mineral & petroleum resources

Department:
Mineral and Petroleum Resources
REPUBLIC OF SOUTH AFRICA

CRITICAL MINERALS STRATEGY OF SOUTH AFRICA

Department of Mineral & Petroleum Resources

14 August 2025

PRESENTATION OUTLINE

01 Background & Introduction

02 Process Followed in Developing the Strategy

03 Criticality Assessment & Results

04 Pillars of the Strategy

05 Key Interventions and Case Studies

06 Governance & Reporting Structure

07 Implementation Plan

Background & Introduction

- South Africa stands at a pivotal moment in its economic and industrial development journey. With the global transition toward green energy, digitalisation, and advanced manufacturing accelerating, the demand for critical minerals has surged—presenting both a strategic opportunity and an urgent imperative for the country.

- The Critical Minerals and Metals Strategy (2025) provides a comprehensive roadmap to harness South Africa's vast mineral endowment to drive inclusive growth, industrialisation, and sustainable development.

- The Strategy's six pillars include geoscience mapping and exploration, value addition and localisation, research & development and skills development, infrastructure and energy security, financial instruments, and regulatory harmonization.

- The Implementation Plan translates this strategic vision into actionable interventions., and sets out clear timelines, lead entities, support institutions, and performance indicators for each intervention.

- It prioritises catalytic projects such as the expansion of the Junior Mining Exploration Fund (JMEF), the establishment of battery precursor and manufacturing hubs, the revival of ferrochrome smelters, and the development of Resource Development Zones (RDZs). These initiatives are underpinned by enabling reforms in licensing, infrastructure, skills development, and fiscal policy.

We Don’t Need More Plans – We Need a Clear Strategy for Focused Execution

The **Medium Term Development Plan** requires the Presidency, National Treasury and DTIC to develop and coordinate an *“integrated economic growth strategy”* to bring together these existing policy commitments in **a focused and carefully prioritized strategy to deliver growth**.

The **Growth and Inclusion Strategy** fulfills this commitment. It provides a framework to which **plans and initiatives across government should be aligned**, and **outlines a clear growth narrative for South Africa**.

Context | What are critical minerals?

The notion of critical minerals lacks consensus on the definition and categorisation since different conceptualizations consider different national contexts.

Global Overview on Criticality

Author		Definition	Region/Country	Key pillars
Nassar and Fortier (2021)		• Critical minerals are those that are very important for the **economic** well-being of a nation as well as for the protection of its **security**. • From this point of view, the importance of minerals cannot be overstated when it comes to preserving the economic well-being of a nation and safeguarding its safety.	United States of America	• Economic growth and development • National Security
Warrior et al. (2023)		• Critical are minerals that promote **economic growth** by promoting technological innovation. • These minerals are important in businesses such as pharmaceuticals, emphasising their larger significance beyond economic worth.	India	• Economic growth and development • National Security • Technological • Health - pharmaceuticals
Hayes & McCullough (2018)		• Critical minerals are essential components of several commodity sectors, subject to **supply interruptions**, and their importance differs depending on the evaluators' perspective. • This provides a more subjective approach that considers supply chain concerns.	None	• Supply disruption

Global Overview on Criticality

Author	Definition	Region/Country	Key pillars
Government of Canada (2022)	• Defines critical minerals as essential for **modern technologies** such as renewable energy, batteries, electronics, and electric cars. • Emphasising their importance in current technological breakthroughs.	Canada	• Technological, renewable energy, batteries, electronics, and electric cars.
United States Energy Act of 2020 (Hayes & McCullough, 2018)	• This act discusses three major features of vital minerals: their contribution to a country's **economy** and **security**, their importance in the production of key intermediate goods, and the vulnerability of their supply chains to disruptions.	United States of America	• Economic growth and development • National Security • Manufacturing • Supply disruption
Ministry of Mines (2023) in Australia	• Metals, non-metals, and minerals are all critical to global **economic prosperity**. Threats to their availability include geological scarcity, geopolitical concerns, and trade policies.	Australia	• Economic growth and development • Geological scarcity • Geopolitical concerns • Trade policies

