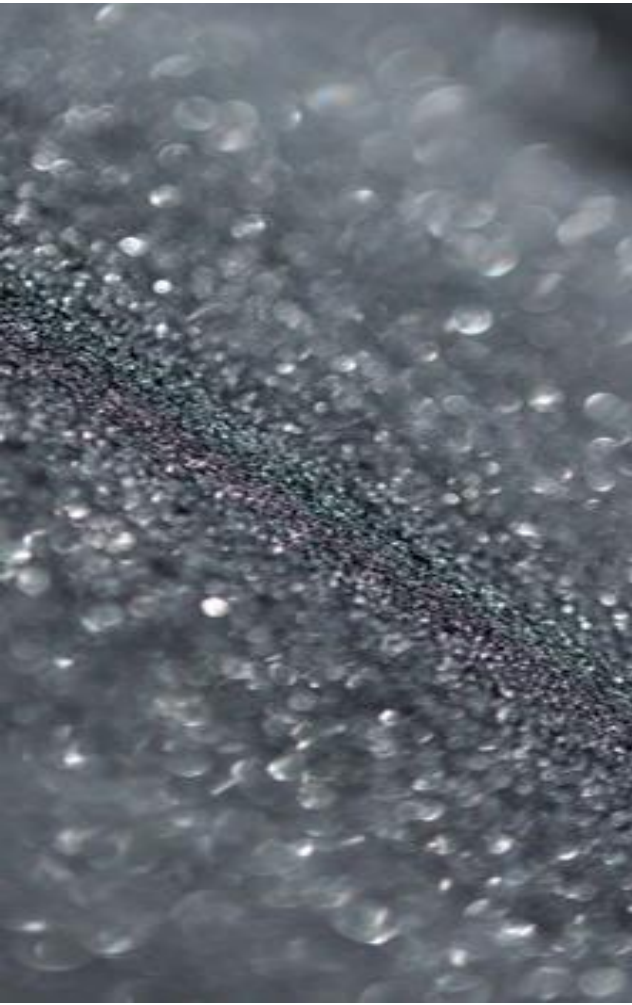


# tharisa

## ANNUAL RESULTS

for the year ended 30 September 2017



# DISCLAIMER

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*These Presentation Materials are for information purposes only and must not be used or relied upon for the purpose of making any investment decision or engaging in any investment activity. Whilst the information contained herein has been prepared in good faith, neither Tharisa plc (the “Company”), its subsidiaries (together, the “Group”) nor any of the Group’s directors, officers, employees, agents or advisers makes any representation or warranty in respect of the fairness, accuracy or completeness of the information or opinions contained in this presentation and no responsibility or liability will be accepted in connection with the same. The information contained herein is provided as at the date of this presentation and is subject to updating, completion, revision, verification and further amendment without notice.*

*These Presentation Materials contain forward-looking statements in relation to the Group. By its very nature, such forward-looking information requires the Company to make assumptions that may not materialise or that may not be accurate. Such forward-looking statements involve known and unknown risks, uncertainties and other important factors beyond the control of the Company that could cause the actual performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Nothing in this presentation should be construed as a profit forecast. Past share performance cannot be relied on as a guide to future performance.*

## REEF MINED

↑3.9%

**5.0 Mt**

(2016: 4.8 Mt)

## PGM PRODUCTION

↑8.3%

**143.6 koz**

(2016: 132.6 koz)

## CHROME CONCENTRATE PRODUCTION

↑7.0%

**1.3 Mt**

(2016: 1.2 Mt)

## SPECIALTY GRADE CHROME PRODUCTION

↑19.9%

**323.1 kt**

(2016: 269.4 kt)

## REVENUE

↑59.1%

**US\$349.4m**

(2016: US\$219.6m)

## EBITDA

↑168.7%

**US\$115.6m**

(2016: US\$43.0m)

## HEPS

↑266.7%

**US\$ 22 cents**

(2016: US\$ 6 cent)

## PROPOSED DIVIDEND

↑400.0%

**US\$ 5 cents**

(2016: US\$ 1 cent)

### HEALTH AND SAFETY

- Two fatality free years
- LTIFR 0.07 per 200 000 hours worked
- Three safety awards: Best Safety Performance and Best Improved Performance awards at Mine Safe 2017, and an award from the Mine Health and Safety Council for 2 000 fatality free production shifts



LTIFR

0.07

(FY2016: 0.36)

### LABOUR RELATIONS

- No labour disruptions during the year
- Transferred ~900 employees from previous mining contractor post the financial year end
- Tharisa Minerals total staff compliment ~1 700 (including mining contractors)



### TRAINING AND DEVELOPMENT

- On mine training centre
- Learnerships, adult education and training
- Compliance to competency

BEST SAFETY PERFORMANCE  
BEST IMPROVED PERFORMANCE  
2 000 FATALITY FREE PRODUCTION  
SHIFTS



# SUSTAINABILITY

## ENVIRONMENT

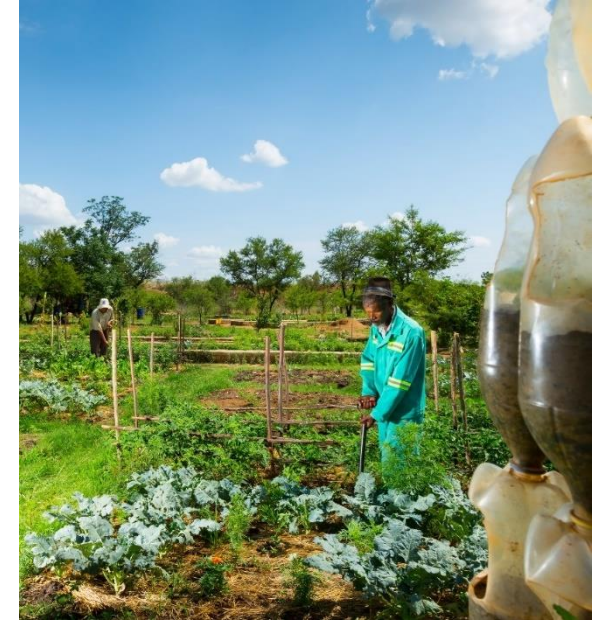
- Subscribe to the Equator Principles
- Environmental monitoring plan
- Environmental rehabilitation provision of US\$13.7 m

## THUSANANG WELLNESS PROGRAMME

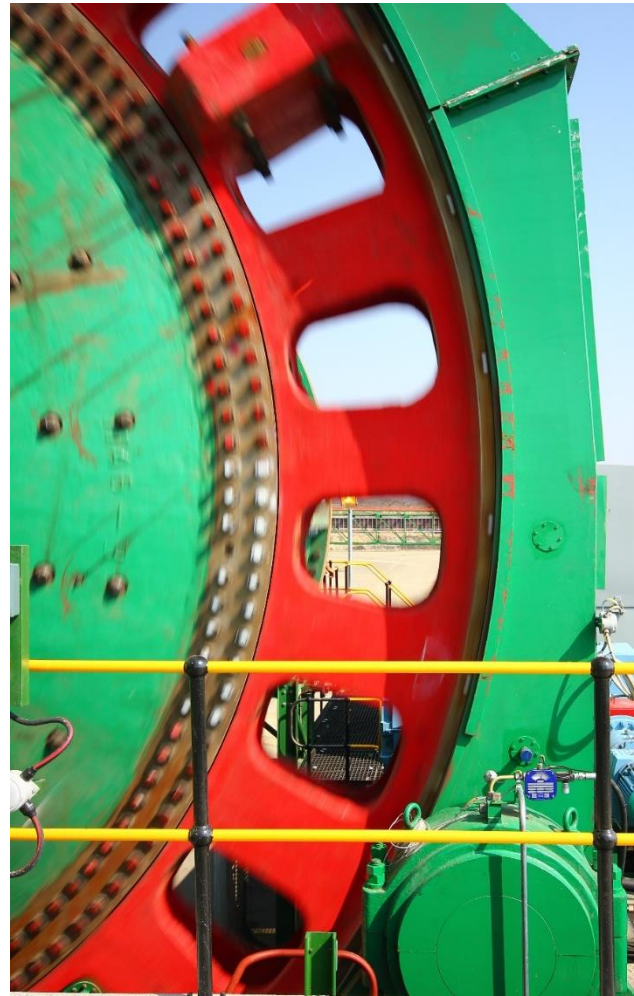
- TB programme
- HIV/AIDS programme
- Cancer awareness programme
- Wellness days
- Peer educator programme

