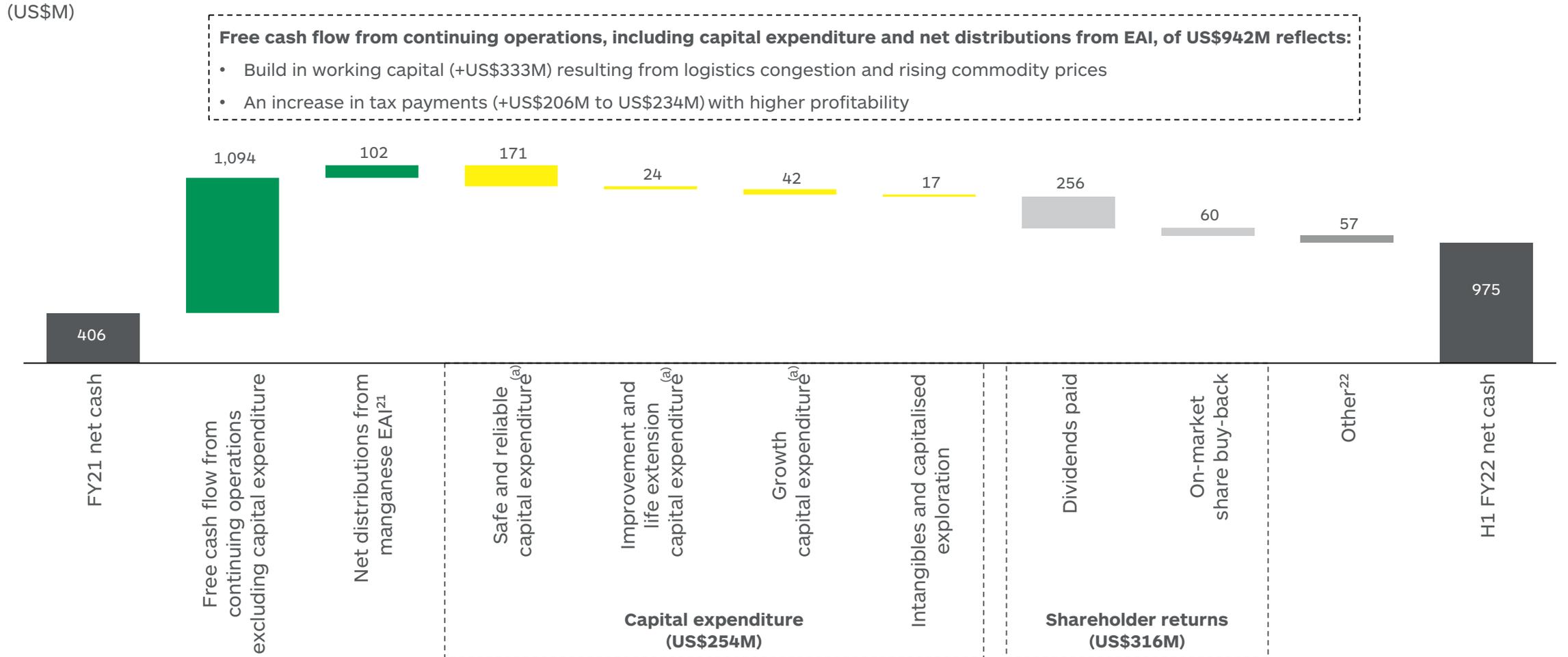


Notes:

- a. The sensitivities reflect the annualised estimated impact on FY22e Underlying EBIT of a 10% movement in H1 FY22 actual realised prices and H1 FY22 actual average exchange rates applied to FY22e volumes and costs.
- b. Aluminium sensitivity does not include the Group consolidation impact of inter-company alumina sold on index. Aluminium sensitivity is shown without any associated increase in alumina pricing.

# CASH FLOW ANALYSIS

**Strong cash flow generation delivered a increase in net cash of US\$569M following further investment in our business and returns to shareholders**



Notes:

a. Excludes equity accounted investments and discontinued operations.

# BALANCE SHEET

**Our strong balance sheet ensures we are well placed to fund the continuing transformation of our portfolio and increase shareholder returns**

## Sierra Gorda transaction pro-forma metrics

(US\$M)	South32 January 2022 <sup>(a)</sup>	Sierra Gorda	South32 pro-forma
Debt	(1,085)	(1,000)	(2,085)
Cash	2,196	(550)	1,646
<b>Net cash/(debt)</b>	<b>1,111</b>	<b>(1,550)</b>	<b>(439)</b>

Notes:

- a. January 2022 numbers are unaudited. Net cash should not be considered as an indication of or alternative to an IFRS measure of profitability, financial performance or liquidity.

- Our capital management framework is unchanged, and we will continue to prioritise maintaining safe and reliable operations and an investment grade credit rating through the cycle
- The acquisition of a 45% interest in Sierra Gorda is expected to close in February 2022<sup>1</sup>
  - ~US\$1.55B upfront consideration funded with cash on hand and up to US\$1B via an underwritten acquisition debt facility
  - Acquisition facility expected to be replaced with longer-term funding
- We retain access to significant liquidity:
  - US\$2.2B in cash (as at January 2022)<sup>(a)</sup>
  - An undrawn US\$1.4B revolving credit facility
- S&P and Moody's have reaffirmed their respective BBB+/Baa1 credit ratings for the Group
- Upcoming commitments to be funded from cash on hand and cash flow:
  - US\$166M purchase price to increase our shareholding in Mozal Aluminium to 63.7%<sup>2</sup>
  - US\$405M ordinary interim dividend to be paid in April 2022 in respect of H1 FY22
  - US\$302M remaining to be returned on our capital management program by September 2022

# CAPITAL EXPENDITURE GUIDANCE

**We are executing our safe and reliable capital activity to plan while investing in improvement and growth programs focused on base metals**

## Safe and reliable capital expenditure<sup>(a)</sup>

(US\$M)	FY20	FY21	FY22e
Group excluding Appin upgrades	445	393	421
Illawarra Metallurgical Coal: Appin infrastructure upgrades <sup>(b)</sup>	0	0	50
<b>Total safe and reliable</b>	<b>445</b>	<b>393</b>	<b>471</b>

## Other capital expenditure<sup>(a)</sup>

(US\$M)	FY20	FY21	FY22e
Improvement and life extension	37	65	87
Growth	115	72	115
Divested operations	169	77	-
<b>Total other capital</b>	<b>321</b>	<b>214</b>	<b>202</b>
<b>Total capital expenditure</b>	<b>766</b>	<b>607</b>	<b>673</b>

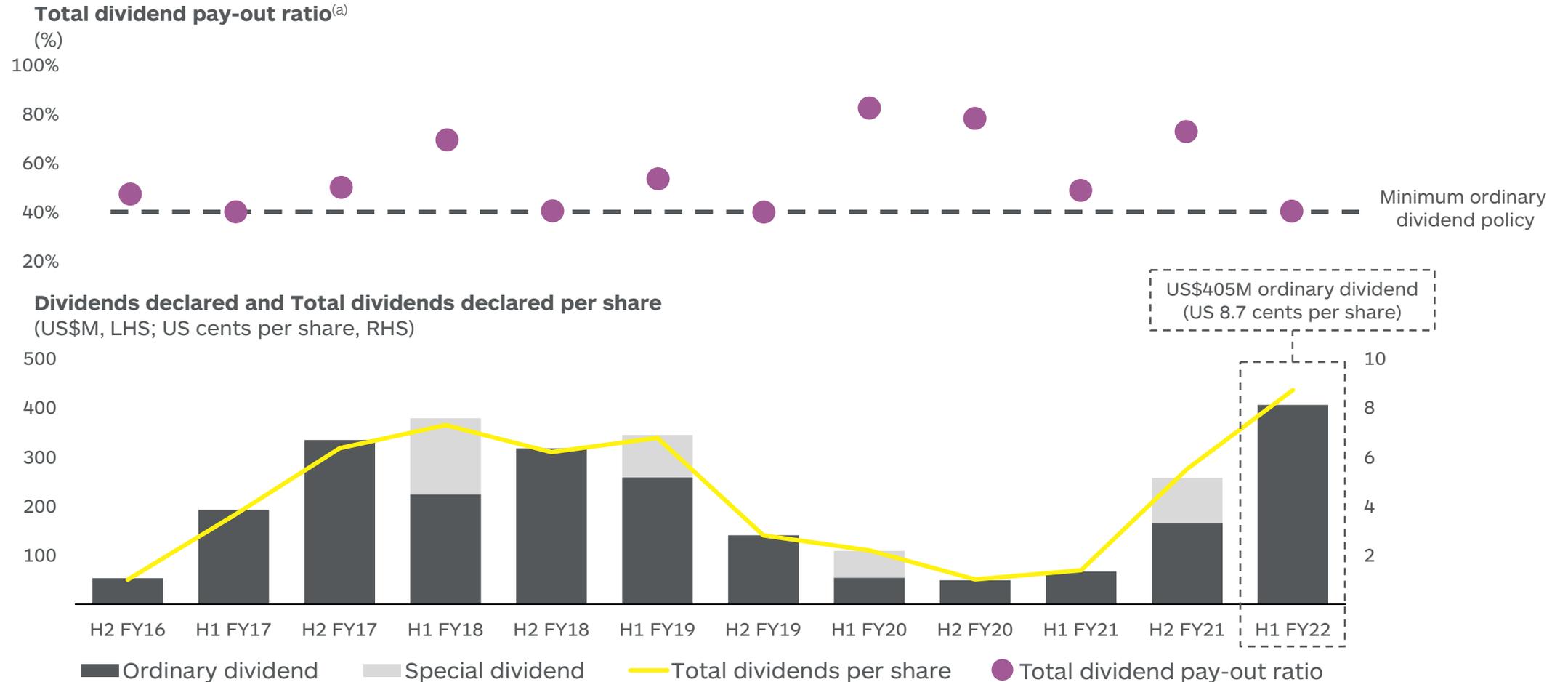
- Our divestment of South Africa Energy Coal has reduced the capital intensity of our business since FY20
- Safe and reliable capital remains within our expected range for our current portfolio (US\$420M to US\$520M), despite our investment in infrastructure upgrades at Illawarra Metallurgical Coal ahead of the transition to a single longwall at Appin from FY25
- FY22 guidance for growth capital at our Hermosa project has been revised to US\$115M (from US\$45M) with the first time inclusion of H2 FY22 expenditure, following completion of the Taylor Deposit PFS. This includes circa US\$50M for critical path items including construction and installation of infrastructure to support orebody dewatering in H2 FY22

### Notes:

- South32 share. Includes equity accounted investments, and excludes divested operations, exploration, intangibles, Group and unallocated capital expenditure.
- Additional coal clearance, ventilation and other infrastructure ahead of the transition to a single longwall mine plan.

# RETURNS TO SHAREHOLDERS

**As our financial performance improves, our flexible dividend policy and the cumulative benefit of our on-market share buy-back is rewarding shareholders with a record dividend per share**



Notes:

a. Calculated as the sum of ordinary and special dividends declared in the period as a ratio of Underlying earnings in respect of the period.

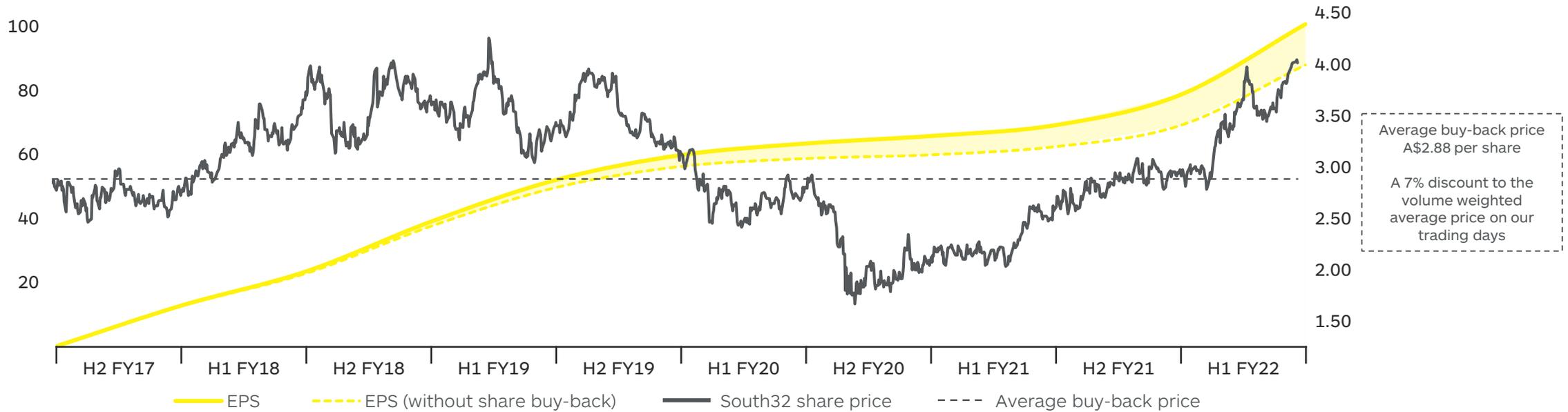
# RETURNS TO SHAREHOLDERS

**Our capital management program that has been active since FY18, is flexible, and returns excess capital efficiently**

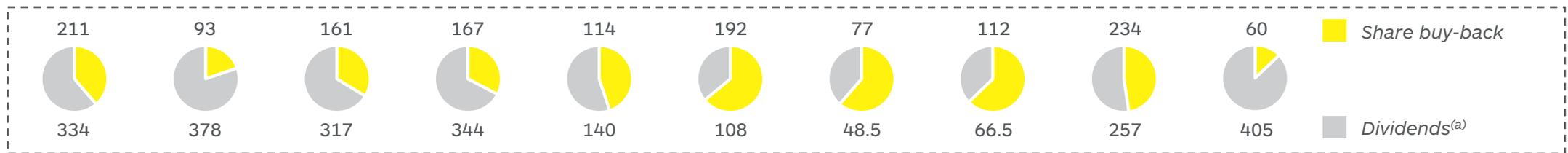
**Returned US\$0.4B in special dividends and US\$1.4B via our on-market share buy-back, reducing shares on issue by 13%**

**Increased the program by a further US\$110M, leaving US\$302M to be returned**

**Cumulative EPS<sup>23</sup> (LHS) and South32 share price (RHS)**  
 (US cents per share from 31 December 2016, LHS; A\$/share, RHS)



## Returns to shareholders (US\$M)



Notes:  
 a. Ordinary and special dividends resolved to be paid in respect of the period.

A close-up photograph of a concrete curb with the word 'SIDE' embossed in large, raised letters. A green plastic strip is visible on the left side of the curb. The background shows a rough, textured surface, possibly a road or construction site.

