

## **DAPHNE MASHILE-NKOSI'S BIOGRAPHY**

Daphne Mashile-Nkosi is the executive chairperson of Kalagadi Manganese; Daphne remains committed to the people of South Africa and uses every available resource to enrich the lives of the average South African. She is responsible for the creation of over 30 000 jobs in the Northern Cape, and will go down in history as the mother of the largest mining venture of its kind in the last 30 years. She is also a trustee & chairperson of the Women's Development Bank Trust, chairperson of WDB Investments Holdings. WDB nominated her to study development economics in Nagoya, Japan in 1993.

Daphne is founder & director of Temoso Telecommunication, represents shareholder interests as director of various companies including Temoso Holdings, Kalahari Resources & Metmar Trading. She is also a chairperson of Bakhazi-Banalim & trustee of the FirstRand Empowerment Trust. Directly involved in the successful structuring of the Cell C third network operator in South Africa. Strong development background & activism in gender issues, brings focus to business issues that improve the quality of life of poor communities & the nurturing of women entrepreneurs & leaders.



May 2011

# Contents



3

1. About Kalagadi Manganese
2. Project Overview
3. Key Timelines
4. Country Investment Case
5. Socio-Economic Impact

# Background



4

- Kalagadi Manganese is one of South Africa's largest black women-owned and managed and mining companies.
- It is a joint venture between Kalahari Resources, IDC and Arcelor Mittal.
- Its core strategy is to focus on exploration and mining.
- Granted prospecting rights in 2003 and mining licence in 2006.
- It is in the process of establishing an integrated commercial manganese operation a mining operation, an ore processing operation (sinter plant) and a smelter.
- The mining and ore processing operations are located in the Northern Cape, while the smelter operation will be located in the Eastern Cape Province.
- Started construction of mining operations in early 2009 and mining operations scheduled to commence during the middle of 2012.
- This project will inject in excess of R11.0 billion capital investment in the struggling economies of the Northern and Eastern Cape.