## COMMUNITY PROJECTS

- Support of community SMME – Rocasize
  - Garden services
  - Brick making
  - Clothing and personal protective equipment
- Retief Primary school food forest



# PRODUCTION AND OPERATIONAL HIGHLIGHTS



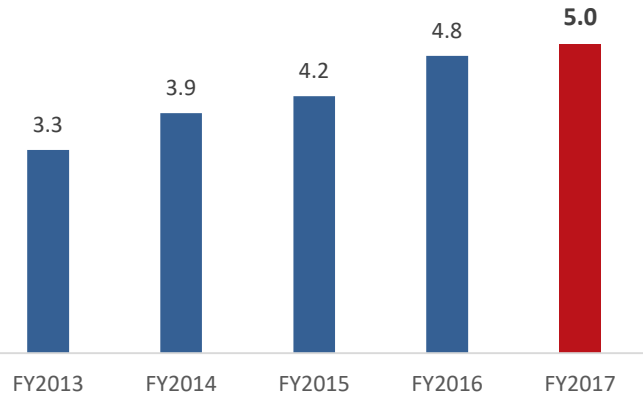
# HIGHLIGHTS

<b>PGM RECOVERY</b> <b>79.7%</b> (2016: 69.9%)	<b>↑14.0%</b>	<b>CHROME RECOVERY</b> <b>64.1%</b> (2016: 62.7%)	<b>↑2.2%</b>
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## REEF MINED

**↑3.9%**

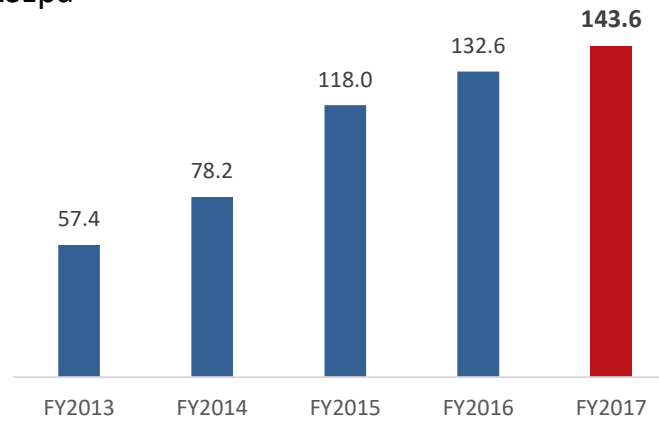
Mtpa



## PGM PRODUCTION

**↑8.3%**

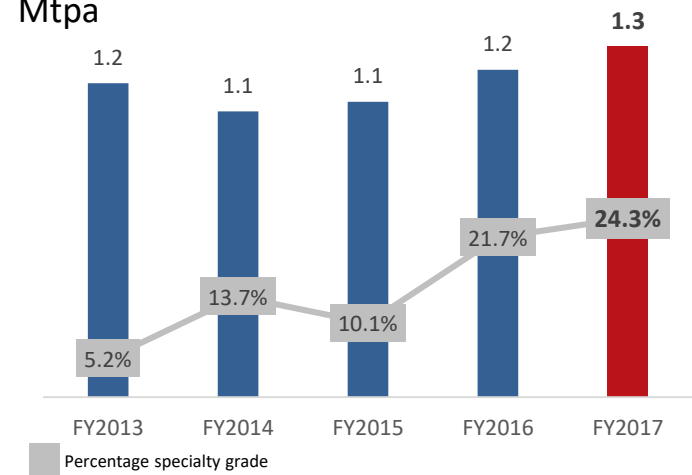
kozpa



## CHROME PRODUCTION

**↑7.0%**

Mtpa



**DELIVERING SUSTAINABLE VALUE**

KEY OPERATIONAL METRICS		FY2017	FY2016	Change
Reef mined	kt	5 025.1	4 837.2	3.9%
Stripping ratio	m <sup>3</sup> :m <sup>3</sup>	7.5	7.3	
PGM rougher feed grade	g/t	1.56	1.65	(5.5%)
Chrome grade	%	17.8	18.0	(1.1%)
ROM processed	kt	4 916.2	4 656.3	5.6%
PGM recovery	%	79.7	69.9	14.0%
PGM in concentrate produced	koz	143.6	132.6	8.3%
Chrome recovery	%	64.1	62.7	2.2%
Chrome concentrate produced	kt	1 331.2	1 243.7	7.0%
PGM basket price	US\$/oz	786	736	6.8%
Chrome concentrate price (42% CIF China)	US\$/t	200	120	66.7%
Average exchange rate	ZAR:US\$	13.4	14.8	9.5%





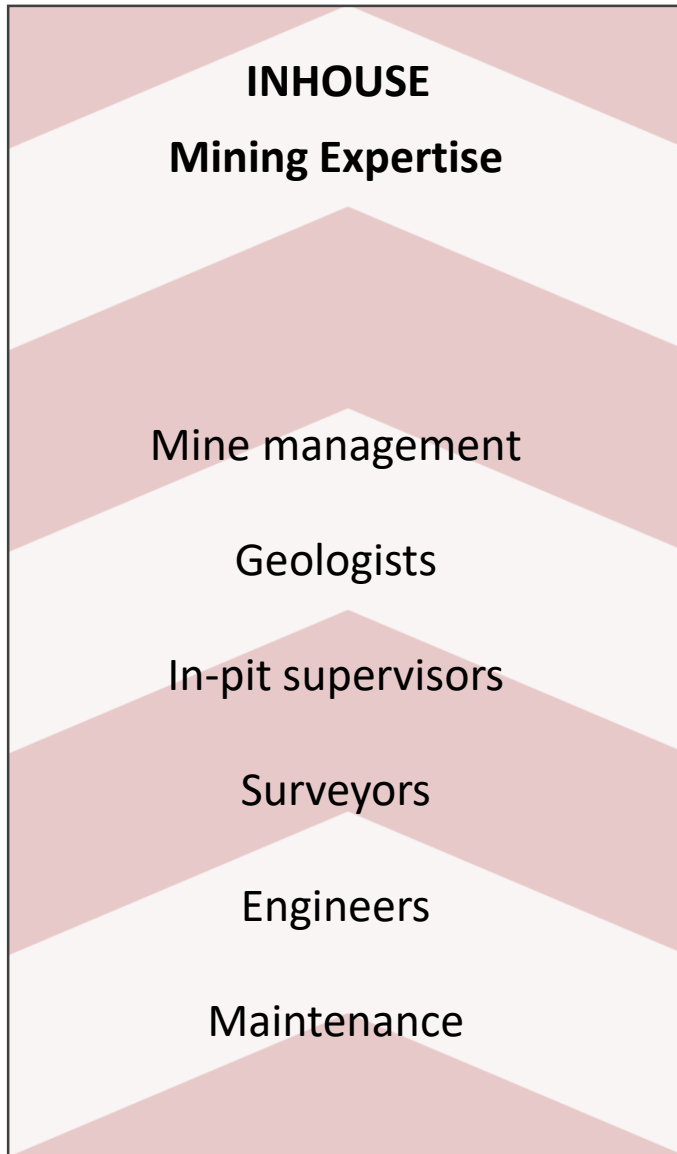
# STRATEGY IMPLEMENTATION



# OWNER MINING TRANSITION

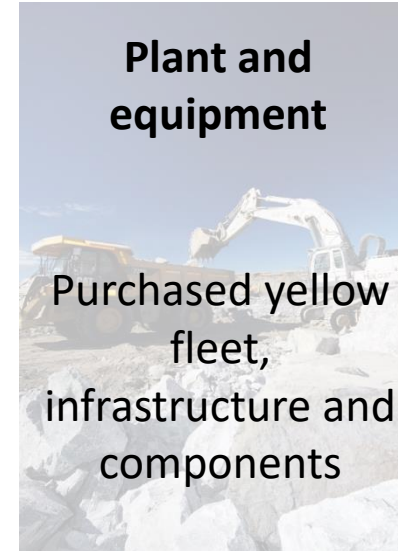
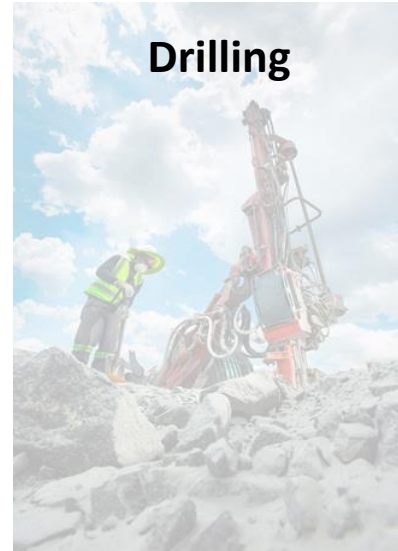
ESTIMATED FLEET  
REPLACEMENT VALUE  
~US\$145.0 m

