



14 May 2019

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

## **BANK OF AMERICA MERRILL LYNCH GLOBAL METALS, MINING & STEEL CONFERENCE PRESENTATION 2019**

South32 Limited Chief Executive Officer, Graham Kerr will present at the Bank of America Merrill Lynch Global Metals, Mining & Steel Conference in Barcelona, Spain today.

The presentation is attached and an accompanying webcast will be available on the South32 website (<https://www.south32.net/investors-media/reports-and-presentations>).

### **About South32**

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

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14 May 2019



Bank of America Merrill Lynch  
Global Metals, Mining & Steel Conference 2019

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# Important notices



This presentation should be read in conjunction with the "Financial results and outlook – half year ended 31 December 2018" announcement released on 14 February 2019, 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 or 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. 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, Basic Underlying earnings per share, Underlying effective tax rate, Underlying EBIT margin, Underlying EBITDA margin, Underlying return on invested capital, Free cash flow, net debt, net cash, net operating assets, Operating margin 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**

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## **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 ORE RESERVES**

The information in this presentation that relates to Mineral Resource estimates for MRN was declared as part of South32's Annual Resource and Reserve declaration in the Annual Report 2018 ([www.south32.net](http://www.south32.net)) issued on 7 September 2018 and prepared by M A H Monteiro 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.

The information in this presentation that relates to estimates of Mineral Resources for the Hermosa Project are qualifying foreign estimates under ASX Listing Rules and reference should be made to the clarifying statement on Mineral Resources in the market announcement 'South32 to acquire Arizona Mining in agreed all cash offer' dated 18 June 2018, in accordance with ASX Listing Rule 5.12. South32 is not in possession of any new information or data relating to the foreign estimate that materially impacts on the reliability of the estimates. South32 confirms that the information contained in the clarifying statement in the 18 June 2018 market announcement continues to apply and has not materially changed. The estimates of Mineral Resources are not reported in accordance with the JORC Code. Competent Persons have not done sufficient work to classify the foreign estimates as Mineral Resources in accordance with JORC Code. It is uncertain that following evaluation and further exploration that the foreign estimates will be able to be reported as Mineral Resources or Ore Reserves in accordance with the JORC Code.

The information in this presentation that relates to estimates of Coal Resources for Eagle Downs Metallurgical Coal project was declared as part of South32's media release "South32 to acquire 50% interest in Eagle Downs and assume operatorship" issued on 29 May 2018 and prepared by Competent Person 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.

Other information in this presentation that relates to Ore Reserve and Mineral Resource estimates was declared as part of South32's annual Resource and Reserve declaration in the FY18 Annual Report ([www.south32.net](http://www.south32.net)) issued on 7 September 2018 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 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.

**Consistently apply  
our strategy**

**Sustainably improve our  
operating performance**

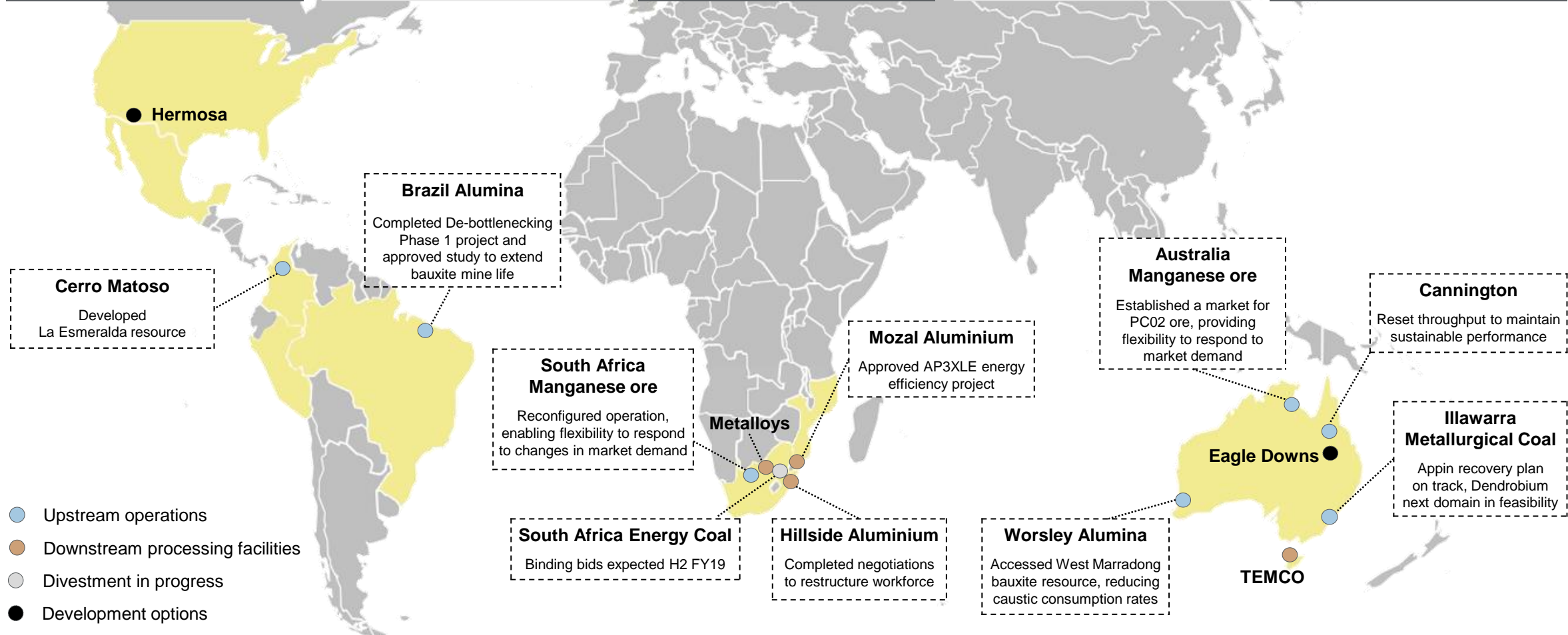
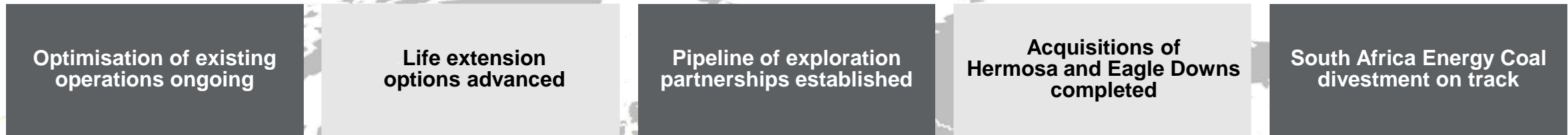
**Continue to embed  
high quality options**

