

That's a profitable low cost co-producer – pgms and chrome June/July 2016







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Basis of preparation note: where figures are expressed in percent and a change is reflected, the change is expressed in percentage basis points.



## **CORPORATE OVERVIEW**

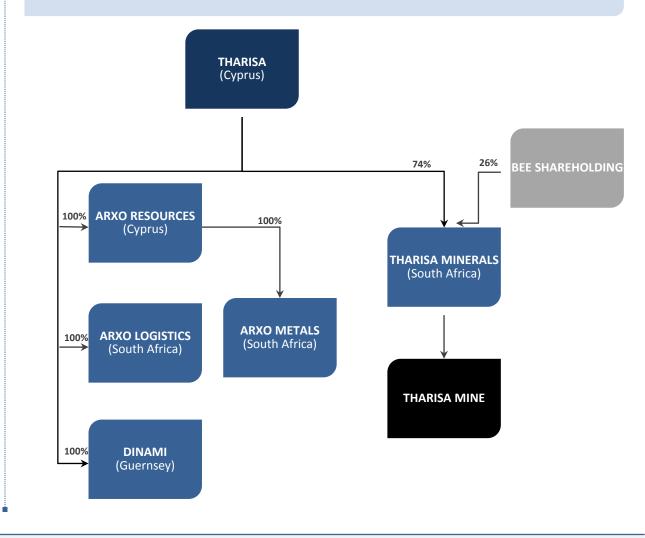
### **MARKET STATISTICS**

ONE YEAR INFORMATION (23 JUNE 2016)	JSE PRIMARY LISTING	LSE STANDARD LISTING MAIN BOARD
Short name	THA	THS
Sector	Mining	Mining
Price	ZAR11.50	GBP0.495
High	ZAR11.50	GBP0.515
Low	ZAR4.00	GBP0.350
Market capitalisation	ZAR2.9 billion	GBP126.7 million
One year return	69.1%	-
PE ratio	39.60	-
Average volume traded*	10 277	27 647
Free float	26.7%	

#### **ONE YEAR PERFORMANCE**



## **SUMMARISED CORPORATE STRUCTURE**





**THA:SJ** 

**THS:LN** 

Source: Bloomberg

<sup>\*</sup> Average volume traded over 30 days

## **MANAGEMENT TEAM**

#### **EXECUTIVE MANAGEMENT**



**Executive Chairman** 

Over 50 years of experience in mining company exploration, project management, financing and production (including PGM and gold mines)

 Established a number of mining companies including TransAfrika Resources, Keaton Energy, Kameni and Eland Platinum



CEO

- Over 15 years of experience in project management in the mining industry (including PGM and chrome)
- Held directorships in several mining companies
- Extensive trading experience within the Tharisa group, Keaton Energy and Chromex Mining



CFO

- Over 18 years of investment banking experience in corporate finance
- Extensive equity and debt capital raising experience with a focus in the latter years in the resources industry
- 6 years of financial management experience with PGM and chrome mining operations



Michelle Taylor

COO

- Over 8 years of mining management experience at the Tharisa Group
- Responsible for the day-to-day operations of the Tharisa Group
- Works closely with the Pouroulis family and is familiar with their operating and reporting procedures and management structure

#### **GROUP MANAGEMENT**



Operations Director: Tharisa Minerals

- Responsible for the mining and processing operations of the Tharisa Mine
- Over 15 years experience in the recovery of PGMs and chrome
- Held various positions in the technical field focusing on the recovery of PGMs and chrome, having worked on a number of chrome and PGM concentrator operations



Managing Director: Arxo Logistics

- Responsible for the overall management of the logistics and transport services provided by Arxo Logistics to the Tharisa group's operations
- **Over 30 years** experience in logistics



