NORTHAM PLATINUM AND THE BUSHVELD COMPLEX

Location of the Bushveld Complex, South Africa

Zondereinde on the western limb produces at ~280 000oz annually. The wholly-owned NCP plant produces chrome from the mine's UG2 tailings.

ZONDEREINDE LIFE OF MINE

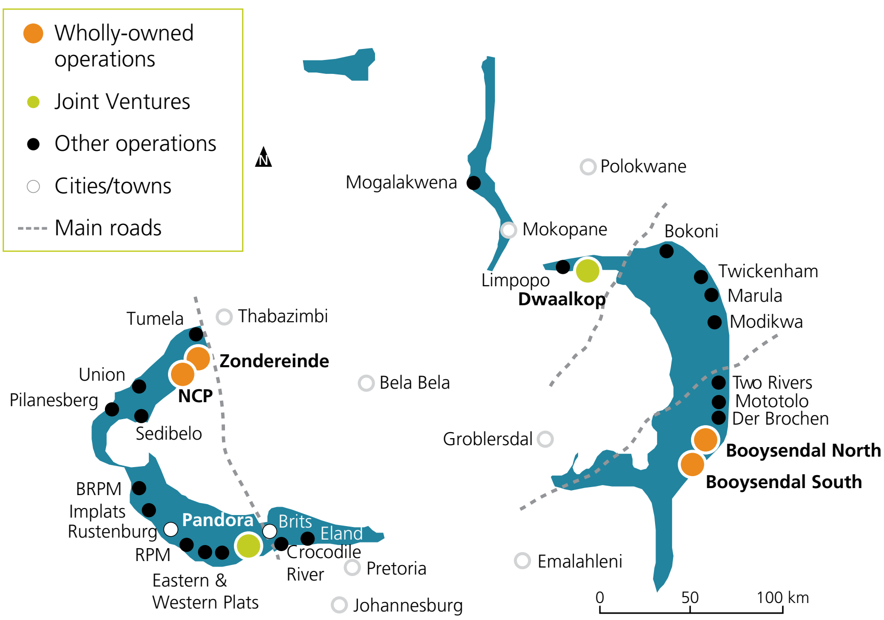
21 years

Operations on the Bushveld Complex

The **Booysendal North** mine came into production in July 2013. At steady state in H1 F2016 it will be producing 160 000oz per annum. Work has begun on integrating the newly-acquired Everest operation, which will form the basis of the **Booysendal South** mine.

STEADY STATE PRODUCTION

160 000oz



CORPORATE PROFILE

Northam is an independent, fully empowered, mid-tier, integrated PGM producer with two primary operating assets, the **Zondereinde** and **Booysendal** platinum group metal (PGM) mines in the South African Bushveld Complex. Northam has its own **metallurgical operations**, including a base metals removal plant and smelter, on the Zondereinde lease area. Performance reported in this report only relates to these mines where the company is the operator.

- The **Zondereinde** mine is a mature operation and produces approximately 280 000oz of PGM in concentrate annually. The mine is located on the northern end of the western limb of the Bushveld Complex near the town of Thabazimbi. Zondereinde has a life-of-mine of 21 years.
- The shallower mechanised **Booysendal** UG2 North mine is located near the town of Mashishing on the eastern limb of the Bushveld Complex. The mine came into production on 1 July 2013. At full production, the mine should produce approximately 160 000oz annually.

In February 2015, Northam acquired the Everest platinum mine (now known as **Booysendal South)** from Aquarius Platinum (South Africa) Proprietary Limited (AQPSA), contiguous to the Booysendal orebody. The integration process with the existing greater Booysendal operation has begun, which will allow the company to begin extracting value and developing the new Booysendal South mine.

Northam Chrome Producers Proprietary Limited (NCP) is a wholly-owned subsidiary of Northam. NCP produces chrome from Zondereinde mine's UG2 tailings.

The company holds a 7.5% interest in another PGM mining operation in the Bushveld Complex, the **Pandora joint venture** (JV), in partnership with Anglo American Platinum Limited and Lonmin plc.