**Complete South Africa  
Energy Coal divestment**

**Further reshape and  
improve our portfolio**

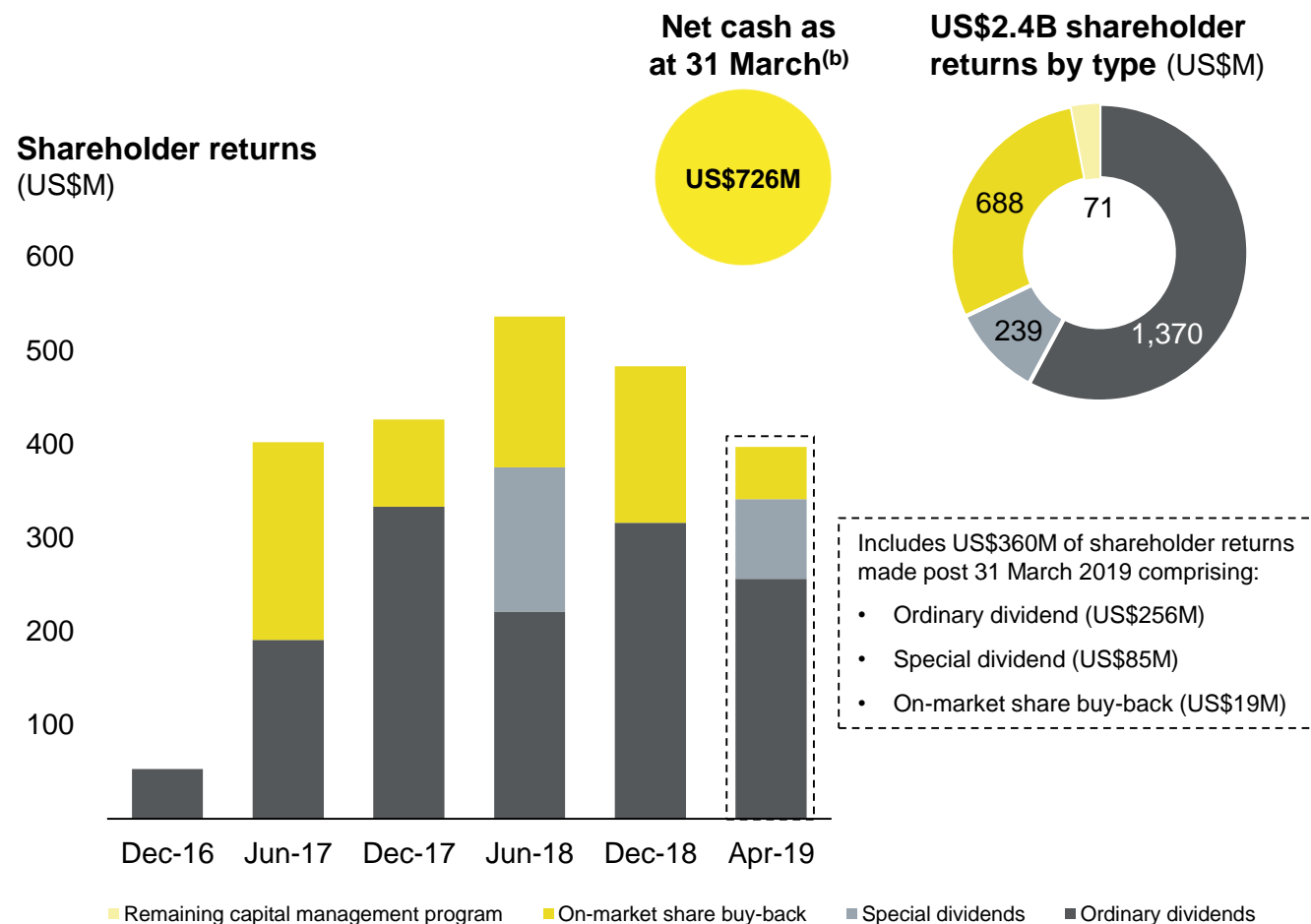
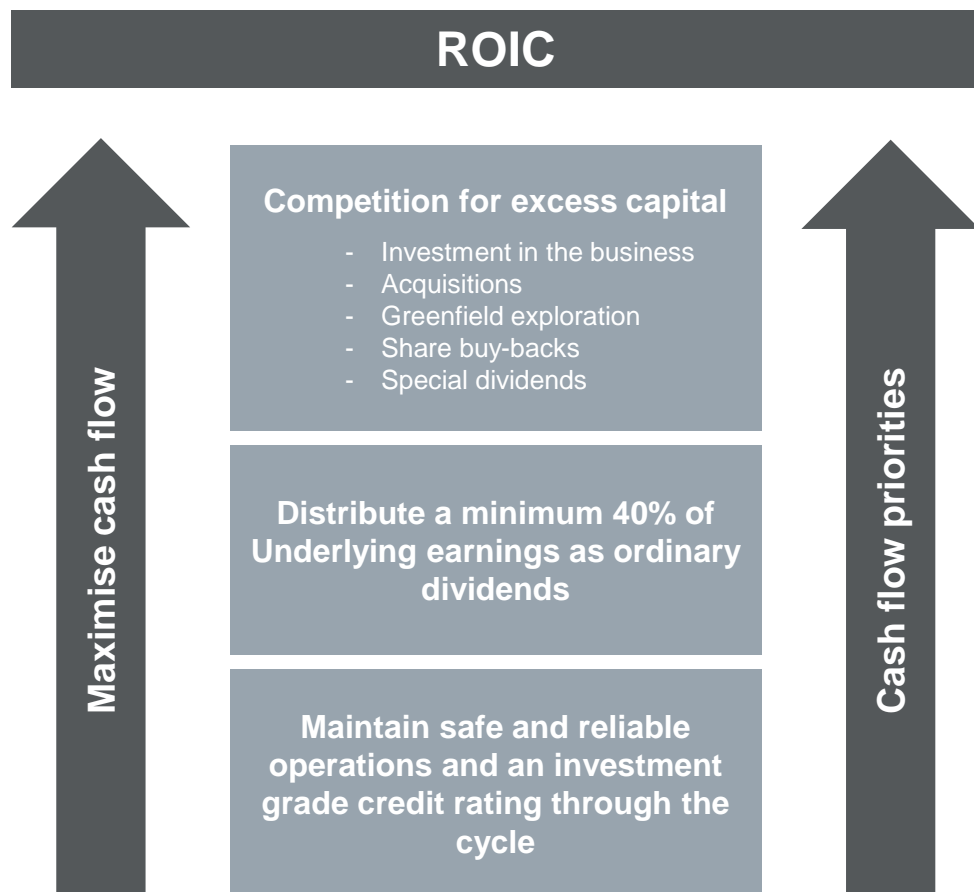
**Maintain  
capital discipline**