Global Overview - Criticality Assessment Methodologies

European Commission

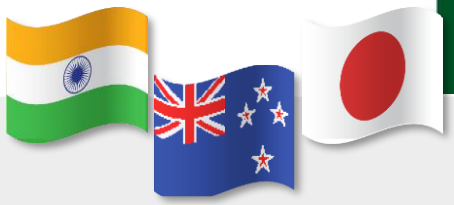
- involves assessing their **economic significance** and **vulnerability** in terms of supply

United Kingdom

- determined using the global **supply risk** (S) and economic **vulnerability** (V) dimensions

United States of America

- followed a **two-stage** approach:
- **Stage 1** - An early warning screening tool evaluates minerals using three **indicators: supply risk, production growth, and market dynamics**.
- **Stage 2** - A comprehensive analysis of the supply chain and effective collaboration among agencies.



India, Australia & Japan

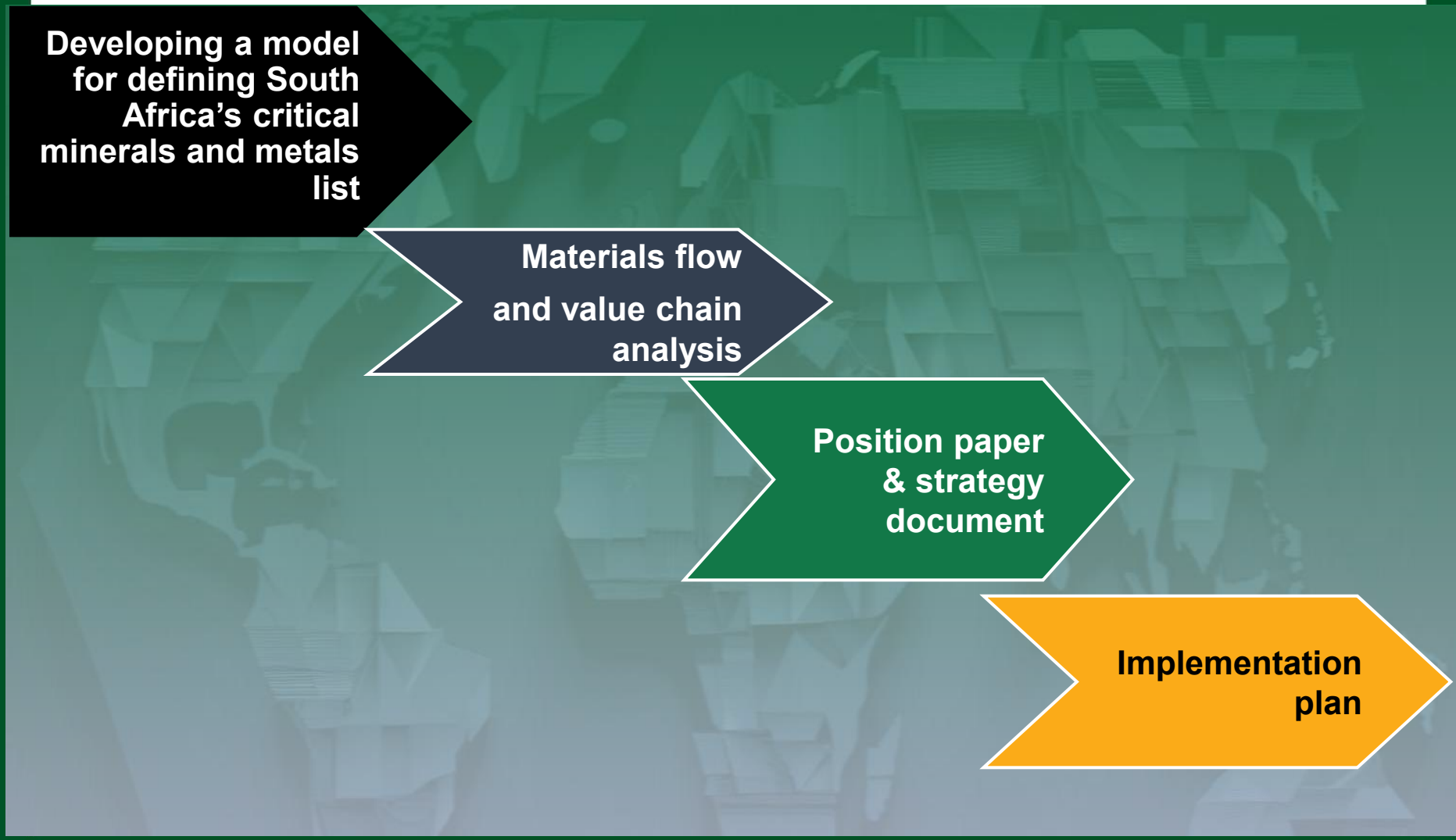
- Involves conducting a **comparative analysis** of global critical minerals

