



26 September 2016

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

## **SOUTH AFRICA MANGANESE – MAMATWAN SITE TOUR**

South32 Limited (ASX, LSE, JSE: S32) (South32) will today host an investor and analyst site tour to its South Africa Manganese Mamatwan open-cut mine at Hotazel in the Northern Cape, South Africa.

### **About South32**

South32 is a globally diversified mining and metals company with high quality operations in Australia, Southern Africa and South America. 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 have a simple strategy to maximise the potential of our assets and shareholder returns by optimising our existing operations, unlocking their potential and identifying new opportunities to compete for capital.

## **FURTHER INFORMATION**

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

JSE Sponsor: UBS South Africa (Pty) Ltd  
26 September 2016



# MAMATWAN INVESTOR TOUR

26 SEPTEMBER 2016



# IMPORTANT NOTICES



This presentation should be read in conjunction with the Annual Financial Report as at 30 June 2016, Financial Results and Outlook – Year ended 30 June 2016, Quarterly Report for June 2016 and any other announcements made by South32 in accordance with its continuous disclosure obligations.

## 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. 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. 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.

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This presentation includes certain non-IFRS financial measures, including Underlying earnings, Underlying EBIT and Underlying EBITDA, Underlying basic 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.

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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, and we strongly recommend that you seek professional advice.

## CURRENCY

All references to dollars, cents or \$ in this document are to US currency, unless otherwise stated.

## ORE RESERVES AND MINERAL RESOURCES

Details of South32 Mamatwan and Wessels Mineral Resource and Ore Reserve estimates which appear in this presentation are estimates previously disclosed in the South32 Annual report 2016 dated 8 August 2016 in compliance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012. The Competent Persons responsible for resources were: P Ferreira (Pri. Sci. Nat., SACNASP), C Nengovhela (Pri. Sci. Nat., SACNASP), F T Rambuda (Pri. Sci. Nat., SACNASP), all full time employees of South32. The Competent Person responsible for reserves was D Takalani (MSA/MM), employed by NRR Mining and Consulting. South32 is not aware of any new information or data that materially affects these Resource and Reserve estimates and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The company confirms that the form and context in which the resource and reserve estimates are presented have not been materially modified from the original market announcements.

Reserve Life is calculated based on the current stated Ore Reserves divided by the current approved nominated production rate as at the end of FY2016.

# SOUTH AFRICA MANGANESE RESOURCE AND RESERVE STATEMENT



## Mineral Resources

As at 30 June  
2016

Deposit <sup>(1)</sup>	Ore Type	Measured Resources			Indicated Resources			Inferred Resources			Total Resources			South32 Interest
		Mt	% Mn	% Fe	Mt	% Mn	% Fe	Mt	% Mn	% Fe	Mt	% Mn	% Fe	
Wessels	Lower Body-HG	7.1	46.9	12.5	13	47.4	11.8	0.9	46.8	11.8	21	47.2	12.1	44.4
	Lower Body-LG	12	42.0	12.8	18	41.9	13.4	2.3	44.1	13.3	32	42.1	13.2	
	Upper Body	-	-	-	94	41.4	18.3	-	-	-	94	41.4	18.3	
Mamatwan <sup>(2)</sup>	M, C, N Zones	19	37.6	4.4	42	37.0	4.5	0.3	37.0	5.0	61	37.2	4.5	44.4
	X Zone	2.5	37.8	4.6	4.2	36.3	4.8	-	-	-	6.7	36.9	4.7	
	Top Cut (balance I&O)	7.5	30.4	6.3	19	29.4	6.4	0.1	28.7	8.3	27	29.7	6.4	

## Ore Reserves

As at 30 June 2016

Deposit <sup>(1)(4)(5)</sup>	Ore Type	Proved Ore Reserves			Probable Ore Reserves			Total Ore Reserves			Reserve Life Years	South32 Interest
		Mt	% Mn	% Fe	Mt	% Mn	% Fe	Mt	% Mn	% Fe		
Wessels <sup>(3)</sup>	Lower Body-HG	2.3	46.2	12.5	8.1	46.3	12.3	10	46.3	12.4	67	44.4
	Lower Body-LG	3.8	41.0	11.8	12	41.4	13.6	16	41.3	13.2		
	Upper Body	-	-	-	64	41.8	17.9	64	41.8	17.9		
Mamatwan	M, C, N Zones	18	37.2	4.5	38	36.6	4.5	56	36.7	4.5	17	44.4
	X Zone	2.4	37.5	4.7	3.7	35.9	4.8	6.1	36.5	4.7		

(1) Cut-off grade for Mineral Resources and Ore Reserves:

Wessels		Mamatwan	
Lower Body-HG	≥ 45% Mn	M, C, N Zones	≥ 35% Mn
Lower Body-LG	≥ 37.5% Mn	X Zone	≥ 35% Mn
Upper Body	≥ 37.5% Mn	Top Cut (balance I&O)	≥ 28% Mn

(2) Decrease in Mineral Resources to account for an incorrect mining depletion from within the FY2015 Mineral Resources.