Northam also owns a 50% interest in the **Dwaalkop PGM JV**, a 51% initial participatory interest in the **Kokerboom JV exploration project** in the northern Cape and a 20.3% interest in listed diamond miner, **Trans Hex Group Limited** (Trans Hex).

The company milled a total of 3.6Mt (Zondereinde: 1.8Mt, Booysendal: 1.8Mt) in the year under review to produce 11 759kg of metal in concentrate, which has been processed to realise sales revenue of R6.0 billion (F2014: R5.3 billion) – an increase of 13%, largely due to the ramp up of production at Booysendal.

At 30 June 2015, Northam held a combined resource base of 194.4 million ounces (Moz) – 19.2Moz in the reserve category – with a mining life of more than 50 years.

Group structure as at 30 June 2015

NORTHAM PLATINUM LIMITED

100%	Zondereinde mine and metallurgical processing	Resource: 81.1Moz
100%	Booysendal mine	Resource: 102.3Moz
50%	Dwaalkop	Attributable resource: 8.9Moz
7.5%	Pandora	Attributable resource: 2.1Moz
100%	Northam Chrome Producers	Cr_2O_3 concentrate
20.3%	Trans Hex Group	Listed diamond producer and marketer
51%	Kokerboom	FeO Cu Au prospect

CORPORATE PROFILE CONTINUED

SHAREHOLDER BASE

Northam's shares are listed on the JSE. Its share code is NHM and its debt instruments are listed under the symbol NHMI. The company has been admitted to participate in the JSE's Socially Responsible Investment (SRI) Index.

BEE SHAREHOLDING IN NORTHAM

Northam is a fully empowered PGM producer. Historically disadvantaged South African (HDSA) ownership levels in the company are pegged at 35.4% following the conclusion of a R6.6 billion black economic empowerment (BEE) transaction, which included the successful raising of R4.6 billion. The transaction was concluded in October 2014 and approved by shareholders in March 2015. In terms of the deal, Northam issued 112 195 122 new shares (equivalent to 22% of Northam's issued share capital) to a special purpose BEE vehicle known as Zambezi Platinum (RF) Limited (Zambezi or Zambezi Platinum). These shares were supplemented by 47 710 331 shares (equivalent to 9.4% of Northam's issued share capital), sold to Zambezi Platinum by the Public Investment Corporation SOC Limited (PIC), a long-standing Northam shareholder.

Zambezi Platinum comprises a range of HDSA stakeholders including an employee trust, two community trusts, a women's group and a core of strategic partners. Together they hold a 31.4% stake in Northam. This holding, added to a 4% BEE credit recognised through the Toro Trust (a profit share scheme) takes the company's HDSA equity to 35.4%, in excess of the Mining Charter requirements, and with a 10-year lock-in period for the participants.

Zambezi Platinum is financing the acquisition of shares in Northam through a preference share arrangement. Apart from this function Zambezi Platinum will not conduct any operational business. Zambezi Platinum's preference shares were listed on the JSE on 11 May 2015.