# MARKETS OUTLOOK

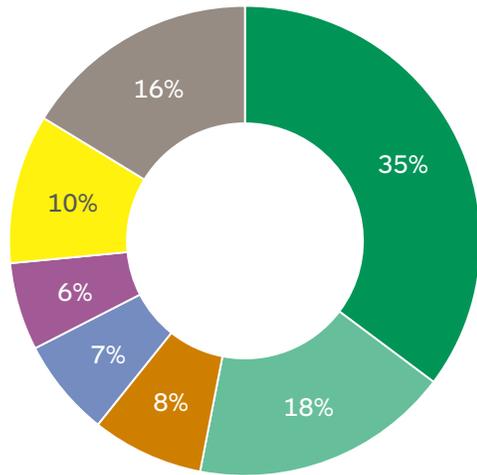
# COMMODITY DEMAND IN A 1.5°C SCENARIO

**Our portfolio is well positioned for a rapid global transition to a low carbon economy**

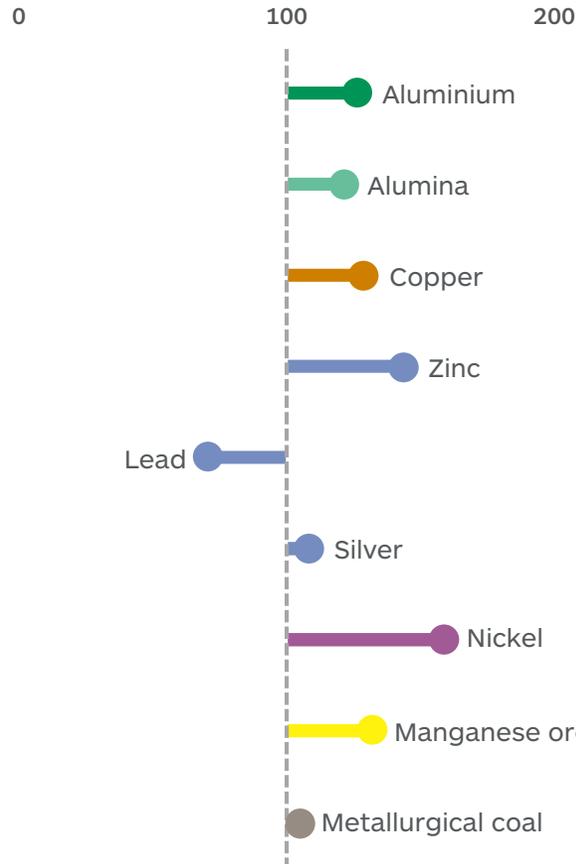
**Demand for most of our commodities would grow significantly with the uptake of low carbon technologies**

Illustrative Group Revenue<sup>(a),24,25,26</sup>

2029-2050 average commodity demand in 1.5°C scenario vs. base case<sup>27</sup>



H1 FY22



## Key drivers in the 1.5°C scenario

- ↑ **Aluminium:** benefits from higher intensity of use in electric vehicles, higher demand in building construction and substitution of fossil fuel-based plastics
- ↑ **Alumina:** a key raw material for the production of aluminium
- ↑ **Copper:** a key metal required in renewable energy infrastructure and electric vehicles
- ↑ **Zinc:** a protective coating used in wind turbines and solar panels
- ↓ **Lead:** reduced demand for lead batteries in motor cars as internal combustion engine fleet is phased out by 2050, partly offset by higher demand for use in energy storage systems
- ↑ **Silver:** used in solar panels due to its superior electrical conductivity
- ↑ **Nickel:** used in alloys in wind, solar and geothermal power infrastructure, while nickel-rich batteries are critical for rapid adoption of electric vehicles
- ↑ **Manganese ore:** benefits from higher use in the infrastructure sector to improve quality and strength of steel, minimal impact of recycling as needs to be continually replaced in steel making
- **Metallurgical coal:** high quality coal required to support emissions targets in steel sector and new capacity in emerging markets, partially offset by higher steel recycling and increasing share of electric arc furnaces

Notes:

a. Illustrative Group incorporates announced restart of the Brazil Aluminium smelter<sup>3</sup>, the acquisitions of a 45% interest in the Sierra Gorda copper mine<sup>1</sup> and an additional 16.6% interest in Mozal Aluminium<sup>2</sup>.

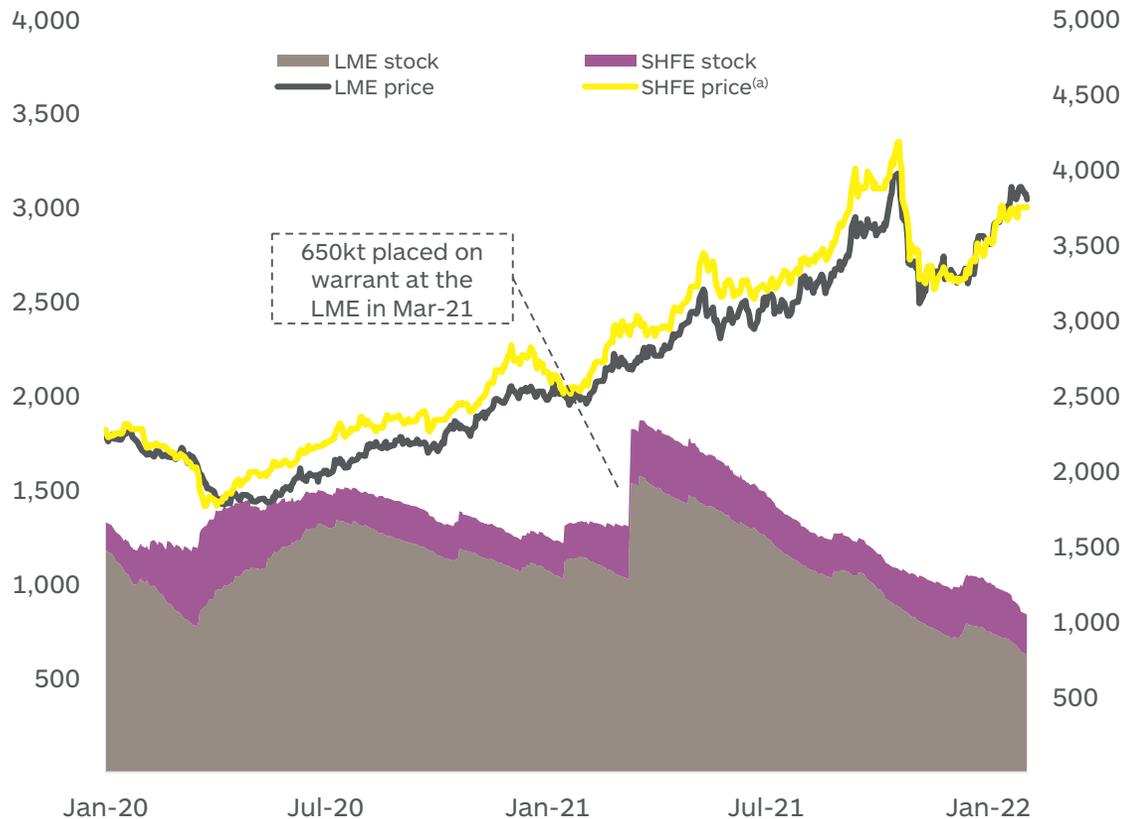
# ALUMINIUM MARKET

**Strong demand and the energy-led curtailment of European capacity has underpinned a rise in prices**

**Supply to remain constrained with China's capacity limit and the industry transitioning towards green energy**

**Long term price supported by higher inducement cost projects ex-China, powered by green energy**

**Aluminium price and stocks**  
(US\$/t, LHS; kt, RHS)



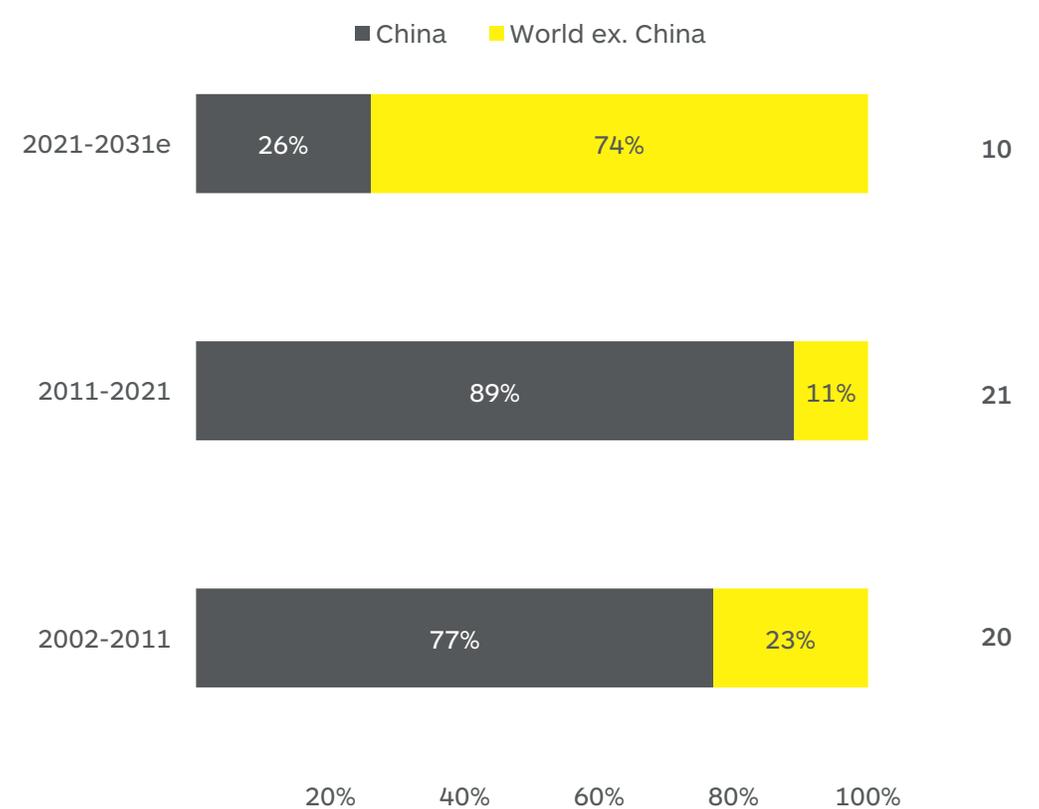
Source: LME, SHFE (Shanghai Futures Exchange)

Notes:

a. SHFE prices refer to SHFE excluding VAT of 13%.

b. Base case scenario.

**Aluminium production growth by decade<sup>(b)</sup>**  
(%)



Source: CRU

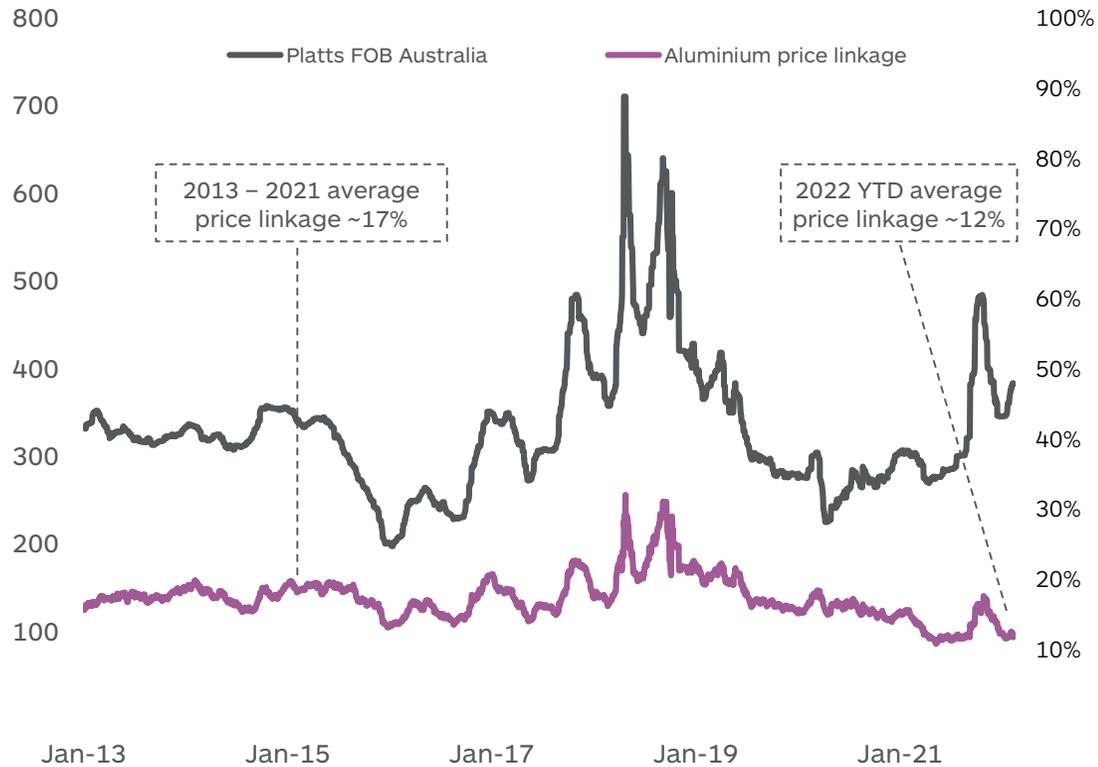
# ALUMINA MARKET

**Strong global aluminium demand to support alumina prices**

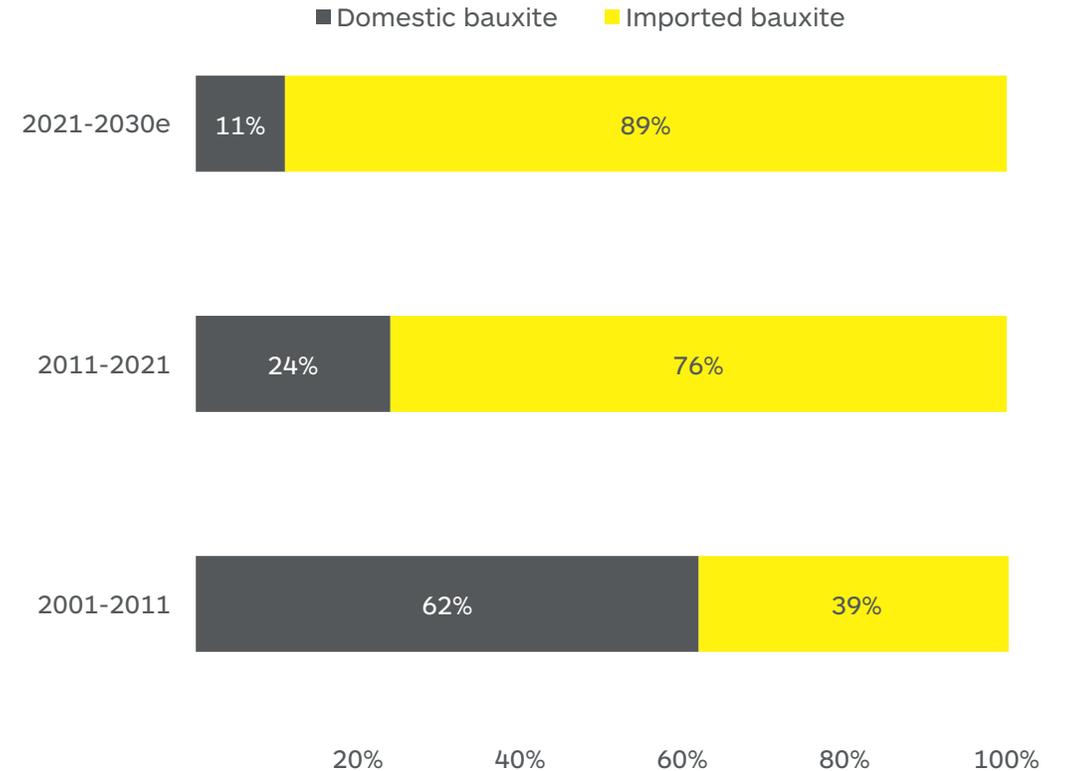
**Cost curve has shifted upwards due to higher freight, energy and caustic soda prices**

**Long term outlook supported by Chinese domestic bauxite depletion and environmental policy, together with higher raw material costs**

**Alumina price (LHS) and implied aluminium price linkage (RHS)**  
(US\$/t, LHS; %, RHS)



**Chinese domestic alumina production growth by decade<sup>(a)</sup>**  
(%)



Source: Platts, South32 Analysis

Notes:

a. Base case scenario.