(3) Addition to Wessels Ore Reserves is based on improved mining recovery assumptions.

(4) Ore delivered to process plant.

(5) Metallurgical recovery for the operations:

Wessels:	88%
Mamatwan:	96%

# OUR SAFETY PERFORMANCE



- Two fatalities in Manganese South Africa in FY16:
  - Mamatwan (rail operations), November 2015
  - Wessels (mobile equipment), June 2016
- Our plan for a step change in safety performance:
  - Restructured leadership for an improved focus on safety
  - Delivering our Care Strategy:
    - Build an inclusive workplace with a strong culture of care and accountability
    - Ensure that work is well designed
    - Continuously improve and learn
    - Undertake a thorough technical and leadership capability review to define, assess and address potential gaps

**Hotazel Manganese Mines Total Recordable Injury Frequency (TRIF)**  
(per million hours worked)

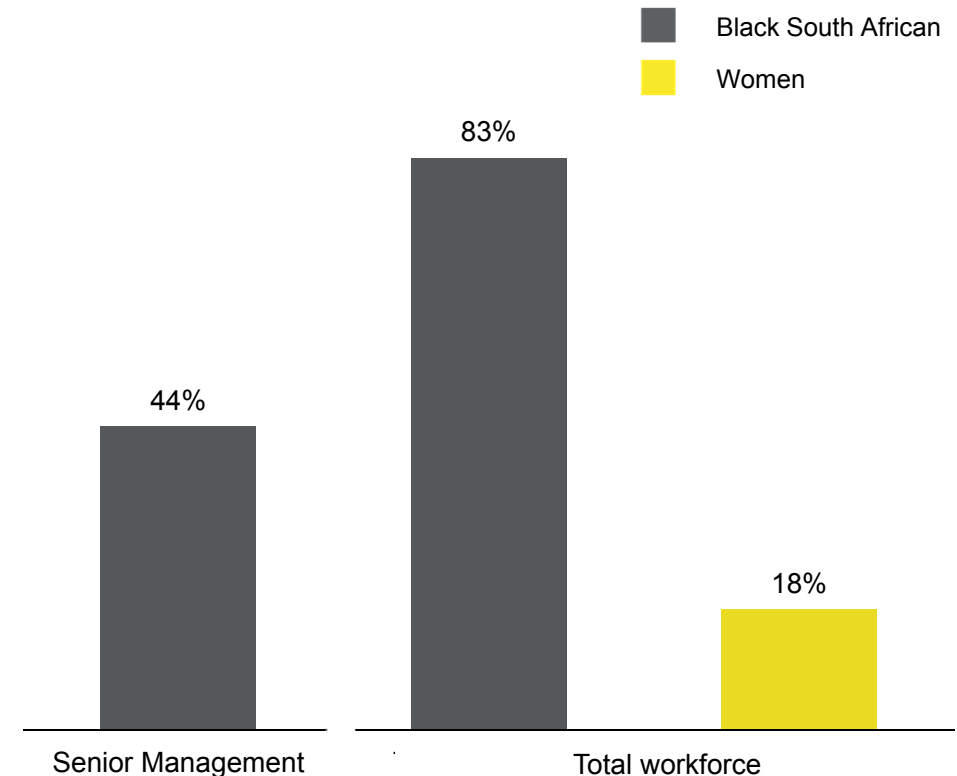


# COMMITTED TO TRANSFORMATION



- Committed to the National Transformation Agenda as enacted in the B-BBEE Act and the Mining Charter
- Accelerated the implementation of key transformation initiatives:
  - Facilitating economic empowerment with broad-based equity ownership structures
  - Working towards equitable representation and the upskilling of our historically disadvantaged workforce at all levels
  - Developing black small and medium enterprises and the creation of opportunities for growth for existing black enterprises
  - Increasing our local engagement through focussed and sustainable community development
  - Improving the housing and living conditions of our employees and ensuring our plans are aligned with our values and the requirements of the South African Mining Charter
  - Recruiting from within our local communities