# Our portfolio



**Our capital management framework remains unchanged**

**Since FY16 we have committed to return US\$2.4B, equivalent to 20% of our market capitalisation<sup>(a)</sup>**



Notes:

a. Based on committed and paid shareholder returns across a three year period in the form of ordinary dividends, special dividends and our on-market share buy-back program. Market capitalisation as at 30 April 2019 is calculated as the number of shares on issue (5,031 million), the South32 closing share price A\$3.34 and an AUD:USD exchange rate of 0.70.

b. Net cash number is unaudited and should not be considered as an indication of or alternative to an IFRS measure of profitability, financial performance or liquidity.

Increase in intensity of use in steelmaking

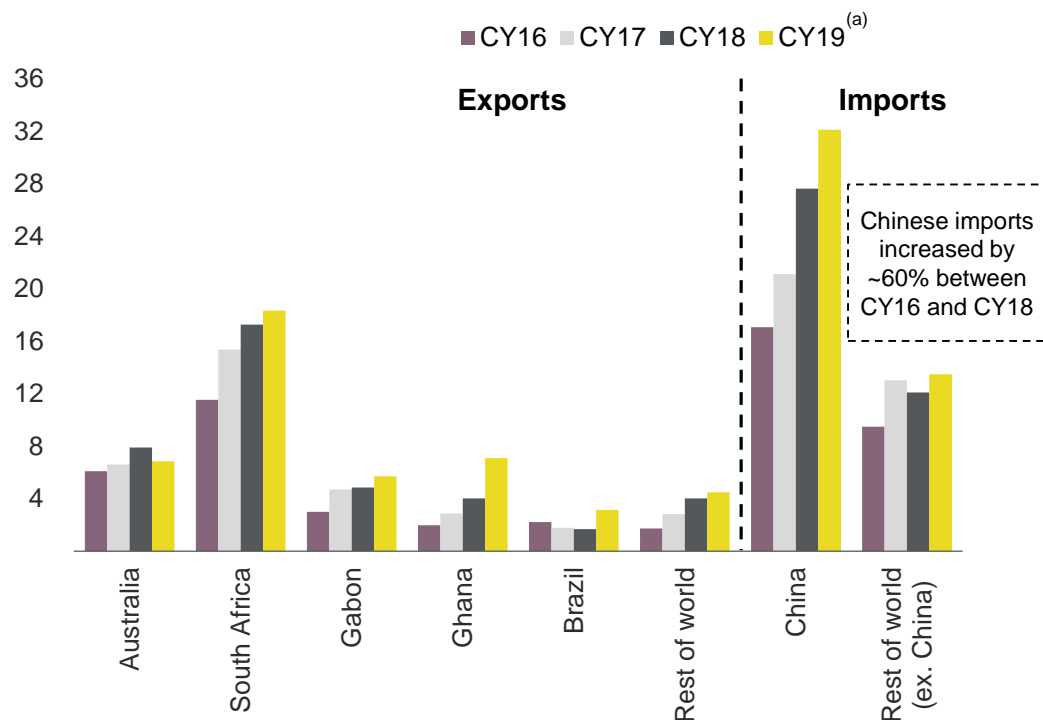
Chinese domestic production has declined as a result of environmental restrictions and grade decline

Supply response from high cost South African producers (lower grade, trucking versus rail)

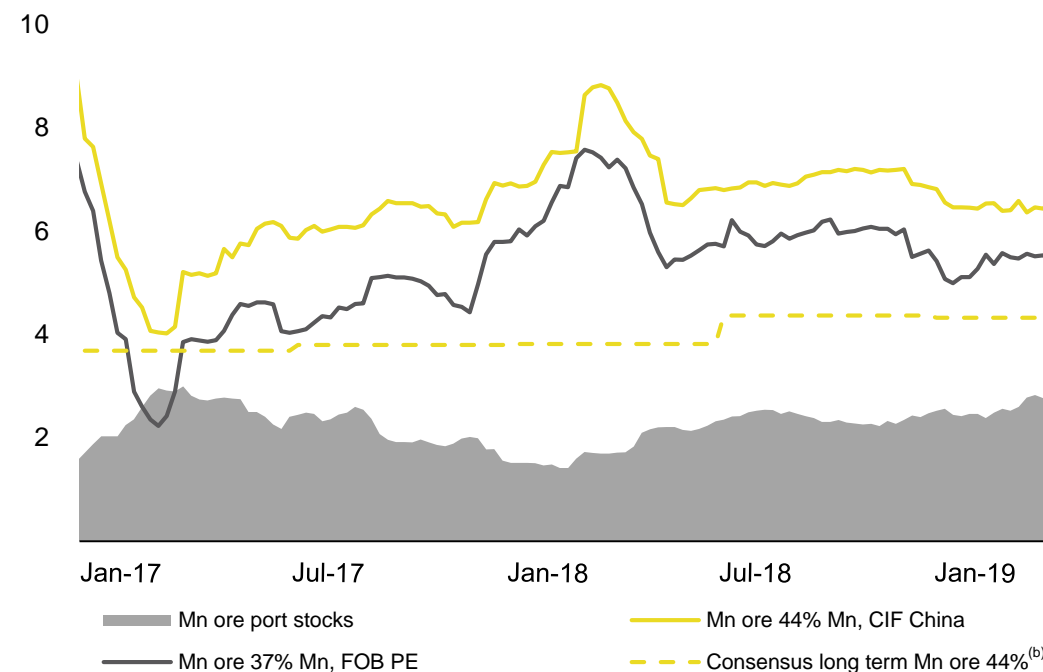
Future cost of South African supply to be set by higher cost trucking and transition to underground mines

