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- Future Developments in Sub-Saharan Africa

SOUTH AFRICAN PRIMARY STEEL INDUSTRY

Executive summary

OECD/ SOUTH AFRICA WORKSHOP ON STREELMAKING
RAW MATERIALS
11 December 2014
Cape Town

SOUTH AFRICAN IRON AND STEEL INSTITUTE
www.saisi.co.za
Executive summary

Introduction
The South African Government’s National Development Plan and its developmental objectives have initiated a broad debate on the optimal way to grow and enhance the South African steel value chain.

Phase 1 beneficiation- Iron ore industry
- South Africa has a significant competitive (structural) advantage in respect of the production of iron ore due to large-scale, high-quality iron ore reserves and sufficient global demand and logistics advantage
- The South African iron ore industry supplies the domestic market’s full demand for iron ore and the remaining volumes are exported

Conclusion
- Government and industry could work together to develop new technologies that could allow for enhanced and sustainable development of iron ore and steel manufacturing capability.

The Mineral Beneficiation Action Plan (MBAP)

Phase 1 beneficiation - Iron ore industry

Steelmaking raw material costs

Steelmaking raw material costs (international)


Steel industry value chain - flat products

Source: www.steelonthenet.com  All prices are per metric tonne, Ore prices are for China imported fines 62% Fe (cfr Tianjin port), Pig iron is the world average fob export price, Slab price is world average fob export price, Coldrolled coil, galvanised steel (for hot dip galvanised, HDG sheet and coil) and organic coated sheet (OCS) are also world averages.
Executive summary  (cont.)

Phase 2 beneficiation- Primary steel industry

- South Africa has a significant steel making industry, relative to the size of its economy compared to similar global economies, however, there is substantial domestic overcapacity in relation to metallurgical beneficiation and shaping.

- The National Development Plan (NDP) has certain key targets that are supported by activities, the key being a secure domestic supply of steel required to execute the NDP’s ambitious infrastructure plans.

- The health of the primary steel mills is intrinsically interlinked with the performance of intensive steel use sectors such as mining, manufacturing and building & construction. Successful development of the downstream value adding industrial sectors are thus understandably the subject of great interest of the primary steel mills and the same of significant job creation and technology advancement.

Executive summary  (cont.)

Sustainability, recycling and multiplying factor

- Steel production is a resource intensive industry While the use of these resources cannot be completely eliminated, efficient and innovative processes and management can minimise amounts that are required to fabricate steel.

- Steel has an enormous capacity for recycling to the point of the most recycled material on earth and is fully recyclable in the future and can be reused without further processing. By-products of steelmaking typically find application in the cement industry, construction sector, and certain other niche applications.

- The production of local steel is beneficial to the domestic economy by adding value in beneficiation over exporting raw materials; creating direct and indirect jobs, providing tax revenue and serving as a key factor in reducing supply lead times compared to imported steel.

- The South African Institute of Steel Construction (SAISC) estimates that an additional R0.43 are generated for each Rand due to the manufacture of steel. Independent economics consulting firm Quantec estimates that 0.82 jobs in indirect and 2.18 jobs in induced employment result from every R1 m of steel demand.

Conclusion

- If the necessary pre-requisites are in place, this will facilitate a sustainable steel industry and boost domestic consumption of steel. Local demand for steel products could be stimulated by creating a supportive environment for large scale investments in key steel consuming industries.
Executive summary (cont.)

Phase 2 beneficiation – Primary Steel Industry

Sustainability, recycling and multiplying factor

APPARENT STEEL USE PER CAPITA
2007 TO 2013

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<td>92.4</td>
<td>92.4</td>
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<td>92.4</td>
</tr>
</tbody>
</table>

Source: World Steel in Figures 2014 – Worldsteel Association

Executive summary (cont.)

- Production capacity of Steel Mills in South Africa
- Participation of Primary steel industry

- Given the major importance of the steel value chain to South Africa, the primary steel industry values government’s aspirations for the sector and is fully committed to cooperating and participating within a joint government industry process, and where appropriate, promote additional sustainable beneficiation.

- The primary steel industry believes that there should be a common understanding of the economic, commercial and policy drivers that inform the viability of the steel value chain and that that government interventions and policy considerations in these sectors need to be carefully evaluated.

Conclusion

- The impact of global economic markets, local policy and regulation and the actions of industry participants will define the prospects for the entire steel value chain.
Executive summary (cont.)