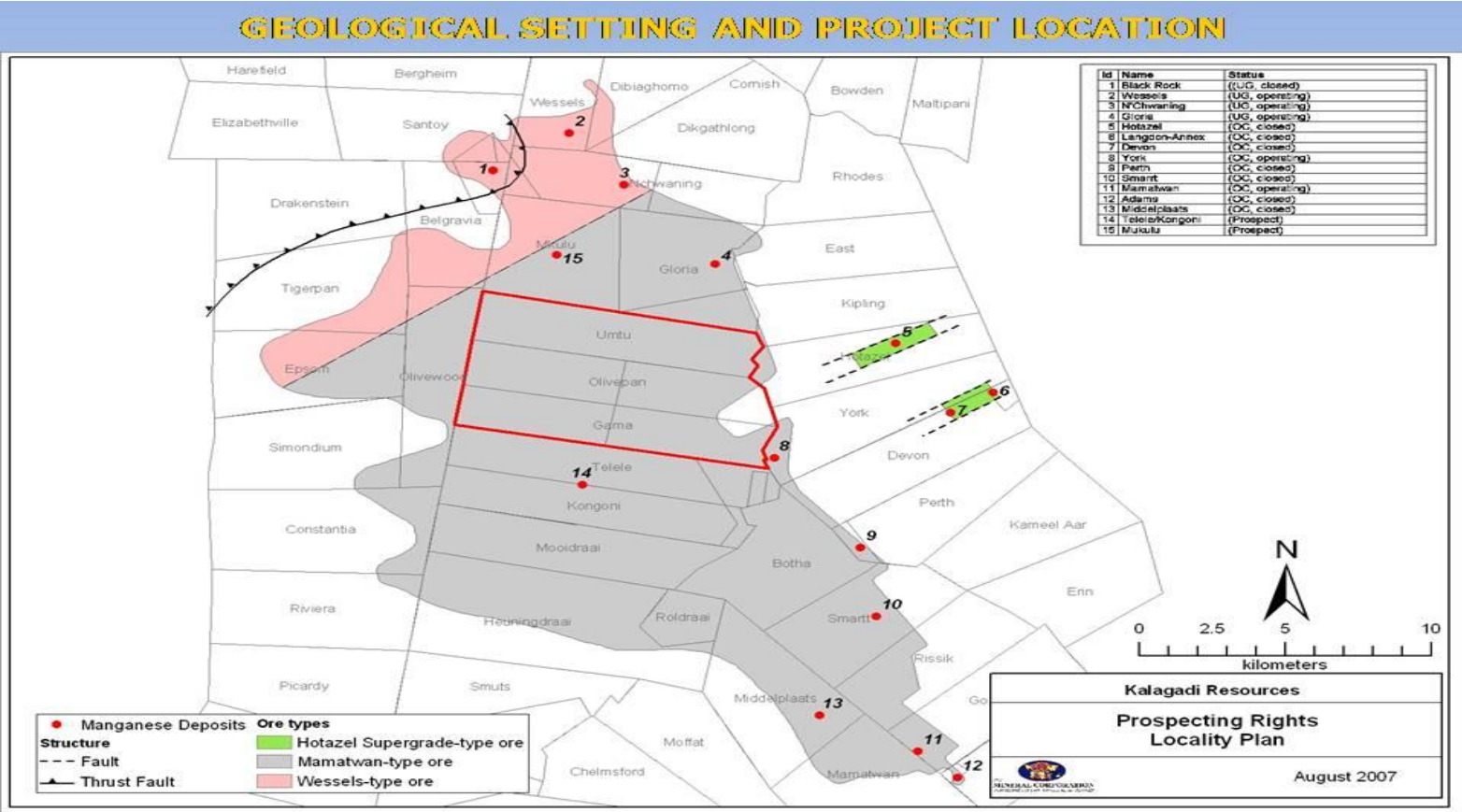
# Locations Map



# Resources and Reserves



- Kalagadi owns mining rights on the Umtu 281, Olivepan 282 and Gama 283 farms.
- This area covers approximately 6 300 hectares, with total deposits in excess of 960 million tons of manganese ore.