Structural factors have lifted and steepened the manganese ore industry cost curve

Manganese ore trade flows (Mt, Mn content unadjusted)



Manganese ore price and China port stocks (US\$/dmtu; Mt)



Source: Metal Bulletin, SteelOrbis

Source: GTIS, South32 Industry Analysis

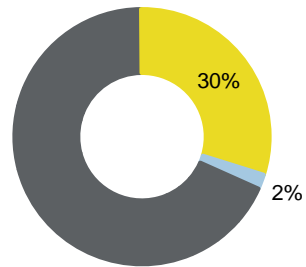
Notes:

a. CY19 based on March 2019 YTD annualised.

b. Long term consensus estimates based on a selection of brokers which includes: BMO Capital, Bank of America Merrill Lynch, Citi, Credit Suisse, Deutsche Bank, HSBC, JP Morgan, Macquarie, Renaissance Capital and UBS.

# Our manganese operations

## H1 FY19 EBITDA contribution<sup>(a)</sup>



Industry leading position in manganese ore, with joint venture supplying 20%<sup>(b)</sup> of seaborne market

- Manganese ore
- Manganese alloy

## Australia Manganese ore

- Unit costs have remained steady, despite an increase in strip ratio
- Pursuing further optimisation of the PCO2 circuit (currently operating at 120% of nameplate capacity)
- Pursuing life extension opportunities
  - Assessment of eastern leases resource to convert to reserve
  - Approval to drill southern areas (expected H1 FY20)

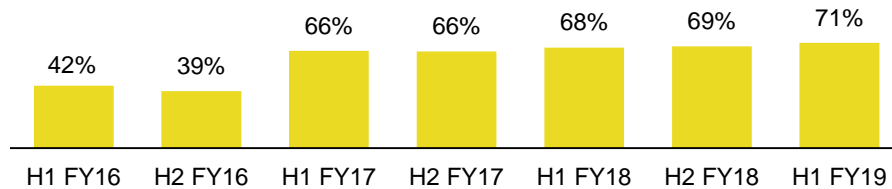
## South Africa Manganese ore

- Completion of the Wessels central block project with increased sales of premium product
- Opportunistic trucking to capture additional margin
- Reviewing options to expand Wessels underground and upgrade train load-out infrastructure

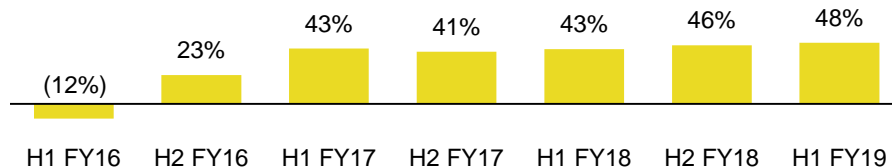
## Australia and South Africa Manganese alloy

- Reviewing options for our alloy smelters as changes in market dynamics have reduced the attractiveness of our exposure

## Operating margin (Australia Manganese ore)



## Operating margin (South Africa Manganese ore)



Notes:

- a. Presented on a proportionally consolidated basis.
- b. South32 analysis. CY18 data presented on a 100% basis.



# Alumina and aluminium markets

Aluminium industry expected to remain at low profitability in near term

Raw material cost pressure has subsided from H1 FY19 peak

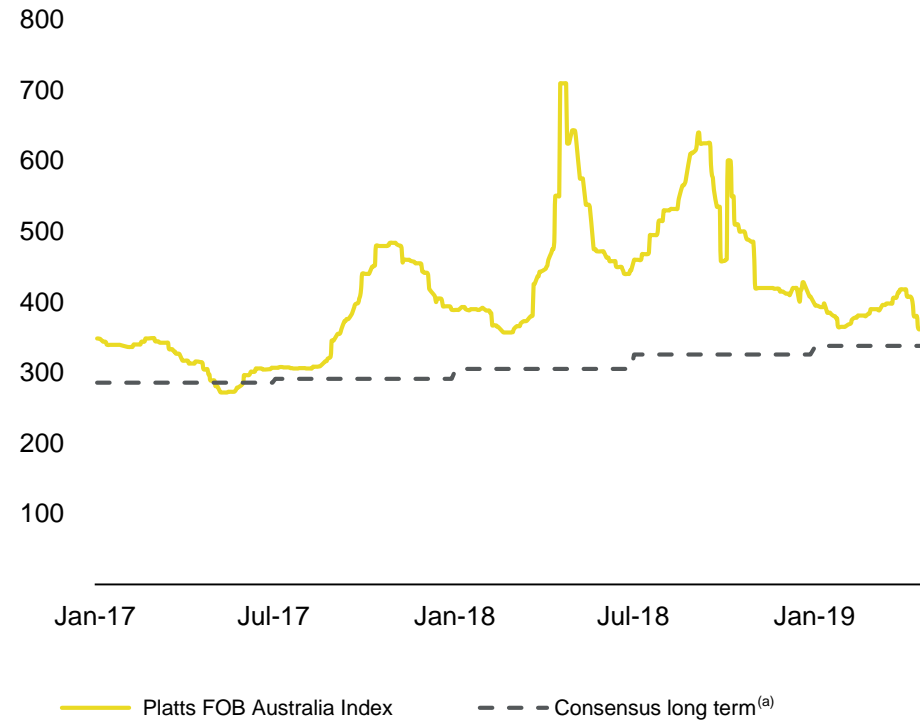
Chinese regulations have led to closures and delays in new alumina refinery builds

Deteriorating Chinese supply has increased dependence on imported bauxite

Aluminium price and % of LME aluminium price (US\$/t; %)



Alumina price (US\$/t)

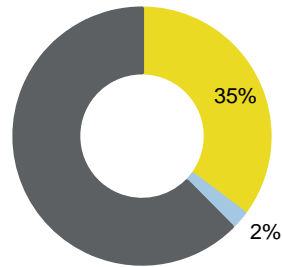


Notes:

- a. Long term consensus estimates based on a selection of brokers which includes: Barclays, BMO Capital, Bank of America Merrill Lynch, Citi, Credit Suisse, Deutsche Bank, HSBC, Investec, Jefferies, JP Morgan, Macquarie, Morgan Stanley, RBC, Renaissance, SMBC and UBS.
- b. 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.