## Hotazel Manganese Mines workforce diversity



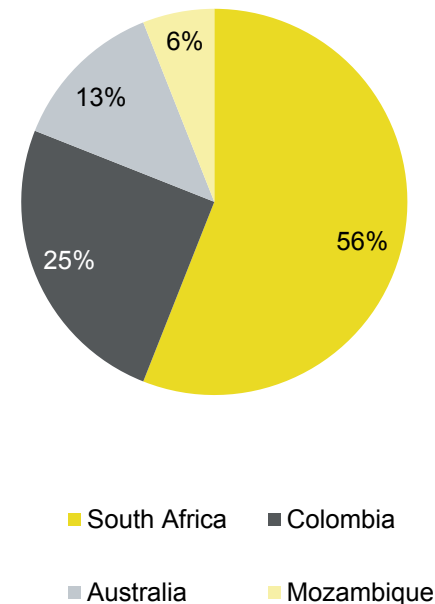


# COMMUNITY AND ECONOMIC CONTRIBUTION



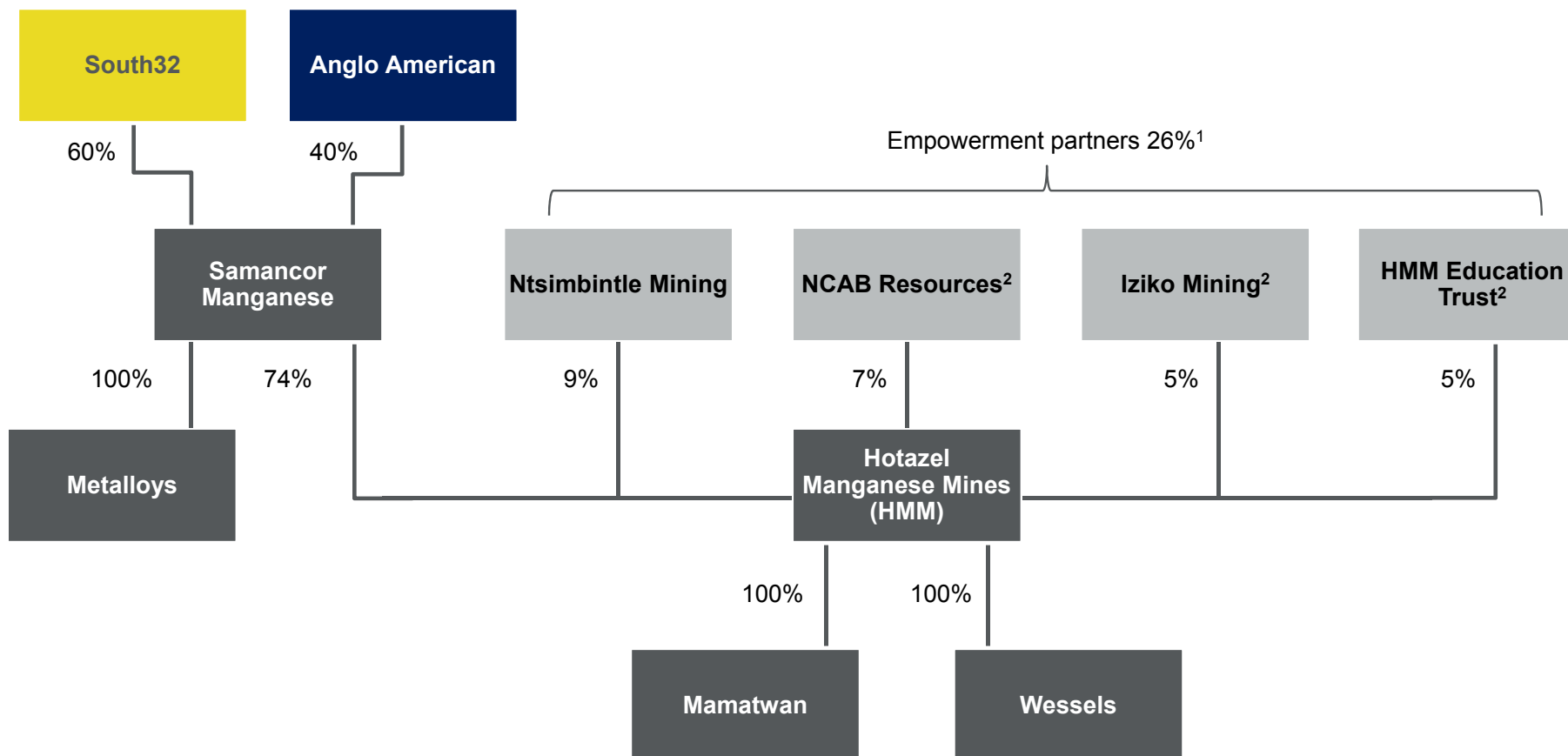
- We want to be trusted by society and the communities in which we operate
- During FY16, South32 contributed US\$16.5M to community investment, of which US\$2.2M was spent at South Africa Manganese
- South Africa Manganese community investment focusses on education, health and poverty alleviation and seeks to:
  - Empower employees to contribute to their community and society
  - Support local communities in areas of need
  - Develop long-term projects focussed on delivering positive outcomes for future generations
- At Hotazel, we collaborated with Joe Morolong local municipality to provide water infrastructure to Kanana village, train the people of Kanana, and create local jobs

**South32 FY16 Community investment<sup>1</sup> by country**



Notes:  
1. Community investment includes donations and investment of funds in the broader community where the target beneficiaries are external to the company. The amount accounts for actual expenditures in the reporting period, not commitments, prepared on an accruals basis and representing South32's equity share.