# Latest Reserve Statement

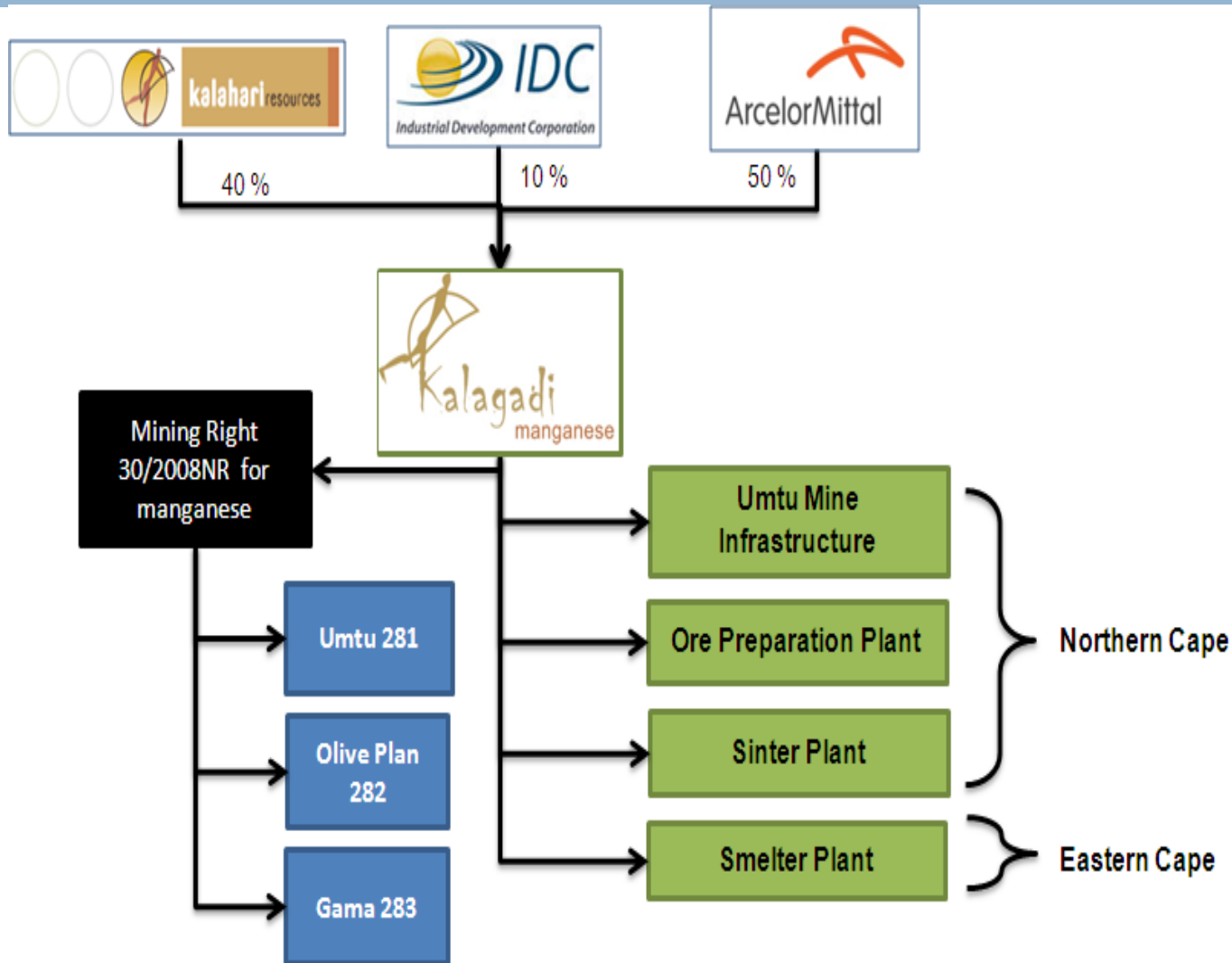


7

- Mn content ranges from 37% to 39%
- Cut off for the resources is 35%

<b>Resources and Reserves (Oct 2010)</b>	
Inferred Resource	9.23Mt
Indicated Resource	84.39Mt
Measured Resource	5.84Mt
<b>Total</b>	<b>99.46Mt</b>
Probable Reserve	44.18Mt
Proven Reserve	0Mt
<b>Total</b>	<b>44.18Mt</b>