Phase 3 beneficiation - Conversion/fabrication and manufacturing industries

- South African converters and manufacturers are to a certain extent competitive in domestic and regional markets, however, international competitiveness is under pressure from inter alia logistics costs and lack of scale. Simultaneously, the volatility related to foreign exchange fluctuations adds further risk to building an export oriented industry.

- In essence, the greatest challenge to the long term viability of the primary steel industry in South Africa is to ensure a broad based sustainable economic growth rate at a sufficiently high level in order to stimulate production capabilities in downstream industries providing strong growth in demand for primary steel products as part of a coherent growth strategy, which will generate sustainable employment and growth in an increasingly competitive world economy.

Conclusion

- It is believed that the primary steel mills have a unique vantage point of the downstream steel use industries and that government could be productively assisted by the steel mills in its own efforts to revitalise the industrial sectors of the economy via the government's industrialisation and various other job creation programmes.

Future developments in Sub-Saharan Africa will create opportunities for higher level of raw material beneficiation in the region’s steel production sector.
Story line

• There is a strong relationship between steel consumption and Fixed Capital Formation
• Africa, the second-most attractive investment destination in the world
• Sub-Saharan Africa gets the lions’ share of Foreign Direct Investment
• The development hubs in the region support the world’s next manufacturing destination
• Apparent steel demand in the region
• Will current steel capacities cope with the demand?
• Further opportunities for raw material beneficiation
• Alignment with the National Development Plan
• Conclusion

Global fixed asset investment dynamics

In value and percentage change

The global steel intensity figure for 2011 is 116 million tonnes of steel consumed per trillion U.S. dollars of fixed asset investment spending. On a global basis, the correlation between the apparent consumption of finished products and billions of dollars of fixed asset investment spending was 0.91 between 2004 and the first half of 2011.
The South African Steel Consumption Pattern Clearly Illustrates the Link Between Gross Fixed Capital Formation and Steel Consumption

Reports from our customers as well as media reports have suggested a worrisome slump in building and construction activity in South Africa. The region, however, supports higher levels of growth.

South African steel market

Demand stimulated by projects like Duvha, Koeberg, Matla power stations; Bloukrans Bridge

Driven by construction of Arnot, Krieland, Hendrina power stations; Sterkfontein Dam

Among core construction projects: Majuba, Kendal, Mtimba, Tutuka power stations; Rietvlei Dam extension

Apart from 2010 Soccer infrastructure, demand coming from projects like Gautrain, TCTA water pipeline, Eskom OCGT plants

Africa posed a dramatic improvement in investor perceptions over the past four years that supported steel demand

Investors see the three regional hub markets — namely South Africa in the south, Nigeria in the west and Kenya in the east — as the Key African hubs: These three countries account for over 40% of total FDI projects in SSA. With Angola, the fourth-most attractive investment destination.

Significant Projects and job creation in 2013 although slightly lower than 2012

750 projects

108,952 jobs

Africa has moved from the third-from-last position in 2011 to become the second-most attractive investment destination in the world.
SSA’s share of FDI rises (mostly infrastructure = supporting steel demand)

FDI projects and job creation reaches an all-time high in 2013

- Comparing FDI flows pre-crisis (2003–07) with post-crisis (2008–13), 2007 proved to be a tipping point for SSA. Since 2007, SSA has accounted for an increasing share of projects, both by number and value.
- This trend accelerated in 2013, with SSA’s share of overall African FDI projects and job creation achieving all-time highs of 82.8% and 79%, respectively.
- This growth is underpinned by solid FDI flows to four countries in particular: South Africa, Kenya, Ghana and Nigeria.

Three major sub-Saharan African regional hubs

- Southern Africa overtook North Africa in 2010 as the largest FDI hub, and the gap has increased since.
- In 2013, both West and East Africa surpassed North Africa in FDI projects for the first time, becoming the second and third most attractive sub-regions in Africa.

- Some investors are concerned that the country may lose its “gateway to Africa” status, FDI numbers indicate that it remains very attractive.
- In FDI project numbers, South Africa has widened its lead over other countries since 2008. In fact, in 2012 and 2013, the country received at least double the number of FDI projects of the second-largest recipient.
- FDI projects in South Africa have increased at a CAGR of more than 16% since 2007.
- In 2013, South Africa’s FDI projects alone exceeded those of the whole of North Africa.

Southern Africa: South Africa acts as an anchor, attracting most interest

Southern Africa: the next manufacturing hotspot?