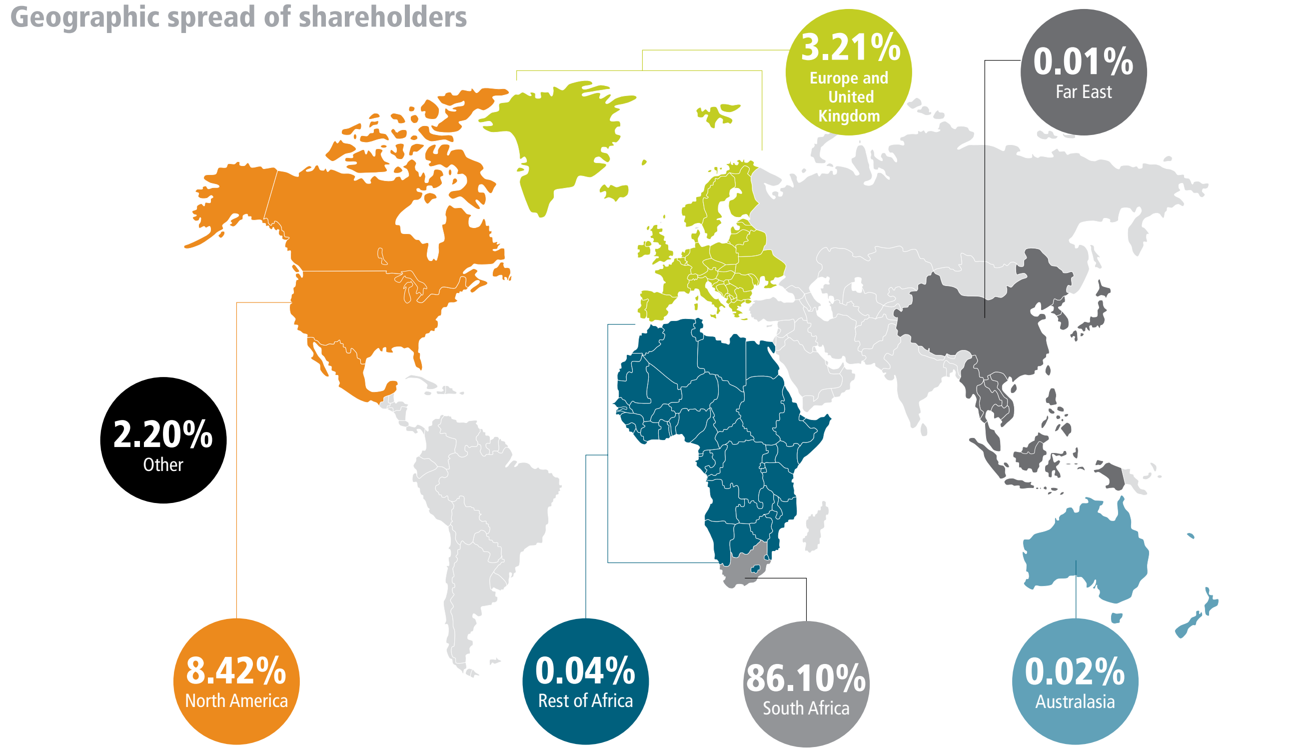
By the end of the 2015 financial year Northam's share capital had increased to 509 781 212 shares in terms of the BEE transaction (2014: 397 586 090 shares). At the end of the 2015 financial year, the company's market capitalisation was R20.5 billion.

Northam has a geographically diverse shareholder base, which at 30 June 2015 comprised predominantly institutional investors in South Africa (86.10%), North America (8.42%), Europe and the United Kingdom (3.21%), the Far East (0.01%), Australasia (0.02%) and the rest of Africa (0.04%).

BEE interests, strategic interests and free float
(%)

Free float	**41.7**
Zambezi Platinum	**31.4**
Coronation Asset Management	**26.9**

Geographic spread of shareholders



PRODUCTS AND END USES

Northam's primary products are the three main PGMs: platinum, palladium and rhodium. The primary consumers of the three main PGMs are the motor-manufacturing and jewellery industries. Other industrial uses range from chemical and electrical applications to glass manufacture. In the automotive sector, PGMs are used in exhaust systems, specifically autocatalysts, helping to reduce noxious gases released into the atmosphere. Platinum jewellery is popular in Asia.

PGMs have also attracted investment attention with the launch of exchange-traded funds (ETFs), which expose investors to physical metal holdings.

PGMs are traded on international markets where the metal prices are determined by global supply and demand, and are US dollar-denominated. This means that South African PGMs realise prices in US dollars, which are then converted and reported in South African rands on the income statement. Northam has little or no influence on the pricing of the sales of its metal and is essentially a price taker. The metal is sold in sponge or ingot form to customers in the US, Europe and the Far East.

Northam's in-house marketing department is responsible for marketing and sales of products domestically and to major global markets in Asia, Europe and North America.

OPERATING APPROACH

In terms of market capitalisation, Northam ranks as a mid-tier PGM producer. The company is distinguished from its peers and other smaller PGM producers in that its activities are integrated; from the underground mining function, through to the concentrating, smelting and base metal removal processes.

Final precious metal concentrate is transported from Zondereinde platinum mine and metallurgical complex for refining to the Heraeus facilities in Germany and Port Elizabeth. By-product metals, copper and nickel sulphate, are extracted at the on-site base metals removal plant and sold in the domestic market.