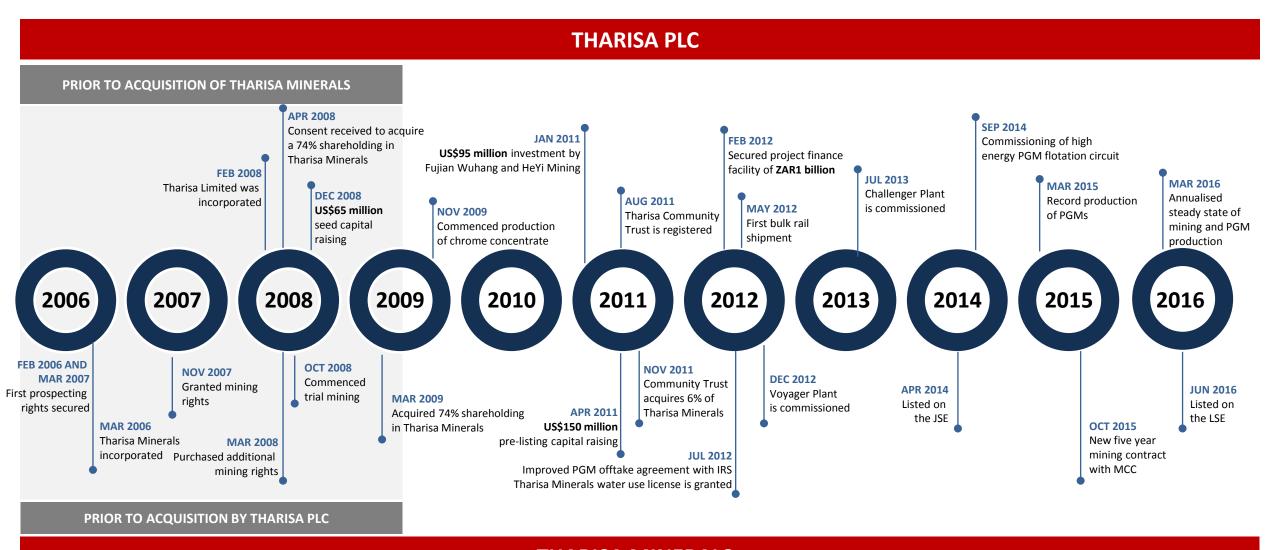
**Greg Taurog** 

Executive – Sales and Marketing

- Responsible for all marketing activities of the Tharisa Group
- Over 20 years experience in international trade, crossborder relations and South African sales
- Held various managerial positions and directorships with prominent companies in the mining industry since 1994



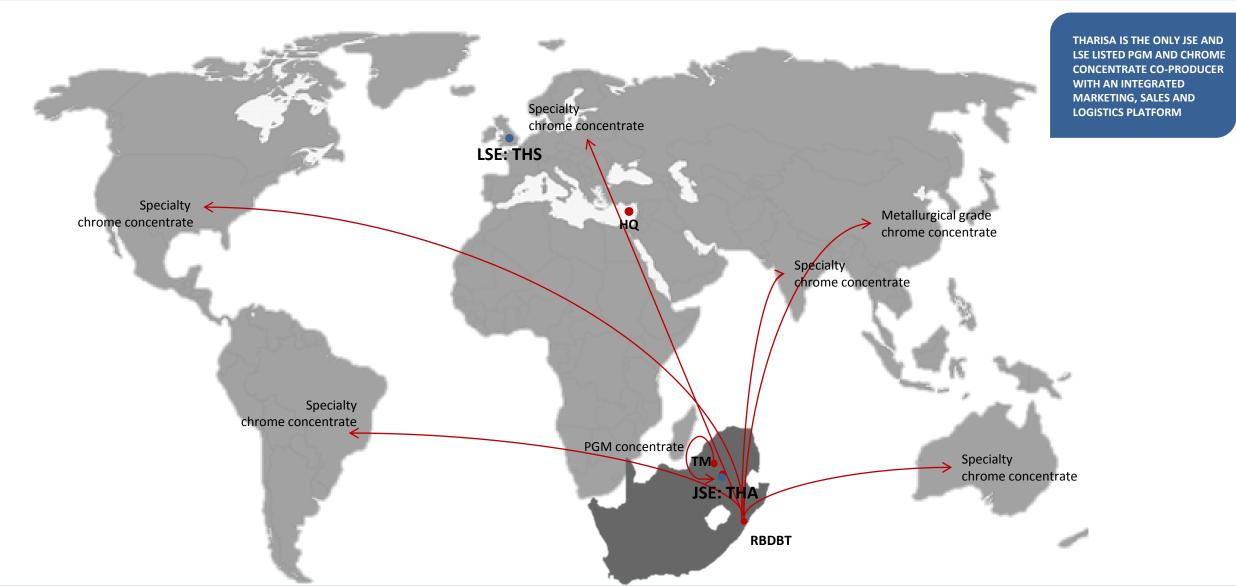
## **HISTORY AND MILESTONES**







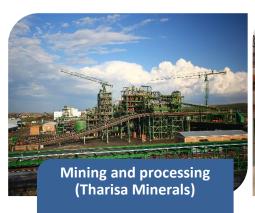
## **BUILDING A GLOBAL PRESENCE**





## **OUR VALUE CHAIN**

## THE FULL VALUE CHAIN IS CAPTURED THROUGH THE CO-EXTRACTION OF PGM AND CHROME AND IN-HOUSE MARKETING, SALES AND LOGISTICS





74%

- 829 Mt resource106 Mt reserve
  - 87 Mt open pit reserve
- 5.5 km mining strike length
- 400 ktpm nameplate capacity
  - Genesis Plant (100 ktpm)
  - Voyager Plant (300 ktpm)
- Production for H1 FY2016:
  - **60.0 koz** of PGMs
  - **604.4 kt** chrome concentrates



 Production of higher value foundry and chemical grade specialty chrome concentrates

Committed to research and development



 10.1% of China's chrome ore/concentrate imports and 14.2% of South Africa's chrome ore/concentrate exports for FY2015

100%

Global reach for specialty chrome concentrates



100%

- Road and rail transport capacity, warehousing facilities and port facilities sufficient for steady state production
- Transport of PGMs to Impala Refinery Services by road
- Shipment of chrome concentrate in bulk from Richards Bay Dry Bulk Terminal and containers from the Durban port
- Shipments for H1 FY2016:
  - 381.9 kt of chrome concentrates, mainly to China