Critical Minerals listed by major economies

Commodity	Canada	EU	South Korea	USA	Japan	Australia	India	UK	China
Aluminium	X	X		X		X			
Antimony	X	X	X	X	X	X		X	
Arsenic			X	X					
Barium		X	X	X	X				
Beryllium		X	X	X	X	X	X		X
Bismuth	X	X	X	X	X	X		X	
Boron		X	X		X				X
Cadmium			X						
Cesium	X		X	X	X				X
Chromium	X		X	X	X	X	X		X
Cobalt	X	X	X	X	X	X		X	X
Coking Coal		X							
Copper	X								
Fluorspar	X	X		X	X				
Gallium	X	X	X	X	X	X		X	X
Germanium	X	X	X	X	X	X	X		X
Graphite	X	X		X	X	X	X	X	
Hafnium		X	X	X	X	X			
Helium	X					X			
Indium	X	X	X	X	X	X		X	
Iridium				X					X
Iron ore									
Lead									
Limestone							X		
Lithium	X	X	X	X	X	X		X	X

Commodity	Canada	EU	South Korea	USA	Japan	Australia	India	UK	China
Magnesium	X	X	X	X	X	X		X	X
Manganese	X		X	X	X	X			X
Molybdenum	X		X		X				X
Nickel	X		X	X	X				X
Niobium	X	X	X	X	X	X	X	X	X
PGMs	X	X	X	X	X	X		X	X
Phosphate		X	X						
Potash	X								
Rare Earth Element Group	X	X	X	X	X	X	X	X	X
Rhenium			X		X	X	X		X
Rubidium				X	X				X
Selenium			X		X				X
Silicon		X	X		X	X	X	X	
Strontium		X	X		X		X		
Tantalum	X	X	X	X	X	X	X	X	X
Tellurium	X		X	X	X			X	
Thallium			X		X				
Tin	X		X	X				X	X
Titanium	X	X	X	X	X	X		X	
Tungsten	X	X	X	X	X	X		X	X
Uranium	X								
Vanadium	X	X	X	X	X	X		X	X
Zinc	X					X			
Zirconium			X	X	X	X	X		X

Process followed to develop the critical minerals strategy of South Africa



Methodology | Approach to determine criticality for SA

- **Method 1:** Supply risk
- **Method 2:** Comparison of the SA production list with critical mineral lists (CMLs) of trading partners
- **Method 3:** Export Potential Indicator (EPI) & Product Diversification Indicator(PDI)
- **Method 4:** Employment Indicator
- **Method 5:** Domestic Sales Indicator
- **Method 6:** Export Sales Indicator
- **Method 7:** Substitutability Indicator
- **Method 8:** Importation of essential minerals (i.e. locally non-available resources)

Definition & List of Critical Minerals and Metals | South Africa

*While a universally accepted definition is lacking, critical minerals in the context of South Africa are "**minerals that are essential for the overall economic development, job creation, industrial advancement and contribution to national security**".*

South Africa possesses ore reserves to a value of more than **US$2.5 trillion**, with **16 commodities ranked in the Top 10 internationally**.

In 2023, **PGMs**, **Gold**, **Iron ore** and **Coal** together accounted for **81%** of total sales, **84%** of export sales, and **87%** of employment, with the **PGMs** being the leading sector in terms of employment at **40%.**

Chrome and **manganese together** accounted for **14%** of total sales, **13.6%** of export sales and **7.3%** of employment.