Source: CRU, South32 Analysis

# COPPER MARKET

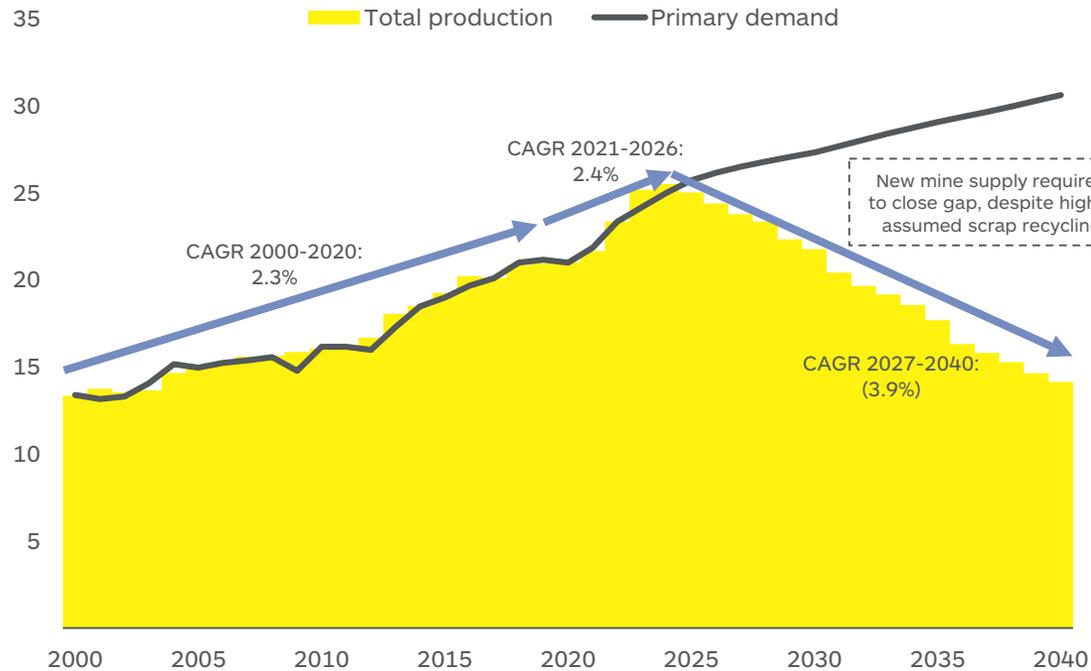
Market expected to move into minor surplus near term following addition of new capacity

1Mt of additional mine production required each year from CY24e

Base case production forecast to diminish at 3.8% p.a. from CY27e due to grade and reserve decline

Copper to play a key role in global decarbonisation and energy transition

Regional mine production<sup>(a)</sup> vs. Primary demand (Mt copper)

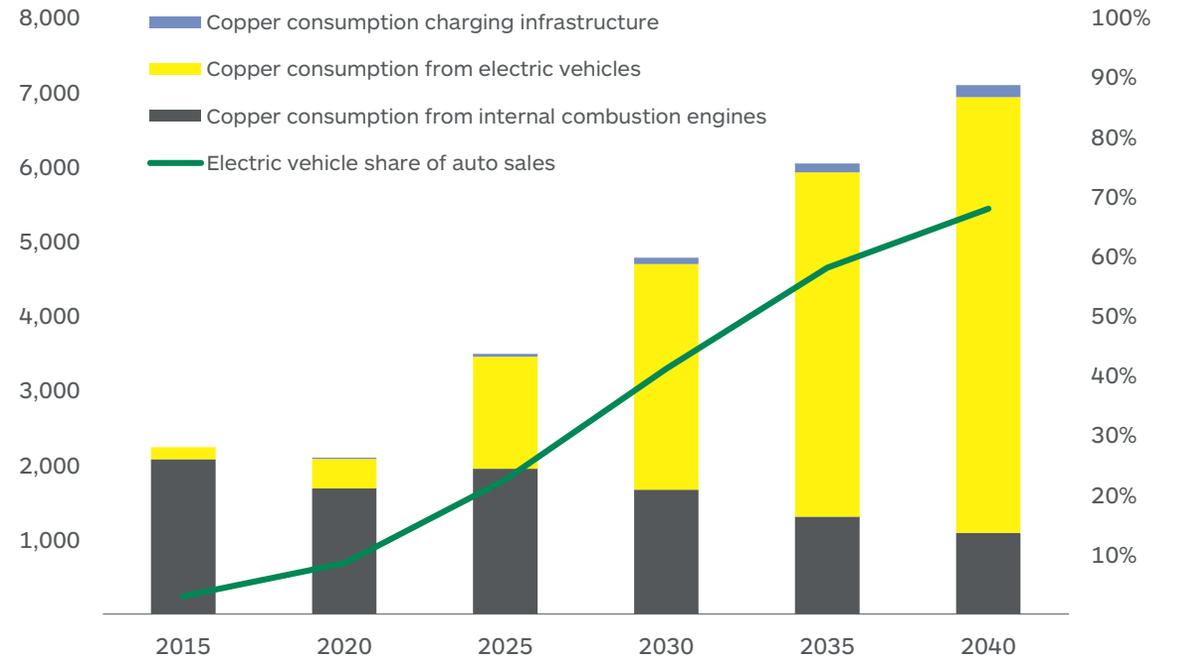


Source: Wood Mackenzie (Q4 2021 Outlook) and South32 analysis

Notes

a. Production capability represents current production before adjustments from existing mines and projects.

Electric vehicle uptake will support copper consumption (kt, LHS; % share of auto sales, RHS)



Source: Wood Mackenzie (Q4 2021 Outlook) and South32 analysis

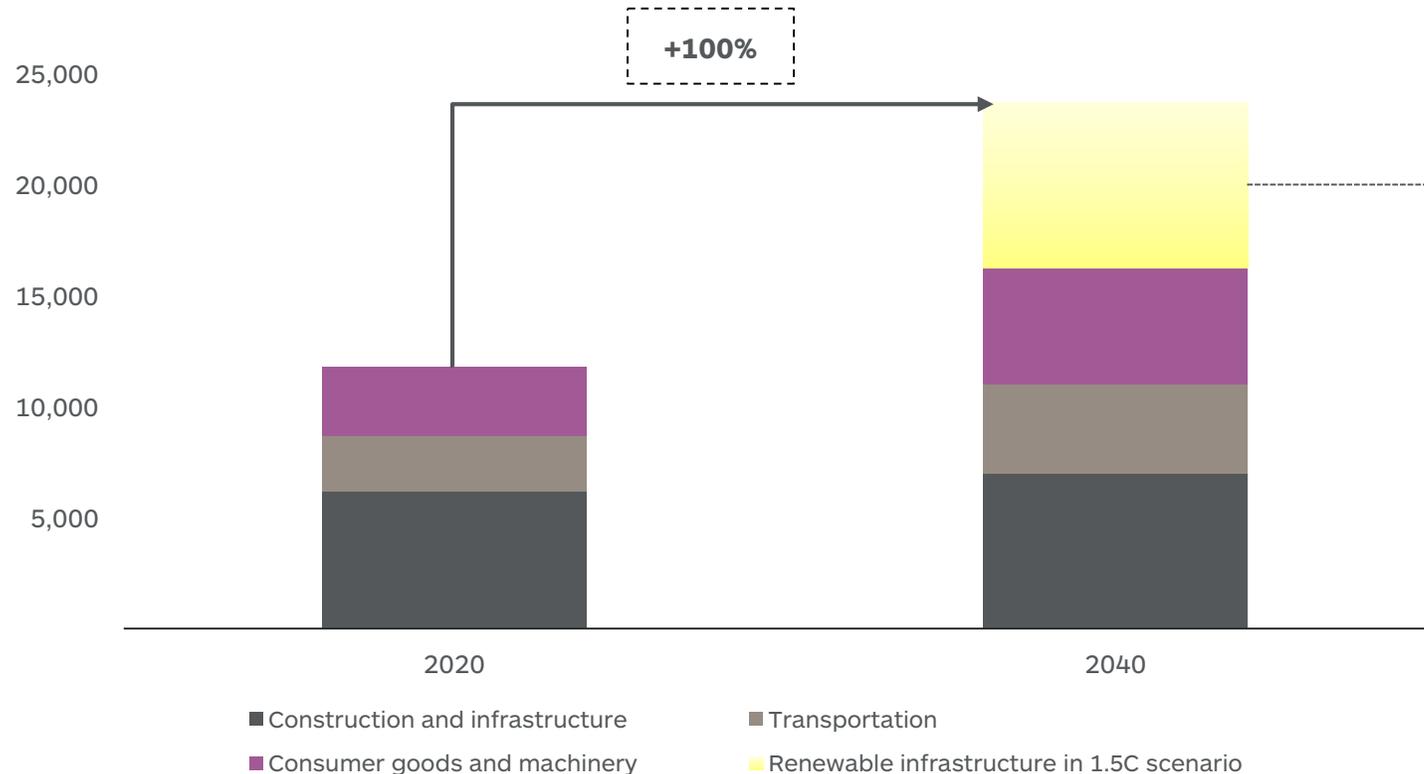
# ZINC MARKET

**Strong demand in transport, consumer and industrial sectors, with rising intensity of use**

**Rapid deployment of wind and solar infrastructure to create new demand**

**Supply expected to fall 3.5% pa to CY2030, requiring investment in new mine supply and inducement pricing**

**Zinc primary demand**  
(kt Zn)



## Demand

- Zinc provides a protective coating in wind turbines, and allows for higher energy conversion in solar panels
- In a 1.5°C (climate change) scenario, we see:
  - 6x increase in renewable energy capacity to 2050, with wind increasing by 10x and solar by 14x
  - Primary zinc demand increasing 2x to 24Mt

## Supply

- Conversely, current mine supply expected to fall by 3.5% pa (~270kt pa) to 2030
- Mine depletion, new builds with lower average grades and longer approval pathways will continue to constrain supply
- Pricing needed to induce new marginal supply to support prices in the long term

# MANGANESE MARKET

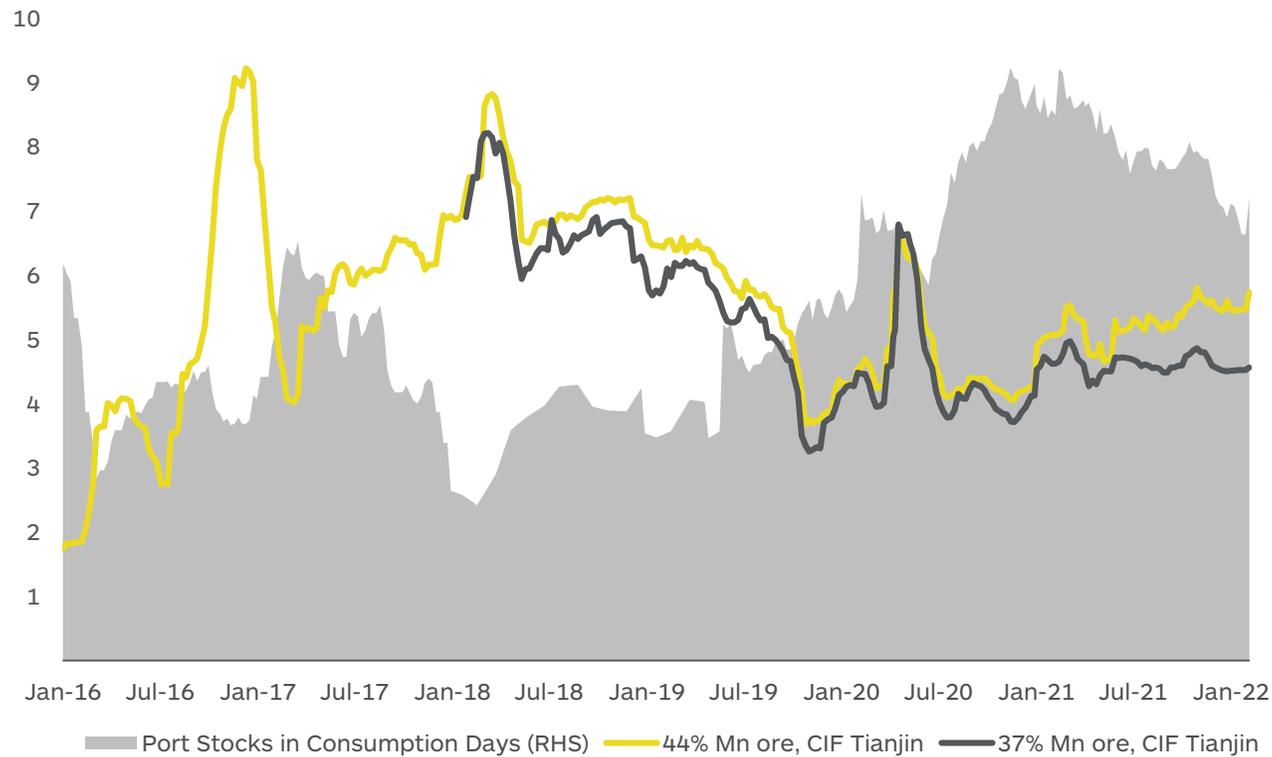


Alloys for steel continue to draw strong near term ore demand

Chinese energy costs have supported a preference for higher grade ores and an expansion of the price premium

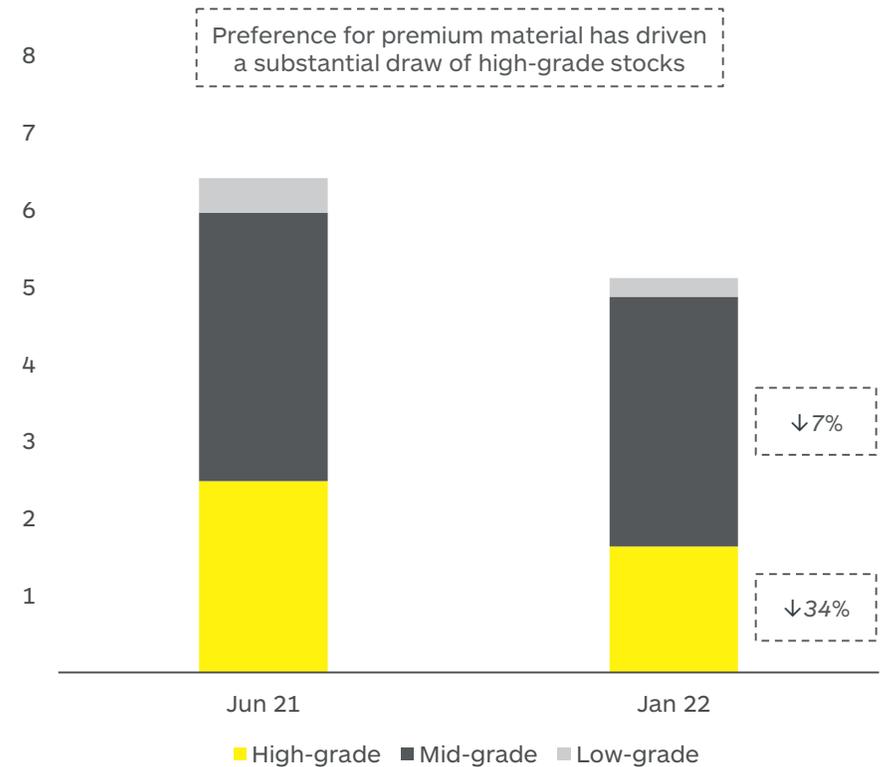
We continue to expect the long term price to be set by marginal South African supply transitioning underground over time