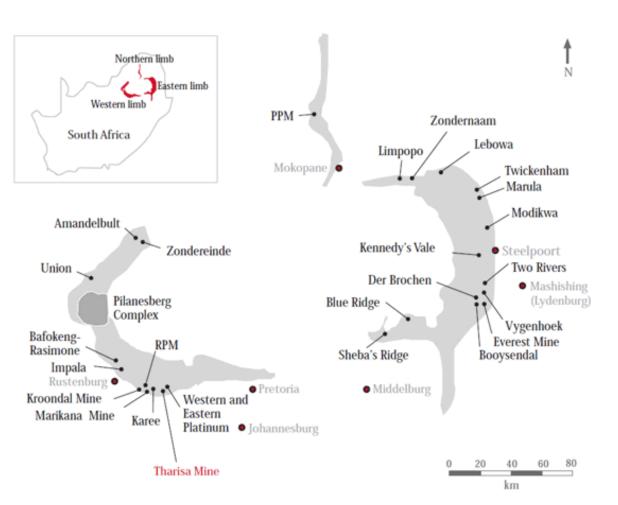


- PGM off-take agreement with Impala Refinery Services
- Agency agreement with Rand York for foundry and chemical grade chrome concentrates
- 50 ktpm chrome concentrate agency agreement with the Noble Group
- Relationships with a broad range of stainless steel producers, ferrochrome producers and global commodity traders

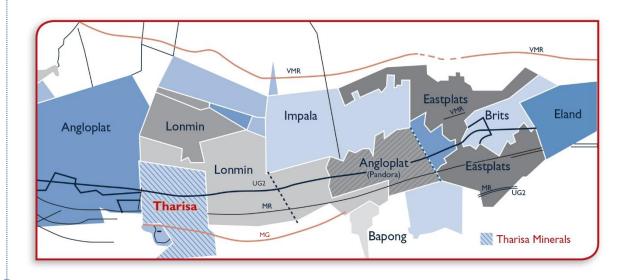


## **LOCATION OF THARISA MINE**

#### LOCATED IN THE MAIN PGM AND CHROME PRODUCING AREA IN SOUTH AFRICA

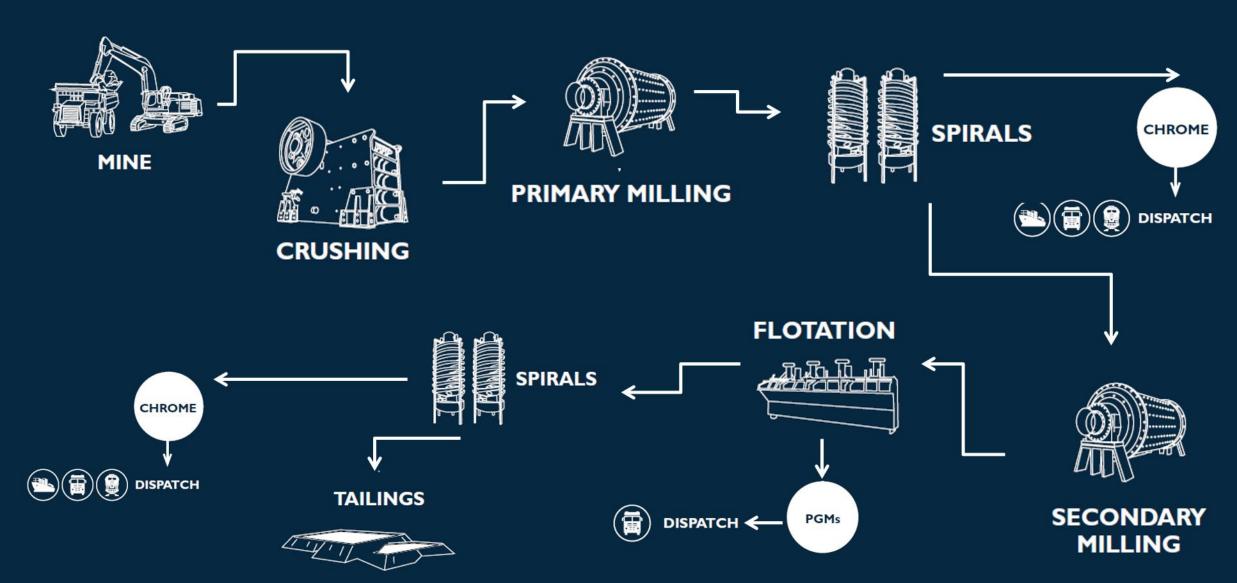


- Mining rights over 5 475 ha
- Adjacent to Anglo Platinum, Lonmin, Impala Platinum, Eastern Platinum
- Well serviced by road, rail, power and other services
- Neighbouring towns are Brits (45 km) and Rustenburg (30 km)