ESTIMATED LIFE OF NEW  
FLEET  
~8 years



## INSOURCING

effective 1 October 2017



### Optimised primary mining fleet

- 19 drill rigs
- 11 excavators
- 46 trucks
- Capable of moving 17 Mm<sup>3</sup> per annum
- ~85 support vehicles

### Benefits

- Safety culture alignment
- Greater control over stripping rates
- Quality and grade control
- Unit cost reduction through efficiency
- Preventative maintenance

*Blasting is outsourced*

## IMPROVEMENTS

- Compliance to mine plan
- During the transition to owner mining – increased management and oversight resulted in availabilities and utilisations improving
- Focus on:
  - Improving availability and utilisation
  - Drill efficiencies and effectiveness
  - Fragmentation

## INTEGRATION

- Implemented asset management and maintenance tool for the mining fleet and integrated into the Tharisa ERP
- Fully integrated with Tharisa's SHE and HR systems with compliance reporting
- Commitment to technical competence and culture of continuous improvement and innovation

# VALUE ADD INITIATIVES

## SUPPLYING TISCO JV

- One of the largest stainless steel producers
- Five year strategic cooperation agreement
- Minimum of 240 ktpa chrome concentrate at market prices
- Represents ~25% of Tharisa's metallurgical grade chrome concentrate
- Effective September 2017



## THIRD PARTY CHROME

- Arxo Metals entered into an agreement with Western Platinum
- Operates the K3 UG2 plant and markets and sells UG2 chrome produced
- Approximately 200 ktpa of chrome concentrates
- September production of 20 kt

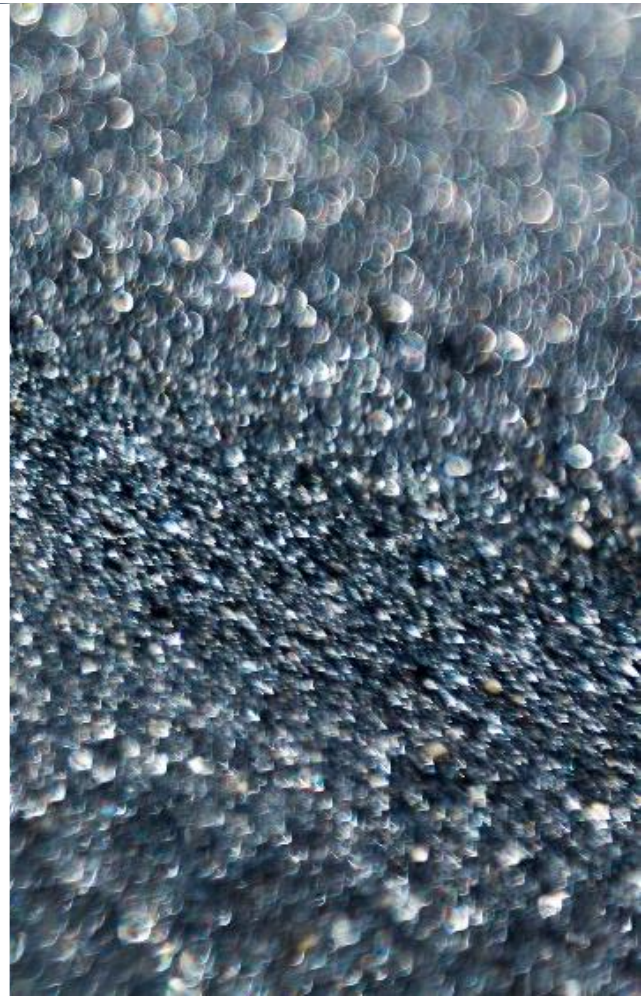


## PGM RICH ALLOY

- Commissioning of 1 MW DC furnace to produce PGM rich alloy on a pilot scale
- Further beneficiation capability
- On sale and further beneficiation of PGM rich alloy with Lonmin under PGM research and development cooperation agreement



# COMMODITY MARKETS

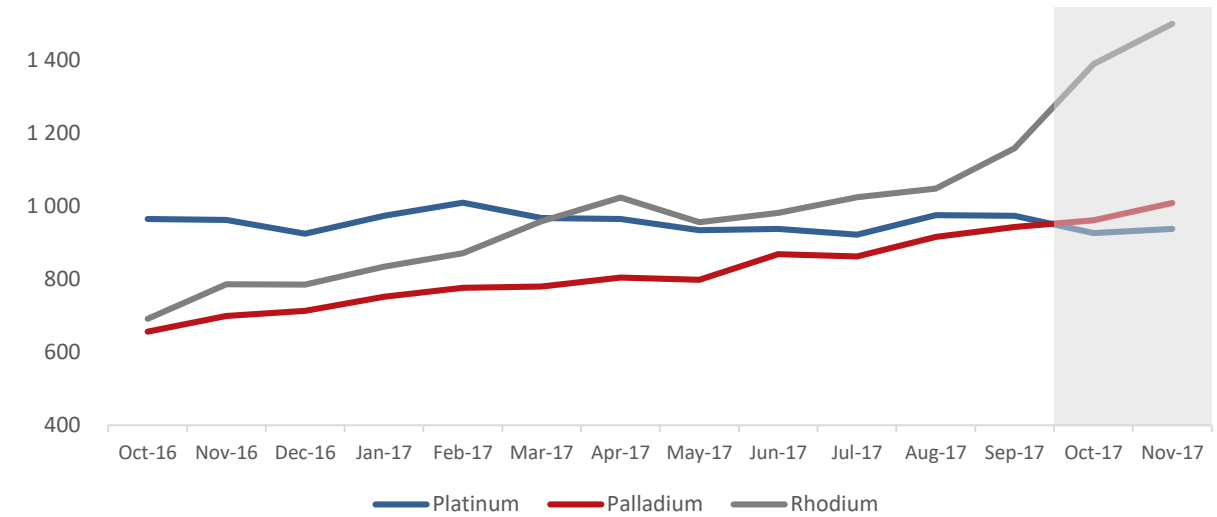


# PGM MARKET

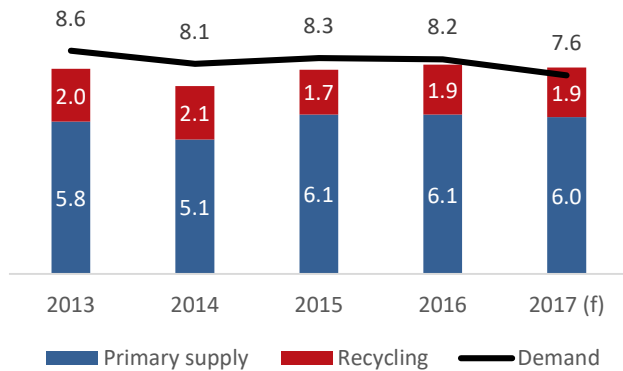
## PLATINUM DEMAND AND SUPPLY

- Demand driven by the auto catalyst, jewellery, industrial and investment sectors
- Both primary and secondary sources of supply seen decreasing
- Primary supply weaker in 2017 due to suppressed average prices, with lower capital investment and cost increases
- In 2017 platinum market expected to be close to balance
- WPIC forecast deficit in 2018 of 250 koz

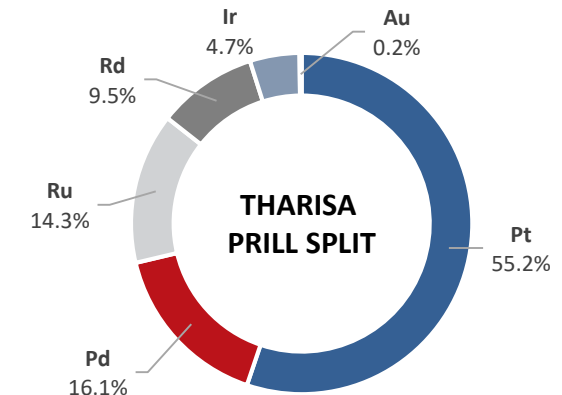
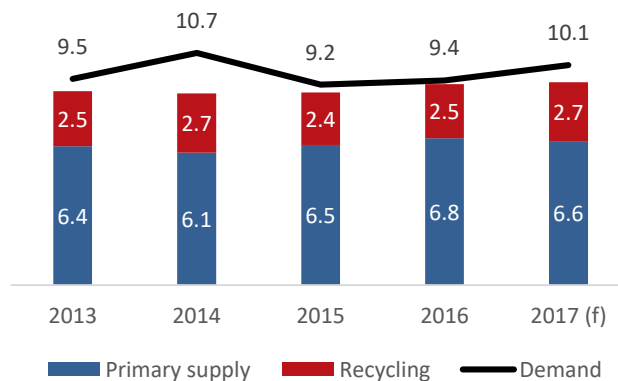
## PLATINUM, PALLADIUM AND RHODIUM MARKET PRICES [US\$/oz]