**Manganese ore price and China port stocks in consumption days**  
(US\$/dmtu, LHS; days, RHS)



Source: Fastmarkets, Ferroalloy.net

**China port stocks**  
(Mt)



Source: Fastmarkets, Ferroalloy.net

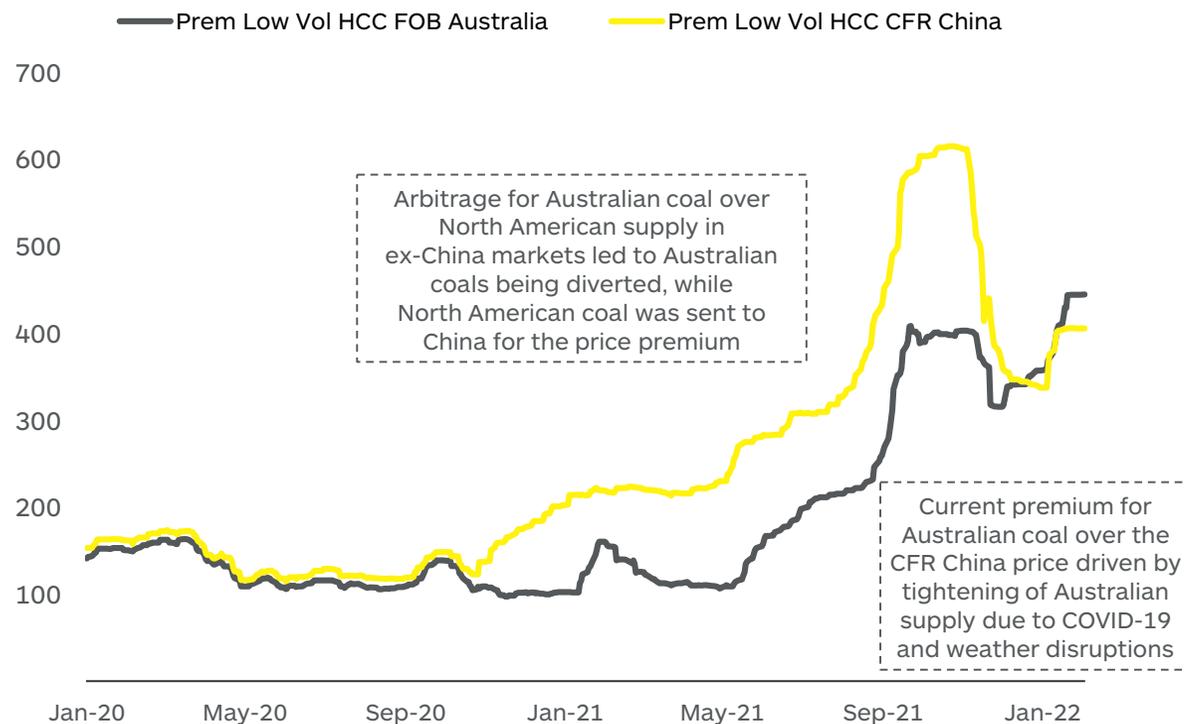
# METALLURGICAL COAL MARKET

**Strong ex-China demand and tight Australian supply have underpinned recent prices**

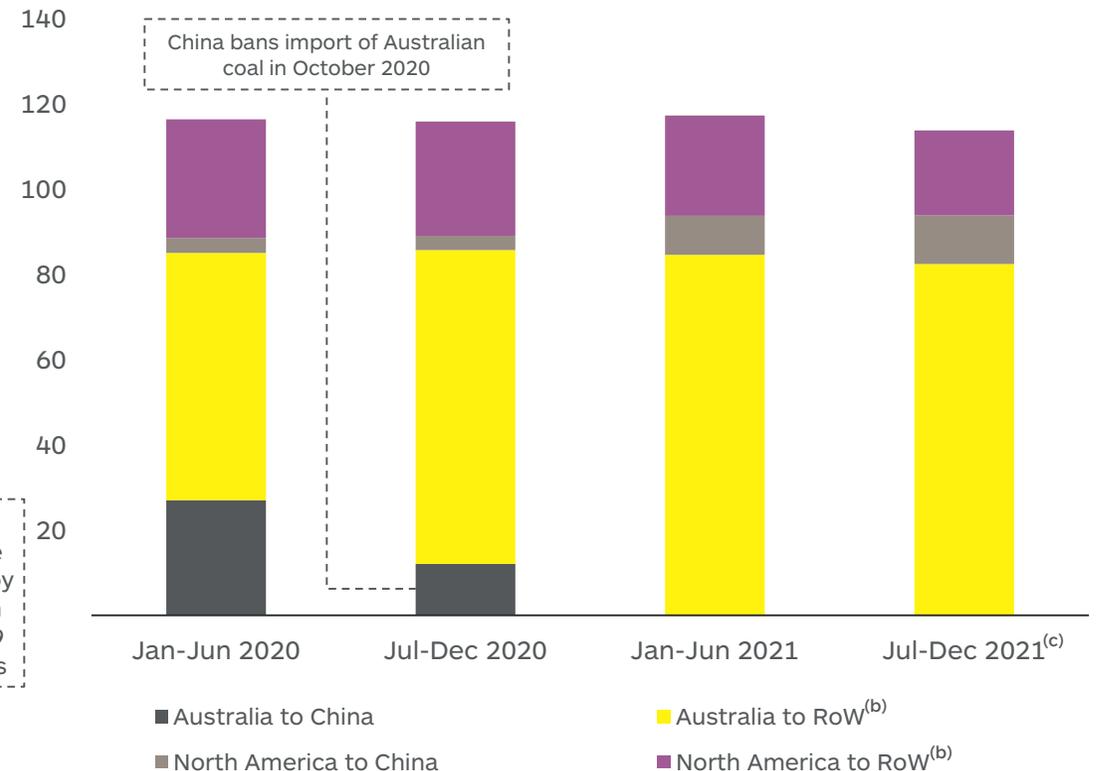
**Seasonal restocking to provide near term price support**

**Long term outlook underpinned by strong demand from India and other emerging Asian markets**

**Metallurgical coal price and arbitrage (US\$/t)**



**Seaborne trade flows<sup>(a)</sup> (Mt, Major seaborne supply)**



Source: Platts, South32 Analysis

Source: IHS Markit (GTIS), South32 Analysis

Notes:

- a. Metallurgical coal trade flow includes HCC, weak coking coal and PCI.
- b. RoW: Rest of World.
- c. Six months based on extrapolation of monthly volumes based on actuals for first five months.

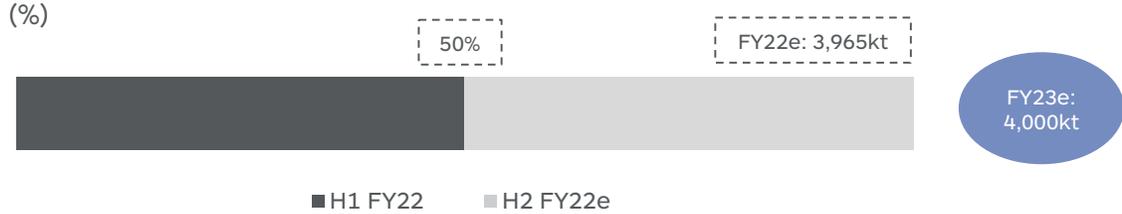


# OPERATIONS ANALYSIS

# WORSLEY ALUMINA

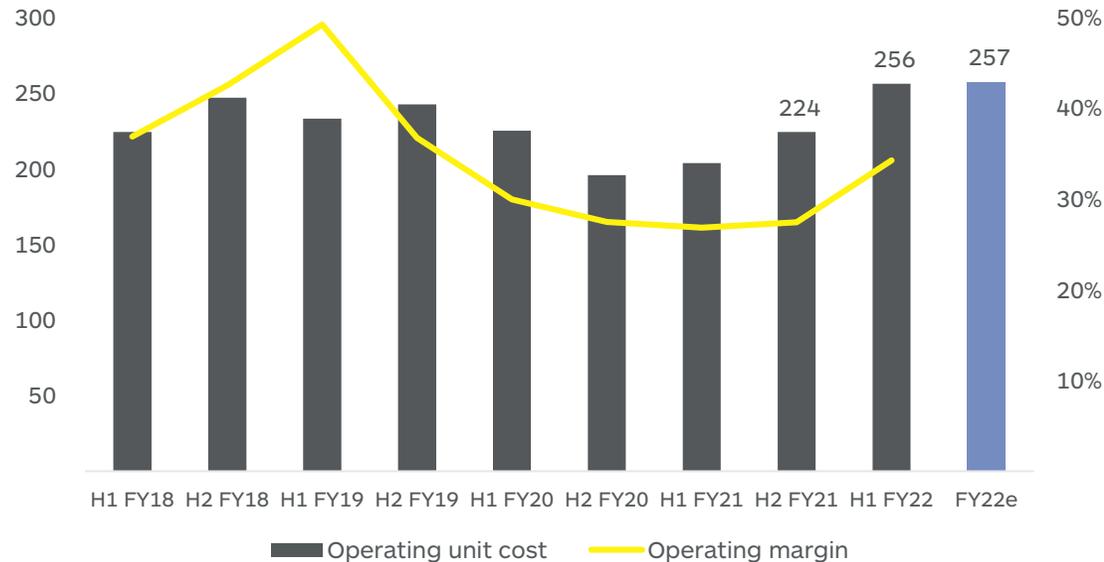
(86% SHARE)

## Production performance to guidance



## Operating unit cost and operating margin

(US\$/t, LHS; %, RHS)



- Refinery on-track to achieve nameplate production in FY22 as we realise the benefit of improvement initiatives
- Targeting production creep to 4Mt (South32 share) in FY23
- FY22 Operating unit cost guidance revised to US\$257/t
- H2 FY22 Operating unit costs expected to be largely in-line with H1 FY22 as elevated caustic soda prices and price-linked freight rates offset a weaker Australian dollar
- Completing energy conversion and efficiency studies to support our plans for decarbonisation and water efficiency at the refinery

# BRAZIL ALUMINA

## (36% SHARE)

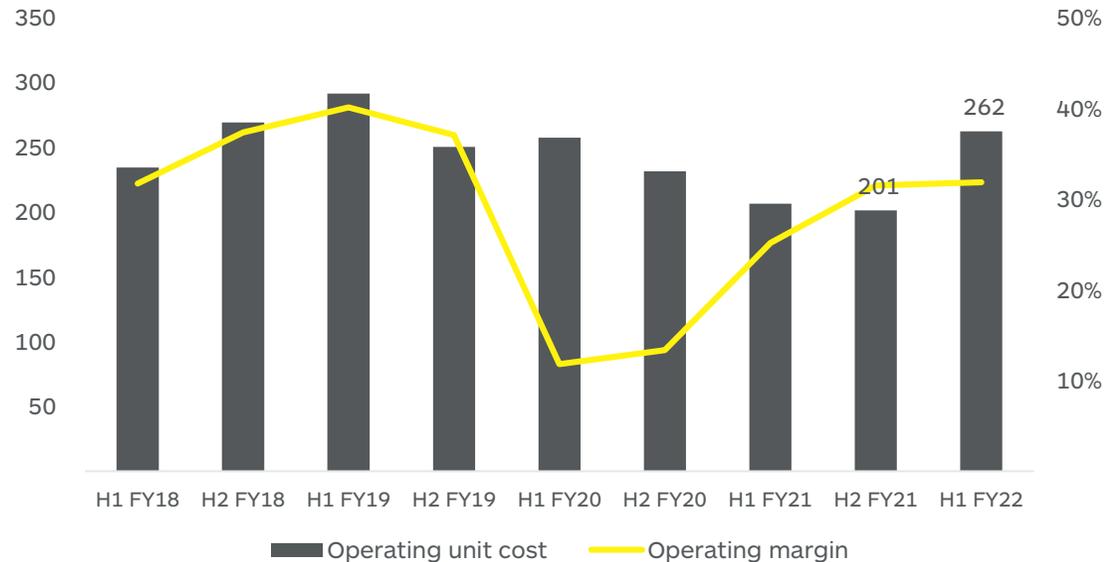
### Production performance to guidance

(%)



### Operating unit cost and operating margin<sup>(a)</sup>

(US\$/t, LHS; %, RHS)



- Refinery successfully returned to normalised rates following the bauxite unloader outage in Q1 FY22
- 7% increase in production volumes expected in FY23 with the refinery operating at normalised rates
- H1 FY22 Operating unit cost increased to US\$262/t due to higher raw material input and energy prices, lower volumes and one-off costs to recover from the bauxite unloader outage
- H2 FY22 Operating unit cost to be influenced by the price of raw materials and a planned improvement in volumes
- Entered into a conditional agreement to acquire an additional 18.2% interest in the MRN bauxite mine, which would take our ownership to 33%
- Our increased ownership will align our Brazilian bauxite supply requirements and is an important step as we work with our partners to complete a PFS for the MRN life extension project. The project has the potential to extend the life of the mine by more than 20 years<sup>28</sup>

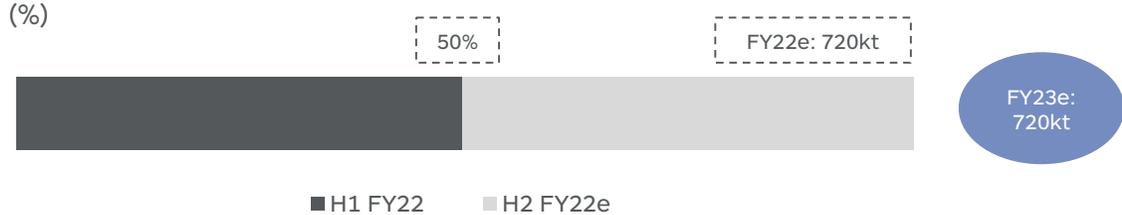
Notes:

a. The Brazil Aluminium smelter is included in the alumina operating margin.

# HILLSIDE ALUMINIUM

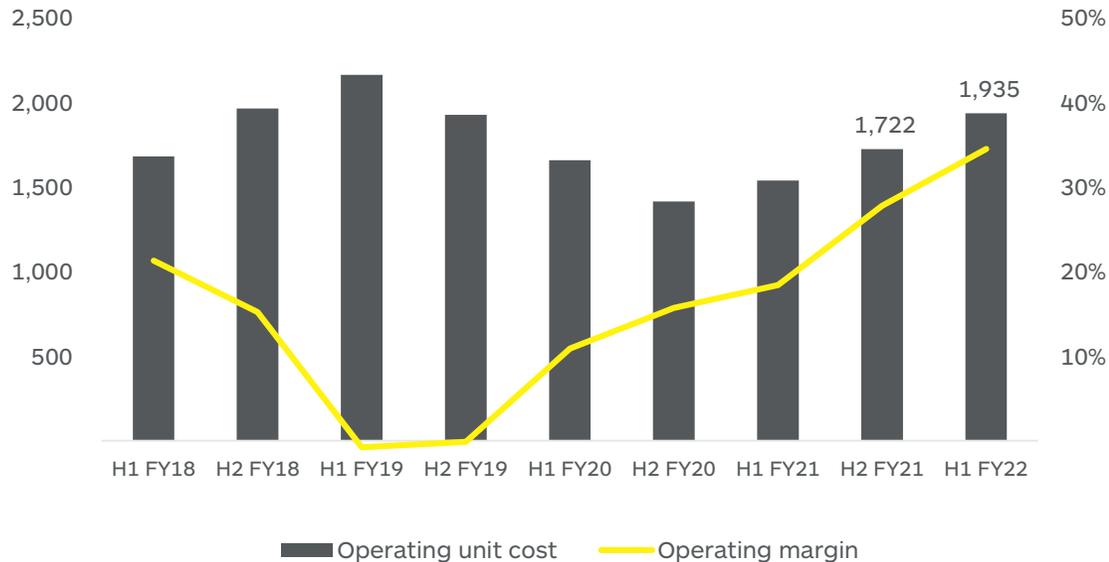
(100% SHARE)

## Production performance to guidance



## Operating unit cost and operating margin

(US\$/t, LHS; %, RHS)

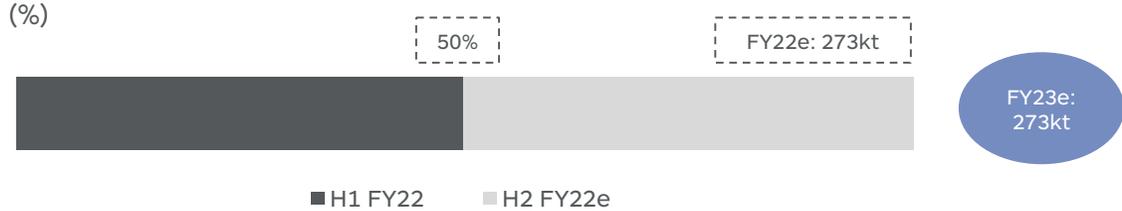


- Smelter continues to test maximum technical capacity despite higher load-shedding
- Record operating margin of 34% as we benefitted from record realised prices
- Operating unit cost will continue to be influenced by the South African rand, and the price of raw materials and energy
- Third party port performance at Richards Bay and ongoing congestion in global shipping conditions, has resulted in a temporary build in inventory. We have and continue to establish alternative shipping solutions and points of dispatch to minimise the impact
- Finalised a new power contract with Eskom during the half year, securing the smelter's energy supply until 2031 under a tariff that is South African rand based with a rate of escalation linked to the South Africa Producer Price Index
- Rolling-out AP3XLE technology from FY23, bringing both volume and efficiency benefits, while reducing carbon intensity