For about 20 years, Zondereinde was Northam's only operating asset. Construction of the shallow mechanised Booysendal mine started in 2010 and, for Northam, represents a significant diversification in terms of geography, mining method, safety, costs and, consequently, lowers the risk that the company is otherwise exposed to with a single operating asset. Booysendal came into production in July 2013 and it achieved over 80% of its steady state production by 30 June 2015. Its ramp-up to reach steady-state production in F2016 continues.

ZONDEREINDE

Zondereinde is a deep-level conventional mining operation producing approximately 280 000oz of PGM per annum. The mine incorporates a metallurgical complex, comprising a smelter and a base-metal removal plant.

Zondereinde is a deep level platinum mine. Its complex geology is characterised by potholed reef and fault structures. Ore grades are relatively high at Zondereinde, as are the metallurgical recoveries from both the Merensky and UG2 ore. The mine's resource is estimated at 81.1Moz.

To extend the life of mine and to access more conformable Merensky reef, a deepening project to 2 300 metres below surface is underway. The development of infrastructure which includes a conveyor decline, a chairlift and a material decline from 13 level to 18 level, is at an advanced stage, with the commissioning of an underground refrigeration plant having made a marked improvement to environmental conditions at depth. Originally planned as a Merensky mine, the focus is shifting to mining a higher proportion of UG2 ore. Along with the deepening project this shift in reef profile has extended the life of mine to 21 years.

BOOYSENDAL

At steady state levels, anticipated in the first half of the 2016 financial year, the Booysendal North mine will be producing 2 250 000 tonnes of ore per annum, generating around 160 000oz of metals in concentrate (3PGE+Au), together with associated precious and base metal by-products.

The Booysendal North mine is a shallow, fully mechanised UG2 mining operation, with a resource of 6.4Moz. Current life of mine is upwards of 20 years. The total Booysendal resource is in excess of 100Moz and with the development of additional mining modules could support mining operations for more than 50 years.

The Booysendal North mine has been developed as a room and pillar operation. The main underground infrastructure consists of the following key elements:

- A reverse decline system consisting of two barrels. The main barrel contains the conveyor belt and chairlift for the transfer of rock and personnel. The other barrel is for the movement of mechanised equipment into and out of the mine.
- Unique to the Booysendal design is the footwall decline placed some 24m below the reef horizon. It is typical in most room and pillar operations to have a conveyor placed on reef. At Booysendal some buffer storage capacity was designed and constructed in order to mitigate any risk related to interruptions in power supply, particularly at peak times. The buffer storage will allow continuous operations for up to 12 hours on the reef horizon should the footwall conveyor be offline; the placement of the conveyor in the footwall allows for rock hoisting to surface during off peak periods.
- There are three main on-reef declines, a central decline for the movement of mechanised equipment and two additional declines; one north and one south of the central decline, to provide access to the tips of the main ore pass system.

CORPORATE PROFILE CONTINUED

PROCESSING

Merensky and UG2 concentrator plants

- Crushing/screening circuit: In the crushing/screening circuit the ore is crushed to reduce its size before it reports into the mill.
- Milling: Merensky ore feeds into a fully autogenous (FAG) mill. In the UG2 plant, the crushed product feeds into a high pressure grinding roll and then into a primary ball mill.
- Flotation: The circuit includes rougher cells, scavenger cells and cleaner columns. External sparger column cells act as a cleaner and this helps to produce a final UG2 concentrate with significantly lower chrome content while maintaining PGM recoveries.

Smelting operations

Commissioned in 1993, the existing smelter has a 15MW capacity. Key processes include drying, smelting and converting the concentrate. Concentrate brought in is blended and dried concentrate is pulverised and then stored in silos. Off-gases are cleaned in an electrostatic precipitator. Concentrate and flue dust is mixed with lime and then fed through to the day bin and into the furnace where electrodes provide heat. The lighter oxides float to the top as slag and the more dense sulphides, which contain the PGMs, sink to the hearth as furnace matte.