### PLATINUM DEMAND AND SUPPLY [Moz]



### PALLADIUM DEMAND AND SUPPLY [Moz]

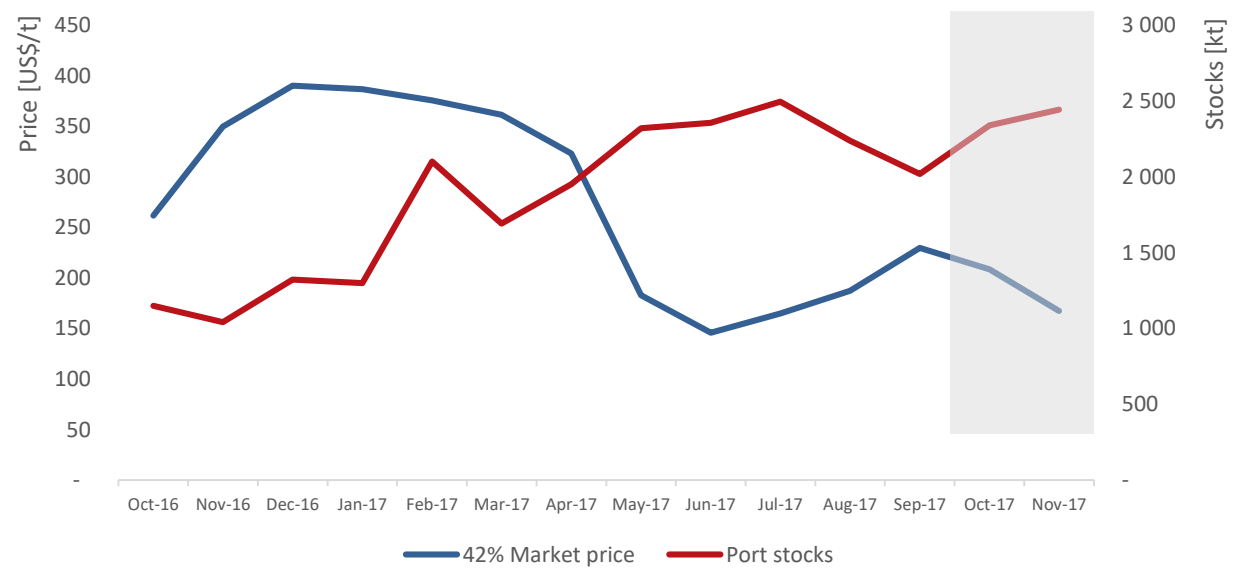


## DEMAND AND SUPPLY

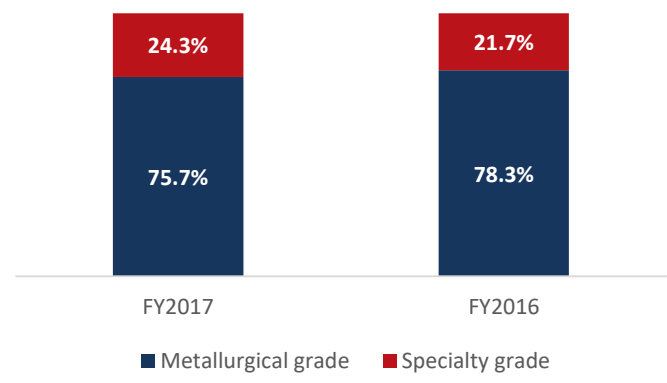
- Demand for metallurgical grade chrome concentrate is driven by its use in the manufacture of stainless steel, the production of which is estimated to grow at between 3% to 4% in 2017
- China is wholly dependent on imports of chrome ore
- Chrome prices were volatile during 2017, peaking at US\$390 and dipping to US\$130 then recovery above US\$200/t
- Now holding between US\$165/t to US\$170/t
- Chrome stocks at Chinese ports are at 2.4 Mt – just over two month’s worth of supply to the ferrochrome and stainless steel industry

CHEMICAL GRADE	FOUNDRY GRADE
Cr <sub>2</sub> O <sub>3</sub> – 45% to 47% SiO <sub>2</sub> - <1.2%	Cr <sub>2</sub> O <sub>3</sub> - >46% SiO <sub>2</sub> - <1.0%
Used to produce sodium dichromate used in leather tanning, pigments, plating	Used in moulds for metal castings and nozzle sands

## METALLURGICAL GRADE CHROME PRICE / PORT STOCK



### THARISA PRODUCT MIX



THARISA AVG MET PRICE FY2017  
**US\$200/t**

SPECIALTY CIF EQUIVALENT BASIS  
**+US\$50/t premium**

# FINANCIAL RESULTS





# HIGHLIGHTS

AVERAGE PGM PRICE

US\$786/oz

(2016: US\$736 /oz)

↑6.8%

42% CHROME PRICE (CIF CHINA)

US\$200/t

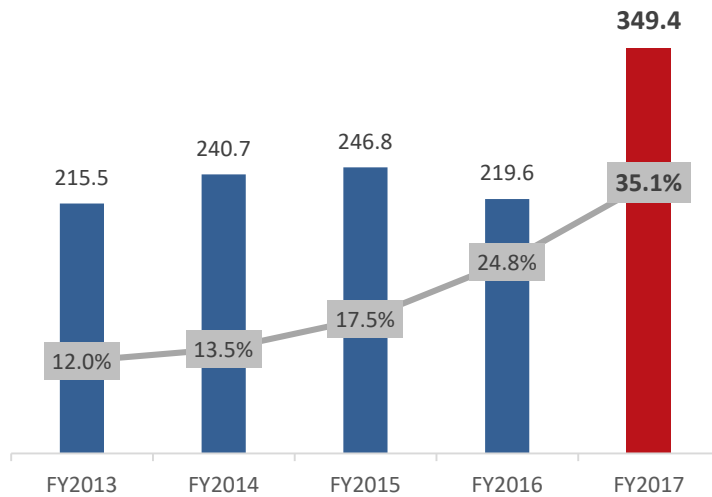
(2016: US\$120/t)