# Corporate Structure of Kalagadi Manganese (Pty) Ltd



# Project Scope



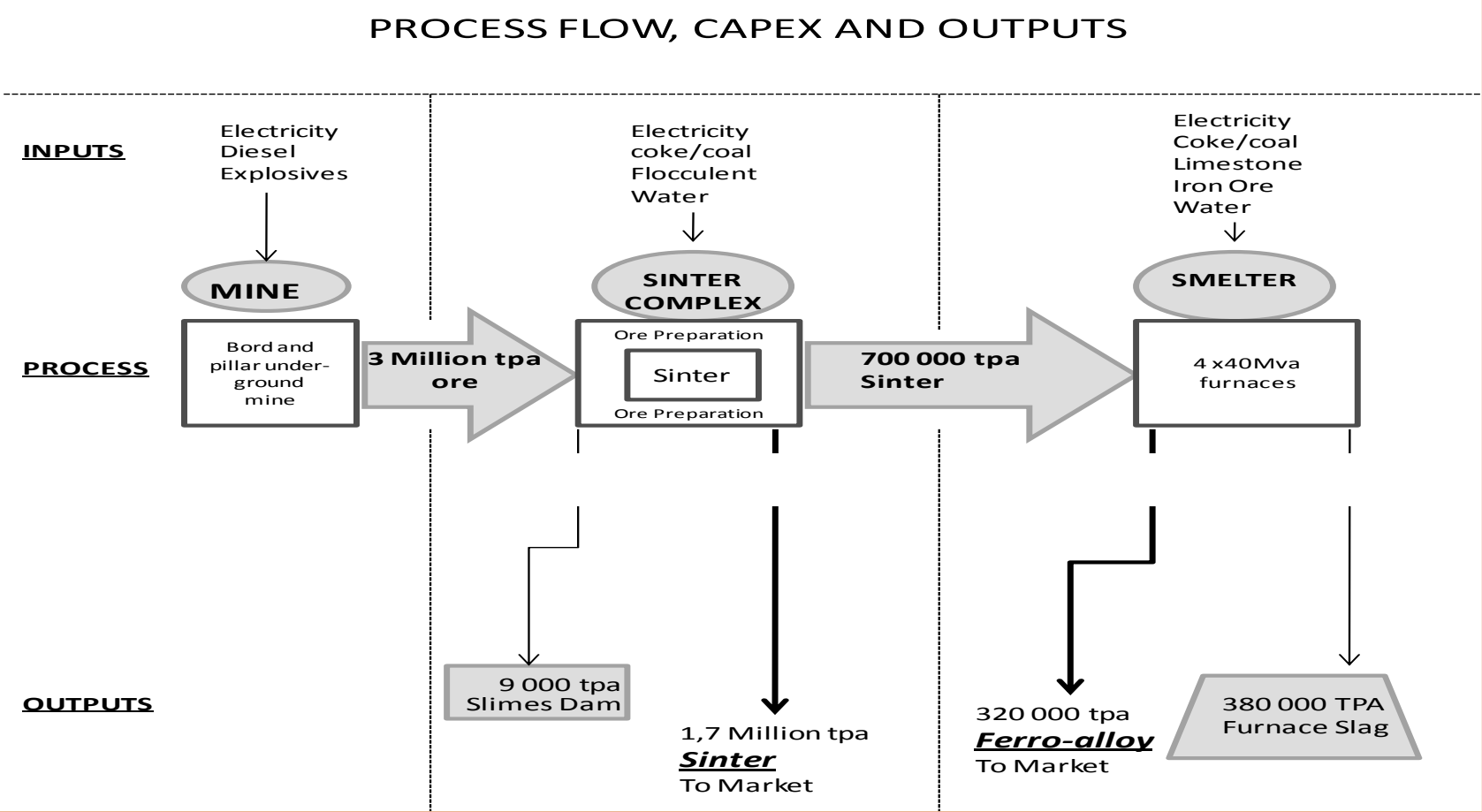
9

- The scope of the project includes the following:-
  - an underground mechanised mine, having the capacity to produce 3mtpa of RoM ore per annum;
  - an ore-preparation plant to crush the RoM ore to a suitable size as a feed to the sinter plant;
  - a moving-grate type sinter plant that will beneficiate the RoM ore to 2.4mtpa of sinter product per annum;
  - a smelter plant to be situated in the Eastern Cape, capable of producing 320,000tpa of HCFeMn;
  - a Rapid Rail Outloading system and an electrified rail spur to ensure the efficient loading of block load trains and access to the main Hotazel-Port Elizabeth Rail Corridor; and
  - other infrastructure, the major component of which is the 132kV power line from Sishen to the Umtu Complex.