The EY attractiveness survey 2014, Plotting the top states and provinces (in terms of FDI projects) in the south, Gauteng and Kwa-Zulu Natal make for a key cluster. In the west, there is a cluster comprising Greater Accra and Lagos. The Nairobi area and Dar es Salaam form a key cluster in the east.

Southern Africa

Gauteng province is a regional giant

Western Cape

KwaZulu-Natal

Lagos and Greater Accra area

Nairobi and Dar es Salaam

Southern Africa acts as an anchor, attracting most interest

Part of the GILA urban corridor — a 600km-long area that snakes through four West African countries: Nigeria, Benin, Togo and Ghana. Lagos is set to be the most populous city in Africa by 2030, with a population of more than 25 million. Greater Accra’s share of Africa’s FDI projects has increased nearly six fold, from just 0.8% in 2007 to 4.7% in 2013.

The EY attractiveness survey 2014, Plotting the top states and provinces (in terms of FDI projects) in the south, Gauteng and Kwa-Zulu Natal make for a key cluster. In the west, there is a cluster comprising Greater Accra and Lagos. The Nairobi area and Dar es Salaam form a key cluster in the east.

... to drive growth in the future

Western Cape

KwaZulu-Natal

Gauteng province is a regional giant

Since 2010, the Gauteng province has been the most popular FDI destination for projects in Africa. It is the economic engine of South Africa, accounting for 33.7% of GDP.

The Western Cape province is served by sea ports including Cape Town and Saldanha. Cape Town was the fifth-most attractive African city in 2013 by FDI projects.

Strategically positioned to access markets across both the Indian Ocean and the Pacific Ocean. It is home to two of Africa’s busiest sea ports, Durban and Richards Bay.

The EY attractiveness survey 2014, Plotting the top states and provinces (in terms of FDI projects) in the south, Gauteng and Kwa-Zulu Natal make for a key cluster. In the west, there is a cluster comprising Greater Accra and Lagos. The Nairobi area and Dar es Salaam form a key cluster in the east.

... to drive growth in the future

Southern Africa

Gauteng province is a regional giant

Western Cape

KwaZulu-Natal

Lagos and Greater Accra area

Nairobi and Dar es Salaam

Strategically positioned to access markets across both the Indian Ocean and the Pacific Ocean. It is home to two of Africa’s busiest sea ports, Durban and Richards Bay.

The East Africa Northern and Central corridors are primarily responsible for trade flows in the eastern part of the continent. While Nairobi lies on the Northern Corridor, Dar es Salaam is part of both corridors. The Nairobi Area’s share of FDI projects in Africa has increased from just 1.3% in 2007 to 7.9% in 2013.
Replacing complete steel product imports to Africa, Steel Consumption could increase substantially over and above the numbers reported by WSO

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<td>24 527</td>
<td>20 380</td>
<td>20 790</td>
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</table>

Source: WSO Statistical Year Book 2013

Different trade zones in the region present some challenges for cross-country trade

Steel demand in the SADC region can be divided into three different trade regimes

- **Imports predominantly from China, Turkey and Brazil.**
  - Rest of the demand is produced locally.

Trade regimes in the SADC region differ substantially

- **COMESA**
  - Includes Kenya, Tanzania, Madagascar, Rwanda, Burundi, Comoros, Zambia and Mozambique.
  - Exports excluded from other SADC countries.

- **EAC**
  - Includes Burundi, Kenya, Tanzania, Rwanda, Ethiopia and Uganda.

- **SADC**
  - Includes Angola, Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.

- **South Africa**
  - Produces 35% of steel demand and shares the continent's largest steel plant.

- **COMESA**
  - Includes all the COMESA countries except Tanzania.

- **EAC**
  - Includes all the EAC countries except Tanzania.

- **SADC**
  - Includes all the SADC countries except South Africa.

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  - Includes all the COMESA countries except Tanzania.

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Impacts predominantly from China, Turkey and Brazil.

Imports are predominantly from South Africa, China, Turkey and Brazil.

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Actual crude steel production in the region, specifically for the Southern African region could be somewhat higher as some scrap based mills started production during the last 5 years are not included in the statistics. (Remotswa, Steelmakers, UNCIL, Good Time Steel, Agni Steels SA, Union Junction, etc.)

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</table>

Southern African steel demand outstrip local supply

- Notwithstanding the short reporting of steel production for the region, it remains a net importer of steel products either in primary products or as final steel products.
- The opportunity to beneficiate additional raw materials to capture the replacement potential is sustainable and real.

Source: WSO Statistical Yearbook 2013, SAISI Analysis
What opportunities are there for Steel Making Raw Materials?