↑66.7%

## GROUP REVENUE

↑51.9%

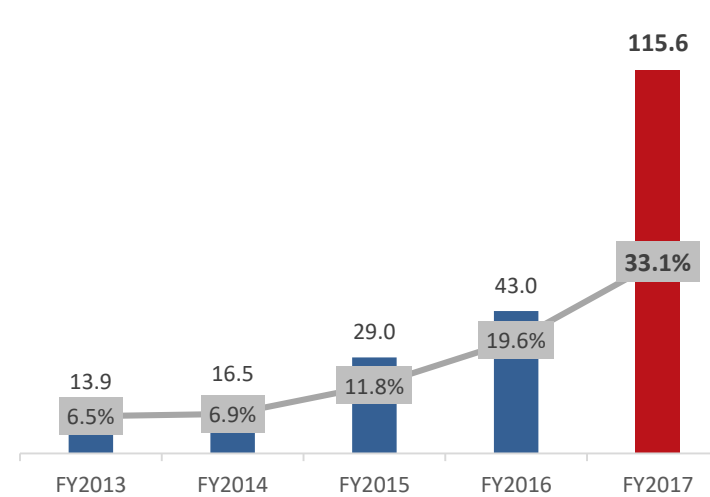
US\$ millions



## EBITDA

↑168.7%

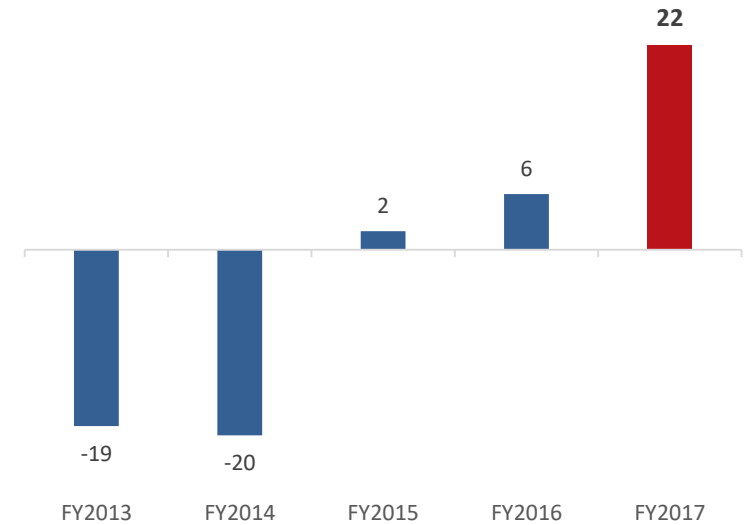
US\$ millions



## HEPS

↑266.7%

US\$ cents



Gross profit margin

EBITDA margin

# SUMMARY OF RESULTS

PROPOSED DIVIDEND  
US\$ 5 cents per share

EXCHANGE RATE  
ZAR:US\$ STRENGTHENED  
9.5%

## INCOME STATEMENT HIGHLIGHTS

US\$ millions	FY2017	FY2016	Change
Revenue	349.4	219.6	59.1%
Gross profit	122.7	54.5	125.2%
Gross profit margin	35.1%	24.8%	41.5%
Results from operating activities	95.9	32.1	198.4%
EBITDA	115.6	43.0	168.7%
EBITDA margin	33.1%	19.6%	68.9%
Net finance costs	4.9	10.2	(51.6%)
Profit before tax	91.0	22.0	314.2%
Tax	23.3	6.2	277.8%
Profit for the year	67.7	15.8	328.5%
Effective tax rate	25.6%	28.1%	(8.9%)
Headline earnings per share (US\$ cents)	22	6	266.7%
Proposed dividend per share (US\$ cents)	5	1	400.0%
Dividend yield	3.7%		

## SEGMENTAL ANALYSIS

Segmental analysis	FY2017			FY2016		
	PGMs	Chrome	Agency	PGMs	Chrome	Agency
Gross profit	36.2	86.2	0.3	24.2	30.3	-
Gross profit margin	39.8%	34.1%	5.4%	29.7%	21.9%	-
Sales volume	143.5 koz	1.3 Mt	-	132.9 koz	1.2 Mt	-
Shared cost allocation	35.0%	65.0%	-	50.0%	50.0%	-
Average transport cost per tonne of chrome concentrate (CIF main ports China)	-	52.0	-	-	42.0	-

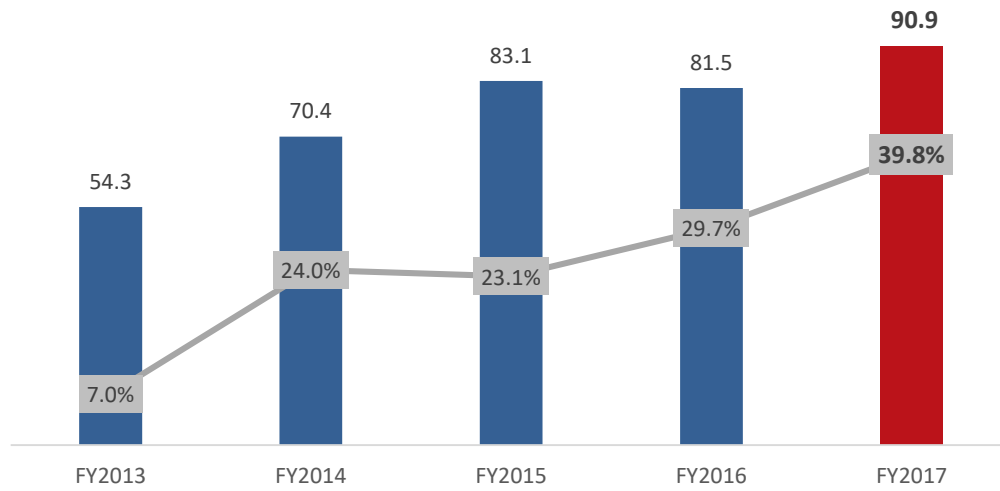
# SEGMENTAL ANALYSIS

**PGM SHARED COSTS**  
**35.0%**  
 (2016: 50.0%)

**CHROME SHARED COSTS**  
**65.0%**  
 (2016: 50.0%)

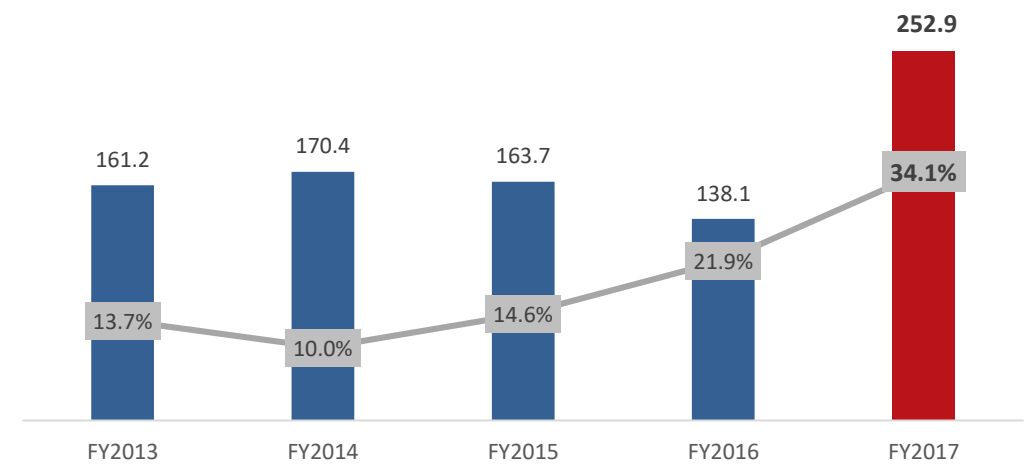
## PGM REVENUE AND GROSS PROFIT MARGIN

US\$ millions



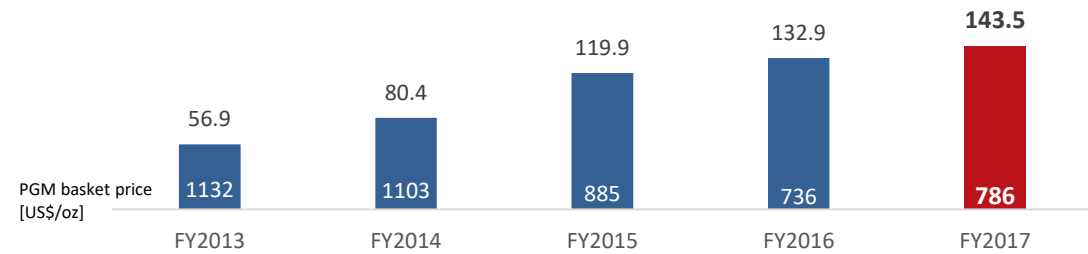
## CHROME REVENUE AND GROSS PROFIT MARGIN