# Our alumina and aluminium operations

## H1 FY19 EBITDA contribution



■ Alumina  
■ Aluminium

First quartile alumina refineries producing ~5.1Mt in FY19e, including ~3.2Mtpa directed to Atlantic and Pacific merchant markets<sup>(a)</sup>

## Worsley Alumina

- Historical investment of US\$3.2B in Efficiency and Growth project positioned the refinery as one of the largest and lowest cost in the industry
- Targeting a sustainable improvement in calciner availability to lift production to nameplate capacity from FY20 ahead of de-bottlenecking activities

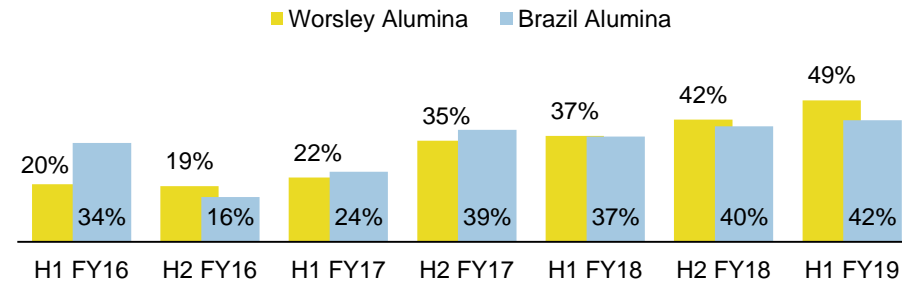
## Brazil Alumina

- Package boilers installed to improve the reliability of steam generation, enabling the full benefits of the De-bottlenecking Phase One project to be realised from FY20
- Joint venture partners have approved a pre-feasibility study to extend MRN bauxite mine life by approximately 20 years<sup>(b)</sup> with a lower capital cost option

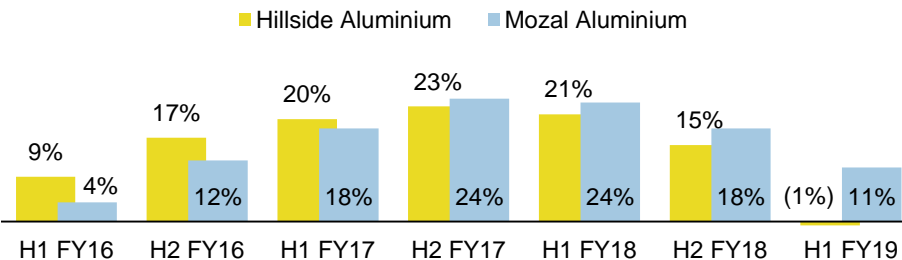
## Hillside and Mozal Aluminium

- Cost base mostly variable raw material inputs and power
- Workforce restructure at Hillside to align smelter with industry benchmarks and the implementation of AP3XLE technology at Mozal to improve energy efficiency

## Operating margin (Alumina)



## Operating margin (Aluminium)



Notes:  
a. FY19e forecast.  
b. Refer to important notices (slide 2) for additional disclosure.

# Metallurgical coal market

Market remains tight and sensitive to supply disruption

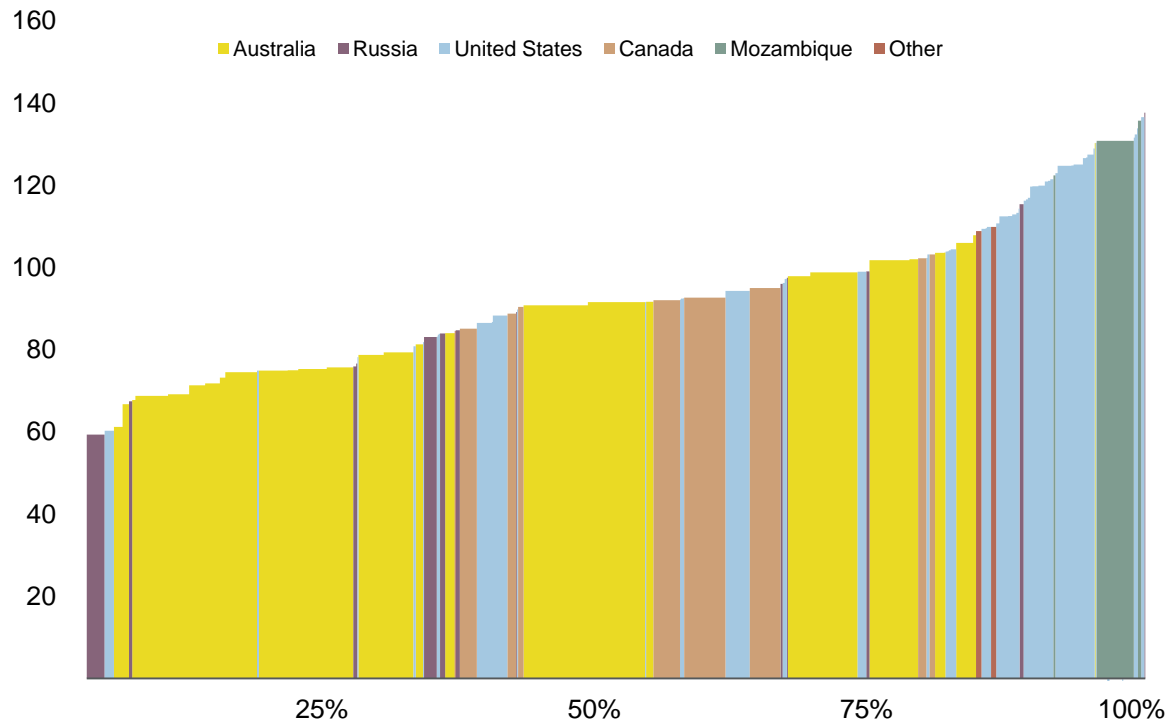
Cost curve will continue to steepen due to higher logistics costs and maturing assets