# MOZAL ALUMINIUM

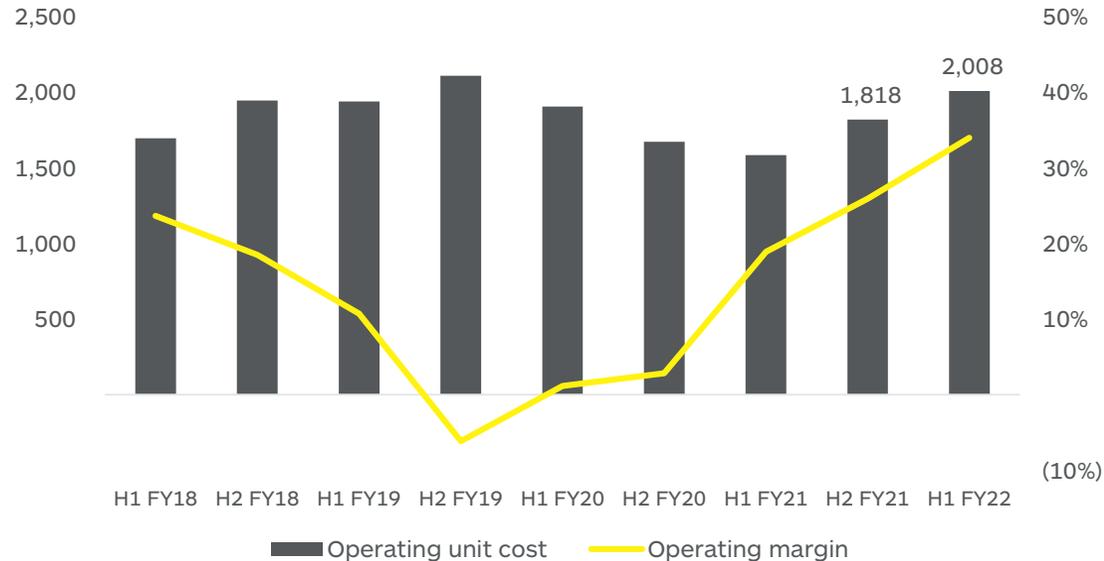
(47.1% SHARE)

## Production performance to guidance



## Operating unit cost and operating margin

(US\$/t, LHS; %, RHS)



- Production volume benefits of the AP3XLE energy efficiency project offset higher load-shedding in H1 FY22
- Record operating margin of 34% as we benefitted from record realised prices
- Operating unit cost will continue to be influenced by the South African rand and the price of raw materials and energy
- Expect to update production guidance following our agreed acquisition of an additional shareholding, to a minimum of 63.7%<sup>2</sup>

# ILLAWARRA METALLURGICAL COAL

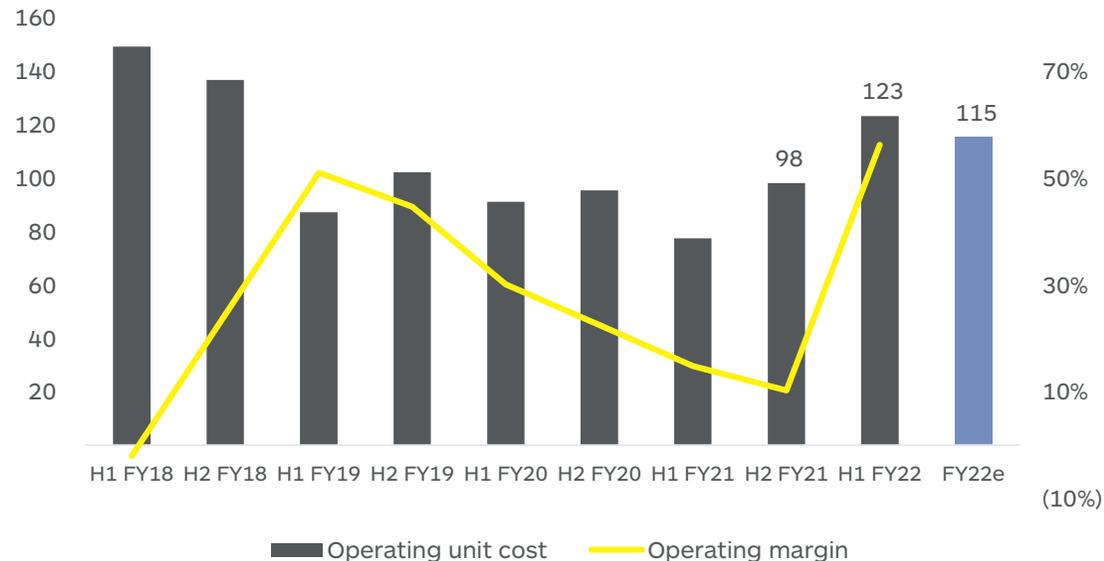
(100% SHARE)

## Production performance to guidance



## Operating unit cost and operating margin

(US\$/t, LHS; %, RHS)

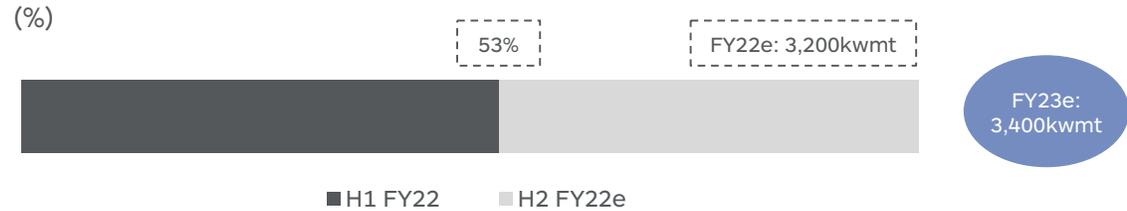


- We are working toward the completion of an alternative mine plan for the DND project and submission of an environmental impact statement in Q3 FY22
- FY22 Operating unit cost guidance revised to US\$115/t
- FY22 production guidance revised lower by 7% to 6.8Mt, due to an extended longwall move in Q2 FY22 and additional COVID-19 restrictions
- FY23 production guidance revised lower by 0.1Mt (or 1%) to 7.4Mt
- Production volumes expected to decline to ~5.5Mt in FY24, as Dendrobium<sup>29</sup> moves mining areas. Production is then expected to improve in FY25, as Appin transitions to a single longwall configuration
- FY22 safe and reliable capital expenditure guidance has been lowered by US\$15M to US\$200M with COVID-19 restrictions slowing the completion of work
- A range for safe and reliable capital expenditure of US\$300M-US\$360M is expected in FY23, as we maintain higher rates of underground development and progress upgrades to coal clearance and ventilation infrastructure ahead of Appin's transition to a single longwall
- The transition to longer panels is expected to bring capital and operating cost efficiencies beyond FY25

Safe and reliable capital expenditure (US\$M)	FY21	H1 FY22	FY22e
Safe and reliable	74	26	65
Underground development	77	40	85
Appin infrastructure upgrades	-	16	50
<b>Total</b>	<b>151</b>	<b>82</b>	<b>200</b>

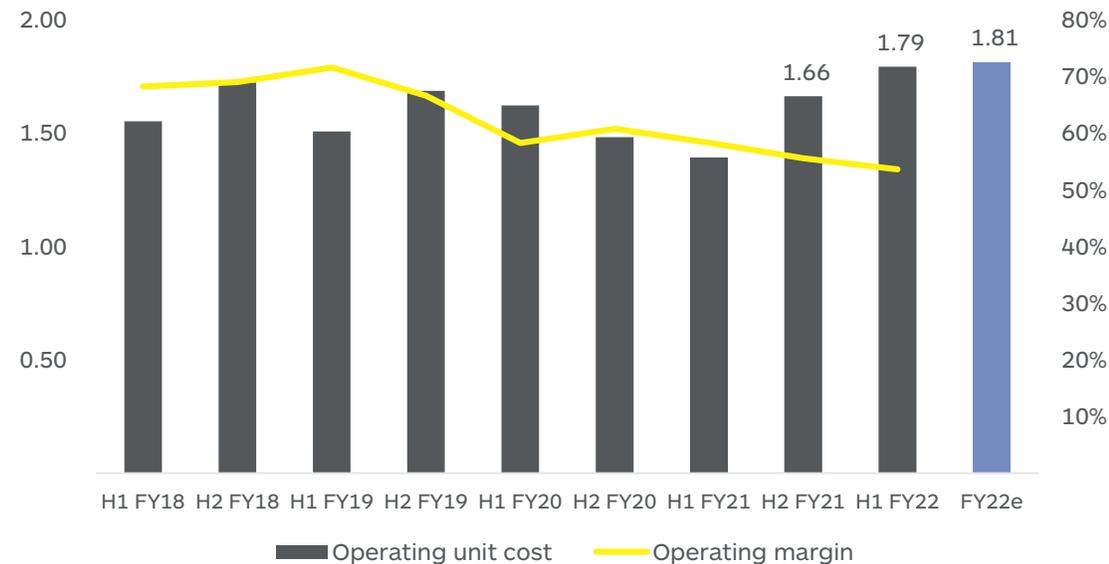
# AUSTRALIA MANGANESE ORE (60% SHARE)

## Production performance to guidance



## Operating unit cost and operating margin

(US\$/dmtu, LHS; %, RHS)



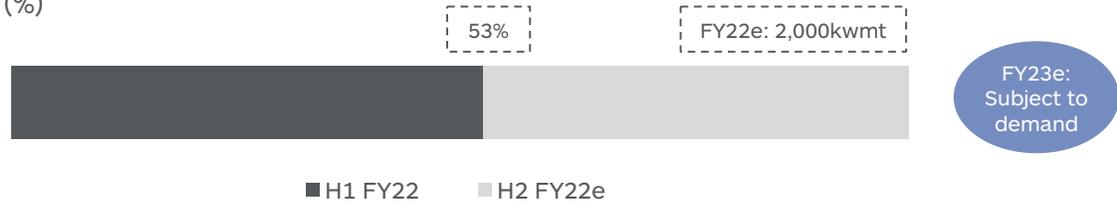
- FY22 production guidance revised lower by 9% to 3,200kt with weather disruptions and additional COVID-19 workforce restrictions preventing the re-build of stockpiles ahead of the wet season
- FY23 guidance is unchanged with production expected to increase by 6% to 3,400kwmt following the re-establishment of stockpiles
- FY22 Operating unit cost guidance revised to US\$1.81/dmtu
- H2 FY22 Operating unit cost expected to be largely in-line with H1 FY22, despite a planned reduction in volumes as we benefit from a weaker Australian dollar
- Feasibility study for our Eastern Leases mine life extension project expected to be completed in H2 FY22

# SOUTH AFRICA MANGANESE ORE

(54.6% SHARE<sup>10</sup>)

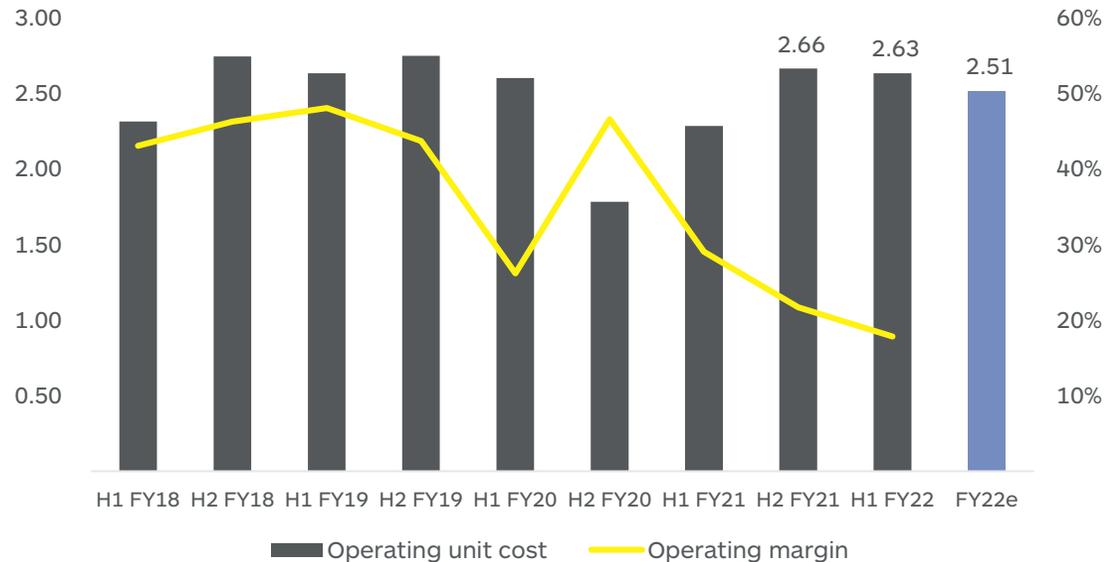
## Production performance to guidance<sup>10</sup>

(%)



## Operating unit cost and operating margin

(US\$/dmtu, LHS; %, RHS)



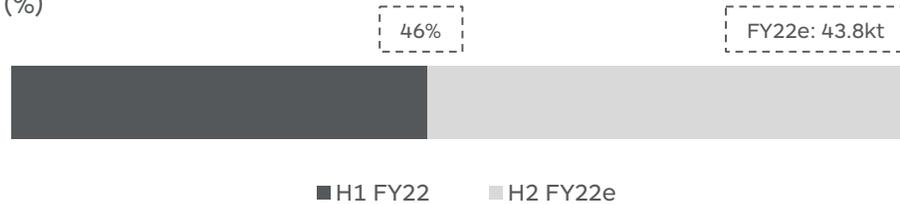
- Production increased by 7% in H1 FY22 as we delivered higher volumes of premium material from our Mamatwan mine and planned maintenance was completed
- FY22 production guidance has been restated at 2,000kwmt to reflect a 54.6% interest
- While we continue to monitor market conditions and our use of higher cost trucking, our expectation for total production (100% share) from the operation is unchanged
- FY23 production guidance remains subject to market demand
- FY22 Operating unit cost guidance revised to US\$2.51/dmtu
- H2 FY22 Operating unit cost expected to decline from H1 FY22 with a weaker South African rand
- We continue to progress our studies to expand the high-grade Wessels underground mine and install rapid train loadout infrastructure to realise further operating efficiencies

# CERRO MATOSO

(99.9% SHARE)

## Production performance to guidance

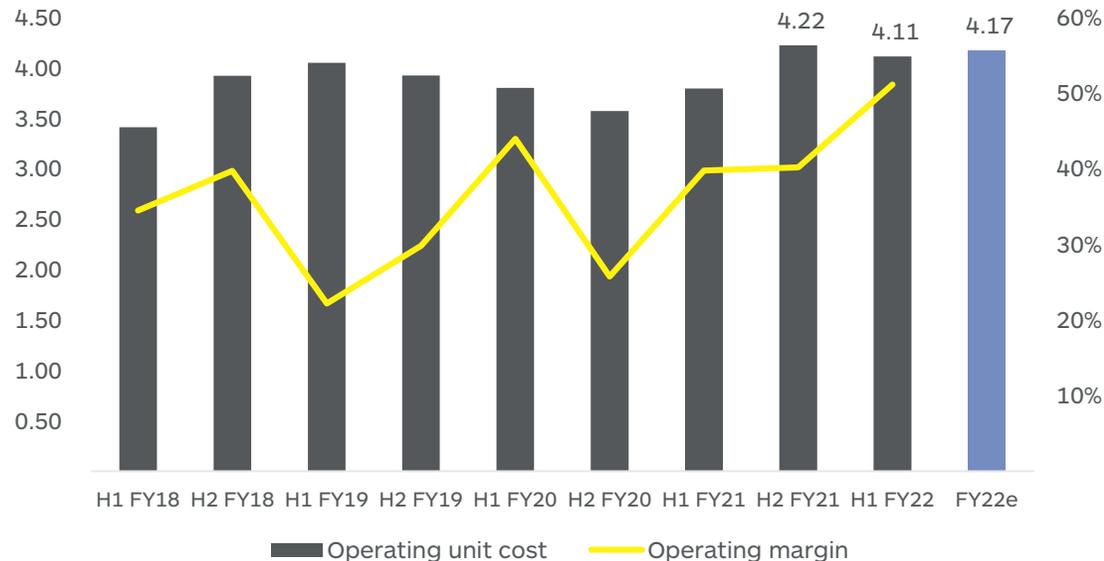
(%)



FY23e:  
43.5kt

## Operating unit cost and operating margin

(US\$/lb, LHS; %, RHS)