US\$ millions



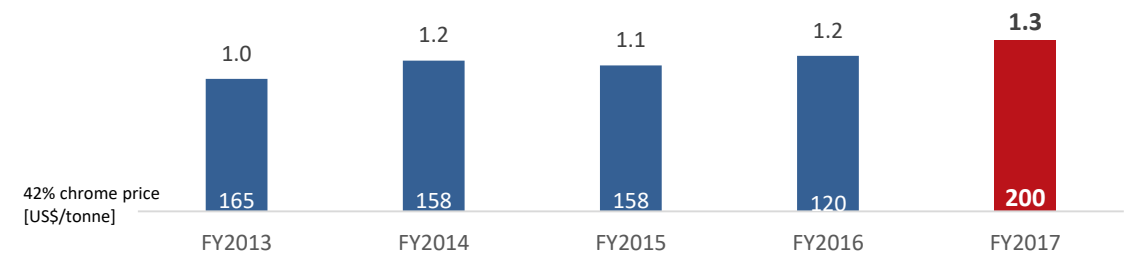
## PGM SALES VOLUME

koz



## CHROME CONCENTRATE SALES VOLUME

Mt

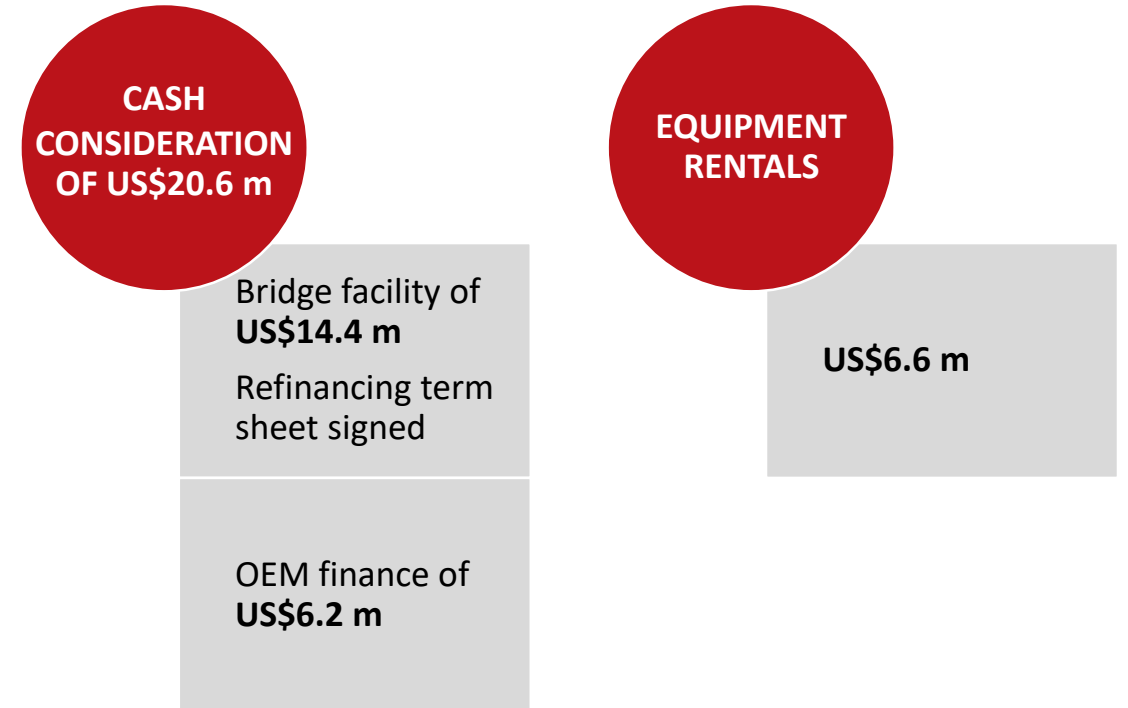


# BALANCE SHEET

## FUNDING

US\$ millions	FY2017	<i>Pro forma</i> FY2017	FY2016
Total interest bearing debt	54.2	74.8	67.1
Long term	4.4	19.0	24.0
Short term*	49.8	55.8	43.1
Debt service reserve account	4.5	4.5	9.8
Adjusted interest bearing debt	49.6	70.2	57.3
Adjusted debt to total equity ratio	18.2%	25.8%	28.4%
Cash and cash equivalents	49.7	49.7	15.8
Net debt	(0.1)	20.6	41.4
Net debt to total equity ratio	0.0%	7.6%	20.5%
Net current assets	63.3	57.1	0.5
Return on equity	19.4%	19.4%	5.8%

## OWNER MINING FUNDING



\*Includes certain amounts in accounts payable relating mainly to accrued dividends payable by a subsidiary

# CASH FLOW

FREE CASH FLOW PER SHARE  
**US\$ 18.2 cents**  
 (2016:US\$ 0.1 cent)

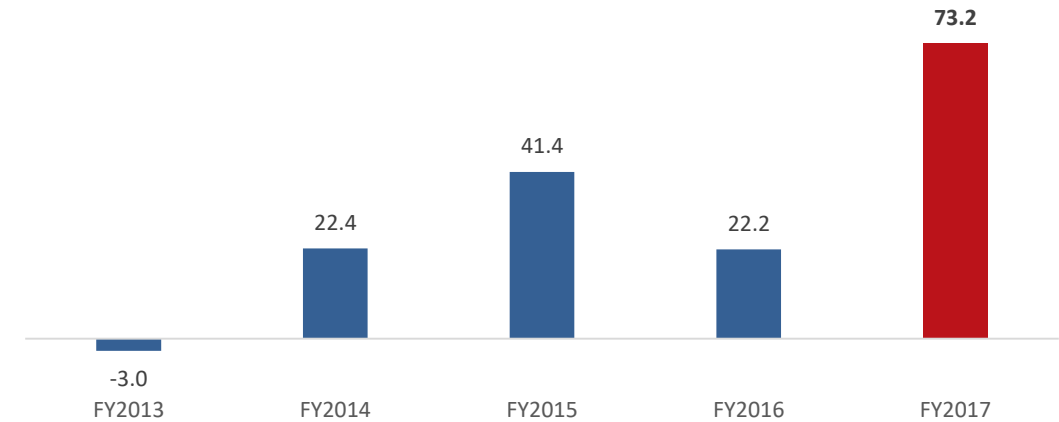
INVESTMENT IN MINING FLEET  
**US\$7.1 m**  
 (2016:US\$0.3 m)

## SUMMARISED CASH FLOW STATEMENT

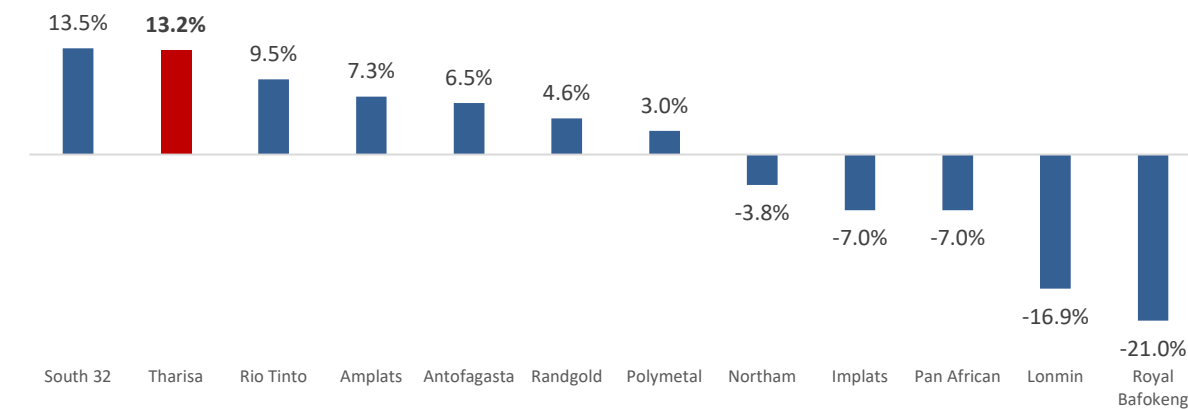
US\$ millions	FY2017	FY2016
Cash flow from operating activities	<b>73.2</b>	22.2
Investing cash flows	<b>(26.6)</b>	(12.0)
Financing cash flows	<b>(12.5)</b>	(18.2)
Net increase / (decrease) in cash	<b>34.1</b>	(8.0)
Cash at the end of the period	<b>49.7</b>	15.8
Depreciation	<b>16.9</b>	10.3
Free cash flow per share (US\$ cents)	<b>18.2</b>	0.1
Price/free cash flow per share	<b>7.9</b>	24.5

## OPERATIONALLY CASH GENERATIVE

US\$ millions



## FREE CASH FLOW YIELD (29 NOVEMBER 2017)



# COST ANALYSIS

**STRIPPING RATIO**  
**7.5 m<sup>3</sup>:m<sup>3</sup>**  
 (2016: 7.3 m<sup>3</sup>:m<sup>3</sup>)

**AVERAGE EXCHANGE RATE**  
**ZAR:US\$13.4**  
 (2016:ZAR:US\$14.8)

## UNIT COSTS

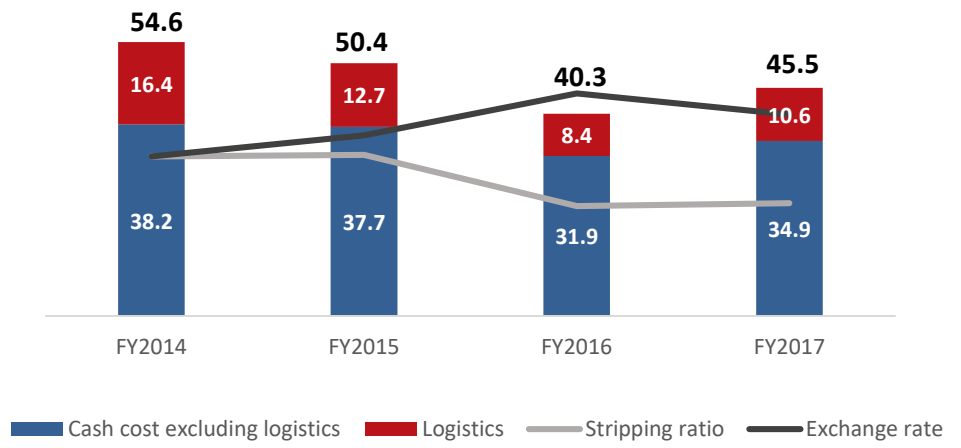
By product basis		FY2017	FY2016
All in cost per Pt ounce sold	US\$/oz	<b>(296.1)</b>	437.8
All in cost per 42% chrome tonne sold	US\$/t	<b>114.0</b>	85.2