# Process Overview



## PROCESS FLOW, CAPEX AND OUTPUTS



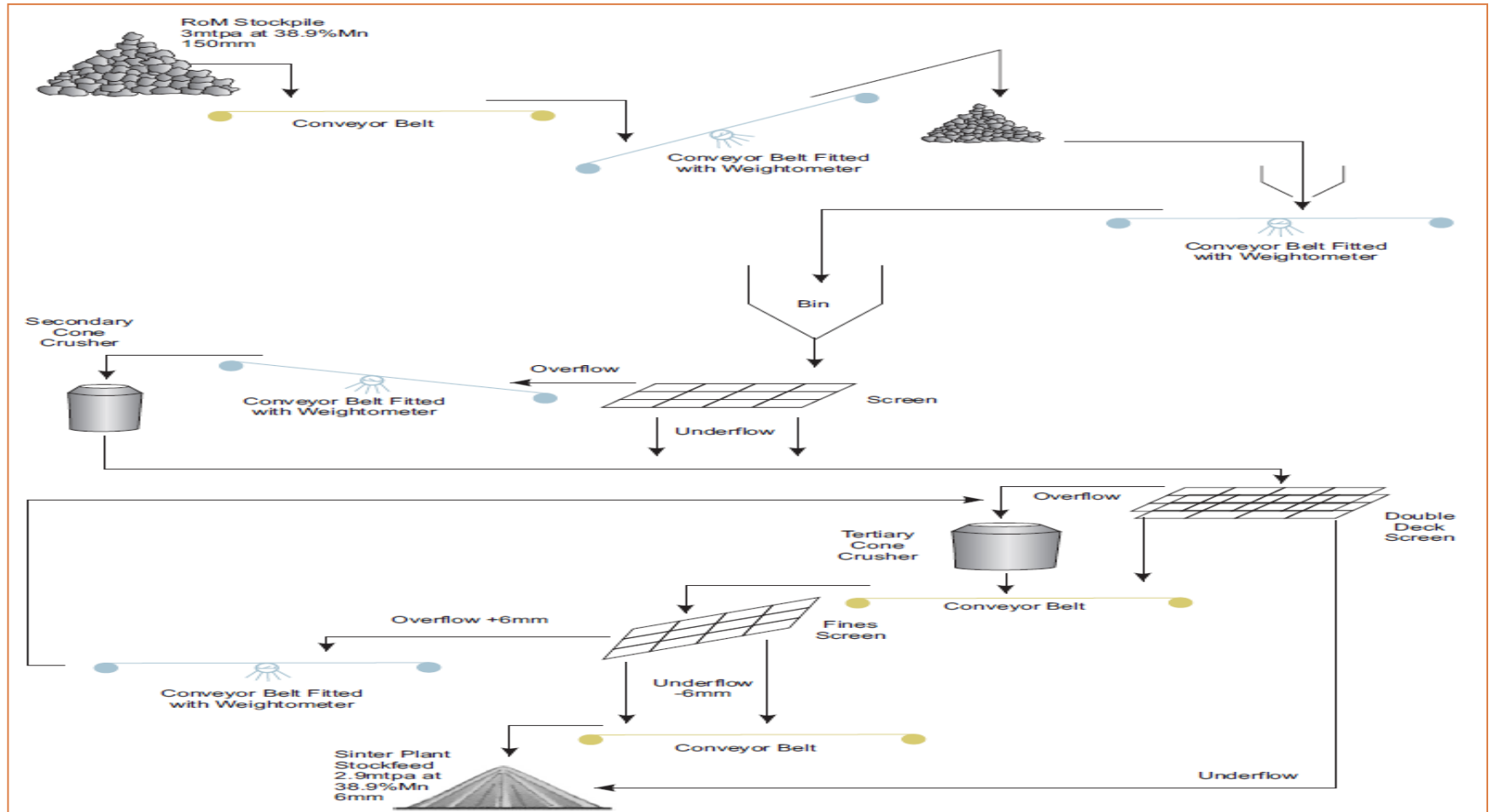
# Mine

- Access to the mine will be means of a twin vertical shaft system
- Kalagadi will apply the classic room-and-pillar mining method and will be fully mechanised



# Ore Preparation

12



# Sinter

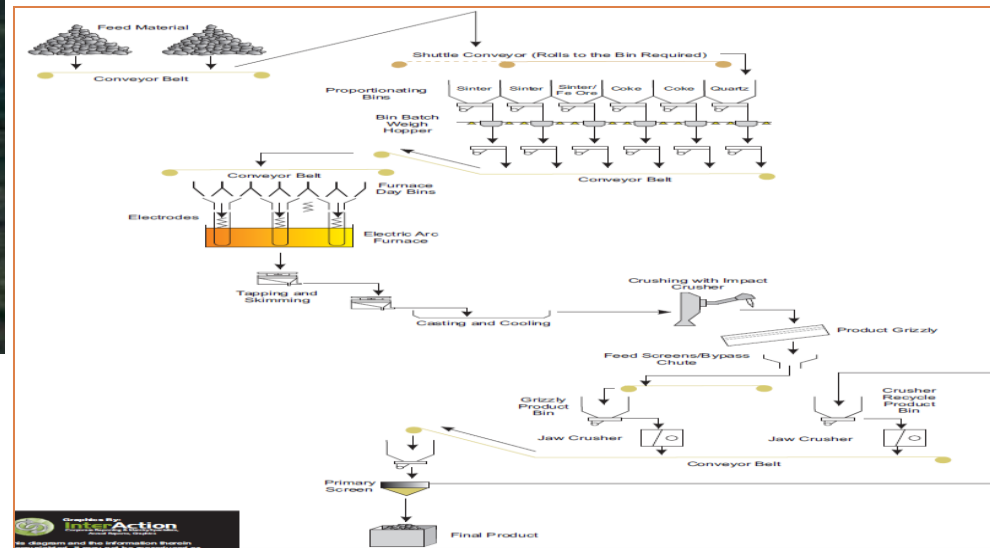
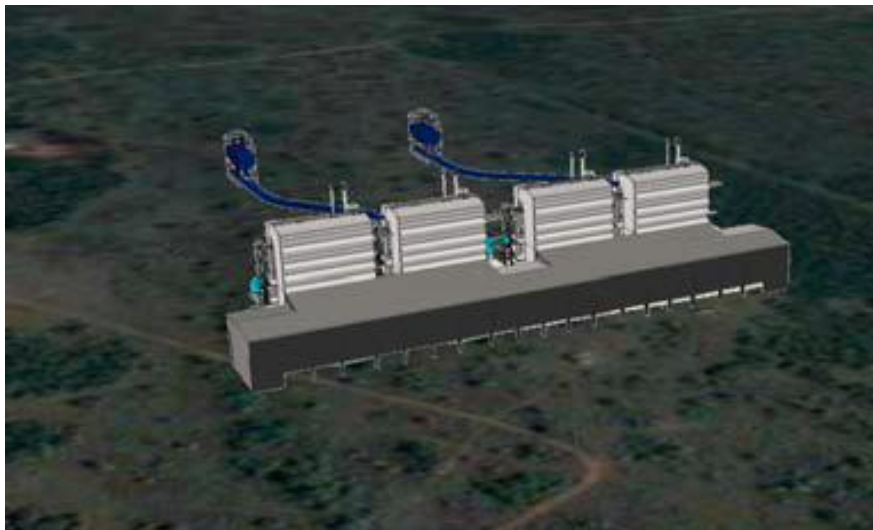
13