Coal accounts for more that **70%** of the country's energy needs.

CRITICALITY	MINERALS / METALS
High-Criticality Minerals	Platinum
	Manganese
	Iron Ore
	Coal
	Chrome Ore
Minerals with Moderate to High Criticality	Gold
	Vanadium
	Palladium
	Rhodium
	Rare Earth Elements
Minerals with Moderate Criticality	Copper
	Cobalt
	Lithium
	Graphite
	Nickel
	Titanium
	Phosphate
	Fluorspar
	Zirconium
	Uranium
	Aluminium

The list needs to be constantly reviewed and updated as the criticality classification mix is dependent on underlying market conditions, technological advancement, substitutability, recycling and geopolitics, among other factors.

Pillars of the Strategy and Proposed Interventions

Geological Mapping and Exploration

Increase the exploration ***investment***

Develop a strong mineral ***intelligence database*** *for targeted reserves quantification*

Value Addition and Localisation

Focused refining and battery precursor production

Support & Enforce Local Beneficiation

Infrastructure Development & Energy Security

Prioritise Rail & Port Upgrades to facilitate efficient movement of goods and commodities

Develop Localised Power Supply Stations & Design Manufacturing Tariffs

Regulatory & Policy Framework for Investment

Clear, Stable & Transparent Regulatory Framework for Mining and Mineral processing

Fiscal Instruments

A robust fiscal framework is essential to support this strategy & a stable and competitive environment, aligning with geopolitical and economic objectives

R&D and Skills Development

Strengthen Mining Innovation Hubs for home grown tech advancement

Expand University & TVET programmes focused on mineral beneficiation

Upstream | **Downstream** | **Dedicated Attention to Enablers** | **Forge Strategic Partnerships** | **Semi & Finished Products**

The winning formula

Market Potential Opportunity & Targeted Growth

1. Geological Mapping & Exploration

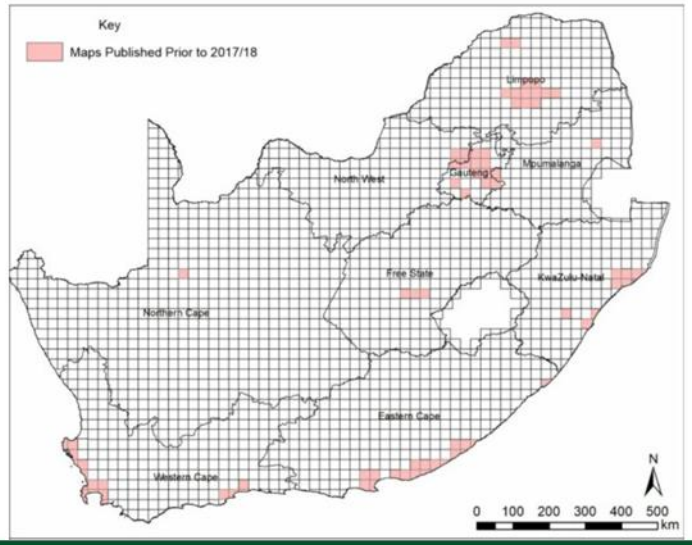
1.1. Increase geological mapping at 1:50,000 scale

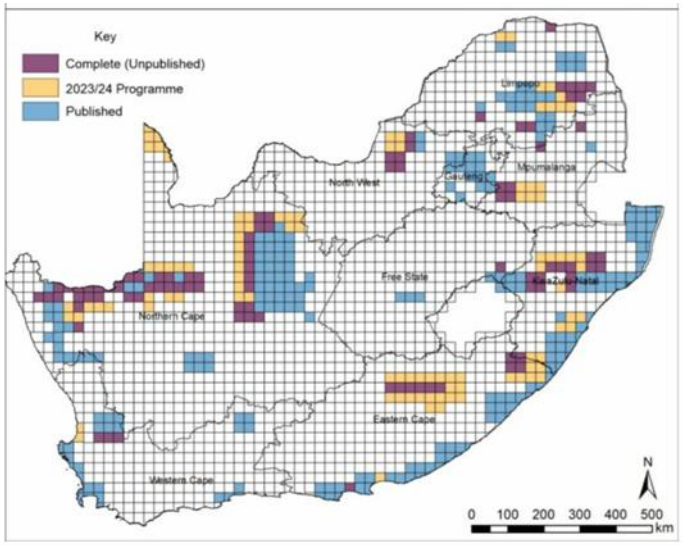
1.2. Expand the Junior Mining Exploration Fund (JMEF) to Support Critical Minerals