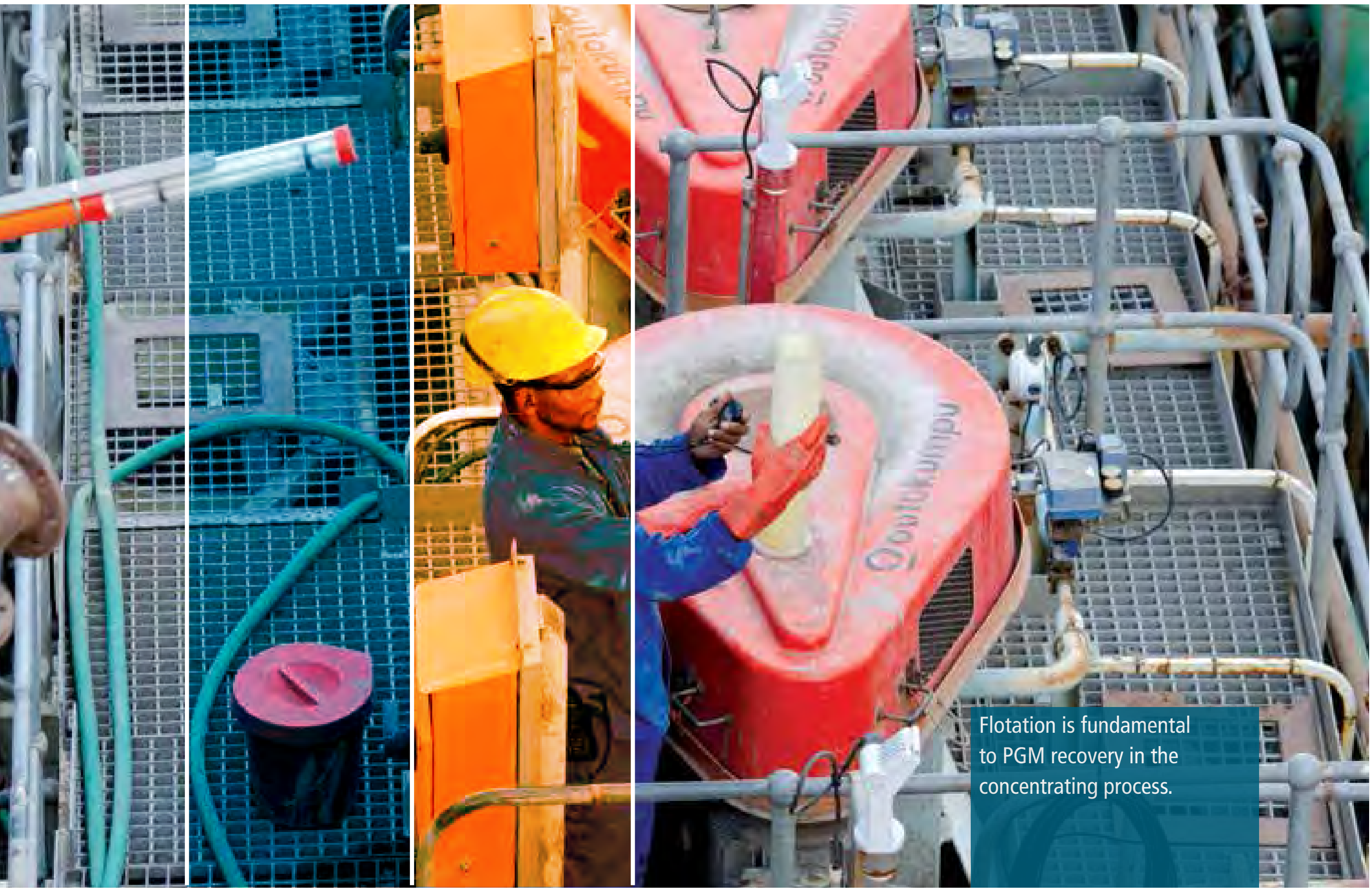
New furnace

The board has approved capital expenditure for the installation of a new 20MW furnace as part of the smelter expansion and de-risking programme. Initially, a sum of R10.0 million has been committed for design and drawing work for the new furnace. The project estimated at R750.0 million is expected to be completed over the next three years. The additional capacity will add significant mining flexibility allowing for higher volumes of UG2 to be mined and treated.