- The sinter plant is based around the Outotec's iron ore sintering technology.
- The proposed sintering machine is designed to produce 2.4mtpa sinter.
- Of the 2.4mtpa of sinter produced, 0.7mt will be sent to the smelter, and the balance, will be sold directly to market



# Smelter

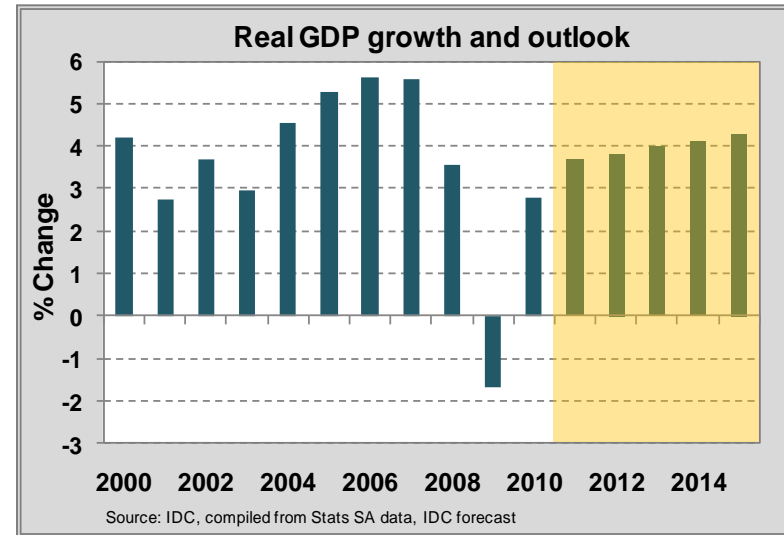
- The smelter will be located in the industrial development zone at Coega  
The project now occupies the prime location in the IDZ, previously intended for the Aluminium Smelter
- The smelter will consist of four 63MVA closed submerged arc furnaces and state of the art ancillary equipment





# Country Investment Case

- South Africa (SA) is one of the most sophisticated and promising emerging markets globally
- SA is Africa's economic powerhouse, as its USD 321.5 billion GDP represents 23.4% of the continent's overall GDP, and makes it the 27<sup>th</sup> largest economy in the world
- Unique combination of highly developed first-world economic infrastructure and a vibrant emergent market economy
- SA has a modern physical infrastructure supporting the efficient distribution of goods throughout the southern African region
- SA is an important emerging economy leading the continent in industrial output and mineral production
- SA takes the leading position on the African continent in terms of industrial output (40% of Africa's total) and mineral production (45% of Africa's total) and generates more than 50% of Africa's electricity
- Over 80% of the world manganese reserves are found in SA and, through sintering and smelting, the project supports the SA government's IPAP2 and New Growth Path.



# Country Investment Case



17

- The cost of doing business in SA compares favourably with other emerging markets, with the World Bank and International Finance Corporation's 'Doing Business 2010' ranking SA in 34<sup>th</sup> position out of 183 countries surveyed in 2010 in terms of ease of doing business
- SA ranked 2<sup>nd</sup> with regard to 'access to credit' and 10<sup>th</sup> in terms of 'protection provided to investors'
- SA has a world-class and progressive legal framework and a well developed legislation governing commerce and labour
- The Johannesburg Securities Exchange (JSE) is the 14<sup>th</sup> largest equities exchange in the world
- The banking regulations rank with the best in the world, and the sector has long been rated among the top 10 globally
- The country plays a significant role in supplying energy, relief aid, transport, communications and investment on the continent
- In January 2011, Standard & Poor's revised SA's outlook to 'stable' (from 'negative'), whilst also maintaining the sovereign foreign currency long-term credit rating of BBB+