# SOUTH AFRICA MANGANESE OWNERSHIP STRUCTURE



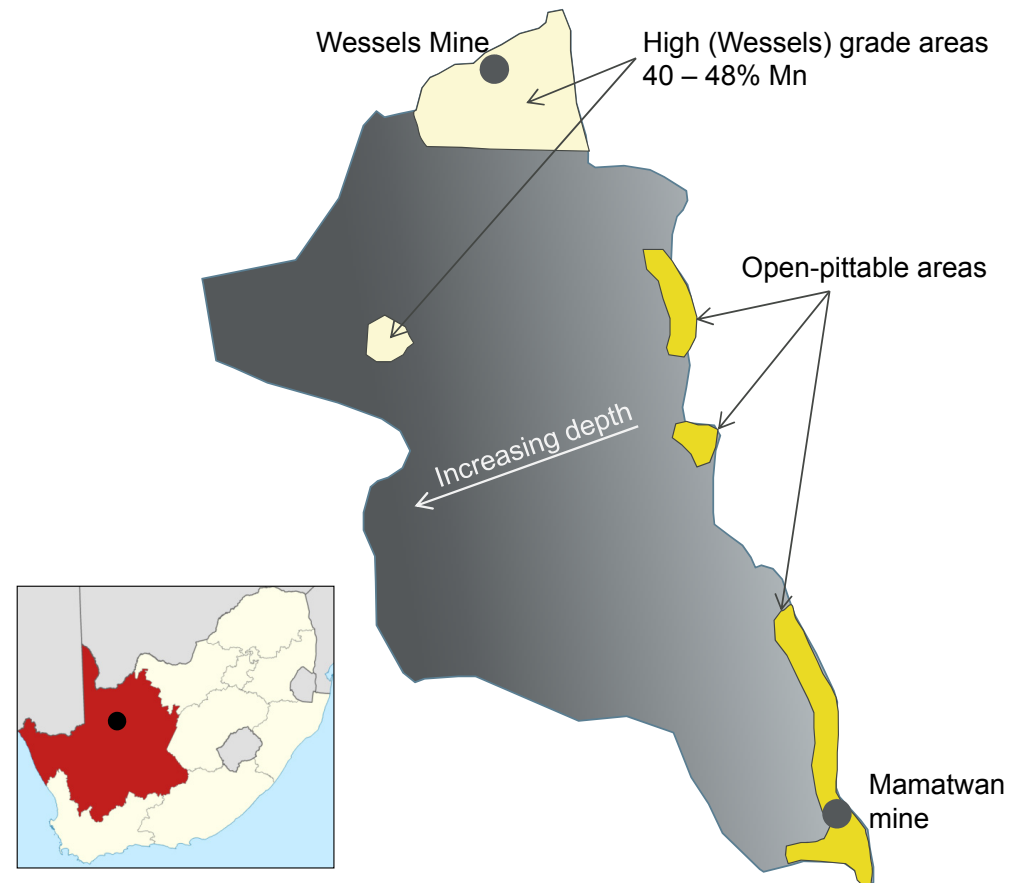
- Notes:
1. Meeting the requirements of empowerment as defined by the Mining Charter.
  2. The interests owned by NCAB Resources, Iziko Mining and HMM Education Trust were acquired using vendor finance, with the loans repayable to Samancor Manganese via distributions attributable to these parties, pro rata to their share in HMM. Until these loans are repaid, Samancor Manganese's interest in HMM is accounted at 91% (South32's effective interest in HMM is therefore 54.6%).



# THE KALAHARI MANGANESE FIELD

- The Kalahari Manganese Field (KMF) of South Africa hosts the majority of the world's minable manganese mineralisation
- Open-pittable resources are limited to the eastern edge of the KMF
- The basin dips to the north and west, increasing in depth to as deep as 1,200m below surface
- Ore body thickness decreases to the north and west
- High-grade Wessels-type ores are found in the north and northwest portions of the basin
- Medium grade Mamatwan-type ore dominates the resources of the Kalahari

## Illustration of the Kalahari Manganese Field



# HOTAZEL MANGANESE MINES



## Mamatwan

**Discovery/history** • Commenced production in 1964

**Reserves**

- 62.1Mt @ 36.7% Mn
- Reserve life: 17 years

**Resources**

- 94.7Mt @ 34.9% Mn

**Mining**

- Open-pit
- 2.3Mtpa optimised rate (100% basis)
- Mining right valid until October 2035