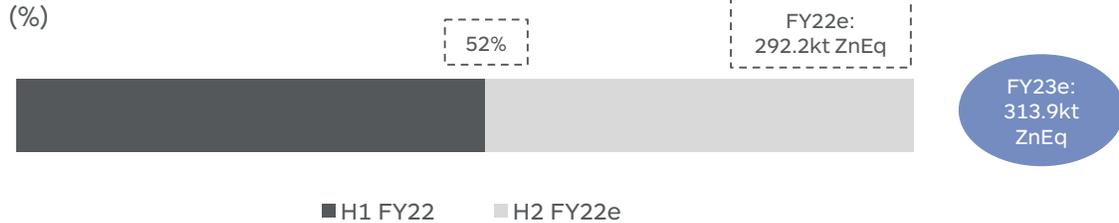


- FY22 production guidance unchanged with increased throughput and grade expected from additional higher-grade Q&P ore in H2 FY22
- FY22 Operating unit cost guidance revised to US\$4.17/lb
- H2 FY22 Operating unit costs are expected to increase marginally from H1 FY22 with additional contractor costs in support of higher Q&P volumes, partially offset by the benefit of a weaker Colombian peso
- OSMOC improvement project remains on-track:
  - Mechanical completion expected in Q4 FY22
  - Expected to deliver a ~50% increase in processing capacity and increase in the ore upgrading factor from ~5% to ~10%<sup>30</sup>
  - Expected to deliver an increase of up to 10% in payable nickel production from FY23, offsetting grade decline
  - Total capital expenditure US\$22M, with US\$10M to be spent in H2 FY22
  - Project IRR >100%<sup>31</sup>

# CANNINGTON

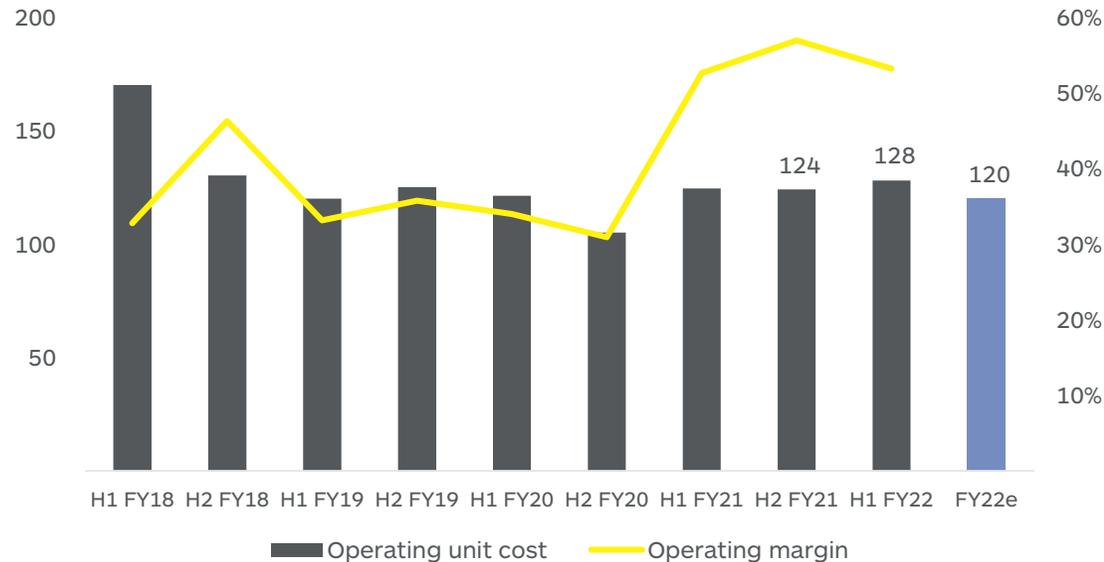
(100% SHARE)

## Production performance to guidance<sup>11</sup>



## Operating unit cost and operating margin

(US\$/t ore processed, LHS; %, RHS)



- FY22 production guidance revised 5% higher, supported by continued strong underground performance and higher average grades
- A further 7% increase in production expected in FY23, with the operation on-track to transition to 100% truck haulage from Q4 FY22
- FY22 Operating unit cost guidance revised to US\$120/t
- FY22 Operating unit costs expected to decline 6% from H1 FY22 as we benefit from continued strong underground performance and a weaker Australian dollar
- Safe and reliable capital expenditure of US\$26M expected in H2 FY22, with US\$15M to support the transition to trucking



STRATEGY AND  
PORTFOLIO

# OUR STRATEGY



## OPTIMISE

our business by working safely, minimising our impact, consistently delivering stable and predictable performance and continually improving our competitiveness.



## UNLOCK

the full value of our business through our people, innovation, projects and technology.



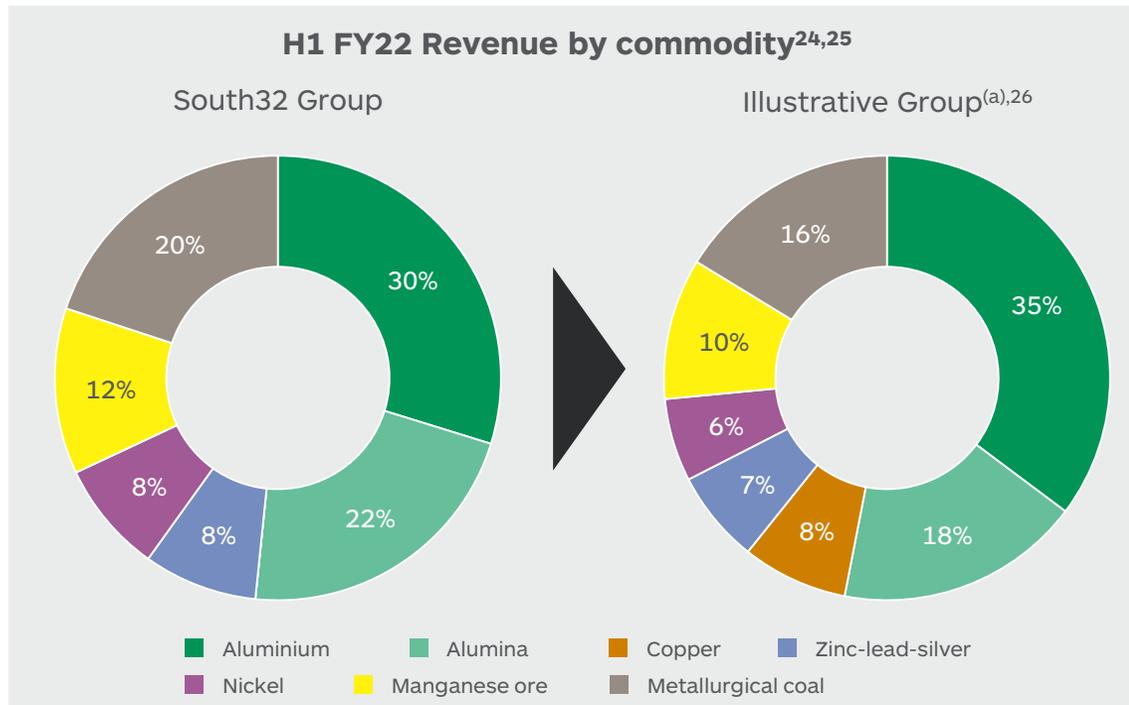
## IDENTIFY

and pursue opportunities to sustainably reshape our business for the future, and create enduring social, environmental and economic value.

**A simple strategy underpinned by a disciplined approach to capital management**

# DELIVERING ON OUR STRATEGY

**We have made significant progress in growing our exposure to the metals critical to a low carbon future**



**Agreed acquisition of an additional share of Mozal Aluminium and restart of the renewable powered Brazil Aluminium smelter**

**Announced acquisition of a 45% interest in the Sierra Gorda copper mine Joint Venture<sup>1</sup>**

**Completed a pre-feasibility study for the Taylor Deposit at our Hermosa project**

**Progressing activity across our pipeline of greenfield exploration projects**

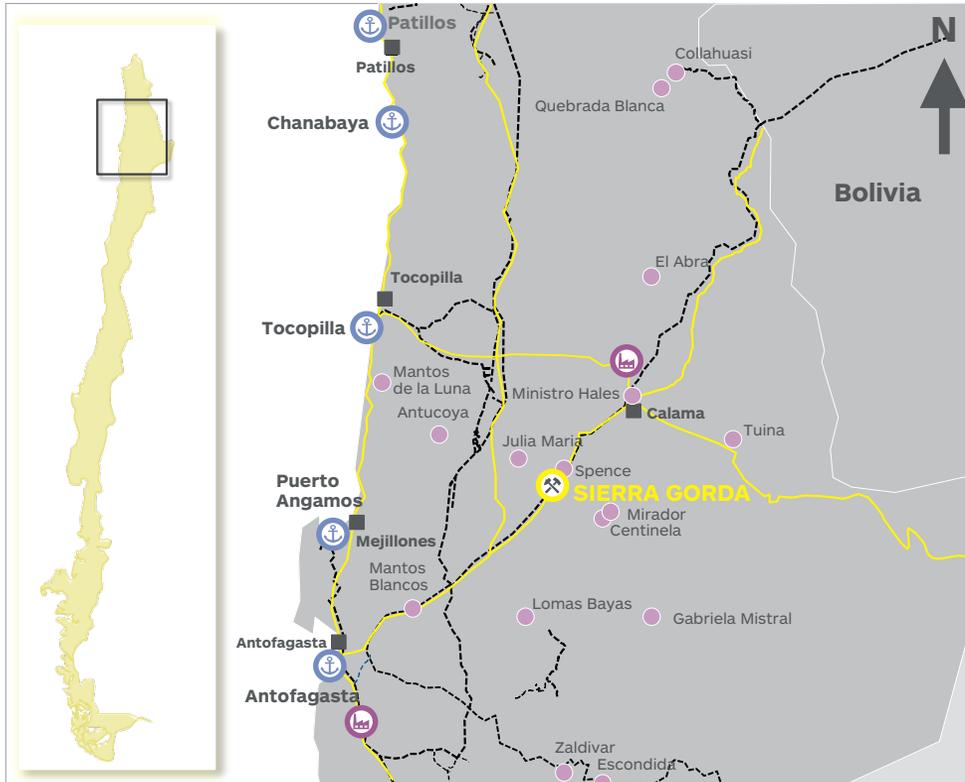
Notes:

a. Illustrative Group incorporates announced restart of the Brazil Aluminium smelter<sup>3</sup>, the acquisitions of a 45% interest in the Sierra Gorda copper mine<sup>1</sup> and an additional 16.6% interest in Mozal Aluminium<sup>2</sup>.

# SIERRA GORDA COPPER MINE

**Our acquisition of a 45% interest in the Sierra Gorda copper mine expected to complete in February 2022<sup>1</sup>**

Located in the prolific Antofagasta copper mining region of Chile



## Sierra Gorda

- Large, conventional open pit mine and processing operation that benefits from significant historic investment
- Supported by excellent infrastructure including access to renewable power
- >1Bt copper-molybdenum-gold-sulphide mineral reserve<sup>(a)</sup> with >4.5Mt copper metal in reserves and a 20+ year mine life (100% basis)
- Expected to be immediately Underlying earnings accretive and further expand our Group's Underlying operating margin

## Further opportunities to unlock upside

- Capital efficient, low technical risk, plant de-bottlenecking project expected to deliver ore throughput of ~50Mtpa (+11% from CY20) and copper recoveries of ~85% in the medium term (100% basis)<sup>32</sup>
- Opportunity to increase production further through low-cost heap leach and conventional SX/EW processing of >100Mt stockpiled oxide material (100% basis)<sup>33</sup>
- Potential for regional exploration within a large land package that has a number of identified targets, including Pampa Lina, a copper-molybdenum-gold porphyry at an early stage

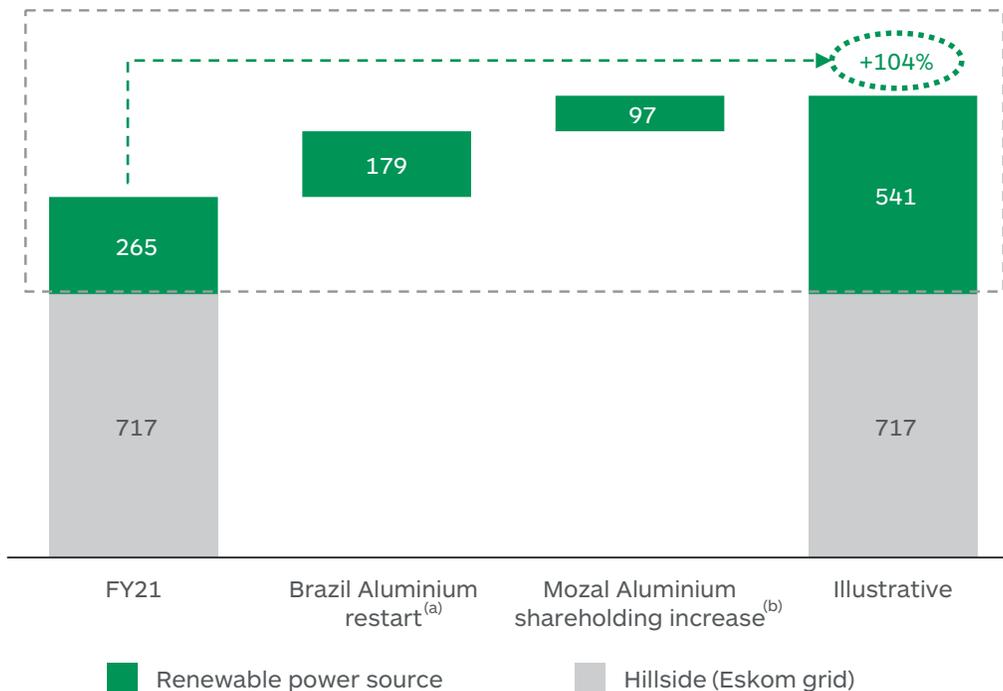
Notes:  
 a. Refer to clarifying statements as required by ASX Listing Rule 5.12<sup>1</sup>. Production depletion to date would likely result in approximately 18% reduction in the reported mineral resource and approximately 20% reduction in the reported mineral reserve for sulphide ore.

# GROWING OUR GREEN ALUMINIUM EXPOSURE

**~100% green aluminium growth by FY23 with the restart of our Brazil smelter and increased shareholding in Mozal**

## Aluminium production

(kt)



## Brazil Aluminium restart (40% South32 share)

- First production expected in Q4 FY22 with full capacity of 447ktpa (100%) in Q3 FY23
- 100% renewable power under long term contracts, placing the smelter in the second quartile of the global aluminium site cost curve<sup>34</sup>
- Alumina to be supplied from co-located Brazil Alumina refinery (36% South32 share)
- Expect to spend ~US\$70M across FY22 and FY23 to support the restart, including ~US\$10M in capital expenditure

## Mozal Aluminium shareholding increase

- Exercised our pre-emptive rights to increase our shareholding by a minimum of 16.6% to 63.7% for a headline purchase price of US\$166M
- Accretive transaction with an acquisition multiple of 1.9x H1 FY22 EBITDA (annualised)
- Smelter is hydroelectric powered and sells to key European markets
- Completion expected in Q3 FY22, subject to satisfaction of conditions

Notes:

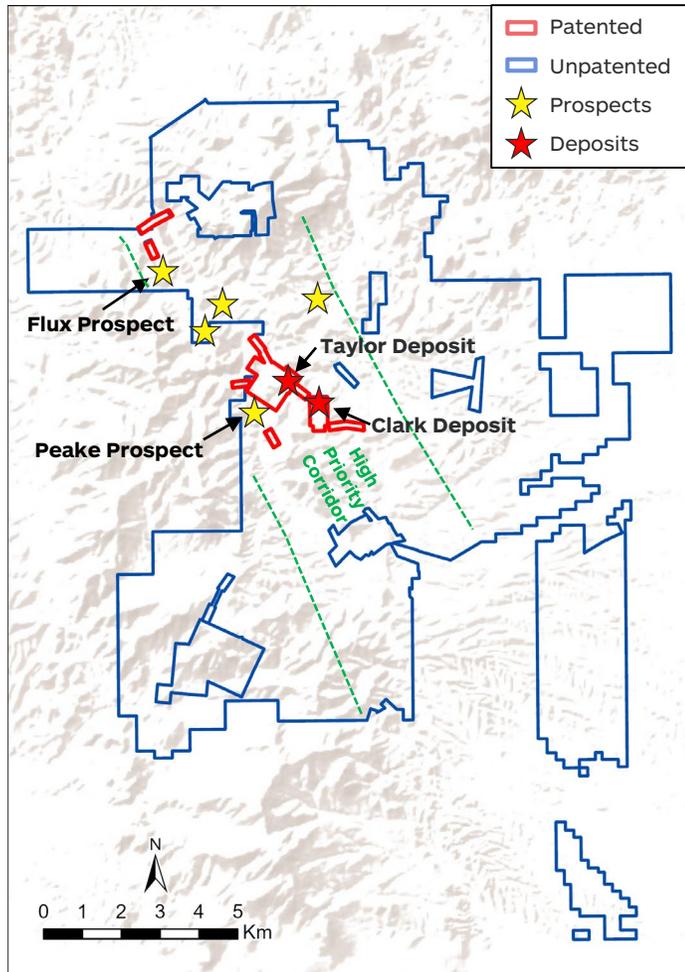
a. Based on nameplate capacity of 447kt (100% basis)<sup>3</sup>.

b. Based on an additional 16.6% interest in Mozal Aluminium and FY23 production guidance of 273kt (47.1% basis)<sup>2</sup>.