## **OUR INNOVATE APPROACH**





## **PGMS PRODUCTS AND END USES**

#### **PGM MARKETS**

Ru

13.9%

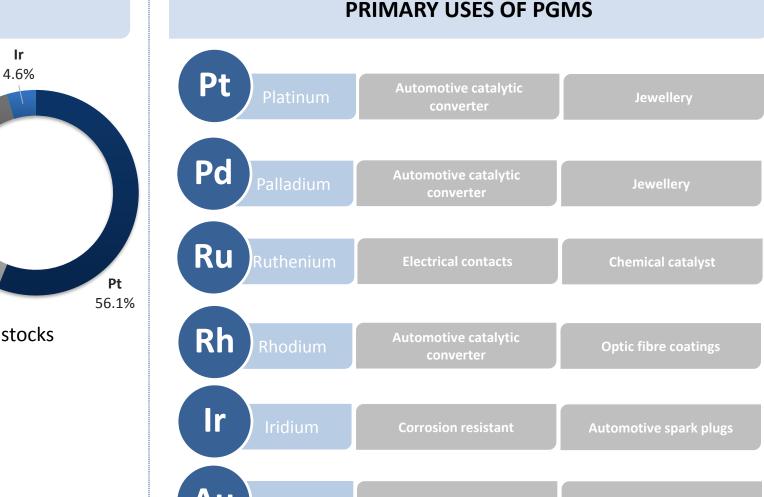
Au

0.2%

Rh

9.5%

- Largest deposits of PGMs are found in South Africa, Zimbabwe, Russia
- Bushveld Complex is the largest platinum resource in the world and accounts for 75% of annual global production
- Longer term PGM outlook remains robust as global emission standards continue to tighten while mine production remains constrained and above ground stocks continue to be drawn down
- Fuel cell applications remain potential wildcard



Jewellery



## CHROME PRODUCTS AND END USES

## **CHROME ORE/CONCENTRATE MARKETS**

**Specialty products** 17.5%

(FY2015: 10.1%)

H1 FY2016

Metallurgical

grade

82.5%

(FY2015: 89.9%)

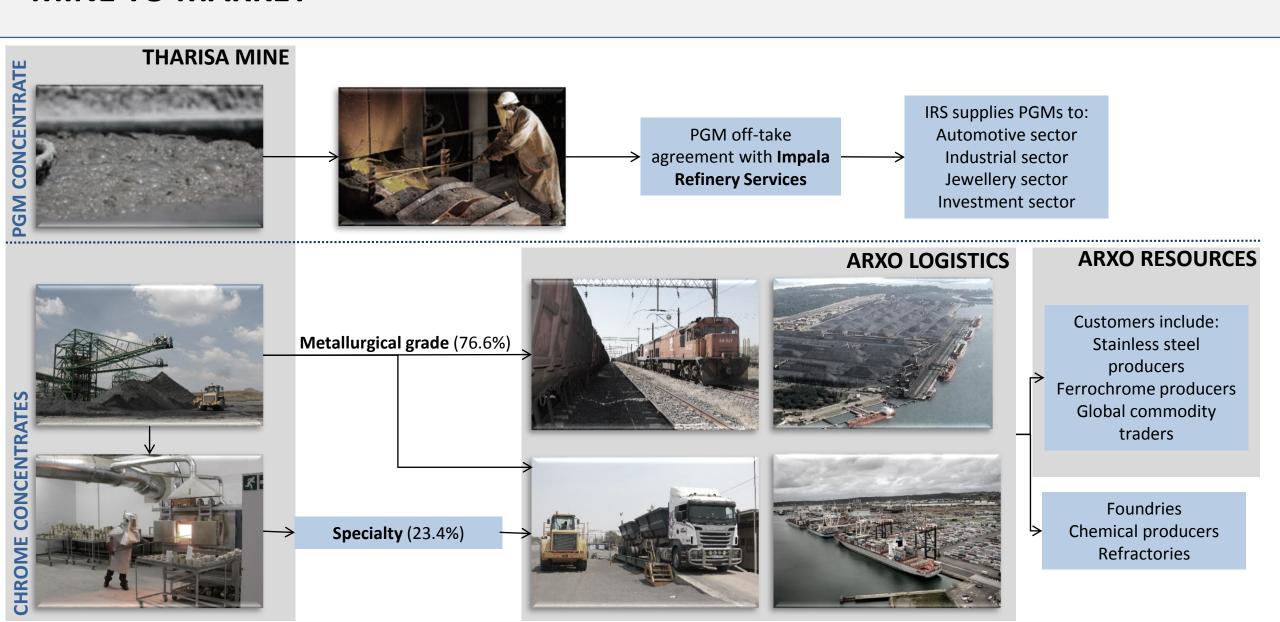
- South Africa has 72% of the worlds chrome resources
- China is wholly dependent on imports of chrome ore/alloy
- Chromite is the mineral extracted from the ore
- Chrome ore is mined from primary chromite deposits
- 92% of global chromite produced is metallurgical grade used for stainless steel production (mostly via ferrochrome)
- Globally, 8% of global chromite produced is the higher value chemical and foundry products
- Tharisa will produce up to 23.4% of the higher value chemical and foundry grades, depending on the ore mix

## **USE OF CHROME ORE/CONCENTRATE**

- $\cdot$ Cr<sub>2</sub>O<sub>3</sub> 30% to 45% •SiO<sub>2</sub> - <1% ingredient for stainless steel
  - $\bullet Cr_2O_3 >46\%$ •SiO<sub>2</sub> - <1% •High thermal •Chrome is the key conductivity and low thermal expansion Mould for metal castings **METALLURGICAL FOUNDRY GRADE GRADE** 92%
    - $\bullet Cr_2O_3 45\%$  to 47% •SiO<sub>2</sub> - <1.2% •Chrome chemicals for metal plating Leather tanning **CHEMICAL** REFRACTORY **GRADE** 2% 3%