*All in cost includes operating costs, administration costs and capital*

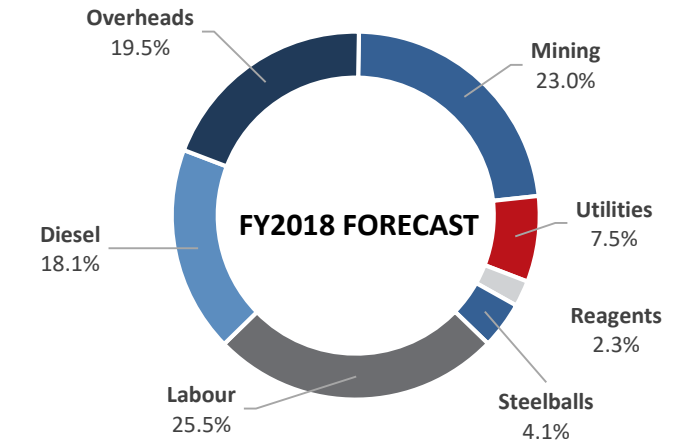
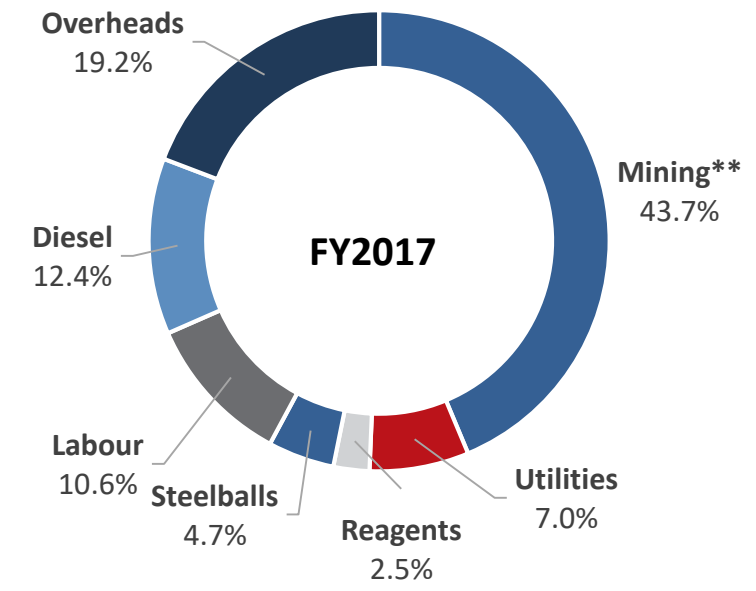
Mining costs		FY2017	FY2017 at LOM stripping*
Mining cost per reef tonne	US\$/t	<b>18.8</b>	22.2
Mining cost per cube	US\$/m <sup>3</sup>	<b>7.8</b>	8.2

## CONSOLIDATED CASH COST PER TONNE MILLED

US\$/tonne milled



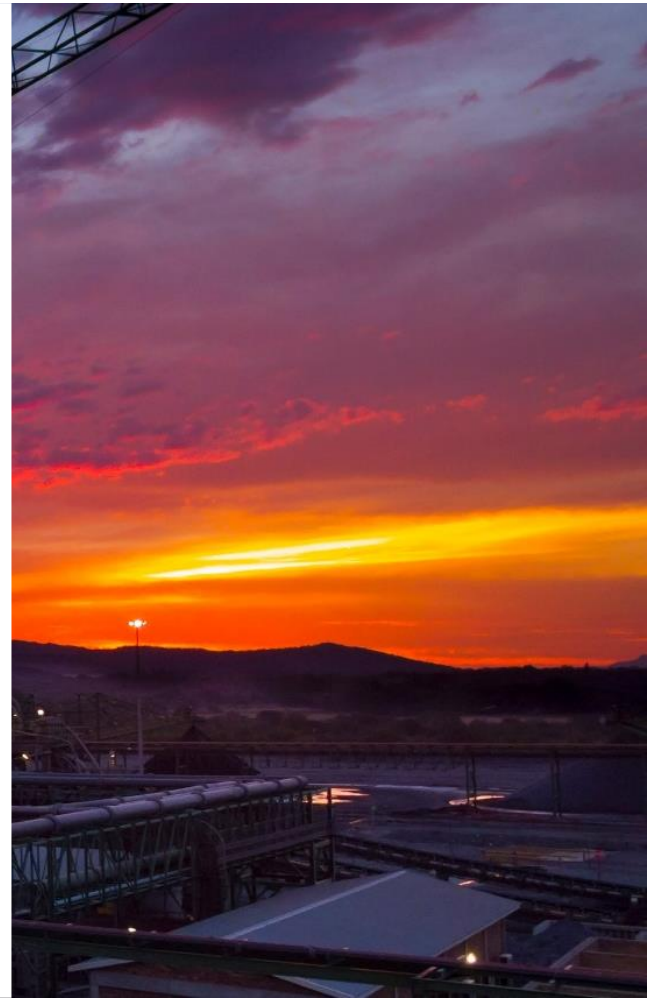
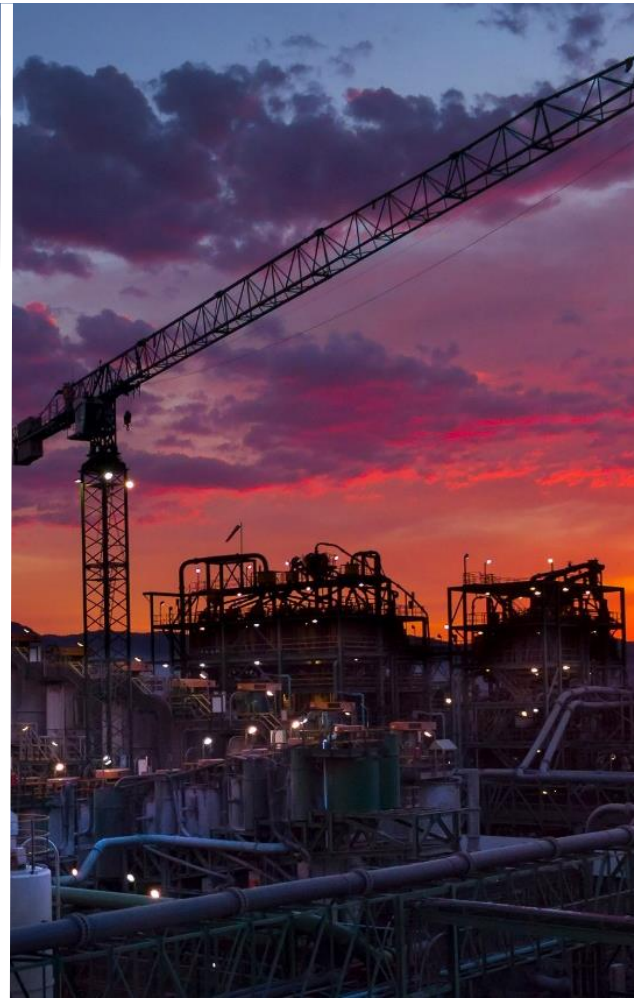
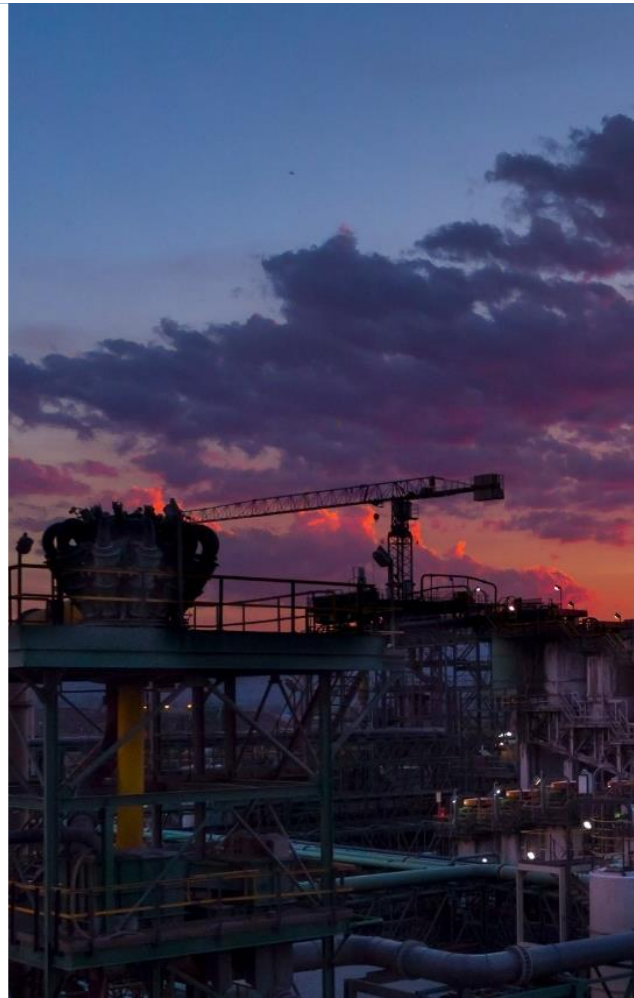
## OPERATING COST ANALYSIS – EX WORKS