South Africa is exporting 60 million tonnes of Iron Ore and 1.5 million tonnes of scrap per annum according to WSO Statistical yearbook 2013. Two examples are:

1. **Kumba Iron Ore**

   Export sales of 39.1Mt

   **OPERATIONAL PERFORMANCE**

<table>
<thead>
<tr>
<th></th>
<th>Sishen</th>
<th>Kolomela</th>
<th>Thabazimbi</th>
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<tr>
<td>Where</td>
<td>Kathu, Northern Cape</td>
<td>Postmasburg, Northern Cape</td>
<td>Thabazimbi, Limpopo</td>
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<tr>
<td>Production 2013</td>
<td>30.9Mtpa</td>
<td>10.8Mtpa</td>
<td>0.6Mtpa</td>
</tr>
<tr>
<td>Production 2014e</td>
<td>~35Mt</td>
<td>~10Mt</td>
<td>~1Mt</td>
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<tr>
<td>LoM</td>
<td>19 years</td>
<td>25 years</td>
<td>10 years</td>
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<td>Design capacity</td>
<td>37Mtpa</td>
<td>10Mtpa</td>
<td>2Mtpa</td>
</tr>
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2. **Assmang Iron Ore**

<table>
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<tr>
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<th>Measured and indicated Mineral Resources</th>
<th>Proved and probable Mineral Reserves</th>
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<td></td>
<td>Mt</td>
<td>Fe %</td>
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<td>BEEHSOEK</td>
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<td>63.73</td>
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<tr>
<td>Dumps</td>
<td></td>
<td></td>
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<tr>
<td>KHUMANI</td>
<td>227,79</td>
<td>64,53</td>
</tr>
<tr>
<td>King</td>
<td>481,18</td>
<td>64,13</td>
</tr>
<tr>
<td>Total</td>
<td>708,97</td>
<td>64,26</td>
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<tr>
<td>Dumps</td>
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</tbody>
</table>

Note: Information is as at 31 December 2013 according to the annual reports.

The South African Steel Mills are Supporting the national development agenda

- The primary steel mills in South Africa are committed to supporting the national development agenda set by the South African government.
- The National Development Plan (NDP) has certain key targets that are supported by activities, the key being a secure domestic supply of steel required to execute NDP’s ambitious infrastructure plans.
- There are other social and environmental targets where the primary steel mills in South Africa contribute positively or where it could improve its contribution.
- Primary steel mills:
Interlinking with downstream value adding sectors

• The health of the primary steel mills is intrinsically interlinked with the performance of intensive steel use sectors such as mining, manufacturing and building & construction.

• Successful development of the downstream value adding industrial sectors are thus understandably the subject of great interest of the primary steel mills and the same of significant job creation and technology advancement.

• It is believed that the primary steel mills have a unique vantage point of the downstream steel use industries and that government could be productively assisted by the steel mills in its own efforts to revitalise the industrial sectors of the economy via the government’s industrialisation and various other job creation programmes.

Key targets of the National Development Plan

1) Economic growth engine

<table>
<thead>
<tr>
<th>Key targets of NDP</th>
<th>Source of Impact</th>
<th>Primary steel mill’s contribution to NDP</th>
</tr>
</thead>
</table>
| • Increase GDP by 2.7 times by 2030.  
• Increase average GDP growth rate to above 5%. | • Impact on GDP  
• The Primary Steel Industry contributes about 1% to GDP.  
• Additional indirect impact on GDP due to multiplier effect of downstream value addition.  
• The Primary Steel Industry is a major South African tax payer.  
• Potentially significant role to play in developing and supporting broad based economic activity among South Africans.  
• However, the Primary Steel Industry’s revenue is not growing significantly due to SA’s economic growth being lower than anticipated, the depressed building and construction industry, high electricity and raw materials costs and the world financial crises.  
• Promoting exports and competitiveness. Exports to grow by 6% a year to 2030.  
• Net exports | • The Primary Steel Industry contributes about 1% to GDP.  
• Additional indirect impact on GDP due to multiplier effect of downstream value addition.  
• The Primary Steel Industry is a major South African tax payer.  
• Potentially significant role to play in developing and supporting broad based economic activity among South Africans.  
• However, the Primary Steel Industry’s revenue is not growing significantly due to SA’s economic growth being lower than anticipated, the depressed building and construction industry, high electricity and raw materials costs and the world financial crises.  
• Primary steel product exports of approximately R18bn in 2013.  
• Primary steel mills offer export rebate for value added steel exports (COSM scheme). |
### Key targets of the National Development Plan (cont.)