REFINING

Since 1992, Northam's production of metal has been refined in Germany, with PGM concentrate being delivered on a weekly basis to the Heraeus refinery in Hanau near Frankfurt. Latterly some of Northam's material has also been treated at the Heraeus plant in Port Elizabeth, South Africa.

A registered member of the London Platinum and Palladium Market (LPPM), Heraeus has London-Zurich 'Good Delivery' status for metal production. The refinery in Hanau is subject to strict European Union and materials handling protocols. Product transportation is also strictly defined by international aviation regulations.



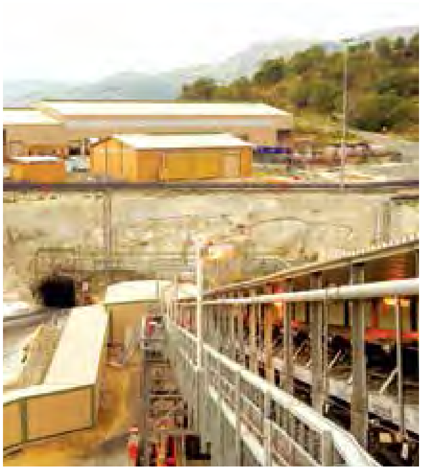
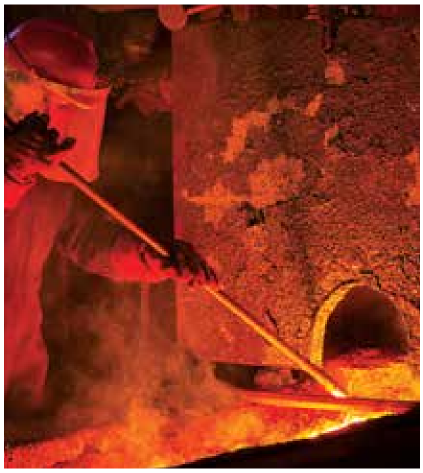
Flotation is fundamental to PGM recovery in the concentrating process.

OUR STRATEGY

DELIVERING ON OUR STRATEGY

The strategic regeneration of business has been underpinned by Northam's empowerment transaction, which has served as a catalyst for the company's growth while also providing a strong and supportive balance sheet. The strategy to diversify the group's production base into shallower, mechanisable operations has translated into the acquisition of AQPSA's Everest mine, infrastructure and resources. Management continues to evaluate a number of growth opportunities, given the company's positioning and ability to take advantage of opportunities that may arise from time to time, even in the adverse economic conditions.

Internally the strategy has been unpacked into a number of initiatives, which are serving to optimise the mining and metallurgical operations.

Zondereinde	Booysendal	Processing and refining
		
Life of mine extended to >21 years by husbanding Merensky orebody	Completing the original decline by December 2015	Increasing milling capacity of UG2 from 90 000 tonnes per month
Shifting the mining ore mix profile to increase UG2 tonnages	Ramp-up to full production	Expanding the smelter by adding a dedicated 20MW UG2 furnace
Unlocking metallurgical constraints in the process plant, increasing the throughput of UG2 concentrator Pursuing deepening project to increase access to Merensky ore	Sustaining concentrator recoveries at 85%	New autoclave installed at the base metals removal plant to match increasing throughput from the smelter
	Plan to expand first UG2 module with a deepening project currently in design phase	Improving the throughput and yield of the chrome ore plant run by Northam Chrome Producers (NCP)
	Bulk sample in progress to evaluate potential of mining Merensky reef from existing footprint	
	Development of Booysendal South in design phase	

OUR BUSINESS MODEL

CAPITAL INPUTS

We mine and produce PGMs from our two primary operating assets – Zondereinde and Booysendal.