## Wessels

**Discovery/history** • Commenced production in 1973

**Reserves**

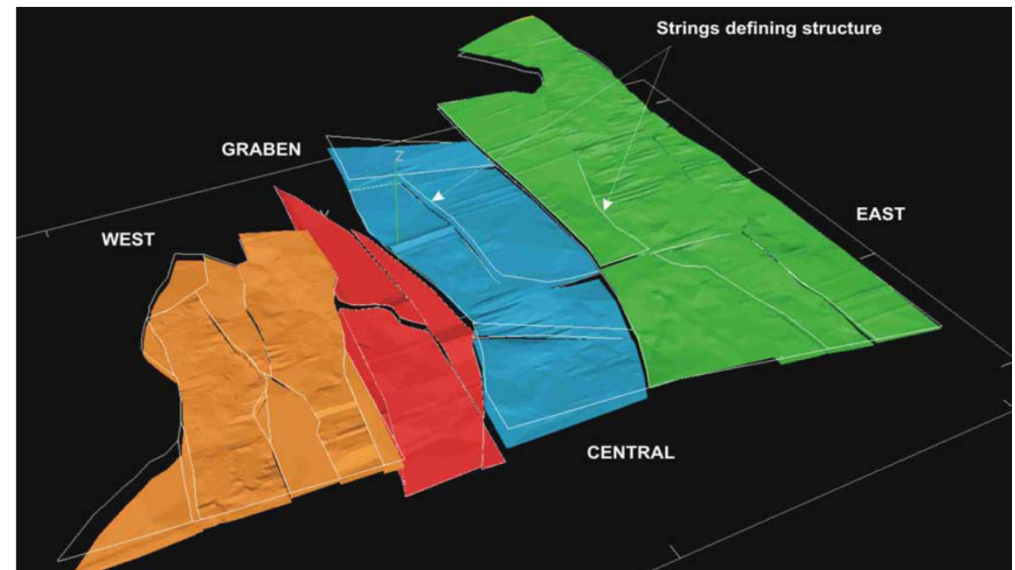
- 90Mt @ 42.2% Mn
- Reserve life: 67 years

**Resources**

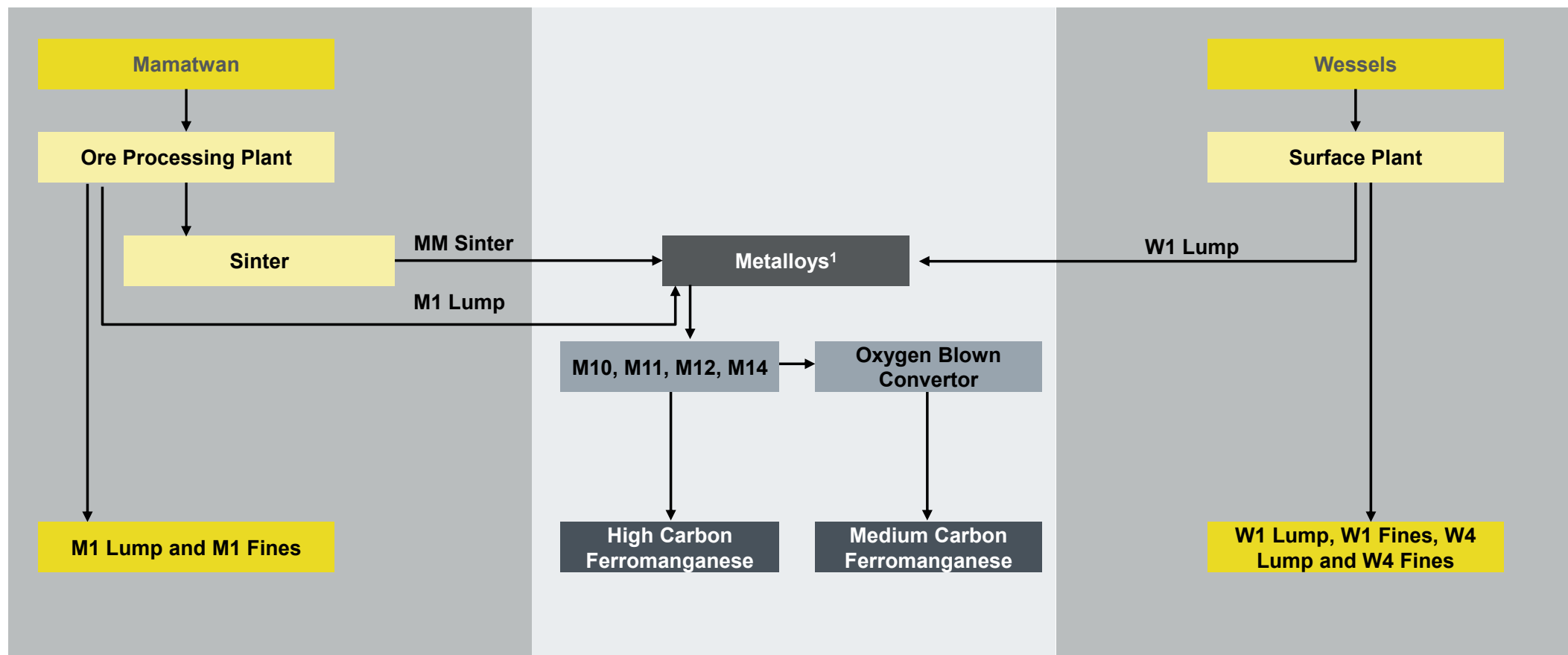
- 147Mt @ 42.4% Mn

**Mining**

- Underground bord and pillar
- 0.6Mtpa optimised rate (100% basis)
- Mining right valid until October 2035



