ENHANCING UPSTREAM AND DOWNSTREAM VALUE ADDITION

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CONTENTS

1. INTRODUCTION – PROBLEM STATEMENT
2. RESOURCE DRIVEN INDUSTRIALISATION
3. BACKGROUND ISSUES AND SUMMARY CHALLENGES
4. TRADE BALANCE
5. KEY POLICY AND PROJECT LEVERS
6. HIGH LEVEL INTERVENTIONS
7. SPECIAL ECONOMIC ZONES
8. BENEFICIATION PROMOTION PROGRAMME
9. WAY FORWARD
Problem statement: how to leverage the comparative advantage from a national resource endowment to build a dynamic industrial economy which secures sustainable development, radical economic transformation and job creation.

- Ensure that our comparative advantage in resources endowment does become a competitive advantage for value adding; labour intensive manufacturing
- Window of opportunity for SA is narrowing as resources are being depleted and competitive advantages the country used to enjoy are no longer available at least at the same scale
KEY QUESTIONS

- How has mineral endowment or the minerals value chain shaped the development of nations?
- Are there evident indications around us of mineral induced development?
- Are developed countries mineral rich?
- Is the mineral resource curse real?
- What role has minerals played in shaping the SA economy?
- What role will the minerals value chain play in SA’s future?
- Is there a difference in the economic structure of resource rich countries? SA, Zimbabwe, Zambia, Mozambique, DRC?
- How will recent events (Marikana, AMCU strike, sell off by Anglo, BHP, retrenchments) affect the sector going forward?
SA CHALLENGES

• Supply and cost of utilities: Power, Water, Logistics, Infrastructure
• Declining/deepening resources/reserves
• Environmental costs – AMD, water, carbon tax
• Declining investments;
• Policy uncertainty
• Weak linkages with industrial sectors
• Transformation and empowerment
• Access to raw materials and supply of inputs
• R & D – COMRO/MINTEK

Shared and accepted vision
SA vs Zambia Economic Performance
RESOURCE-DRIVEN INDUSTRIALISATION

- Importance of industrialisation as an engine of sustainable economic growth and development
- Success of industrialised nations attributed to clear industrial priorities and interventions to leverage comparative advantage in the desired direction
- Most of the new industrial powers were previously primary-based economies (China, South Korea, India, Brazil, Malaysia, Vietnam, Indonesia and Mexico)
- In SA and Africa the contribution of the industrialised sector is well below potential and there is a growing focus on leveraging the linked industrial opportunities afforded by the continent’s mineral resources
- **Key industrial opportunity arising from natural resource endowment is not the opportunity to exploit the resource but rather the development of the up and downstream industries** (Ramos 1998, Walker & Jourdan 2002) – Nordic countries, New Zealand, Australia, Canada
AUSSIE RESOURCE CURSE
now only 1 in 12 jobs is in manufacturing
PRIMARY VS INDUSTRIALISED SECTOR

**Primary Sector**

- Generally unskilled labour
- Process innovation
- Extreme price fluctuations
- Diminishing Returns
- Technology change leads to lower prices in consuming countries

**Industrialised Sector**

- Skilled/semi-skilled labour, High tech product innovation
- Stable prices
- Dynamic imperfect competition
- Increasing Returns
- Technology change – higher wages, profits in producing countries

Source: E. Reinert, 2012
BACKGROUND ISSUES

• SA faces challenge of diversifying away from resource extraction and reliance on commodity exports towards a manufacturing, value adding and more labour intensive growth. Manufacturing sector has highest economic and employment multipliers with significant spill-over effects.

• Recent economic data again underlines the view that the current import intensive growth trajectory is unsustainable. GDP contraction evidence of importance of mining but critical need to move up the value chain.