**GRADE** 

## **MINE TO MARKET**

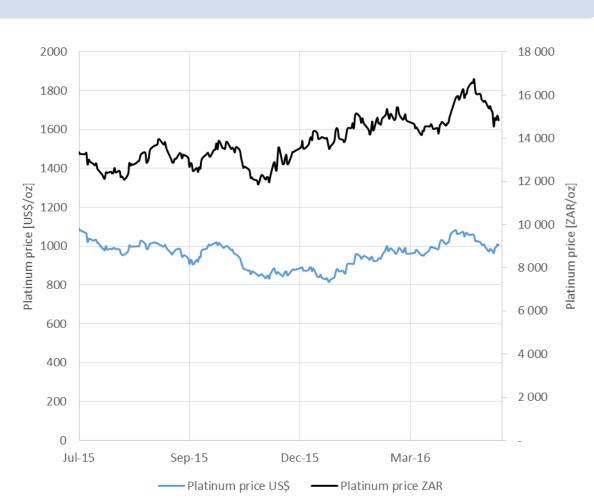


~US\$715/oz (June 2015: US\$854/oz)

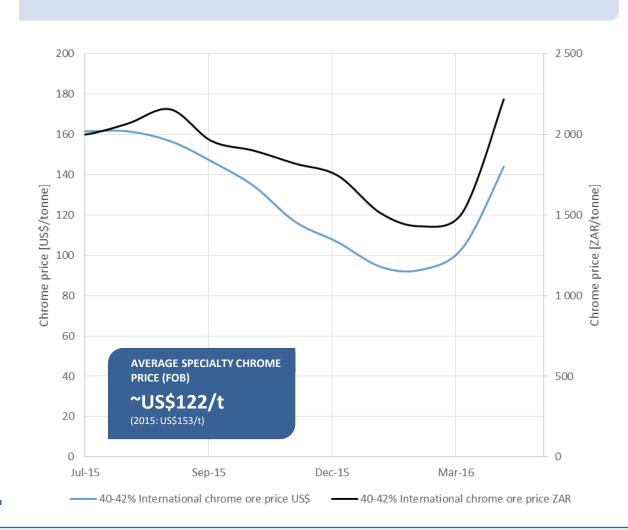
~US\$150/t (June 2015:US\$152/t)

**CURRENT CIF 42% CHROME CONCENTRATE PRICE** 



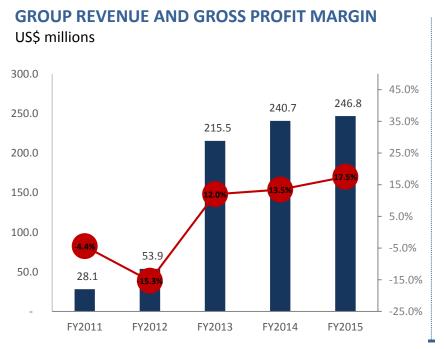


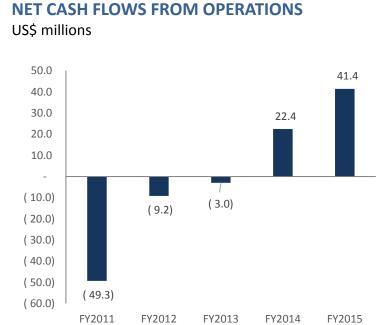
### **CHROME**

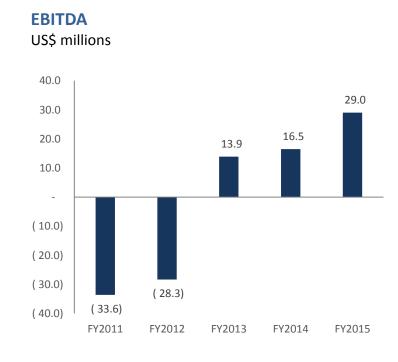




## **FINANCIAL CONTEXT**

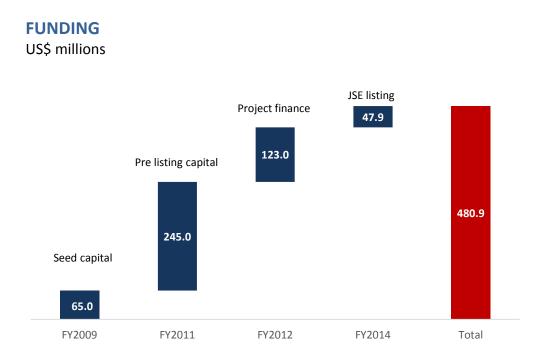






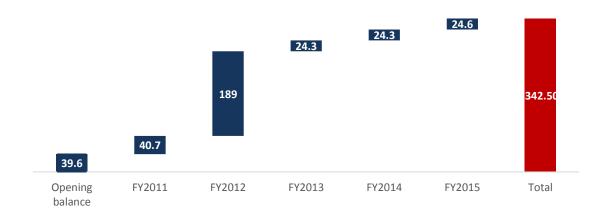


## **FINANCIAL CONTEXT**





US\$ millions





<sup>\*</sup> Includes deferred stripping



# tharisa H1 FY2016 INTERIM RESULTS







## **H1 FY2016 – OUR ACHIEVEMENTS**

PGM PRICES

↓27.4%

U\$\$686/oz

(2015: U\$\$945/oz)