# SOUTH AFRICA MANGANESE FLOW CHART

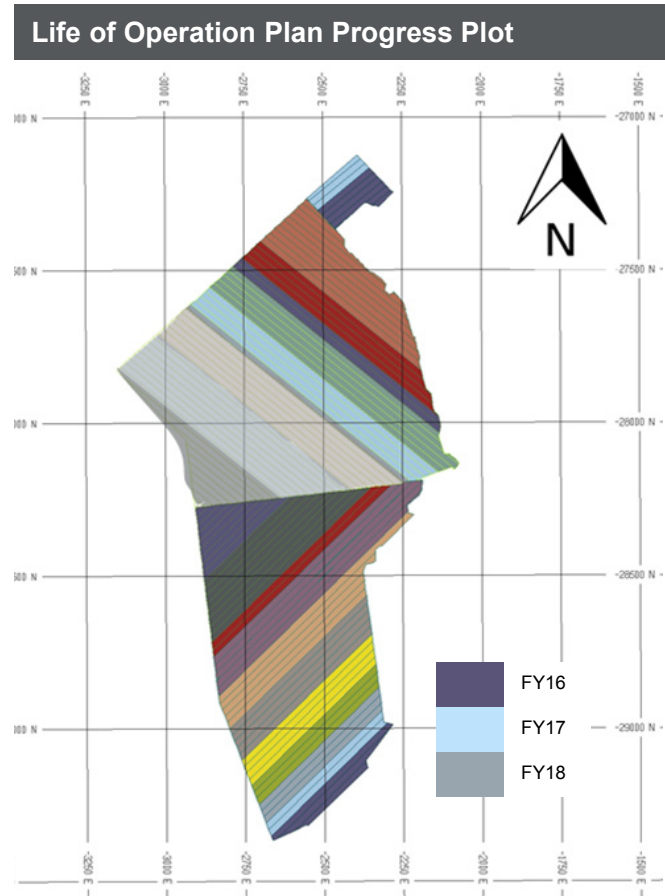


Note:  
1. M10, M11 and M12 furnaces are currently under care and maintenance. Additional alloy production achieved through processing of ferromanganese slag in the Metal Recovery Plant (Metrec).

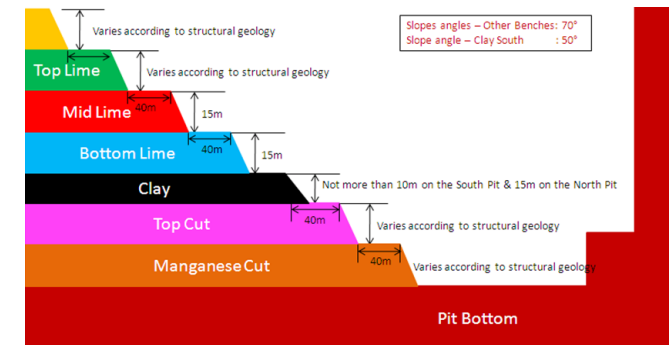
# MAMATWAN LIFE OF OPERATION PLAN



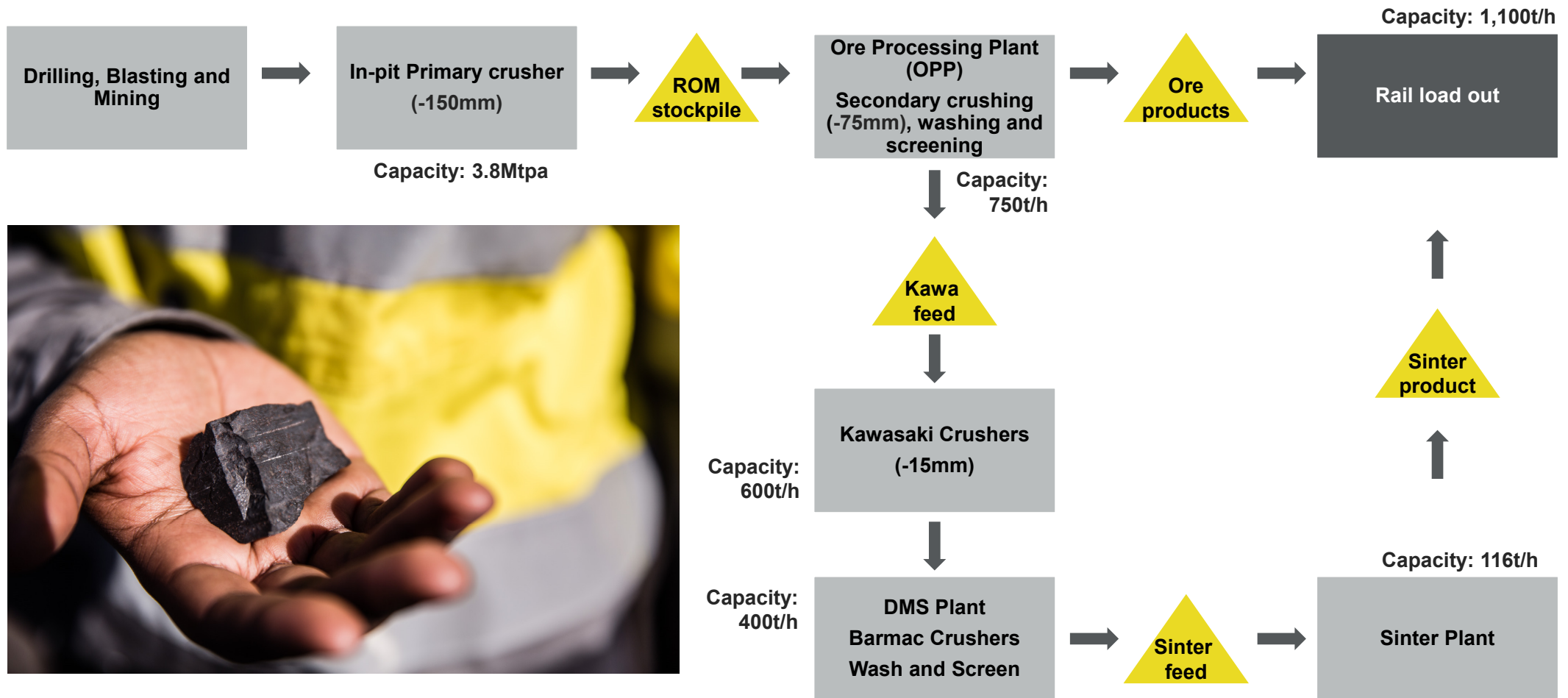
- One of the largest manganese mines in South Africa
- Large resource base with medium-grade (37% Mn) ore product
- Conventional drill and blast open-pit mine
- Current mining activities are focused on the Central Pit
- Mining direction is towards the North
- Relatively stable strip ratio and product grade expected
- Flexibility to change production to match market demand and optimise value



