

Mineral Beneficiation and the South African Economy

Presentation for:
**AngloGold Ashanti Mining For Change 2012:
Understanding South Africa's Mining Future**

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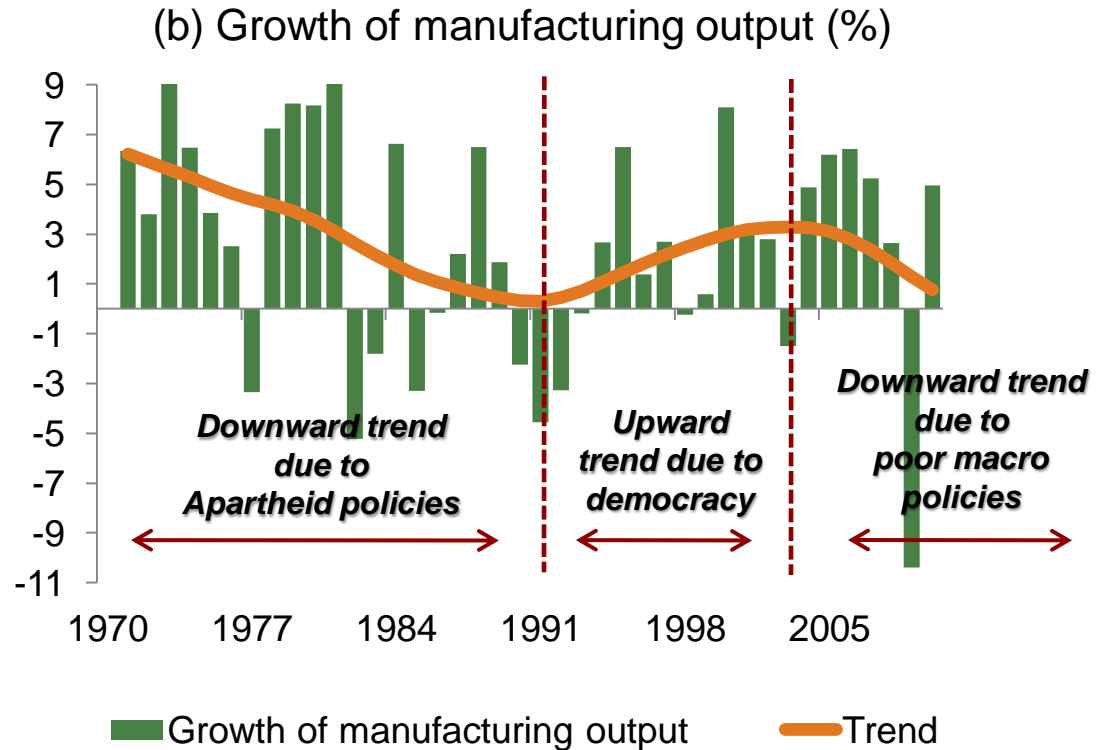
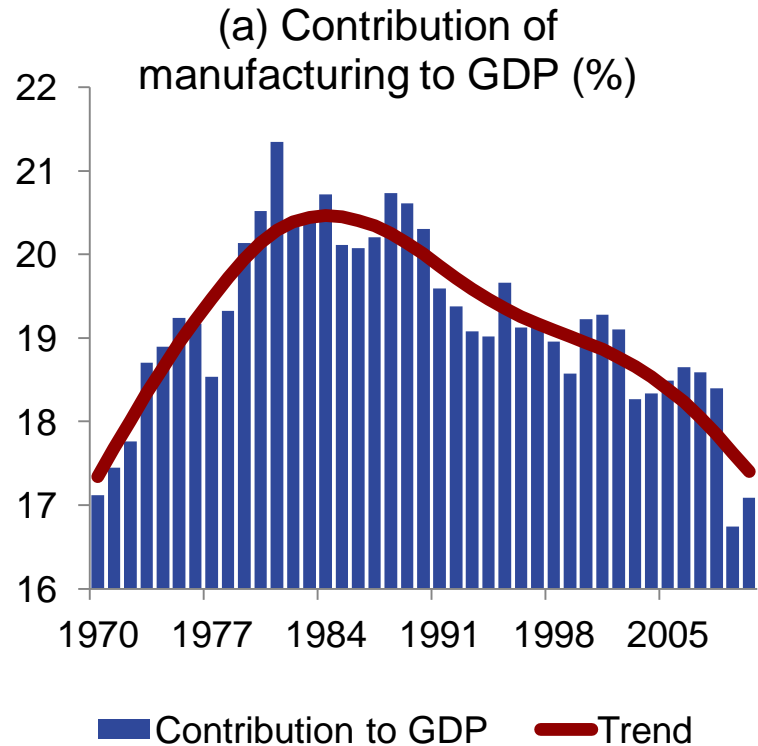
Pan-African Investment & Research Services (Pty) Ltd.