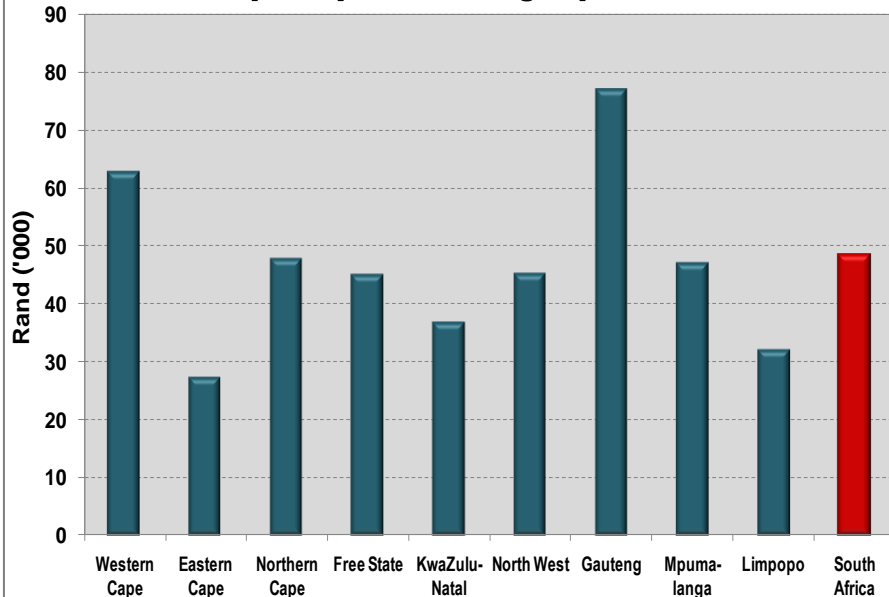
# Eastern and Northern Cape



18

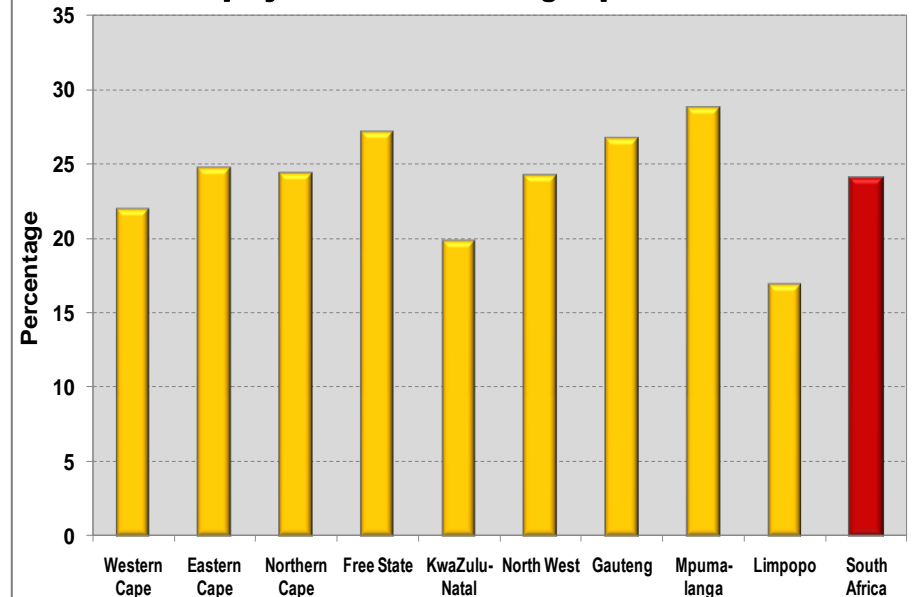
- The project will be implemented across two of the country's poorest provinces.
- Very low educated (10% had no schooling, 34% some primary education, 30% some secondary, 11% grade 12, 6% higher education) and inappropriate skills.
- Poor access to social services.
- Majority of the population falls below the poverty level.
- High unemployment and low levels of GDP per capita, especially in the Eastern Cape.