## Illustration of overburden and bench-design



# MAMATWAN PROCESS FLOW

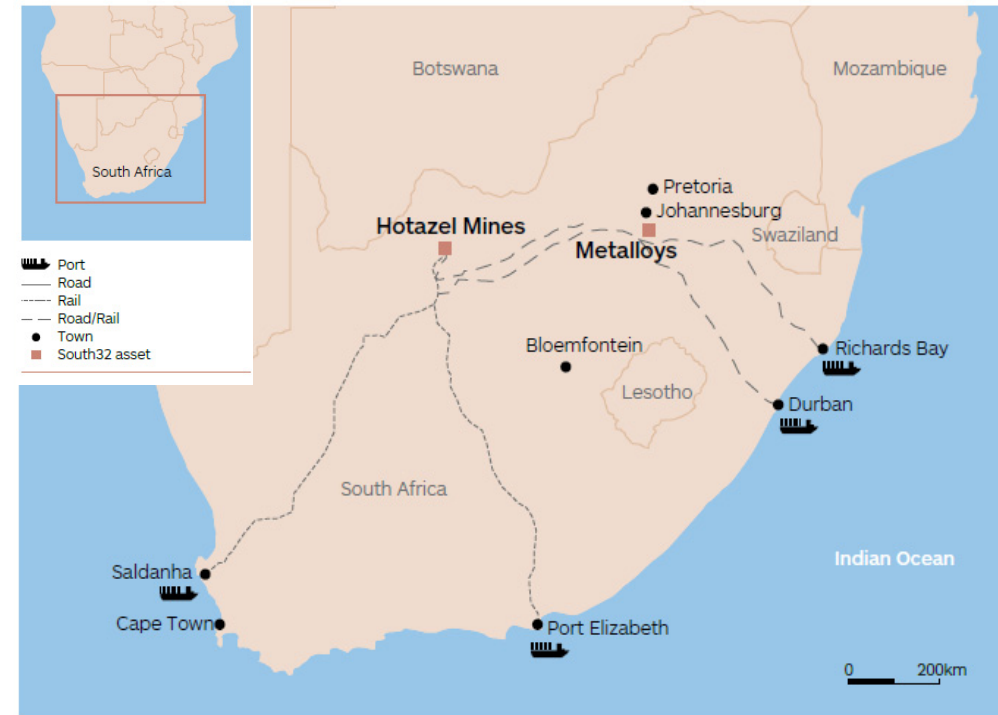




# SOUTH AFRICA MANGANESE LOGISTICS



- ~85% of current HMM ore production is exported; the balance is converted to ferromanganese alloy at Metalloys
- Transport and logistics costs are approximately 40% of the costs to export manganese ore
- Transnet allocated MECA2 export rail capacity of 2.6Mtpa
- Harmonised rail tariffs apply to MECA2 routes for all producers:
  - Port Elizabeth (1,100km)
  - Saldanha Multi-Purpose Terminal (900km)
- Additional opportunistic capacity available on other rail and road routes (e.g. Durban)
- Majority of exports are shipped to Asia and Europe