FINANCIAL CAPITAL
- Financing
- Shareholder opportunity
- Capex

MANUFACTURED CAPITAL
- Resource
- Infrastructure
- Mining type
- Synergies

1

HUMAN CAPITAL
- 10 080 employees (incl contractors)
- Skills
- Management capacity

SOCIAL CAPITAL
- Compliance
- Mining Charter
- Governance

2 3 4 5

NATURAL CAPITAL
- Utility synergies
- Footprint limitation
- Compliance

6

STRATEGIC OBJECTIVES

GROWTH

- underpinned by empowerment transaction
- acquisition of Everest mine

DIVERSIFICATION

- mechanisable orebodies
  - lower cost production

OPTIMISATION OF MINING AND METALLURGICAL OPERATIONS

- **Zondereinde**
  - LOM extension
  - better access to Merensky reef
  - rebalancing ore mix
- **Booysendal**
  - ramp-up to full production
  - completion of decline
  - development of Booysendal South
- **Processing and refining**
  - increasing milling capacity of UG2
  - smelter expansion

MATERIAL ISSUES

MATERIAL ISSUE 1: Ensuring the successful delivery and execution of our business strategy

MATERIAL ISSUE 2: Establishing and maintaining constructive communication channels with our employees and their representative bodies

MATERIAL ISSUE 3: Creating and maintaining safe workplaces that support our employees' and contractors' health and livelihoods

MATERIAL ISSUE 4: Ensuring that our stakeholders benefit, where appropriate and possible, from the value created by our company

MATERIAL ISSUE 5: Maintaining our legislative and regulatory compliance, and in so doing, protecting our licence to operate

MATERIAL ISSUE 6: Acting as responsible environmental stewards and conserving resources

OUR BUSINESS

RESOURCES AND RESERVES

- Combined resource base of 194.4 Moz
  - 81.1Moz at Zondereinde
  - 6.4Moz at Booysendal (North)
- 19.2Moz combined reserves

MINING

- Zondereinde – deep-level mine, mining UG2 and Merensky ore
- Booysendal – shallow, fully mechanised UG2 mining operation

MINERALS PROCESSING

- Merensky and UG2 concentrator plants – crushing, milling, flotation
- 3.6Mt milled
  - 1.8Mt milled at Zondereinde
  - 1.8Mt milled at Booysendal
- 11 759kg of metal in concentrate produced
- Zondereinde incorporates metallurgical complex – smelter, base-metal removal plant

REFINING

Northam's production refined at:

- Heraeus refinery, near Frankfurt, Germany
- Heraeus plant, Port Elizabeth, South Africa

MARKETING

In-house department responsible for marketing and sales of metals in sponge or ingot form:

- domestically
- to major global markets in Asia, Europe, North America

CAPITAL OUTPUTS

FINANCIAL CAPITAL

- R1.3 billion to salaries, wages and other benefits
- R391.7 million to taxes and royalties
- R252.4 million to providers of capital

MANUFACTURED CAPITAL

Total refined metal sales:

Platinum	253 784Moz
Palladium	124 580Moz
Rhodium	38 430Moz
Gold	5 837Moz
Total:	422 630Moz

HUMAN CAPITAL

Turnover rate of 7.5% (weighted average)

Training and development:

- R21.8 million spent at Zondereinde
- R3.3 million spent at Booysendal

Accommodation:

- 375 housing units sold to employees
- 1 828 single units created
- R11.7 million on upgrading hostels.

Safety:

- Zero fatalities
- 1.31 LTIIR at Zondereinde
- 0.54 LTIIR at Booysendal

Health:

- R65.8 million contributed to health care funds
- 1 250 employees received VCT
- 45 new cases of NIHL

SOCIAL CAPITAL

- R6.8 million to corporate social responsibility

NATURAL CAPITAL

- Water consumption increased by 9.3% to 4 299 000m^3
- Electricity consumption at Zondereinde increased by 9% to 630 085MWh
- Electricity consumption at Booysendal increased by 24% to 115.386MWh owing to ramp-up.
- CO_2 emissions 804 661 tonnes
- SO_2 emissions 5 734 tonnes

OUR MATERIAL ISSUES

Our reporting is informed by our business model and strategy and the risks to the business. We also take into account the needs and concerns of our internal and external stakeholders.

This year we are reporting in terms of our material issues – those issues that are most material to the business and stakeholders, and which fundamentally influence the assessments and decisions of stakeholders.

We take the determination process of our materiality seriously and see it as an opportunity to assess whether we are focusing our energy and resources in the correct areas. We identified our material issues through a series of workshops which analysed our internal and external environments, information from the company's risk register and stakeholder feedback. These issues are reviewed by management on an ongoing basis.

Our material issues should be read in conjunction with the company's business risks beginning on page 34.