# HERMOSA PROJECT

Potential to be a globally significant producer of metals critical to a low carbon future

## Hermosa land package



### Taylor Deposit

Zinc-lead-silver  
development option

- PFS demonstrates potential for a sustainable, low cost operation with 20+ year initial resource life<sup>(a)</sup> in the first quartile of the industry's cost curve
- US\$1.7B capital to build a conventional 4.3Mtpa plant and dual shaft access with associated infrastructure
- Final investment decision expected in mid CY23

### Clark Deposit

Battery-grade manganese  
product potential

- Scoping study<sup>(a)</sup> has confirmed the potential to produce battery-grade manganese into rapidly-growing markets
- Manganese listed as a critical mineral in the United States
- Studies to consider a potential integrated development of Taylor and Clark, unlocking operating and capital synergies

### Exploration

A highly prospective  
land package

- Land tenure increased by 66% since acquisition, consolidating the most prospective areas
- Through soil sampling, geophysics and mapping, we have defined a highly prospective corridor
- High-grade copper-lead-zinc-silver mineralisation intersected at the Peake prospect, south of the Taylor Deposit
- Planning to drill the Flux prospect in late CY22, located down-dip of an historic mining area

Notes:

a. Refer to important notices (slide 2) for additional disclosure.

# GREENFIELD EXPLORATION

**A dedicated strategy to discover our next base metals development option**

**Strategy to identify, advance and cycle options**

**Has generated prospective base metals options, focused in the Americas**

**25+ active exploration programs across our partnerships and own properties**

## Greenfield exploration

- Adventus
- EMX Royalty
- Minsud Resources
- Silver Bull Resources
- AusQuest
- Freegold Ventures
- Sable Resource
- South32 owned projects

- FY22e US\$26M greenfield exploration
- Investment via exploration partnerships and own properties
- Drilling programs planned or underway in five countries
- Mapping, sampling, geophysics, and project generation studies
- Funding third phase of exploration at the Chita Valley copper project with Minsud Resources
- Strategic alliances with AusQuest and EMX Royalty

## Ambler Metals JV

- Arctic Deposit
- Bornite Deposit
- Ambler VMS belt
- Cosmos Hills Region

- FY22e US\$15M capitalised exploration
- Arctic resource drilling
- VMS targets

## Hermosa project

- Taylor Deposit
- Clark Deposit
- Regional exploration (e.g. Peake, Flux)

- FY22e US\$20M capitalised exploration
- Resource, near-mine and regional programs
- Initial copper intercepts at Peake
- Peake and Flux planned to be drilled in CY22

*Early stage exploration opportunities within our development options*

**Generative**

**Exploration**

**Discovery**

**Development**

- Copper
- Nickel
- Polymetallic
- Zinc

# SUMMARY

**H1 FY22 Underlying EBITDA  
US\$1.9B**

**H1 FY22 Operating margin  
44%**

**H1 FY22 Underlying earnings  
US\$1.0B**

**Interim ordinary dividend  
US 8.7 cents per share  
(US\$405M)**

**Capital management program  
expanded by US\$110M, leaving  
US\$302M to be returned**

**Growing our exposure to  
the metals critical to a  
low carbon future**

**Exited lower returning operations,  
further improving our portfolio**

**Our Balance Sheet  
remains strong**

**Our focus is on operational  
performance and disciplined  
capital allocation**

A photograph of two workers in a mine. They are wearing hard hats, safety glasses, and high-visibility work clothes. One worker is pointing towards the other. In the background, there are large piles of reddish-brown ore and a conveyor belt system under a clear blue sky.

# SUPPLEMENTARY INFORMATION

# OPERATING UNIT COSTS

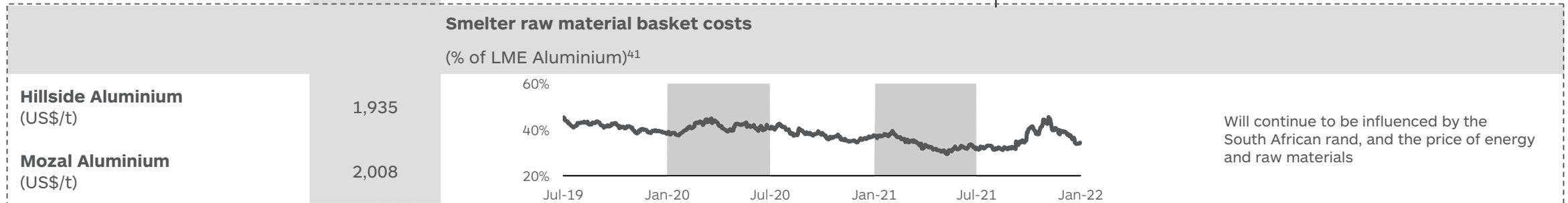
Operating unit costs	H1 FY21	H2 FY21	H1 FY22	H1 FY22 adjusted <sup>35</sup>	FY22 prior guidance <sup>36</sup>	H1 FY22 actual vs. FY22 prior guidance				Commentary to guidance or H1 FY21
						(5%)	5%	15%	25%	
<b>Worsley Alumina</b> (US\$/t)	204	224	256	239	241					Higher caustic soda and freight costs, partially offset by a weaker Australian dollar
<b>Brazil Alumina (non-operated)</b> (US\$/t)	206	201	262	N/A	Guidance not provided					Higher raw material inputs and energy costs, lower volumes and costs to recover from the bauxite unloader outage (to H1 FY21)
<b>Illawarra Metallurgical Coal</b> (US\$/t)	77	98	123	118	101					Higher price-linked royalties and lower volumes partially offset by a weaker Australian dollar
<b>Australia Manganese<sup>37</sup></b> (FOB, US\$/dm tu)	1.39	1.66	1.79	1.80	1.68					Lower volumes and higher diesel costs partially offset by a weaker Australian dollar
<b>South Africa Manganese<sup>37</sup></b> (FOB, US\$/dm tu)	2.28	2.66	2.63	2.62	2.57					Higher transport costs and price-linked royalties
<b>Cerro Matoso</b> (US\$/lb)	3.79	4.22	4.11	4.30	4.12					Lower metal volumes offset by a weaker Colombian peso
<b>Cannington<sup>38</sup></b> (US\$/t)	124	124	128	126	121					Higher price-linked royalties and inventory movements, partially offset by a weaker Australian dollar

Cost breakdown						Commentary to H1 FY21
H1 FY22						
<b>Hillside Aluminium</b> (US\$/t)	1,536	1,722	1,935			Higher raw material input costs and a stronger South African rand (to H1 FY21)
<b>Mozal Aluminium</b> (US\$/t)	1,585	1,818	2,008			

Foreign exchange 
  Price-linked costs (including royalties)<sup>39</sup>
 Controllable costs 
  Raw material inputs 
  Other 
  H1 FY22 actual vs. FY22 prior guidance % movement 
  ≤ 5% of guidance 
  >5% of guidance

# OPERATING UNIT COST GUIDANCE

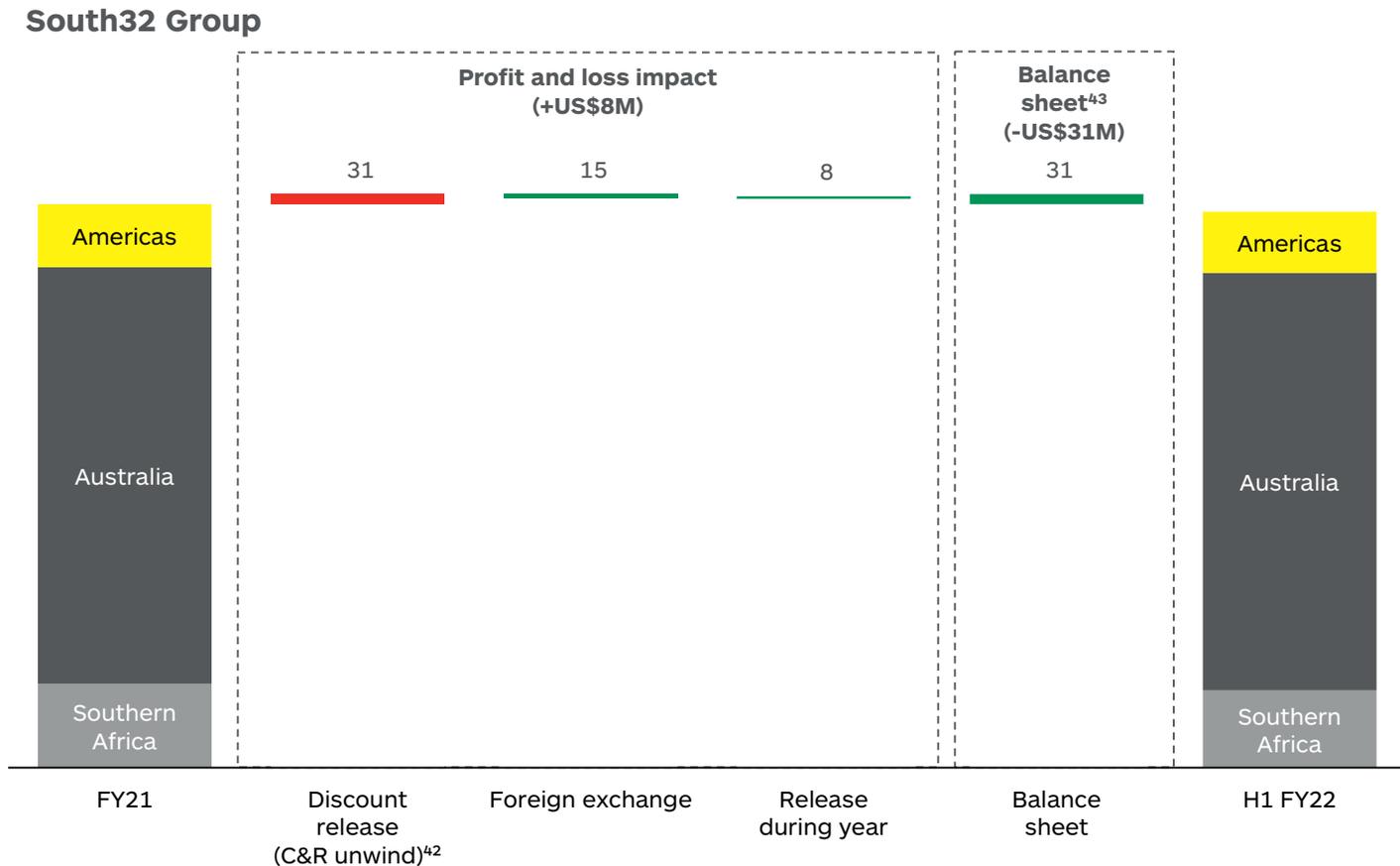
Operating unit costs	H1 FY22 actual	FY22 prior guidance	FY22 adjusted prior guidance <sup>35</sup>	FY22 new guidance <sup>40</sup>	FY22 new guidance vs. FY22 prior guidance				Commentary
					(10%)	0%	10%	20%	
<b>Worsley Alumina</b> (US\$/t)	256	241	257	257					Higher caustic prices partially offset by a weaker Australian dollar
<b>Brazil Alumina (non-operated)</b> (US\$/t)	262	Guidance not provided	N/A	Guidance not provided					Cost profile will continue to be influenced by the price of raw materials and an expected improvement in volumes in H2 FY22
<b>Illawarra Metallurgical Coal</b> (US\$/t)	123	101	104	115					Reduced production guidance, higher contractor costs and price-linked royalties, partially offset by a weaker Australian dollar
<b>Australia Manganese<sup>37</sup></b> (FOB, US\$/dmu)	1.79	1.68	1.65	1.81					Reduced production guidance partially offset by a weaker Australian dollar
<b>South Africa Manganese<sup>37</sup></b> (FOB, US\$/dmu)	2.63	2.57	2.51	2.51					Largely unchanged with a weaker South African rand
<b>Cerro Matoso</b> (US\$/lb)	4.11	4.12	4.04	4.17					Largely unchanged with higher price-linked royalties and contractor rates, partially offset by a weaker Colombian peso
<b>Cannington<sup>38</sup></b> (US\$/t)	128	121	119	120					Largely unchanged with a weaker Australian dollar



Foreign exchange 
  Price-linked costs (including royalties)<sup>39</sup>
 Controllable costs  
 FY22 new vs. FY22 prior guidance % movement 
  ≤ 5% of prior guidance 
  >5% of prior guidance

# CLOSURE & REHABILITATION PROVISIONS

Closure and rehabilitation provisions by operation (South32 share)	H1 FY22	FY21
	US\$M	US\$M
Worsley Alumina	833	825
Cannington	227	232
Illawarra Metallurgical Coal	205	206
Hillside Aluminium <sup>(a)</sup>	184	206
Cerro Matoso	114	115
Mozal Aluminium	52	49
Brazil Alumina (non-operated) <sup>(b)</sup>	33	40
Hermosa	31	31
Brazil Aluminium (non-operated) <sup>(b)</sup>	8	6
Eagle Downs Metallurgical Coal	7	7
<b>Total</b>	<b>1,694</b>	<b>1,717</b>



Notes:

- a. Includes the closed Bayside aluminium smelter.
- b. FY21 balances restated to separate Brazil Alumina and Brazil Aluminium, consistent with the Group's operating segments.

# UNDERLYING ADJUSTMENTS

<b>Underlying adjustments<sup>44</sup></b>	<b>H1 FY22</b>	<b>H1 FY21<sup>10,(a)</sup></b>
	<b>US\$M</b>	<b>US\$M</b>
<b>Adjustments to Underlying EBIT</b>		
Significant items	77	-
Manganese joint venture adjustments	(79)	(115)
Exchange rate gains/(losses) on restatement of monetary items	32	(71)
Net impairment losses <sup>(b)</sup>	(37)	(36)
Gains/(losses) on non-trading derivative instruments and other investments measured at fair value through profit or loss	(5)	19
Major corporate restructures	-	(17)
<b>Total adjustments to Underlying EBIT</b>	<b>(12)</b>	<b>(220)</b>
<b>Adjustments to Underlying net finance costs</b>		
Manganese joint venture adjustments	11	10
Exchange rate variations on net debt	11	(66)
<b>Total adjustments to Underlying net finance costs</b>	<b>22</b>	<b>(56)</b>
<b>Adjustments to Underlying income tax expense and Underlying royalty related tax expense</b>		
Tax effect on significant items	(26)	-
Manganese joint venture adjustments relating to income tax expense	51	71
Manganese joint venture adjustments relating to royalty related tax expense	26	27
Tax effect of other adjustments to Underlying EBIT	2	31
Tax effect of other adjustments to Underlying net finance costs	(3)	9
Exchange rate variations on tax balances	(32)	55
<b>Total adjustments to Underlying income tax expense and Underlying royalty related tax expense</b>	<b>18</b>	<b>193</b>
<b>Total adjustments to profit/(loss)</b>	<b>28</b>	<b>(83)</b>

Notes:

a. H1 FY21 includes TEMCO and discontinued operation South Africa Energy Coal.

b. In relation to Eagle Downs Metallurgical Coal, partially offset by an impairment reversal at Brazil Aluminium.