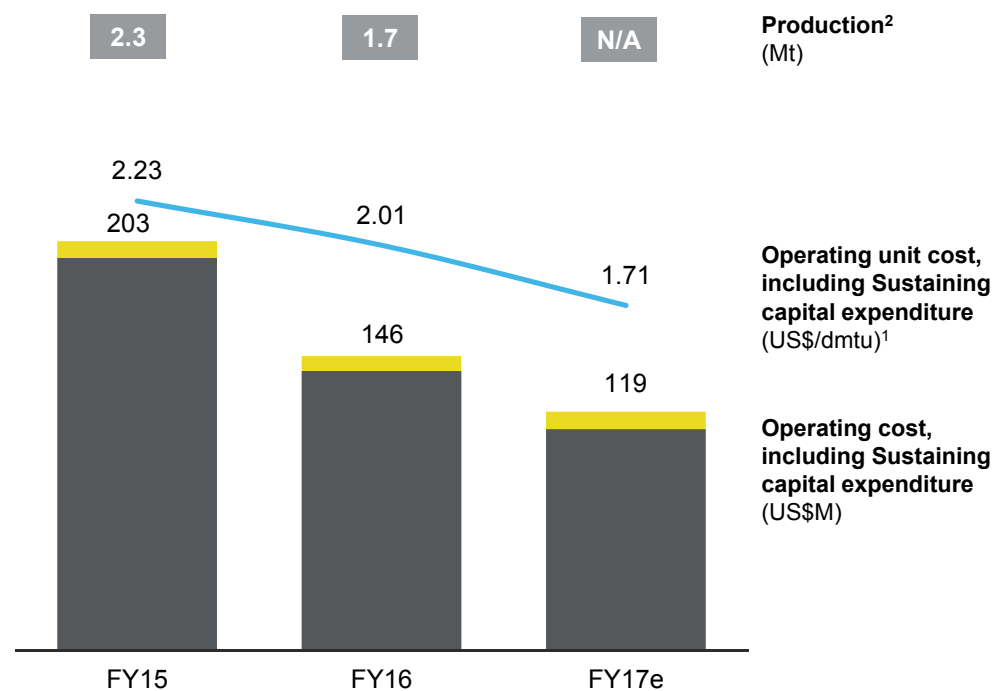
Note:

1. MECA2 refers to the second Manganese Export Capacity Allocation process (MECA) which will be in place until the development of the Coega export facility. At that time a third allocation process will be run, MECA3.

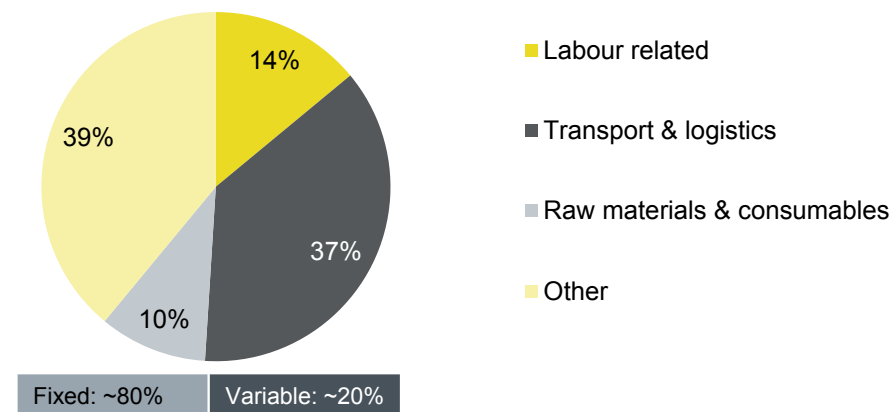
# KEY METRICS - HMM



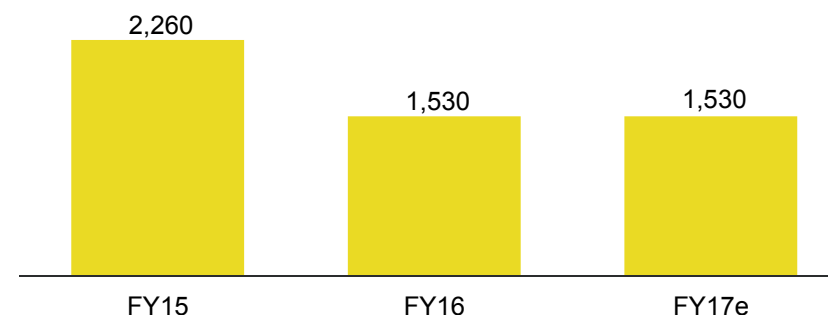
## Operating cost, including Sustaining capital expenditure<sup>1</sup>



## FY16 Operating cost, excluding Sustaining capital



## Employee and contractor headcount<sup>3</sup>



### Notes:

- Operating unit cost targets, including Sustaining capital expenditure, and Sustaining capital expenditure guidance for FY17e, include royalties and the influence of exchange rate assumptions, and are predicated on: a manganese ore price of US\$3.23/dmtu for 44% manganese product; and a USD:ZAR exchange rate of 16.57; all of which reflect forward markets as at May 2016 or our internal expectations. All years are on an FOB basis and the target for South Africa Manganese reflects the expected June 2017 half year run-rate as activity has been reprioritised following a fatality at the Wessels underground mine in June 2016.
- South32 share. FY17e guidance subject to market demand.
- Compares end of period average contractors and employees for respective financial years (FY15, FY16 and FY17e).