42% CIF CHROME PRICES

↓32.1%

U\$\$106/t

(2015: U\$\$156/t)

#### **PRODUCTION**

PGM PRODUCTION (6E)

**1**4.5%

60.0 koz

(2015: 57.4 koz)

CHROME CONCENTRATE PRODUCTION

**↑**7.3%

604.4 kt

(2015: 563.3 kt)

#### **PROFITABILITY**

**REVENUE** 

**↓**30.5%

US\$86.0m

(2015: US\$123.7m)

**GROSS PROFIT MARGIN** 

**↑**6.2%

24.6%

(2015: 18.4%)

NET CASHFLOWS FROM OPERATING ACTIVITIES

**1**18.2%

US\$18.2m

(2015: US\$15.4m)

HEADLINE PROFIT PER SHARE

US\$1 cent

(2015: US\$1 cent)

#### **LOW COST**

ALL IN COST – PER PT OUNCE

**↓**26.8%

US\$450/oz

(FY2015: US\$615/oz)

ALL IN COST – PER 42% CHROME TONNE

**↓**40.4%

US\$81/t

(FY2015: US\$136/t)



# OPERATIONAL HIGHLIGHTS

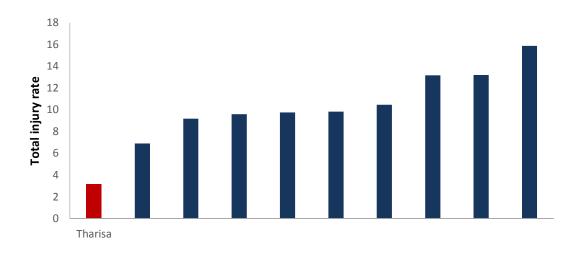


#### **FOCUS ON SAFETY**

- Safety remains the number one priority of management and all employees - we strive for zero harm
- Section 54 and 55 instructions were issued by the DMR
  - Q1 FY2016: approximately 42 weighted average production shifts were lost (approximately 15.1% mill throughput)
  - Q2 FY2016: no lost production shifts
- Renewed commitment to safety and engagement with new safety imperatives and programmes being launched
- New training centre was launched in April 2016, focused on the development of our employees and those of our contractors:
  - safety and regulatory training
  - ABET (adult basic education training)

#### **INDUSTRY COMPARISON**

## COMPARATIVE RATE PER MILLION MAN HOURS WORKED March 2016



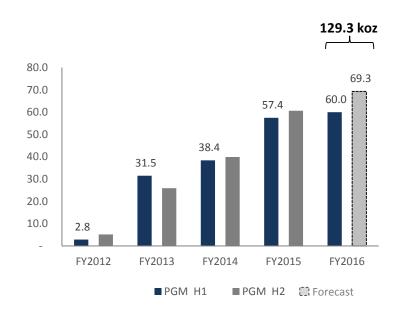


PGM PRODUCTION
(6E)

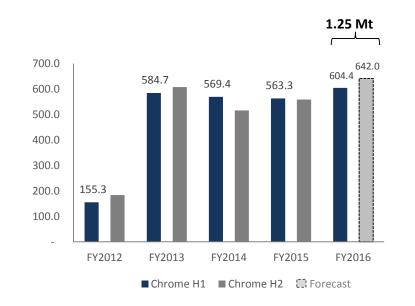
44.5%

60.0 koz
(2015: 57.4 koz)

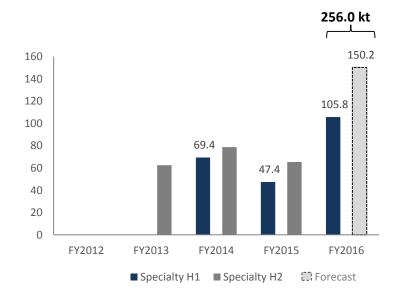
## **PGM PRODUCTION (koz)**



## **TOTAL CHROME PRODUCTION (kt)**



## **SPECIALTY GRADE PRODUCTION (kt)**





## **OPERATIONAL HIGHLIGHTS**

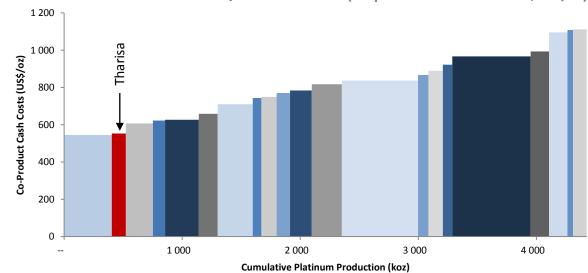
#### **KEY OPERATIONAL METRICS**

		% change	H1 FY2016	H1 FY2015
		70 Change	111112010	111 1 12013
ROM mined	Mt	21.1%	2.4	1.9
PGM rougher feed grade	g/t	1.8%	1.68	1.65
Chrome grade	%	(0.3%)	18.4	18.7
ROM processed	Mt	-	2.2	2.2
PGM recovery	%	1.9%	65.0	63.1
PGM in concentrate	koz	4.5%	60.0	57.4
Chrome recovery	%	6.1%	62.8	56.7
Chrome concentrate	kt	7.3%	604.4	563.3
PGM basket price	US\$/oz	(27.4%)	686	945
Chrome concentrate price (42% CIF China)	US\$/t	(32.1%)	106	156
Average exchange rate	ZAR:US\$	(30.4%)	15.0	11.5