Outline

1. Trends in industrialization and mineral beneficiation
2. Conceptual Frameworks for mineral beneficiation
3. Financial and fiscal issues: The Funding Paradigm
4. Concluding remarks

Trends in the South African Mineral Beneficiation and Manufacturing Sector

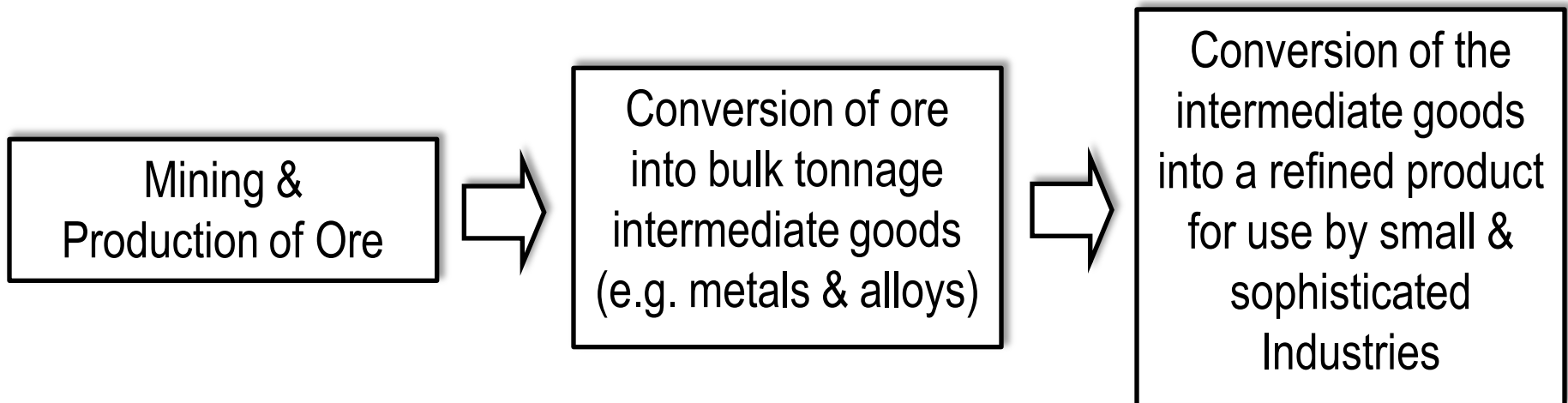
Increasing manufacturing output but declining manufacturing contribution to GDP