Environmental restrictions are increasing demand for higher quality coals

Identified new supply to increasingly come from projects with lower coal quality

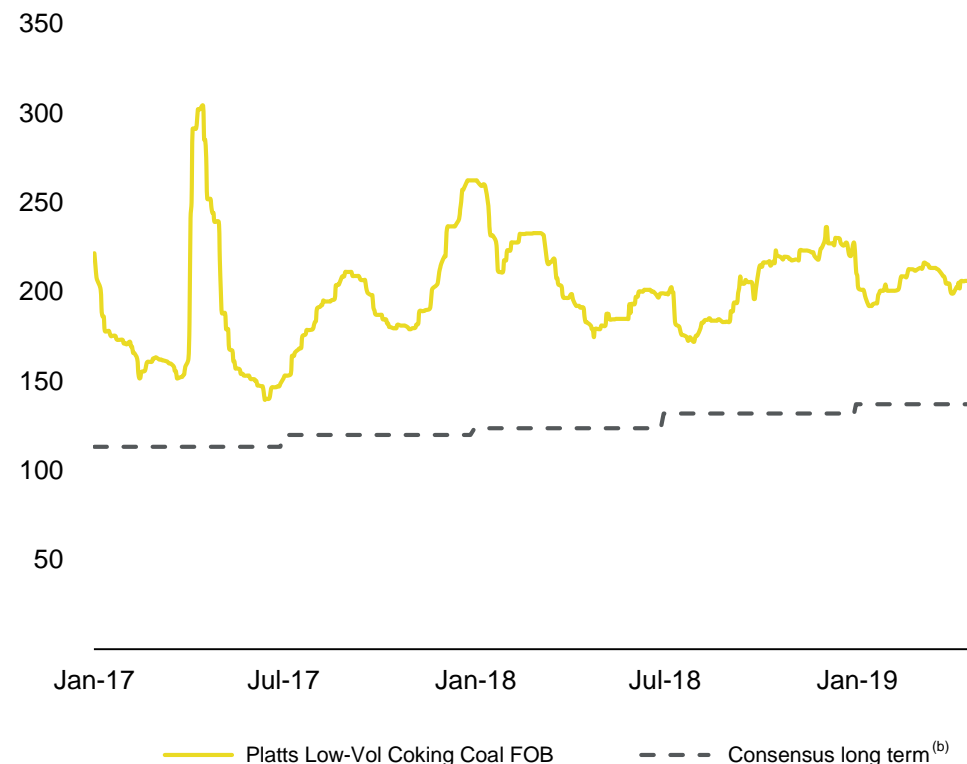
Long run growth driven by India and other emerging Asian countries

**Seaborne metallurgical coal cash cost curve (CY19)<sup>(a)</sup>**  
(US\$/t, FOB)



Source: Wood Mackenzie

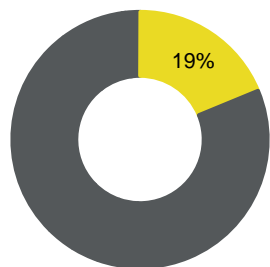
**Metallurgical coal price**  
(US\$/t)



Notes:  
 a. Quality unadjusted basis.  
 b. Long term consensus estimates based on a selection of brokers which includes: Barclays, BMO Capital, Bank of America Merrill Lynch, Canaccord, Citi, Credit Suisse, Deutsche Bank, Dundee, HSBC, Investec, Jefferies, JP Morgan, Macquarie, Morgan Stanley, National Bank, Raymond James, RBC, Scotia Bank, TD Securities and UBS.

# Our metallurgical coal operations

## H1 FY19 EBITDA contribution



■ Illawarra Metallurgical Coal

Positioned to benefit from recovery in Illawarra Metallurgical Coal production and Eagle Downs development option

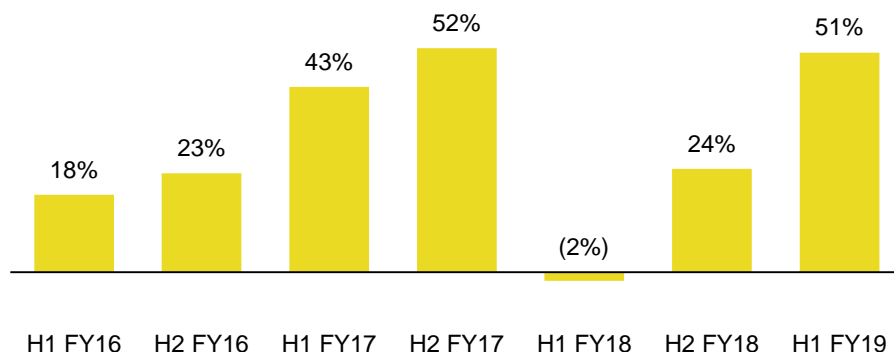
## Illawarra Metallurgical Coal

- Appin and Dendrobium longwalls performed strongly in the nine months ended March 2019
- Targeting production of 6.5Mt in FY19 and 7Mt in FY20
- Focussed on achieving a substantial uplift in development rates at Appin to sustain two longwalls in parallel from H2 FY20
- Dendrobium next domain project progressed to feasibility

## Eagle Downs Metallurgical Coal development project

- 50% interest and operatorship
- 1.1Bt<sup>(a)</sup> Coal Resource in the Bowen Basin, Queensland
- Fully permitted, partially developed mine
- Review of existing development plan completed in H1 FY19
- Final investment decision scheduled for the December 2020 half year