# UNDERLYING INCOME TAX EXPENSE

Underlying income tax expense reconciliation and Underlying effective tax rate <sup>44</sup>	H1 FY22	H1 FY21
	US\$M	US\$M
Underlying EBIT	1,514	390
Include: Underlying net finance costs	(62)	(70)
Remove: Share of profit/(loss) of immaterial equity accounted investments	-	8
<b>Underlying profit/(loss) before taxation</b>	<b>1,452</b>	<b>328</b>
Income tax expense/(benefit)	<b>430</b>	<b>(9)</b>
Tax effect of earnings adjustments to Underlying EBIT	2	31
Tax effect of earnings adjustments to Underlying net finance costs	(3)	9
Exchange rate variations on tax balances	(32)	55
Tax effect on significant items	(26)	-
Manganese joint venture adjustments relating to income tax expense/(benefit)	51	71
Manganese joint venture adjustments relating to royalty related tax expense/(benefit)	26	27
<b>Underlying income tax expense/(benefit)</b>	<b>448</b>	<b>184</b>
<b>Underlying effective tax rate (ETR) including royalty related tax</b>	<b>30.9%</b>	<b>56.1%</b>

# UNDERLYING NET FINANCE COSTS

Underlying net finance costs reconciliation	H1 FY22	H1 FY21
	US\$M	US\$M
Unwind of discount applied to closure and rehabilitation provisions	(39)	(33)
Interest on lease liabilities	(26)	(27)
Other	3	3
Discontinued operation	-	(13)
<b>Underlying net finance costs</b>	<b>(62)</b>	<b>(70)</b>
Add back earnings adjustment for exchange rate variations on net debt	11	(66)
Manganese joint venture adjustments <sup>44</sup>	11	10
<b>Net finance costs</b>	<b>(40)</b>	<b>(126)</b>

# CAPITAL EXPENDITURE GUIDANCE

Capital expenditure excluding exploration and intangibles (South32 share)	H1 FY22	FY22e
	US\$M	US\$M
Worsley Alumina	20	43
Brazil Alumina	31	54
Hillside Aluminium	10	27
Mozal Aluminium	5	10
Illawarra Metallurgical Coal	82	200
Cerro Matoso	6	23
Cannington	17	43
<b>Safe and reliable capital expenditure (excluding EAI)</b>	<b>171</b>	<b>400</b>
Worsley Alumina	4	18
Brazil Aluminium – smelter restart	-	3
Illawarra Metallurgical Coal – Dendrobium Next Domain	6	10
Cerro Matoso	8	20
Other operations	6	17
<b>Improvement and life extension capital expenditure (excluding EAI)</b>	<b>24</b>	<b>68</b>
Hermosa	42	115
<b>Growth capital expenditure</b>	<b>42</b>	<b>115</b>
<b>Total capital expenditure (excluding EAI)</b>	<b>237</b>	<b>583</b>
<b>Total capital expenditure (including EAI)</b>	<b>281</b>	<b>673</b>
<b>Capital expenditure for EAI excluding exploration and intangibles (South32 share)</b>		
Australia Manganese	32	55
South Africa Manganese	8	16
<b>Safe and reliable capital expenditure (EAI)</b>	<b>40</b>	<b>71</b>
Australia Manganese	2	10
South Africa Manganese	2	9
<b>Improvement and life extension capital expenditure (EAI)</b>	<b>4</b>	<b>19</b>
<b>Total capital expenditure (EAI)</b>	<b>44</b>	<b>90</b>

# FOOTNOTES



1. Refer to market release “South32 to acquire a 45% interest in the Sierra Gorda copper mine” dated 14 October 2021. The estimates indicated in the original announcement are qualifying foreign estimates and are not reported in accordance with the JORC Code. A Competent Person has not done sufficient work to classify foreign estimates as Mineral Resources or Ore Reserves in accordance with the JORC Code. It is uncertain that following evaluation and/or further work that the foreign estimates will be reported as Mineral Resources or Ore Reserves in accordance with the JORC Code.
2. Refer to market release “South32 to acquire up to an additional 25% of Mozal Aluminium” dated 30 September 2021.
3. Refer to market release “Restart of Brazil Aluminium using renewable power” dated 6 January 2022.
4. Refer to market release “Hermosa project update” dated 17 January 2022.
5. Metrics describing health, safety, environment, people and community related performance in this presentation apply to ‘operated operations’ that have been wholly owned and operated by South32, or that have been operated by South32 in a joint arrangement.
6. Total Recordable Injury Frequency (TRIF): (The sum of recordable injuries x 1,000,000) ÷ exposure hours. This is stated in units of per million hours worked for employees and contractors. We adopt the United States Government Occupational Safety and Health Administration (OSHA) guidelines for the recording and reporting of occupational injuries and illnesses. Total recordable illness frequency (TRILF): (The sum of recordable illnesses) x 1,000,000 ÷ exposure hours, for employees and contractors. We adopt the United States Government Occupational Safety and Health Administration (OSHA) guidelines for the recording and reporting of occupational injuries and illnesses.
7. Generic term meaning Africans, Coloureds and Indians who are citizens of the Republic of South Africa by birth or descent; or who become citizens of the Republic of South Africa by naturalisation before 27 April 1994 or on or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalisation prior to that date.
8. Senior leadership refers to Presidents and Vice Presidents reporting to members of the South32 Lead Team.
9. Operational leadership refers to all General Managers and Managers reporting to Vice President Operations and all Managers reporting to General Managers at an Operation, excluding Functional Managers (such as Human Resources, Finance and Supply).
10. South Africa Manganese ore has been reported as a 54.6% interest (previously 60%) reflecting the proposed divestment of our 60% interest in the Metalloys manganese alloy smelter and aligning with our interest in Hotazel Manganese Mines (HMM). South32 has a 44.4% ownership interest in HMM. 26% of HMM is owned by a B-BBEE consortium comprising Ntsimbintle Mining (9%), NCAB Resources (7%), Iziko Mining (5%) and HMM Education Trust (5%). The interests owned by NCAB Resources, Iziko Mining and HMM Education Trust were acquired using vendor finance with the loans repayable via distributions attributable to these parties, pro rata to their share in HMM. Until these loans are repaid, South32’s interest in HMM is accounted at 54.6%.
11. Payable zinc equivalent (kt) was calculated by aggregating revenues from payable silver, lead and zinc, and dividing the total Revenue by the price of zinc. FY21 realised prices for zinc (US\$2,357/t), lead (US\$1,862/t) and silver (US\$25.4/oz) have been used for H1 FY19, H2 FY19, H1 FY20, H2 FY20, H1 FY21, H2 FY21, H1 FY22, FY22e and FY23e.
12. Operating margin comprises Underlying EBITDA excluding third party product EBITDA, divided by revenue excluding third party product revenue.
13. Ceased & sold includes South Africa Energy Coal, and the TEMCO, Metalloys and Bayside smelters.
14. Underlying net finance costs and Underlying income tax expense are actual H1 FY22 results, not half-on-half variances.
15. H1 FY21 third party product cost is US\$16M for aluminium, US\$16M for alumina, US\$85M for coal, US\$18M for manganese, US\$77M for freight services and US\$35M for raw materials. H1 FY22 third party product cost is US\$58M for aluminium, US\$20M for alumina, US\$30M for coal, US\$19M for manganese, US\$158M for freight services and US\$72M for raw materials.
16. Other includes accounting related adjustments.
17. Cost base includes EAI and excludes Other income. H1 FY22 includes a US\$37M adjustment for Other income and other accounting related adjustments to reconcile to Underlying Revenue minus Underlying EBITDA (H1 FY21 includes a US\$75M adjustment for Other income and other accounting related adjustments to reconcile to Underlying Revenue minus Underlying EBITDA).
18. Market traded consumables and price-linked costs includes the impact of smelter power costs.
19. Other (H1 FY22 expenditure) includes bauxite consumption at Brazil Alumina. Other (HoH increase) includes accounting related adjustments.
20. Aluminium (Aluminium LME cash index); Alumina (Platts Alumina Index (PAX) (FOB Australia)); Metallurgical coal (Platts Low-Vol Hard Coking Coal index (FOB Australia)); 44% manganese (Metal Bulletin 44% manganese lump ore index (CIF Tianjin, China)); Nickel (Nickel (LME) cash index); Silver (Silver LME cash index); Lead (Lead LME cash index); and Zinc (Zinc LME cash index).
21. Distributions include dividends and the net repayment of shareholder loans from manganese EAI.
22. Other primarily includes vendor support provided as part of the divestment of South Africa Energy Coal, foreign exchange movements on net cash, capitalised lease liabilities and capitalised interest.
23. EPS refers to Underlying earnings per share since inception of the capital management program. Cumulative EPS is calculated as the sum of Underlying earnings over time, divided by shares outstanding with or without the share buy-back.
24. Sierra Gorda pro-forma financials are unaudited and for illustrative purposes only.
25. Excludes Group and unallocated items/eliminations. Metallurgical coal comprises Illawarra Metallurgical Coal, including energy coal by-product volumes, the Brazil Aluminium smelter is included in alumina and copper comprises Sierra Gorda, including by-product volumes.
26. Illustrative Group includes H1 FY22 revenue, Sierra Gorda H1 FY22 revenue based on the mid point of medium-term copper equivalent production for a half year of 103kt and the FY21 index price for copper (US\$4.23/lb), and a 276kt increase in annual aluminium production (South32 share), following completion of the acquisition of an additional 16.6% interest in Mozal Aluminium and the restart of the Alumar aluminium smelter at nameplate capacity. Refer to footnotes 2 and 3 on slide 56.
27. In FY21, we developed a scenario in which global warming is assumed to be limited to 1.5°C above pre-industrial levels, and analysed the potential impacts on commodity demand. In this scenario the world transitions to a low carbon economy at a much faster rate than in our base case (which is a probable trajectory of at least 2°C warming). The chart illustrates projected long-term commodity demand in the 1.5°C scenario compared to our base case.

# FOOTNOTES

28. Production Target Cautionary Statement: The information in this announcement that refers to the Production Target and forecast financial information for MRN is based on Measured (63%), Indicated (9%) and Inferred (28%) Mineral Resources. The Mineral Resources underpinning the Production Target have been prepared by a Competent Person in accordance with the JORC Code and is available to view in South32's FY21 annual report ([www.south32.net](http://www.south32.net)) published on 3 September 2021. There is low level of geological confidence associated with the Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target will be realised. The stated Production Target is based on South32's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met. South32 confirms that inclusion of 28% Inferred Mineral Resource tonnage is not the determining factor of the project viability and the project forecasts a positive financial performance when using 72% tonnage (63% Measured and 9% Indicated Mineral Resources). South32 is satisfied, therefore, that the use of Inferred Mineral Resources in the Production Target and forecast financial information reporting is reasonable.
29. Production Target Cautionary Statement: The information in this presentation that refers to the Production Target and forecast financial information for Illawarra Metallurgical Coal is based on the original announcement "Financial Results and Outlook – half year ended 31 December 2021", released on 17 February 2022 and is available to view at [www.south32.net](http://www.south32.net). The Coal Reserves and Coal Resources underpinning the Production Target have been prepared by a Competent Person in accordance with the JORC Code. There is low level of geological confidence associated with Inferred Coal Resources and there is no certainty that further exploration work will result in the determination of Indicated Coal Resources or that the Production Target will be realised. The stated Production Target is based on South32's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.
30. The information in this report that relates to the production target is based on Proved and Probable Ore Reserves (87%), Measured (12%) and Indicated (1%) Mineral Resources for Cerro Matoso. Mineral Resources and Ore Reserve estimates for Cerro Matoso was declared as part of South32's Annual Resource and Reserve declaration in the Annual Report 2021 ([www.south32.net](http://www.south32.net)) issued on 3 September 2021 and prepared by I Espitia (MAusIMM) and N Monterroza (MAusIMM) in accordance with the requirements of the JORC Code. South32 confirms that it is not aware of any new information or data that materially affects the information included in the original announcement. All material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. South32 confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement. Payable nickel is calculated using long term consensus metal prices and relative metallurgical recoveries.
31. IRR is predicated on a consensus long term LME Nickel price of US\$16,000/t.
32. Medium term is expected average CY22 to CY26.
33. South32 notes that the stockpiled ore referred to in this presentation is unclassified and cannot confirm whether the estimate has been compiled using an appropriate foreign reporting standard.
34. Based on the CRU Aluminium Cost Model 2021.
35. H1 FY22 adjusted is restated to reflect price and foreign exchange rate assumptions used for FY22 prior guidance. FY22 adjusted guidance is restated to reflect price and foreign exchange rate assumptions used for FY22 new guidance.
36. FY22 prior Operating unit cost guidance includes royalties (where appropriate) and the influence of exchange rates, and includes various assumptions for FY22, including: an alumina price of US\$289/t; an average blended coal price of US\$140/t for Illawarra Metallurgical Coal; a manganese ore price of US\$4.79/dmtu for 44% manganese product; a nickel price of US\$7.93/lb; a silver price of US\$25.84/troy oz; a lead price of US\$2,165/t (gross of treatment and refining charges); a zinc price of US\$2,846/t (gross of treatment and refining charges); an AUD:USD exchange rate of 0.75; a USD:ZAR exchange rate of 15.00; a USD:COP exchange rate of 3,650; and a reference price for caustic soda; all of which reflected forward markets as at June 2021 or our internal expectations.
37. FOB ore Operating unit cost is Revenue less Underlying EBITDA, freight and marketing costs, divided by ore sales volume.
38. Cannington Operating unit cost is Revenue less Underlying EBITDA divided by ore processed. Periodic movements in finished product inventory may impact Operating unit costs as related marketing costs may change.
39. Price-linked costs reflect commodity price-linked and market traded consumables costs.
40. FY22 new Operating unit cost guidance includes royalties (where appropriate) and the influence of exchange rates, and includes various assumptions for FY22, including: an alumina price of US\$378/t; an average blended coal price of US\$244/t for Illawarra Metallurgical Coal; a manganese ore price of US\$5.42/dmtu for 44% manganese product; a nickel price of US\$8.83/lb; a silver price of US\$24.57/troy oz; a lead price of US\$2,329/t (gross of treatment and refining charges); a zinc price of US\$3,179/t (gross of treatment and refining charges); an AUD:USD exchange rate of 0.72; a USD:ZAR exchange rate of 15.47; a USD:COP exchange rate of 3,930; and a reference price for caustic soda; all of which reflected forward markets as at January 2022 or our internal expectations.
41. Sources: LME, Baiinfo, Aladinny, AZ China, CRU, Platts, Jacobs. Calculation assumes 1t of aluminium, 1.9t alumina, 0.35t coke, 0.075t pitch and 0.02t aluminium tri-fluoride.
42. Unwind of discount applied to closure and rehabilitation provisions.
43. Balance sheet movement (-US\$31M) reflects net impact of a US\$36M increase in provisions as a result of amounts capitalised to the provision as a result of a review of underlying cash flow assumptions and estimates relating to open mines, a US\$62M decrease in provisions associated with the capitalisation of foreign exchange impacts on restatement of closure provisions relating to open sites and a US\$5M decrease as a result of utilisation.
44. The underlying information reflects the Group's interest in material equity accounted joint ventures and is presented on a proportional consolidation basis, which is the measure used by the Group's management to assess their performance. The joint venture adjustments reconcile the underlying proportional consolidation to the equity accounting position included in the Group's half year consolidated financial statements.

The denotation (e) refers to an estimate or forecast year.

The following abbreviations have been used throughout this presentation: aluminium tri-fluoride (ATF); cost, insurance and freight (CIF); dry metric tonne (dmt) Dendrobium Next Domain (DND); earnings before interest, tax, depreciation and amortisation (EBITDA); equity accounted investments (EAI); free on board (FOB); feasibility study (FS); financial year (FY); hard coking coal (HCC); Illawarra Metallurgical Coal (IMC); internal rate of return (IRR); million (M); Mineração Rio do Norte (MRN); Premium Concentrate Ore (PC02); pulverized coal injection (PCI); pre-feasibility study (PFS); South Africa Energy Coal (SAEC); Tasmanian Electro Metallurgical Company (TEMCO); total recordable injury frequency (TRIF); total recordable illness frequency (TRILF); United States (US) and year to date (YTD).