Source: SARB and PAIRS

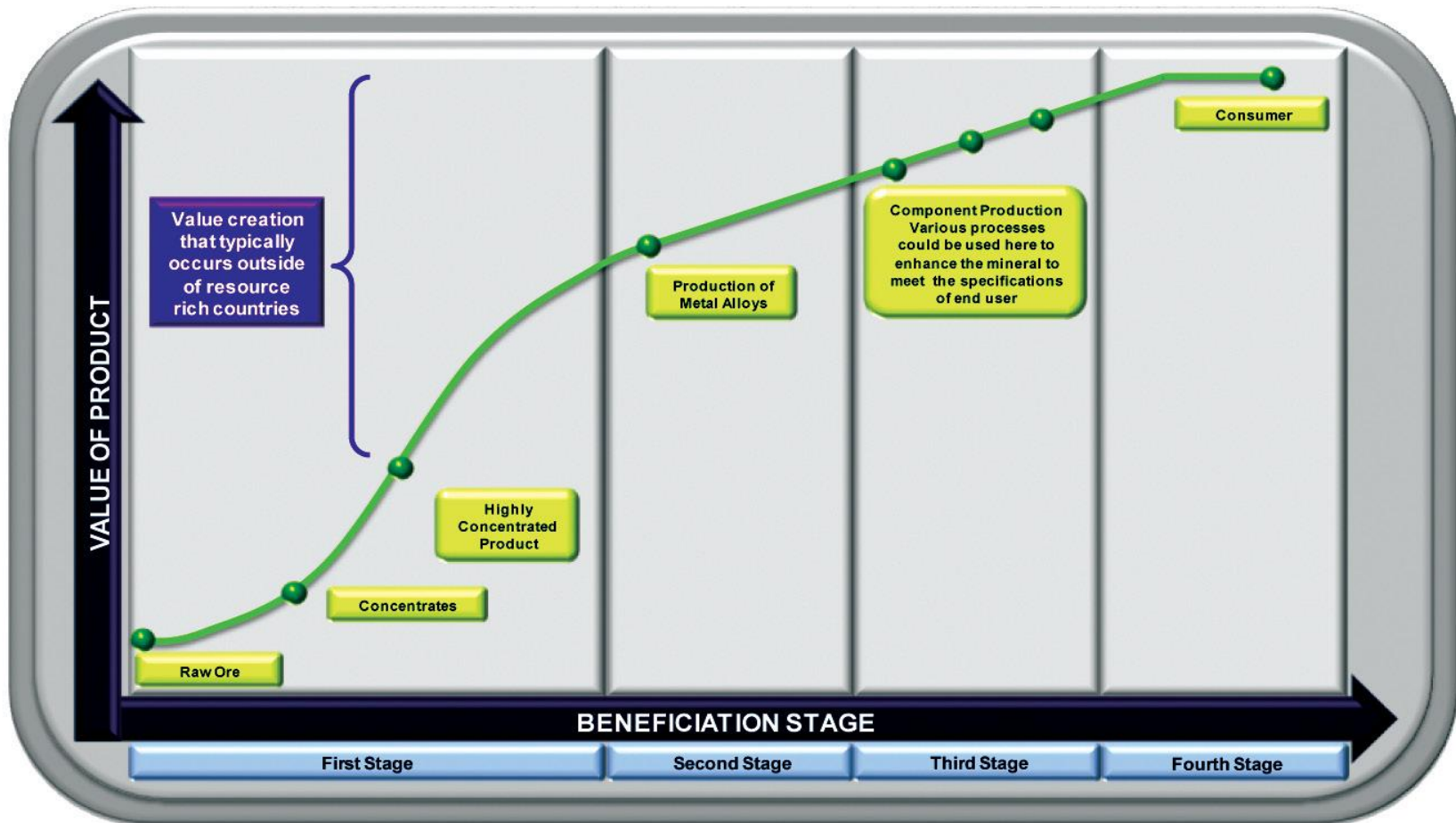
Manufacturing Expansion Needs Mineral Beneficiation