## Operating margin (Illawarra Metallurgical Coal)



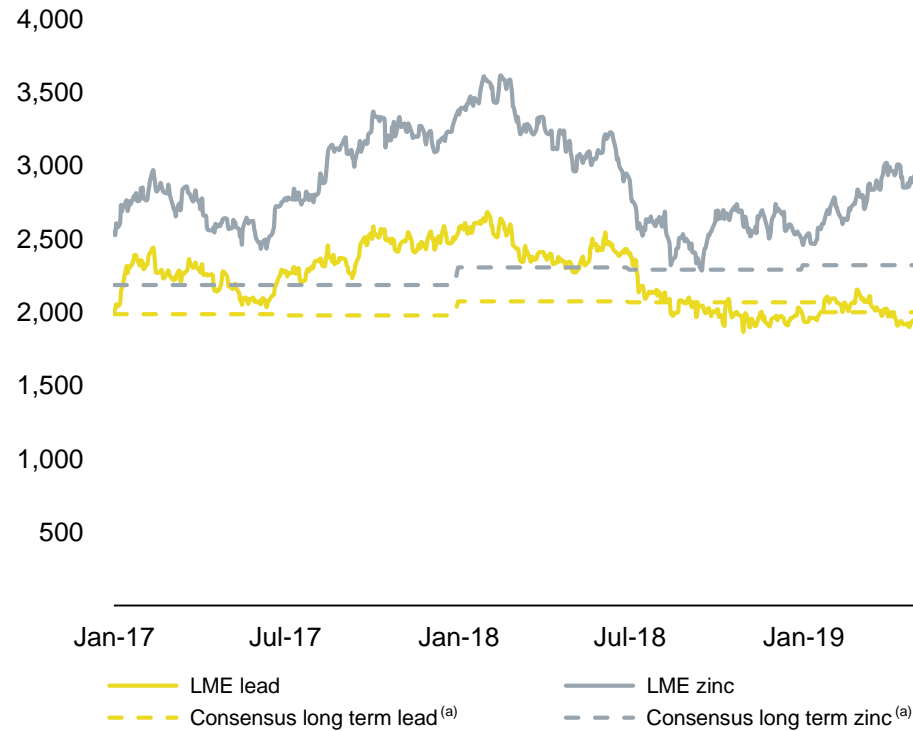
Notes:

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

**New zinc supply required due to depletion of existing resources**

**Hermosa has lowest inducement cost of identified greenfield zinc-lead projects**

**Zinc and lead prices (US\$/t)**



Source: London Metal Exchange

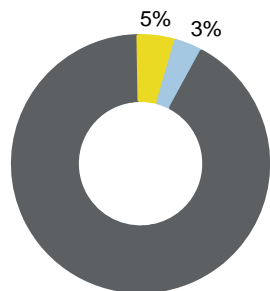
**Zinc cash cost curve (induced CY27) (US\$/t net of credits)**



Source: Wood Mackenzie

Notes:  
 a. Long term consensus estimates based on a selection of brokers which includes: Barclays, BMO Capital, Bank of America Merrill Lynch, Canaccord, Citi, Credit Suisse, Deutsche Bank, Dundee, HSBC, Investec, Jefferies, JP Morgan, Macquarie, Morgan Stanley, National Bank, Raymond James, RBC, Renaissance Capital, Scotia Bank, SMBC, TD Securities and UBS.

## H1 FY19 EBITDA contribution



■ Cannington  
■ Cerro Matoso

Expect to grow our base metals exposure over time with Hermosa development option and exploration partnerships

## Cannington

- Studying options to bring the open pit life extension project forward, utilising spare capacity in the mill

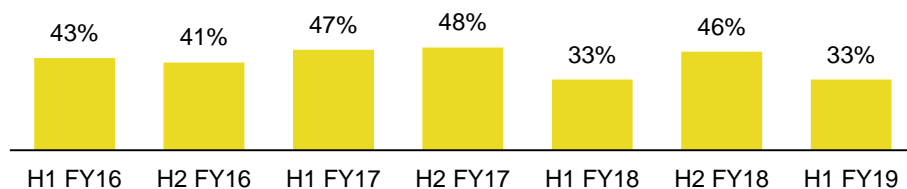
## Cerro Matoso

- Further improvement in plant utilisation to partially offset the expected decline in grade
- Brownfield exploration ongoing to identify additional higher grade mineralisation

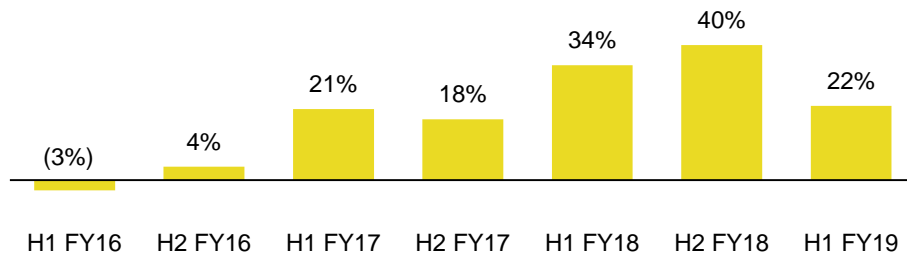
## Hermosa development option

- Progressing studies, exploration drilling and infrastructure build
- On track to declare a Mineral Resource in accordance with the JORC Code<sup>(a)</sup> during June 2019
- Regional exploration targets identified for future drilling

## Operating margin (Cannington)



## Operating margin (Cerro Matoso)



Notes:

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

# Further reshape and improve our portfolio

**Industry leading positions in manganese ore and alumina**

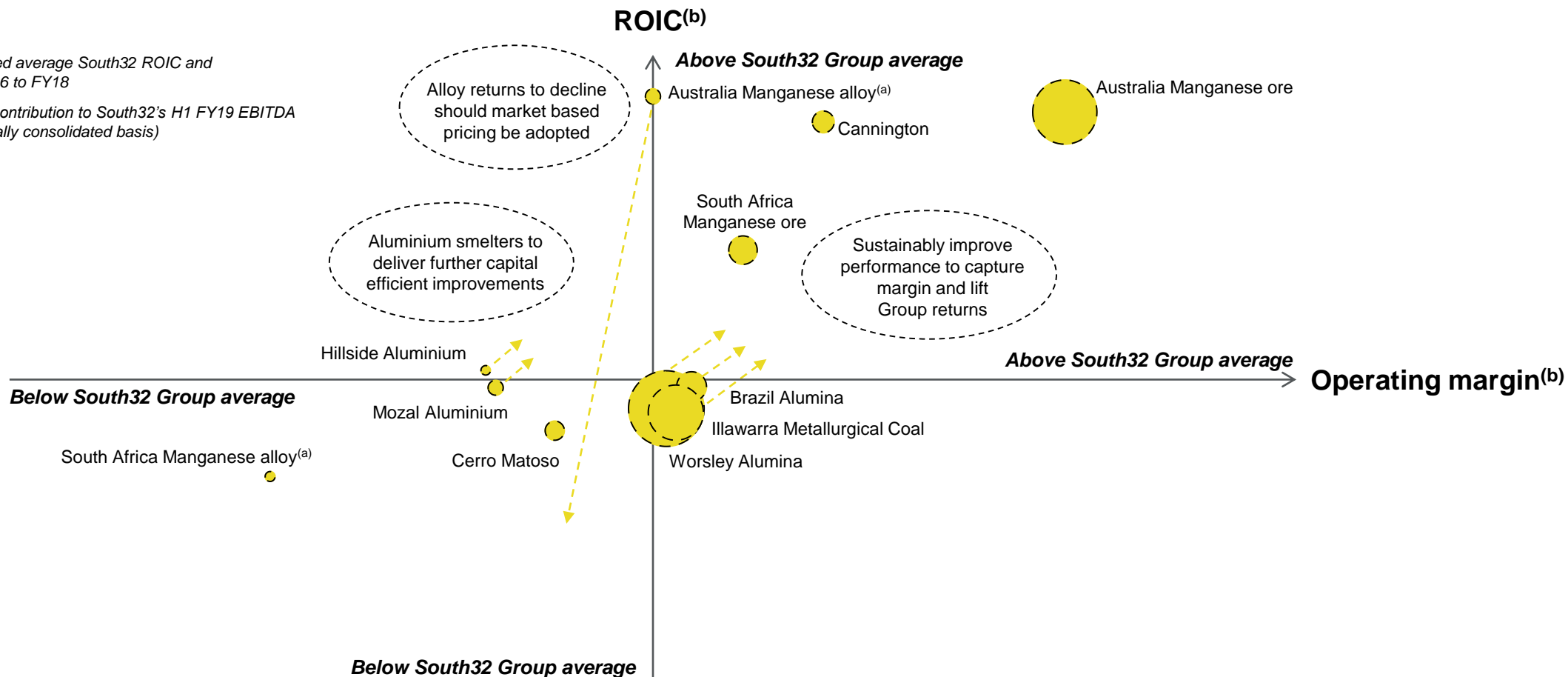
**Complete South Africa Energy Coal divestment**