1.3. Research Tax Incentives to Attract Exploration Capital

Objectives:

“To enhance exploration investment through increased availability and accessibility of geological data, expanded financial support, and attractive fiscal incentives, thereby increasing the resource base of critical minerals.”





2. Value Addition & Localisation

2.1. Establish Battery Manufacturing and Precursor Processing Hubs

2.2. Revive Ferrochrome Smelters and Incentivize Stainless Steel Production

OBJECTIVES:

"To move beyond raw material exports, this pillar promotes domestic beneficiation and manufacturing. It supports the establishment of battery precursor and manufacturing hubs, revival of the ferroalloys sector, and development of **downstream industries in steel**, **automotive**, **aerospace**, and **hydrogen technologies**."

Key Sector Focus Areas | Midstream & Downstream

Energy Storage	Energy Generation	Ferroalloys Industry	Steel Industry	Automotive Sector	Defence and Aerospace
Energy Storage Materials and Batteries	*Fuel Cells, Hydrogen and its Derivatives*	*Revival of Smelting Capacity in South Africa*	*Green hydrogen reduced iron ore*	*E-mobility*	*Local Titanium Beneficiation*
			Local beneficiation through trade measures		
(Ni, Mn, Va, Co, Li, Cu, Al, Graphite, Phosphate)	*(Pt, Cu, REE, Si, U, Al)*	*(Cr, Mn, Ni, Si, Fe)*	*(Fe, Cr, Mn, Ni, Va, Si)*	*(**Pt**, Li, Ni, Co, Mn, Cu, Fe, Graphite)*	*(**Titanium**, Pt, Mn, REE, Li, Co, Al, Ni)*

Exploration, Research and Development, Building a Skilled Workforce and Infrastructure

Energy Security, Fiscal Instruments and Harmonisation of the Regulatory Regimes

Key Considerations

Circular Economy and ESG, Regional Integration and Strategic Resource Diplomacy

sanpc

2.1 Establish Battery Manufacturing and Precursor Processing Hubs

Objectives:

Through collaboration with stakeholders in the industry, government, research and financing institutions, the DTIC is putting together South Africa's value proposition to establish strategically located, vertically integrated hubs that enable the local production of battery components including precursor materials, active materials and battery cells.