**GDP per capita according to province in 2009**



Source: IDC, compiled from Stats SA data

**Unemployment rate according to province in 2010**



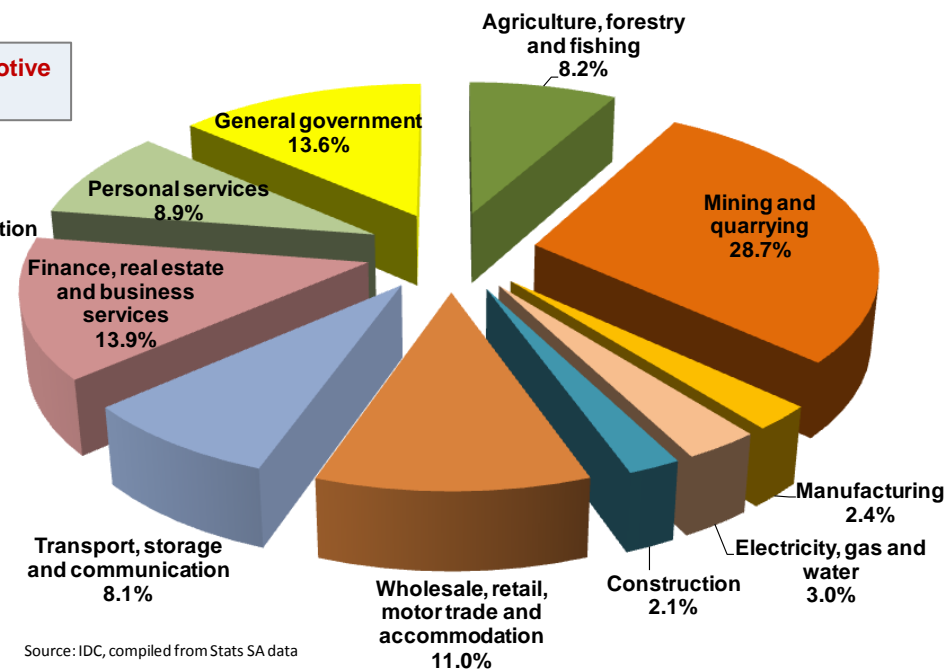
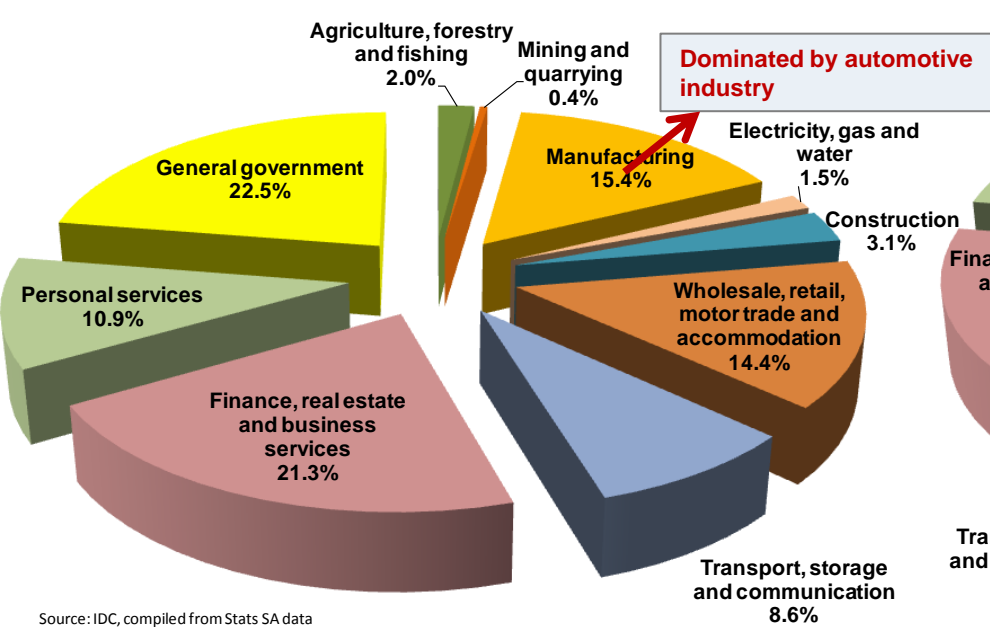
Source: IDC, compiled from Stats SA data

# Eastern and Northern Cape

- Lack of economic infrastructure remains a key challenge
- Lack of diversification in the economy (heavily dependant on the mining, agriculture and automotive sectors)

**Sectoral composition of the Eastern Cape economy in 2009**

**Sectoral composition of the Northern Cape economy in 2009**



Source: IDC, compiled from Stats SA data

Source: IDC, compiled from Stats SA data

# Socio-Economic Benefits



20

- The project creates about 2 200 jobs during peak of construction.
- Mine complex will create 580 permanent direct jobs in Hotazel.
- Smelter will create 475 permanent direct jobs in Port Elizabeth.
- In excess of R400 million will be invested in water, sanitation, transport, energy and telecoms infrastructure.
- About R180 million will be invested in social infrastructure like schools, clinics, social housing, hospitals, etc.
- Project already has a positive impact on provincial gross value added.
- The project will support in excess of 1 000 direct jobs during production and the number of indirect jobs in spin-off industry is a further 8 000
- The project has, however, the ability to create new and/or sustain as many as 20 000 employment opportunities throughout the SA economy due to its strong linkages with domestic suppliers of goods and services during the project's operational phase.

# Thank You