**Advance studies for development options**

**Embed further growth options from exploration partnerships**

**Review options for manganese alloy smelters**

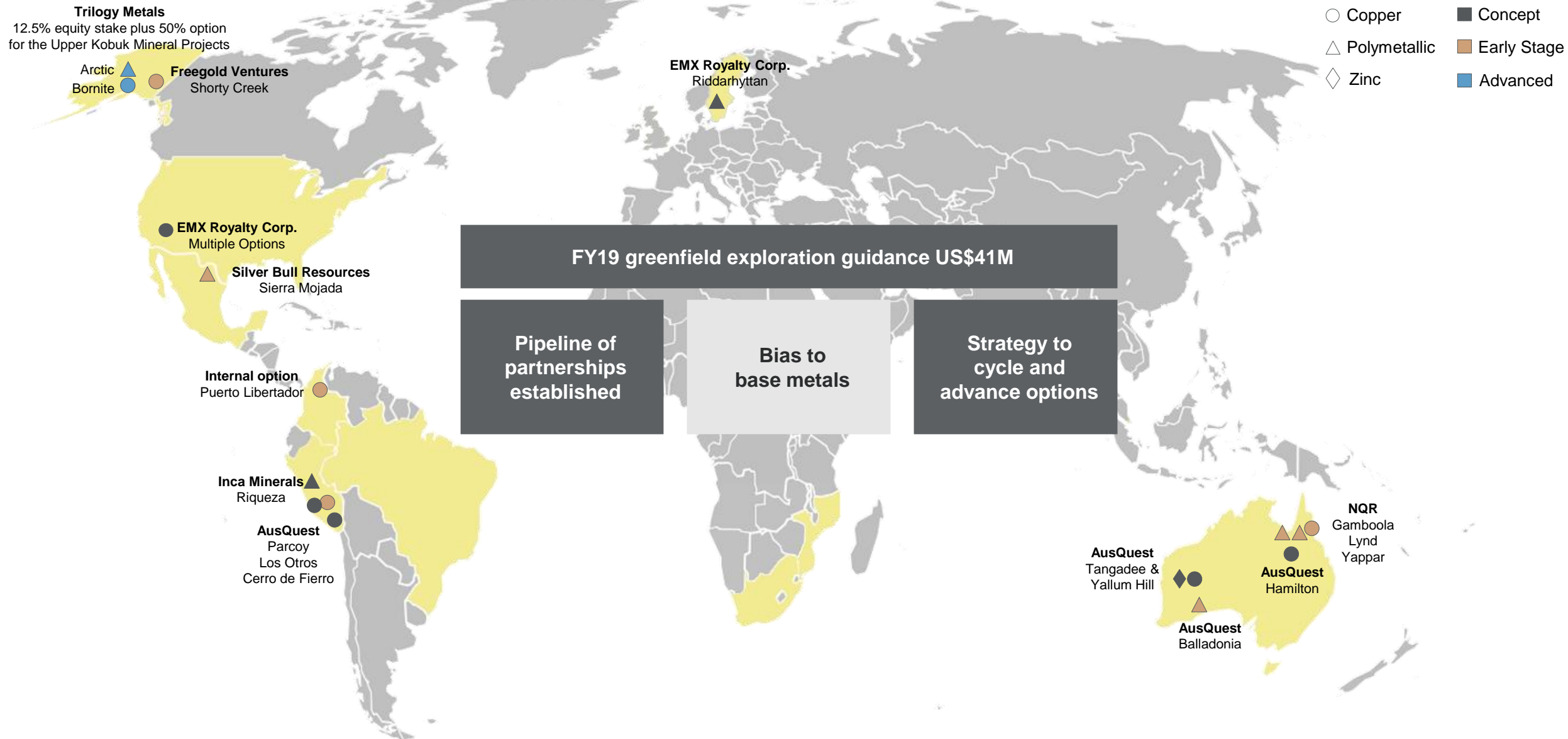
Centre point shows weighted average South32 ROIC and Operating margin from FY16 to FY18  
 Size of bubble represents contribution to South32's H1 FY19 EBITDA (presented on a proportionally consolidated basis)



**Notes:**

- a. Manganese ore sold to alloy operations on internal commercial terms.
- b. ROIC represents the weighted three year average of return on invested capital from FY16 to FY18. Operating margin represents the weighted three year average of Operating margin from FY16 to FY18.

# Our exploration footprint





**Consistently apply  
our strategy**

**Sustainably improve our  
operating performance**

**Continue to embed  
high quality options**

**Complete South Africa  
Energy Coal divestment**

**Further reshape and  
improve our portfolio**

**Maintain  
capital discipline**