Battery precursor metals in South Africa

Electric vehicles
Smart-grid storage
Portable electronics

Electric cars, hard drives
Wind turbines
High-tech industries

Fluorspar — 1st
- Electrolyte for lithium ion batteries

Manganese — 1st
- Cost-effective cathode for Li-ion batteries

Vanadium — 2nd
- Flow batteries

Titanium — 4th
- Advanced anodes for Li-ion batteries

Nickel — 5th
- Advanced cathodes for Li-ion batteries

Phosphate — 6th
- Electrolyte for Li-ion batteries

Rare earth elements (Neodymium & Dysprosium) — Low
- Permanent super magnets

SA reserve size vs global

A specific feature of these battery precursor metals is **exceptional purity.**

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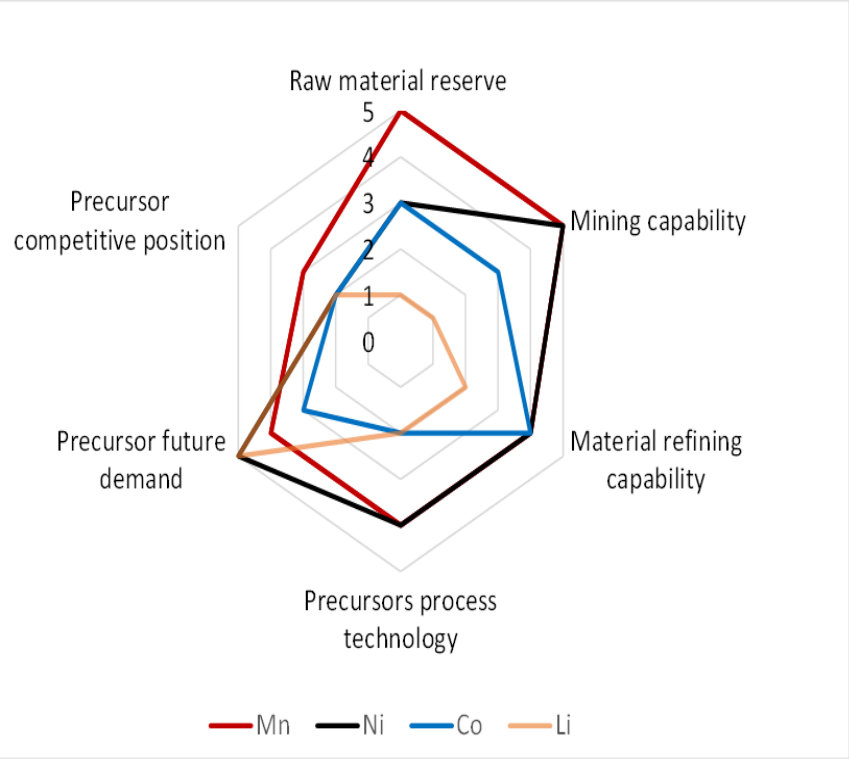
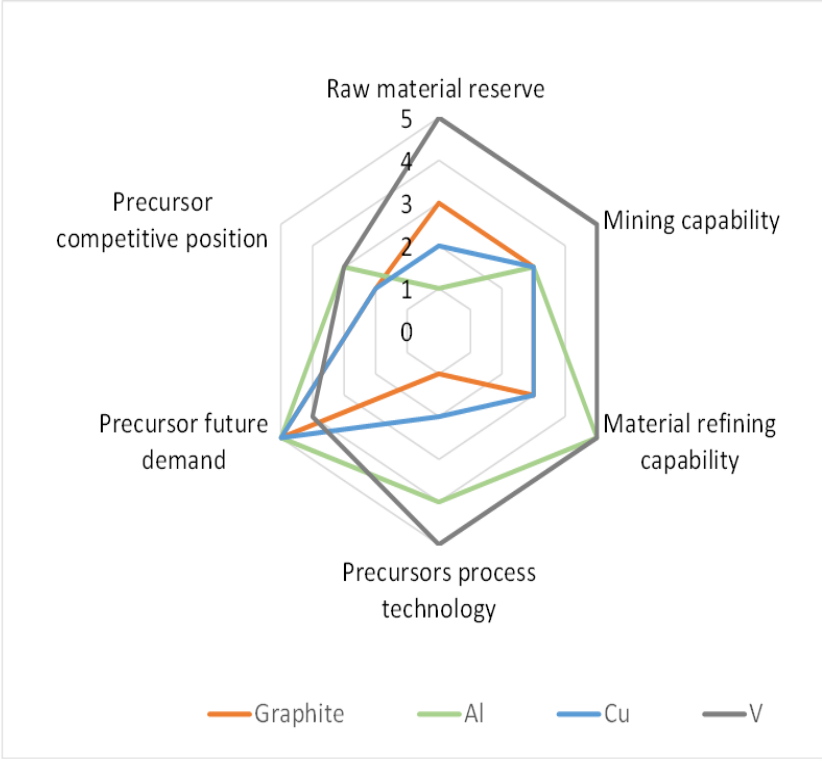
Summary of critical / battery materials sources in Southern Africa

COUNTRY	MINING	REFINING
South Africa	*PGMs(1st), Manganese (1st), Vanadium (4th), Copper, Titanium (4th), Phosphate (5th), Fluorspar (3rd), Nickel & Cobalt	PGMs, Copper, Nickel and Cobalt
Namibia	Copper & Lithium	Copper
Zimbabwe	Nickel & Lithium	Nickel
Zambia	Copper & Nickel	Copper
Botswana	Copper& Nickel	-
Democratic Republic of the Congo	Cobalt & Copper	Cobalt & Copper
Tanzania	Copper & Graphite	-
Mozambique	Titanium & Graphite	Aluminium
Madagascar	Cobalt, Nickel & Graphite	Cobalt & Nickel