#### 2) Employer, job creator and skills developer

<table>
<thead>
<tr>
<th>Key targets of NDP</th>
<th>Source of impact</th>
<th>Primary steel mill’s contribution to NDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increase number of jobs by 61%. 11 m more jobs by 2030.</td>
<td>• Direct Employment.</td>
<td>• Primary Steel Industry provides employment to more than 25,000 people.</td>
</tr>
<tr>
<td>• Reduce unemployment to 6%. No. of employed to rise to 24m.</td>
<td></td>
<td>• Indirect economy-wide employment increases substantially via suppliers to primary steel industry.</td>
</tr>
<tr>
<td>• Encourage training and skills development.</td>
<td>• Training.</td>
<td>• However, no significant increase in number of people being employed by steel mills.</td>
</tr>
<tr>
<td>• Produce 30,000 artisans a year.</td>
<td>• Investment in Community cap development.</td>
<td>• Primary Steel Industry spent is significant on training.</td>
</tr>
<tr>
<td></td>
<td>• Development into skilled positions.</td>
<td>• Training to produce more than 750 artisans.</td>
</tr>
<tr>
<td>• More people living closer to their places of work.</td>
<td></td>
<td>• Majority of employees are local as primary steel mills are regarded as employer of choice providing stable jobs in local communities.</td>
</tr>
<tr>
<td>• Increase university enrolment by 70%.</td>
<td>• Investment in Innovation.</td>
<td>• More than 150 university bursaries.</td>
</tr>
<tr>
<td>• Provide 1m learning opportunities through community education.</td>
<td></td>
<td>• Local community education via science centres.</td>
</tr>
<tr>
<td>• Increase students eligible for maths and science degrees.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Expand innovation output by increasing research and development.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3) Impact on local communities

<table>
<thead>
<tr>
<th>Key targets of NDP</th>
<th>Source of impact</th>
<th>Primary steel mill’s contribution to NDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Upgrade all informal settlements on suitable land by 2030.</td>
<td>• Human settlement development.</td>
<td>• Primary steel mills are important centres of economic activity in local communities.</td>
</tr>
<tr>
<td>• Universal access to basic services, health care, education.</td>
<td></td>
<td>• Steel required for construction of houses and electric distribution.</td>
</tr>
<tr>
<td>• Universal access to clean and potable water.</td>
<td></td>
<td>• Significant spent by primary steel mills for community development.</td>
</tr>
<tr>
<td>• Electricity access to at least 90% of households.</td>
<td></td>
<td>• Primary steel mills built schools, science centres, provided libraries and various health projects and done re-roofing of houses in local communities.</td>
</tr>
<tr>
<td>• Improving public services and spaces, integrated housing and sports facilities.</td>
<td></td>
<td>• However, safety audits for employees only.</td>
</tr>
<tr>
<td>• Safety audits done for all communities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Eradicate school infrastructure backlog by 2030.</td>
<td>• New schools built.</td>
<td>• Built schools for communities.</td>
</tr>
</tbody>
</table>
### Key targets of the National Development Plan (cont.)

#### 4) Environmental footprint

<table>
<thead>
<tr>
<th>Key targets of NDP</th>
<th>Source of impact</th>
<th>Primary steel mill’s contribution to NDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reduce carbon footprint.</td>
<td>• Total CO₂</td>
<td>• CO₂ emissions per tonne of steel produced by primary steel mills have limited opportunities available to be directly reduced.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The primary steel mills are actively engaged in the debate about the design and implementation of carbon legislation in SA, given the potentially serious operational and economic consequences.</td>
</tr>
<tr>
<td>• Ensure compliance with environmental regulations.</td>
<td>• Environmental management.</td>
<td>• Investments prioritised to ensure compliance.</td>
</tr>
<tr>
<td>• Reduce water demand by 15% below business as usual.</td>
<td>• Total water withdrawal.</td>
<td>• Primary steel mills reduced water abstraction.</td>
</tr>
<tr>
<td>• By 2030, carbon price should be entrenched.</td>
<td>• CO₂ emissions reduction.</td>
<td>• Primary steel mills do not support carbon pricing for steel.</td>
</tr>
<tr>
<td>• Reductions in the total volume of waste disposed to landfill.</td>
<td>• Recycled material use.</td>
<td>• Optimisation of by-products a priority.</td>
</tr>
</tbody>
</table>