Mineral Beneficiation – A Narrow Perspective

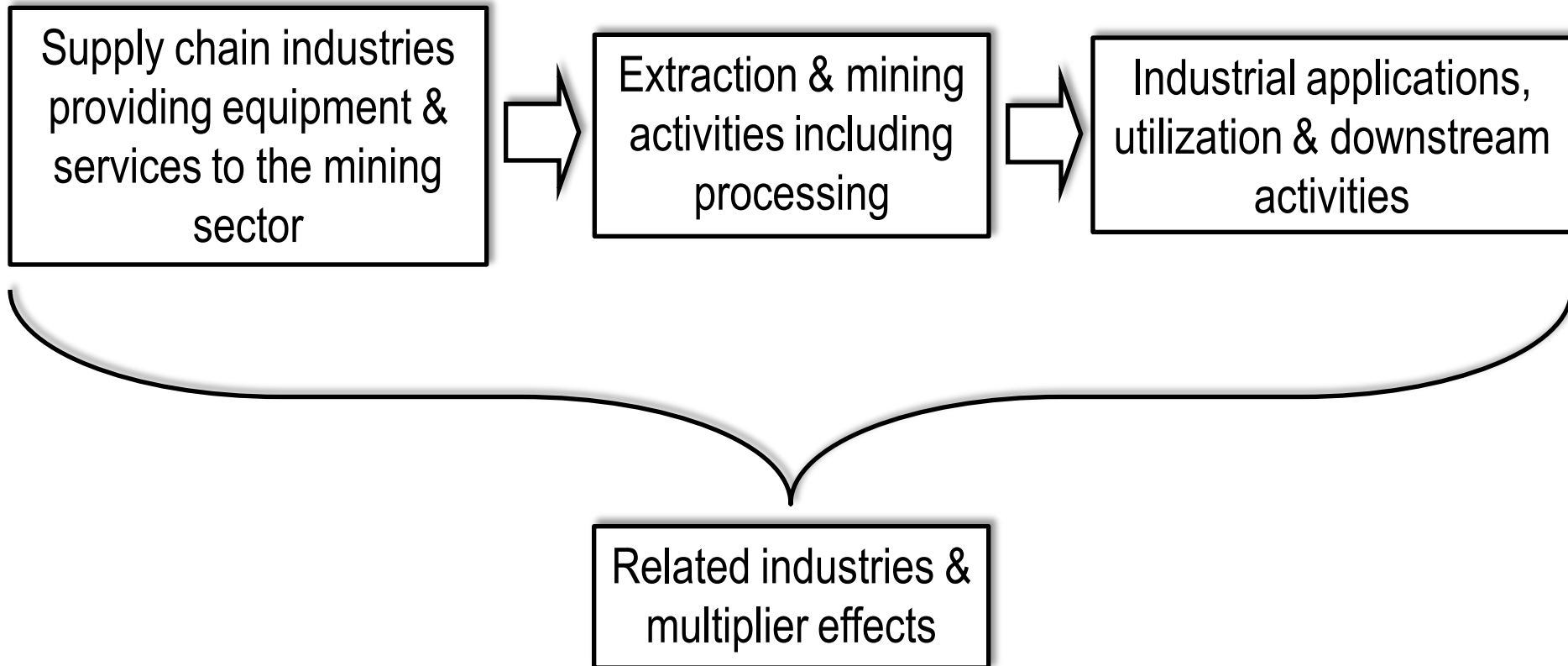


Source: PAIRS

Beneficiation Stages – A Narrow Perspective

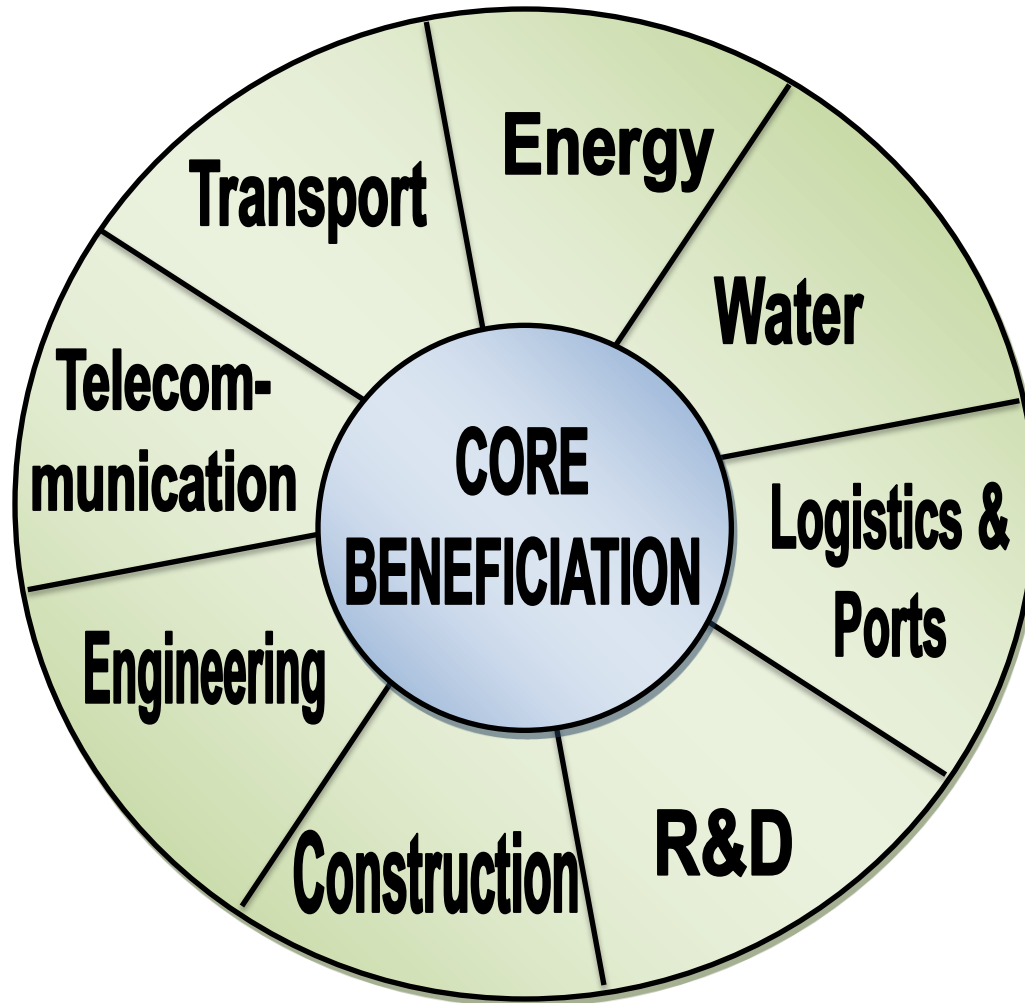


Beneficiation Value Chain – Broader Perspective



Source: PAIRS

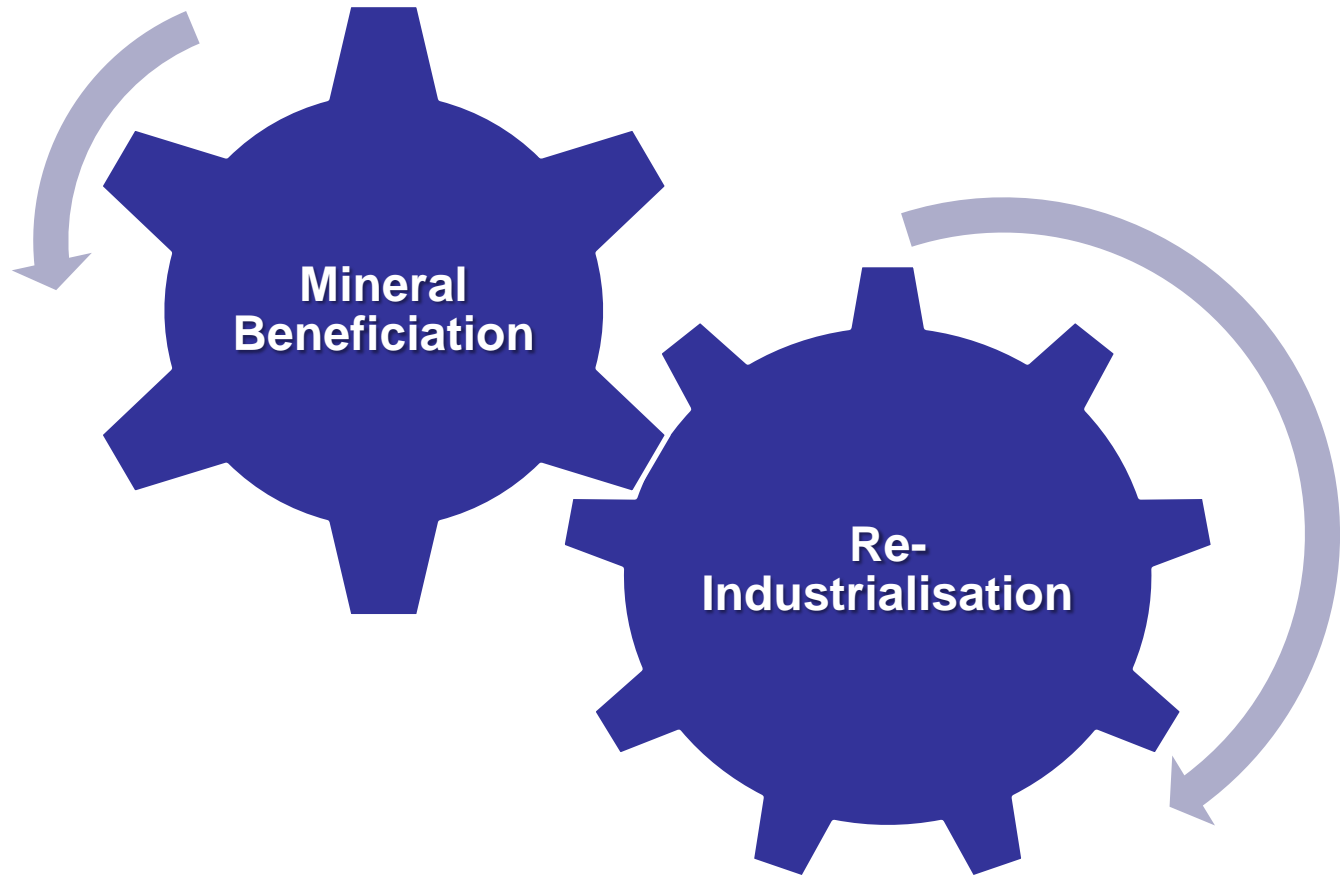
Core vs. Integrated Mineral Beneficiation



Source: PAIRS

A Significant Business Reality:

Mineral Beneficiation & Re-industrialisation are Inseparable....



Financing Infrastructure: Critical Pre-Condition



1. Timely provision of reliable infrastructure is the key to unlocking beneficiation and re-industrialization;
2. Appropriate financing of SA's infrastructural backlog is "the make or break" of our success;
3. The predominant share of current infrastructure backlog must be financed by the private sector, no need for public equity or public debt funding;
4. Governments needs to focus on its share of infrastructure finance and not to create unnecessary fiscal liabilities or procedural delays.

Concluding Remarks

1. Mineral beneficiation and re-industrialization of SA economy are inseparable.
2. SA has the potential to re-industrialize at a scale larger than the 1950s and 1960s!
3. Successful re-industrialization and mineral beneficiation require inspired and sustained leadership of both business and government.
4. Left to the market forces, SA's mineral beneficiation and re-industrialization are unlikely to materialize.
5. Getting the funding paradigm for integrated beneficiation and industrialization right is the key!

Thank you for your attention



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