#### **OPERATIONAL FLEXIBILITY**

- Annualised steady state achieved mining and PGM production
- Change in product mix to react to market
- Improved recoveries
- Updated steady state numbers of 147.4 kozpa PGMs and 1.3 Mt of chrome concentrates

CASH COST COMPARISON – PT EQUIVALENT BASIS (Co-product cash cost of US\$552/oz)





# FINANCIAL HIGHLIGHTS



## **SEGMENTAL ANALYSIS**

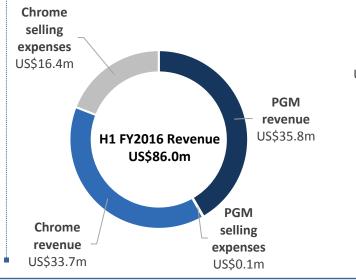
(2015: US\$123.7m)

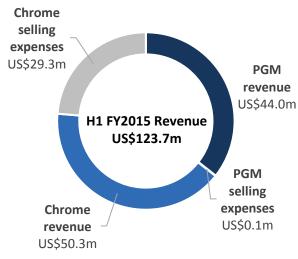
↓ 12.4% **US\$10.6m** (2015: US\$12.1m)

**OPERATING PROFIT** 

US\$m	% change	H1 FY2016	H1 FY2015
Gross profit	(7.5%)	21.1	22.8
Gross profit margin	6.2%	24.6%	18.4%
Results from operating activities	(12.4%)	10.6	12.1
EBITDA	(17.9%)	14.7	17.9
EBITDA margin	2.6%	17.1%	14.5%
Net finance costs	22.0%	6.1	5.0
Profit/(loss) before tax	(36.6%)	4.5	7.1
Tax*	(36.4%)	1.4	2.2
Profit /(loss)	(36.7%)	3.1	4.9
Headline earnings per share (US\$ cent)	-	1	1
Free cash flow per share (US\$ cent)		4.6	2.5

	H1 FY2016		H1 FY2015		_
US\$m	PGMs	Chrome	PGMs	Chrome	
Gross profit	12.1	9.0	17.2	5.6	
Gross profit percentage	33.8%	17.9%	39.1%	7.0%	
Sales volume	59.1 koz	481.7 kt	58.4 koz	520.5 kt	
Average transport costs per tonne of chrome concentrate (CIF main ports China) a decrease of 32.2%		US\$40/t		US\$59/t	





<sup>\*</sup>Expected normalised tax rate of approximately 25% Exchange rate positive impact on cost of sales of 16%



## **COST ANALYSIS**

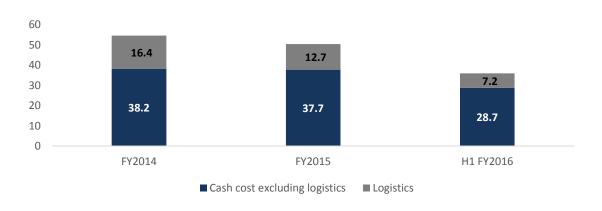


## **UNIT COSTS\***

	%change	H1 FY2016	FY2015
All in cost per Pt ounce	(26.8%)	US\$450	US\$615
All in cost per 42% chrome tonne	(40.4%)	US\$81	US\$136

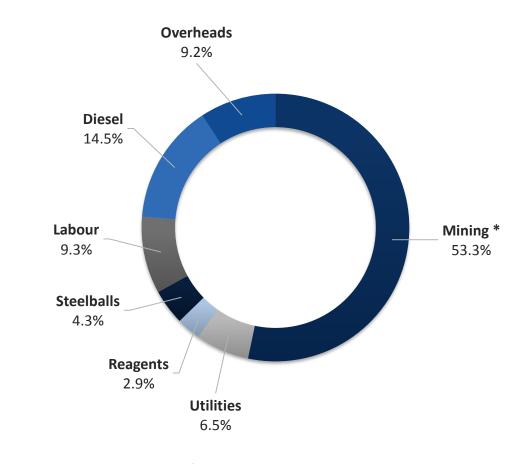
#### **CONSOLIDATED CASH COST PER TONNE MILLED**

US\$/tonne milled



\* Co product basis

#### **OPERATING COST ANALYSIS – EX-WORKS**



<sup>\*</sup> Including contractor mining labour of 884 people



## **FUNDING**

**BALANCE SHEET** 

US\$m	H1 FY2016	FY2015
Total interest bearing debt	51.8	75.6
Long term	27.8	36.3
Short term*	24.0	39.3
Debt service reserve account	9.8	10.6
Pro forma interest bearing debt	42.0	65.0
Pro forma debt to total equity ratio	24.2%	36.3%
Cash and cash equivalents	11.1	24.3
Net debt	30.9	40.7
Net debt to total equity ratio	17.8%	22.7%
Net current liabilities	11.4	10.3
Return on equity	2.7%	2.0%