#### 5) Enabler of S.A. development through supply of steel

<table>
<thead>
<tr>
<th>Key targets of NDP</th>
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<th>Primary steel mill’s contribution to NDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increase capital expenditure to 30% of GDP.</td>
<td>• Total steel contribution.</td>
<td>• Steel is an integral part of any economy, at the core of infrastructure development and a key input for manufacturing and mining.</td>
</tr>
<tr>
<td>• Increase public infrastructure spending to 10% of GDP.</td>
<td></td>
<td>• The production of local steel is beneficial to the domestic economy by adding value in beneficiation over exporting raw materials, creating direct and indirect jobs, providing tax revenues for government and serving as a key factor in reducing supply lead times compared to imported steel.</td>
</tr>
<tr>
<td>• Invest in large infrastructure projects in Health, Education, Energy and Transport.</td>
<td></td>
<td>• Creation of downstream steel industries is key to maximising beneficiation and the primary steel mills actively participates in developing and supporting secondary steel industries.</td>
</tr>
<tr>
<td>• Increase Durban port capacity from 3m to 20m containers.</td>
<td></td>
<td>• Steel from the primary steel mills is critical for NDP infrastructure projects.</td>
</tr>
<tr>
<td>• Better quality public transport.</td>
<td></td>
<td>• Current production of primary steel mills below full capacity due to low domestic demand and competition from imports.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The primary steel mills continually encounters challenges to its continued ability to be able to produce steel affordably, and competitively, threatening the contribution that it makes to South Africa.</td>
</tr>
</tbody>
</table>
Key targets of the National Development Plan (cont.)

6) Catalyst for change in South Africa

<table>
<thead>
<tr>
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<th>Source of impact</th>
<th>Primary steel mill’s contribution to NDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Effective redress by creating employment equity.</td>
<td>• Employment equity.</td>
<td>• Historically disadvantaged South Africans represent majority of employed, however, no significant increase is taking place.</td>
</tr>
<tr>
<td>• Clear targets set for expanding economic participation.</td>
<td>• Safety &amp; Health hazards.</td>
<td>• Targets to reflect national racial distribution.</td>
</tr>
<tr>
<td>• Reduce prevalence of non-communicable chronic diseases.</td>
<td>• Employee Wellness.</td>
<td>• The primary steel mills require a high proportion of skilled employees which takes many years to develop.</td>
</tr>
<tr>
<td>• Reduce injury, accidents and violence by 50%.</td>
<td>• External reporting.</td>
<td>• Occupational disease frequency not significantly reduced.</td>
</tr>
<tr>
<td>• Deploy primary healthcare teams to provide care.</td>
<td>• Anti-corruption.</td>
<td>• Injury rate reduced.</td>
</tr>
<tr>
<td>• A set of indicators for natural resources and publication of annual reports.</td>
<td>• JSE listed primary steel mills publishes annual sustainability reports with environmental indicators.</td>
<td>• Sponsored clinic in local community and various other health projects.</td>
</tr>
<tr>
<td>• Corruption is reported on and monitored.</td>
<td>• Corrupt practices monitored and reported.</td>
<td></td>
</tr>
</tbody>
</table>

Closing Remarks: Economic Growth Prospects are on track with Developing Regions elsewhere in the World

• FDI should continue to play a critical role in sustaining, and even accelerating, growth and development in Africa over the coming decades.

• Rather than focusing on converting sceptics, attention should shift to better enabling those already investing and doing business on the continent.

• People already doing business on the continent identify two key constraints to their activities: one, transport and logistics infrastructure, and two, bribery and corruption.

• Countries that are making substantial improvements in transport and logistics are the ones that have implemented long-term and comprehensive reforms and investments across the transport and logistics supply chain.

• Bribery and corruption is an issue for both government and business, and both need to take responsibility for actively addressing the challenge.

• To sustain and accelerate Africa’s progress, we need a bias to action: one grounded in an intellectual and emotional framework that ensures government, business, the donor community and broader civil society are all working together to achieve the same long-term objectives of economic growth and social development.
In Conclusion

- Africa and Sub-Saharan Africa present a significant opportunity across multiple sectors and specifically in the steel and metals sector.

- The rapid emergence of a middle class, already equal in size to India, makes consumption a major driver of economic growth across the region, and is one of the most interesting yet less explored opportunities across the sub-continent.

- The existence of corruption, poverty and limited infrastructure mean that the continent can still be a challenging place to do business, but there are steady progress across most markets.

- Critically, it is this risk-reward equation that makes African investment so compelling – the returns remain among the highest in the world, while risks are diminishing and can be effectively managed.