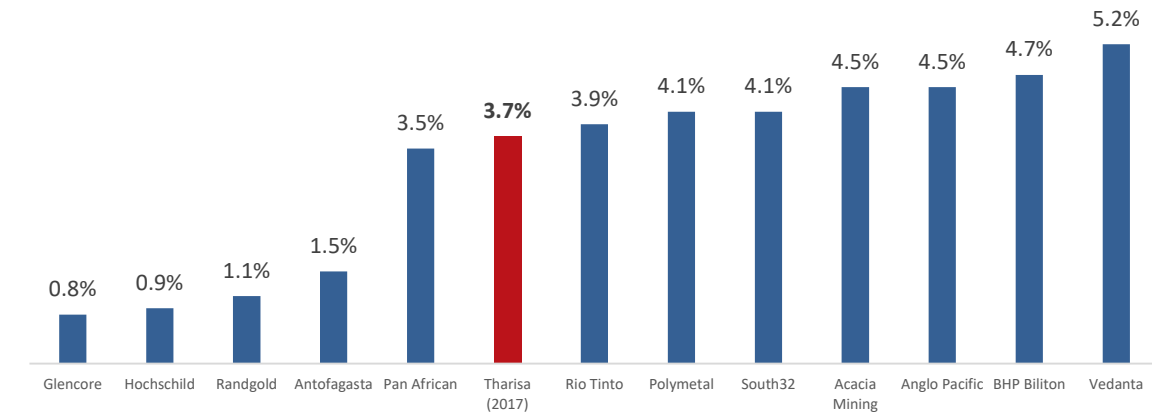
\*LOM stripping ratio of 9.7

\*\*Includes contractor mining labour

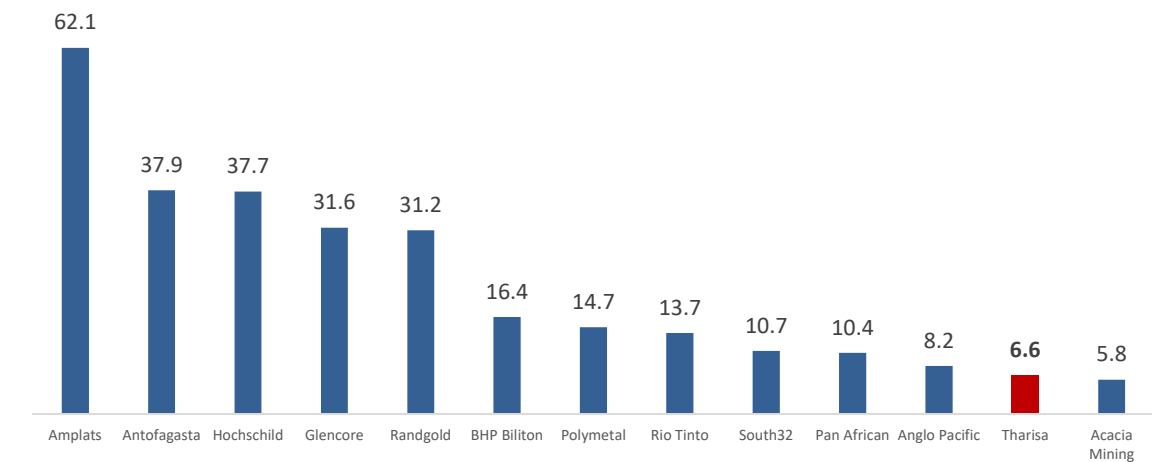
# INVESTMENT CASE AND OUTLOOK



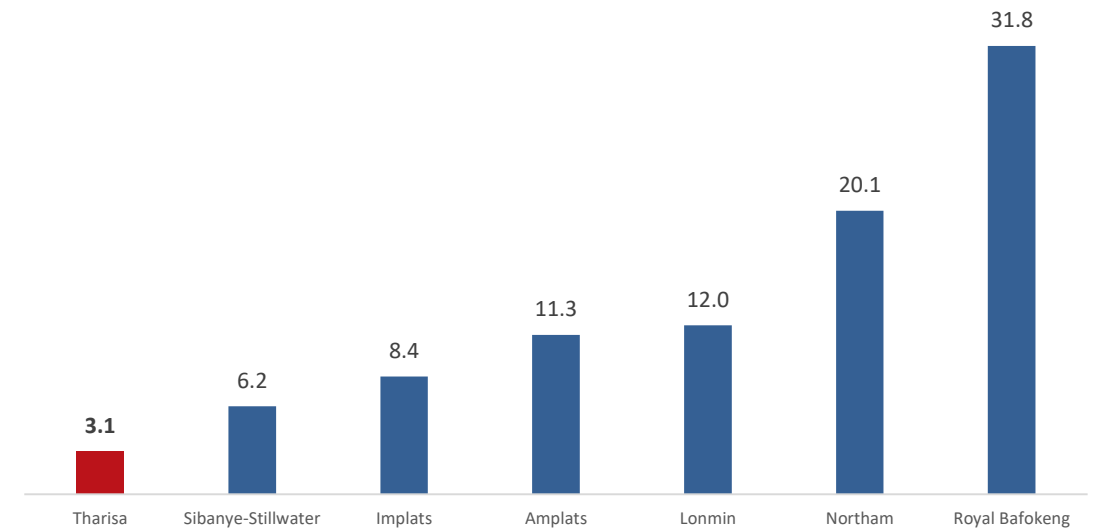
## DIVIDEND YIELD (2016A)



## PE RATIO (30 NOVEMBER 2017)



## EV/EBITDA



US\$ millions	Tharisa	Sibanye	Implats	Amplats	Lonmin	Northam	Royal Bafokeng
EV	352.5	4 459.9	2 277.6	7 394.3	147.7	1 876.5	731.6
EBITDA 2017E	115.6	716.7	272.7	654.6	12.3	93.4	23.0



# DELIVERING ON OUR STRATEGY

## LEADING NATURAL RESOURCES GROUP

Globally significant diversified low cost operations

## INNOVATION

Growth through innovative research and development

## OPTIMISATION INITIATIVES

Maximise value extraction

## LEVERAGING MARKETING AND LOGISTICS PLATFORM

Marketing, sales and logistics platform  
Expansion into multi-commodities  
Geographic diversity

## CAPITAL DISCIPLINE

Dividend policy of minimum 10% NPAT  
Capital allocation to low risk projects

**Record financial and operational year**

**Organic growth and R&D  
Vision 2020**

**Improved recoveries**

**Initiated third party agency and logistics**

**Proposed dividend of US\$ 5 cents per share  
Increased dividend policy to at least 15% of NPAT**

**FY2018 GUIDANCE: PGMS OF 150 kozpa & CHROME CONCENTRATES OF 1.4 Mtpa**

# VISION 2020