Our material issues for 2015 were determined as follows:

Ensuring the successful delivery and execution of our business strategy

It is the responsibility of executive management to set realistic and achievable strategic targets for the business (see business model and strategy on page 7). As a public company, the success of this strategy affects shareholders, or the providers of capital, and a range of other stakeholders, most importantly the group's employees. In terms of this material issue we discuss these challenges and our response.

See pages 78 to 80.

Creating and maintaining safe workplaces that support our employees' and contractors' health and livelihoods

We aim to create and maintain safe and healthy environments for our employees and contractors. We will do this by continuously seeking to reduce injuries, applying appropriate technologies, through communication and training, and reinforcing operational standards and responsibility.

See pages 81 to 85.

Establishing and maintaining constructive communication channels with our employees and their representative bodies

We understand the importance of establishing and maintaining constructive communication channels with our employees and their representative bodies, both for our employees' sake and that of the sustainability of our business. We do this through stakeholder engagement and sound employee relations based on direct channels of two-way communication.

See pages 86 to 88.

Ensuring that our stakeholders benefit, where appropriate and possible, from the value created by our company

We create value for stakeholders in many ways, including increasing production and sales; increasing earnings and growth; through taxes and royalties; transformation; salaries and wages; training and development; housing and accommodation; and investing in communities in the form of local economic development, preferential procurement and corporate social investment. We recognise that stakeholders, be they shareholders, employees, communities or government, have certain expectations of the company, not all of which may be appropriate or possible to meet. We need to understand and manage these expectations through credible and effective stakeholder engagement.

See pages 89 to 101.

Maintaining our legislative and regulatory compliance, and in so doing, protecting our licence to operate

We recognise that we do business within the legal framework of the various South African government departments. We aim for full compliance with the laws of the land. In terms of this material issue we discuss the most relevant aspects of legislation as they apply to Northam and its operations. Given the nature of our business these remain the Mineral and Petroleum Resources Development Act (MPRDA) and the associated Mining Charter.

See pages 102 to 103.

Acting as responsible environmental stewards and conserving resources

We understand the importance of being responsible environmental stewards. As responsible environmental stewards, we make optimal use of and conserve our natural resources (our focus is on water and energy, areas where we are most exposed); we make every effort to minimise our environmental impacts; where possible we conserve land; and we seek to comply strictly with all environmental legislation.

See pages 104 to 111.

KEY FEATURES F2015

CORPORATE DEVELOPMENTS

- Empowerment status secured for 10 years with R6.6 billion deal with Zambezi Platinum
- Northam is 35.4% HDSA-owned, including the existing Toro Trust
- Successful capital raising of R4.6 billion
- BEE transaction unlocks strategic growth path – indicated by the acquisition of Everest for R450 million
- Acquisition of an additional 20% of Northam Chrome Producers, now a wholly-owned subsidiary

R6.6 billion

deal with Zambezi Platinum

FINANCIAL IMPACTS

- PGM fundamentals remain challenging with weak global macro-economic conditions and declining commodity prices
- Group sales revenue grew by 13% to more than R6 billion
- Operating profits reach R596 million
- Year on year the South African currency weakened by 10.6% against the US dollar, averaging R11.45/US dollar
- Group unit cash costs increased by 6.7%
- Recovery in operating margin to 9.9% (F2014: 1.2%)
- Emphasis on cost containment across the group

9.9%

recovery in operating margin

(F2014: 1.2%)

OPERATIONS

- Booysendal North on track to reach steady state production in H1 of F2016
- Zondereinde life of mine extended to 21 years
- Future production at Zondereinde planned at a UG2 65: Merensky 35 ratio
- Additional processing capacity in progress at Zondereinde
- Booysendal concentrator achieves recoveries of 86%
- Progress in plans to exploit Merensky reef at Booysendal
- Good safety performance at both operations

86%

Booysendal concentrator recoveries

SOCIO-ECONOMIC IMPACTS

- 10 080 employees in total
- R1.3 billion paid in wages, salaries and benefits
- Three-year wage agreement signed
- Group pays R392 million in taxes
- Development of comprehensive housing and accommodation strategy

10 080

employees in total