- A specific feature of these battery precursor metals is **exceptional purity**
- * RSA reserve size vs global

South Africa's position in mining, refining and precursor production



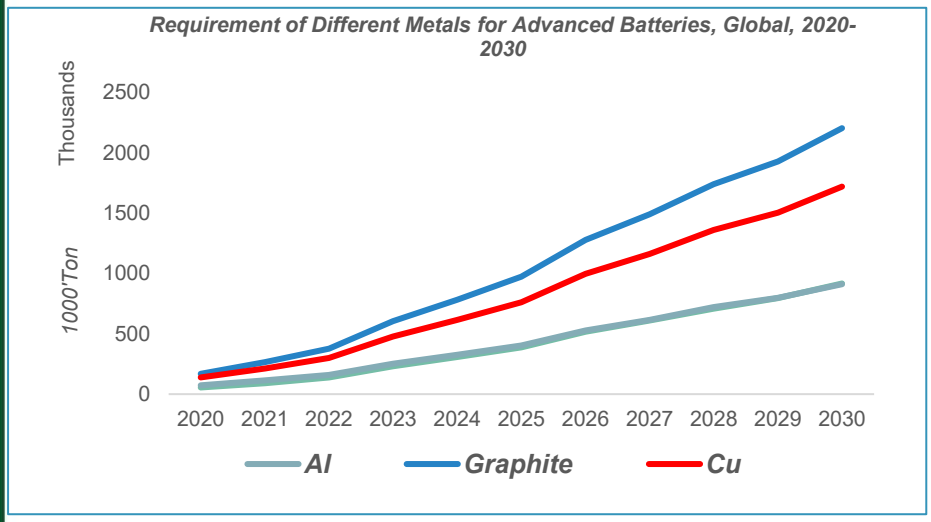


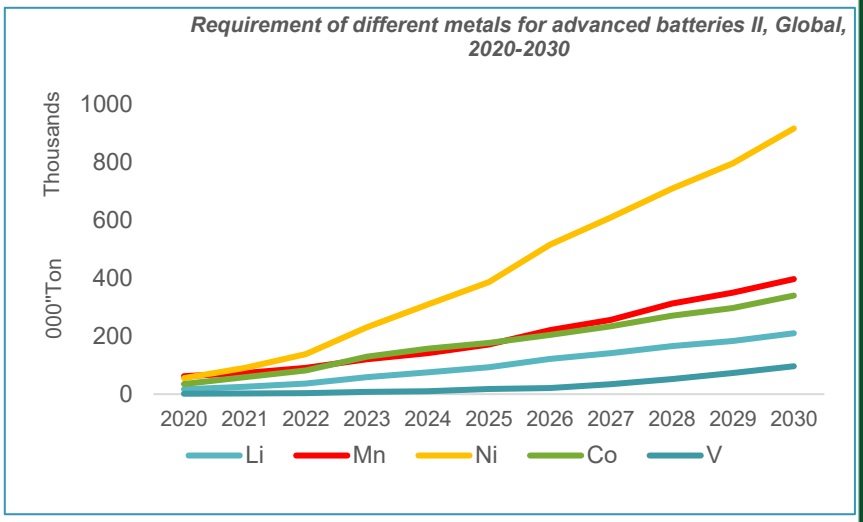
- Highly ranked: **Vanadium** and **Manganese**
- Moderately ranked: **Nickel** and **Aluminium** (lack of resources in South Africa)
- Lowly ranked: **Lithium** (lack of reserves in South Africa)
- Importation of raw materials: Lithium, graphite, copper and cobalt