• Upstream and downstream beneficiation and linkages to the manufacturing sectors is critical
SA’s top 10 Exports in Jan 2014

- Diamonds, whether or not worked, but not mounted or set:
- Centrifuges, filtering or purifying machinery for liquids or gases
- Motor cars and other motor vehicles principally designed for the transport of persons
- Manganese ores and concentrates
- Motor vehicles for the transport of goods
- Petroleum oils (excluding crude)
- Ferro-alloys:
- Coal and similar solid fuels manufactured from coal:
- Iron ores and concentrates
- Platinum, unwrought or in semi-manufactured forms
SA’s top 10 imports in Jan 2014

1. Petroleum crude oils
2. Motor cars and other motor vehicles principally designed for the transport of goods or passengers
3. Telephone sets, including telephones for cellular networks transmission
4. Automatic data processing machines
5. Medicaments consisting of mixed or unmixed products for therapeutic purposes
6. Electric generating sets and rotary converters
7. Parts and accessories of the motor vehicles
8. Self-propelled bulldozers, angledozers, graders, levellers, scrapers
9. Original equipment components of vehicles
10. Petroleum oils (excluding crude)
Performance of metals and engineering sector

Failure to leverage public capital expenditure
Public investment and trade balance in metal products and machinery, 1990 - 2008

Source: SARB
CHALLENGES AND STRUCTURAL ISSUES IN THE ECONOMY

- Minerals-energy complex is characterised by capital/energy intensive beneficiation
- Abuse of market power and IPP where strategic manufacturing inputs (steel, plastics, etc) are not passed through to manufacturing despite SA’s feedstock advantage
- Transport and logistics costs - cost of export of value-added goods is higher than cost for primary commodities. Transnet infrastructure and operations prioritise commodity exports.
- Offshore listings and the unbundling that followed has led to loss of capacity and capabilities in horizontally integrated mining companies divesting of ‘non-core’ assets
- The decline of SA’s public and private sector mining technology development (RDI) and skills is a significant problem.
Strategic areas of policy intervention:

1. Security of supply and access to minerals and metals at a cost plus pricing
2. Local procurement and supplier development
3. Research, development and innovation especially where important capabilities have been lost
4. Support for and investment in beneficiation
KEY POLICY AND PROJECT LEVERS

DMR
» Mining Charter

DTI
» IPAP – Upstream (Mining, Transport Capital Goods sector) and downstream beneficiation action plans
» B-BBEE (aligned with localisation provisions)
» SEZ’s and other incentives; investment and export promotion
» Manufacturing incentives

DPE/DOT
» SOE shareholder compacts – ports/rail access and expansion conditional on developmental objectives
» Rail and port tariffs

EDD
» IDC led projects and investment/investment facilitation
» Competition Commission (pricing)
MINERAL VALUE CHAIN STUDY

- DTI initiated Mineral Value Chain Study in Jan 2013 to develop key interventions to advance beneficiation in SA.
- Project steering committee - the dti, DMR, DST, IDC, TNPA
- Develop strategies and proposals to advance Upstream (Mining and transport and capital equipment) and forward beneficiation across 5 priority value chains:
  1. iron-ore and steel
  2. polymers
  3. titanium
  4. platinum group metals
  5. Upstream mining inputs
  6. (Work also underway on Oil and Gas)
HIGH LEVEL INTERVENTIONS

Cross Cutting Policy interventions
1. MPRDA Amendments
2. Competition Act amendments to include regulatory measures for key inputs into labour absorbing sectors
3. Mining Charter (procurement, R&D, beneficiation equity off-set provisions)
4. TNPA’s Beneficiation Promotion Programme

Other interventions
1. Inter-departmental task team on iron-steel
2. Potential new player in the steel industry led by the IDC
3. Bushveld Complex – unlocking SA’s vast magnetite resources
4. Special Economic Zones with incentives to support value addition industries – projects on fuel cell development, jewellery manufacturing, coking coal and polymer production
5. Autocatalyst sector – develop high impact growth strategy to 30% of global production
6. Resources Capital Goods Development Programme
7. Cluster development (plastics and minerals processing equipment cluster)
BENEFICIATION...THE WAY FORWARD

– Huge opportunities in unlocking the mineral linkages in the economy to drive industrial development and create jobs
– In order to achieve and sustain this we need a strong primary mining industry that can create new input and output industries
– Concerted combined public-private sector effort to develop competitive industries
– Expanded R&D that contributes towards innovation that supports beneficiation, rebuild national mining technology development capabilities
– Harness the collective industrial capabilities of local firms with targeted incentives
– Enabling, aligned policies and support measures
THANK YOU