### **CAPITAL**

US\$m	H1 FY2016	FY2015
Capital expenditure	6.4	24.6
Deferred stripping	3.1	15.2
	3.3	9.4
Depreciation charge	4.6	10.3

#### **STRIPPING RATIO**

m<sup>3</sup> to m<sup>3</sup> basis



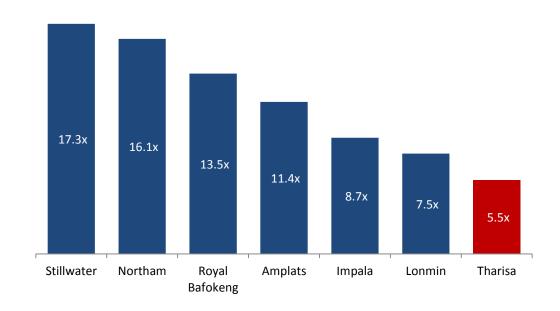
<sup>\*</sup> Included certain amounts in accounts payable relating mainly to accrued dividends payable by a subsidiary



## **OUR VALUE PROPOSITION**

	THARISA*	PEER AVERAGE**
EV/EBITDA	5.5 x	12.3 x
Debt/EBITDA	1.8 x	1.9 x
Net debt/EBITDA	1.0 x	1.0 x
Net debt/Equity	0.2 x	0.2 x
EBITDA margin	17.1%	13.7%
Operating margin	21.2%	12.6%
Price/free cash flow per share*	7.8 x	12.1 x

## **EV/EBITDA COMPARISON\***





<sup>\*</sup>Annualised EBITDA

<sup>\*</sup>Source: BMO Capital / Factset

<sup>\*</sup>As at 24 June 2016

<sup>\*</sup>Source: BMO Capital / Factset

## OUTLOOK



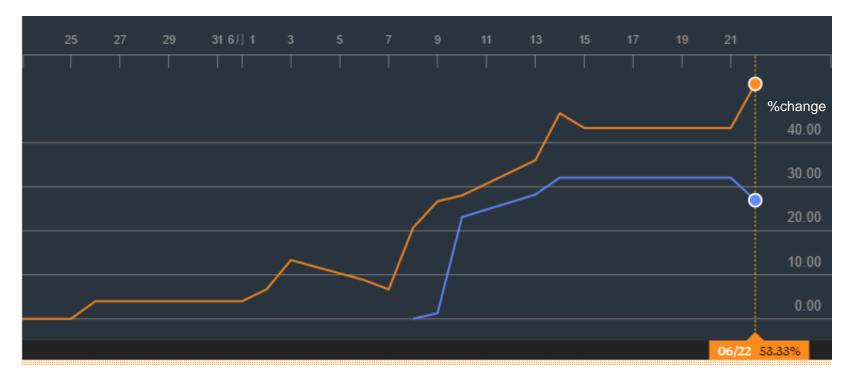
Primary listing will remain on the JSE

Market capitalisation of ZAR2.9 billion or GBP126.7 million

## WHY LONDON, WHY NOW?

- Large international shareholder base
- Raising international profile
- Access to wider pool of investors
- Improve trading liquidity

#### **ONE MONTH PERFORMANCE**



THA:SJ – One month return 53.3%

THS:LN - One month return 26.9%

Source: Bloomberg



## **OUTLOOK**

- H1 FY2016 production of 60.0 koz of PGMs and 604.4 kt of chrome concentrates
- PGM full year 2016 forecast of 129.6 koz
  - Updated steady state production of 147.4 kozpa\*
- Chrome concentrate full year 2016 forecast of 1.25 Mt
  - Updated steady state production of 1.3 Mtpa\* including 300 kt of specialty chrome concentrates
- Recovery of commodity prices from H1 FY2016
  - PGMs and 42% chrome concentrate prices are up by 4% and 42% respectively
- Looking ahead
  - Improving ROM feed grades
  - Targeted improvement in PGM and chrome recoveries
  - Optimisation initiatives being implemented through innovative technology
  - Annual dividend policy of 10% NPAT

Tharisa will continue to implement its strategy to become a leading natural resources company focused on originating, developing and operating mines in the PGM, chrome and steel raw materials sectors



\* Updated 2015 CPR 29

## **STRATEGY**



## GROWTH

## LEADING NATURAL RESOURCES COMPANY

PGM, CHROME AND STEEL RAW MATERIALS

LARGE SCALE, LOW COST PROJECTS THAT ARE IN OR CLOSE TO PRODUCTION

## **OPTIMISATION**

#### From SIB

- Spiral replacement programme complete by end FY2016
- High energy flotation at Genesis Plant complete by end FY2017

## Ring fenced capital

- Public private partnership with Transnet for on mine rail siding (estimated capital of ZAR180 million)
- Ultra fine grind feasibility study to improve PGM recoveries by 10% (estimated capital of ZAR250 million)
- Assessment of various chrome technologies to improve recoveries

#### **ACCRETIVE**

#### Parameters

- Open pit, large scale
- Quick to market approach
- ROI of 25%
- Location/geographic diversification

#### Commodities

- PGMs
- Chrome
- Stainless steel raw materials
- Automotive raw material supply



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