Scale 1 to 5	
Poor	1
Good	5

Source: Customized Energy Solutions and LHA

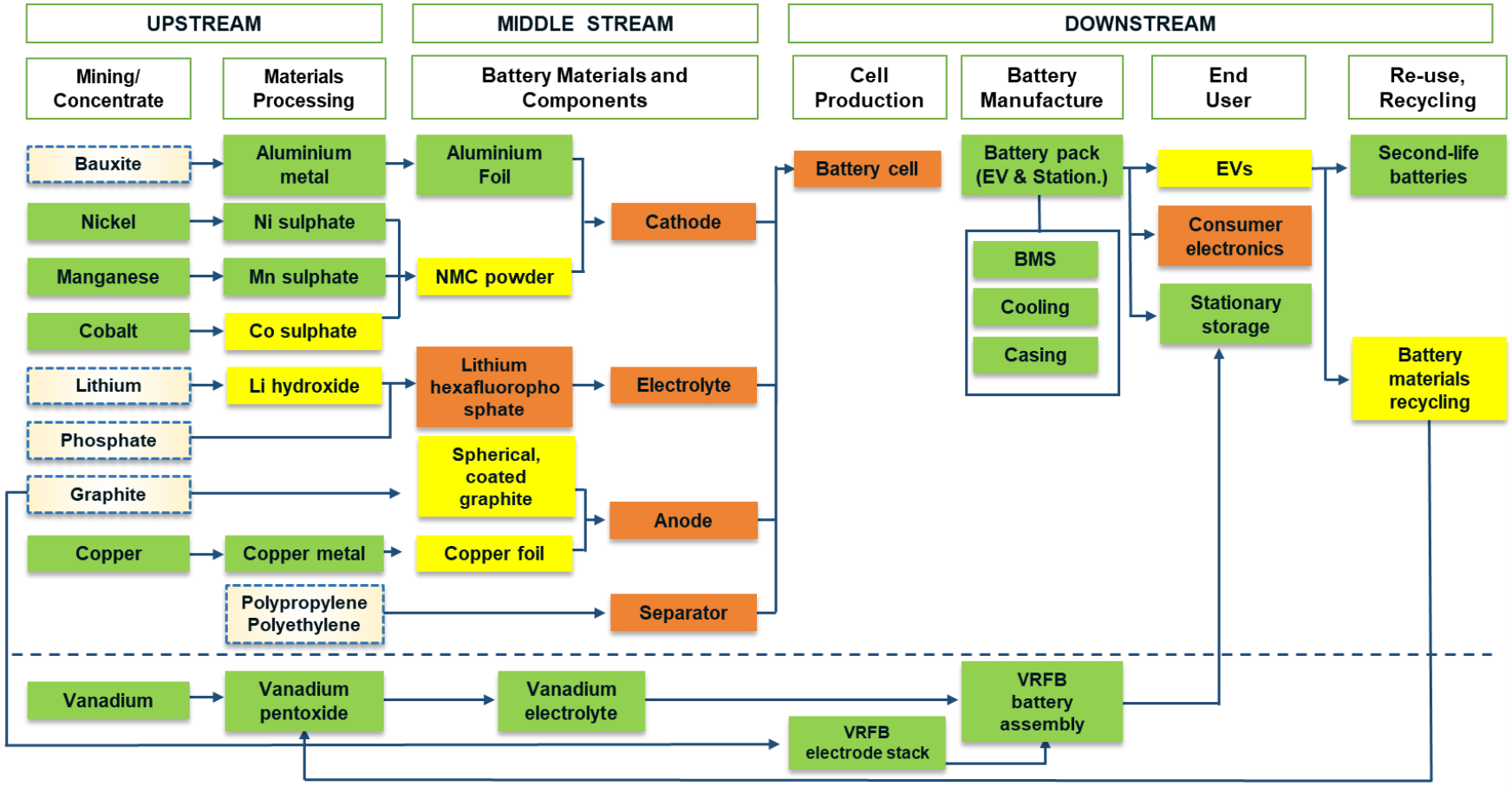
Global Demand of Metals for Battery Manufacturing





- The demand for **graphite**, **copper**, and **aluminum** will be the highest, followed by other metals such as **Ni**, **Mn** and **Cobalt**.
- The growth for **nickel** is driven by the higher energy density chemistries that require higher nickel content.

The battery value chain | opportunity summary

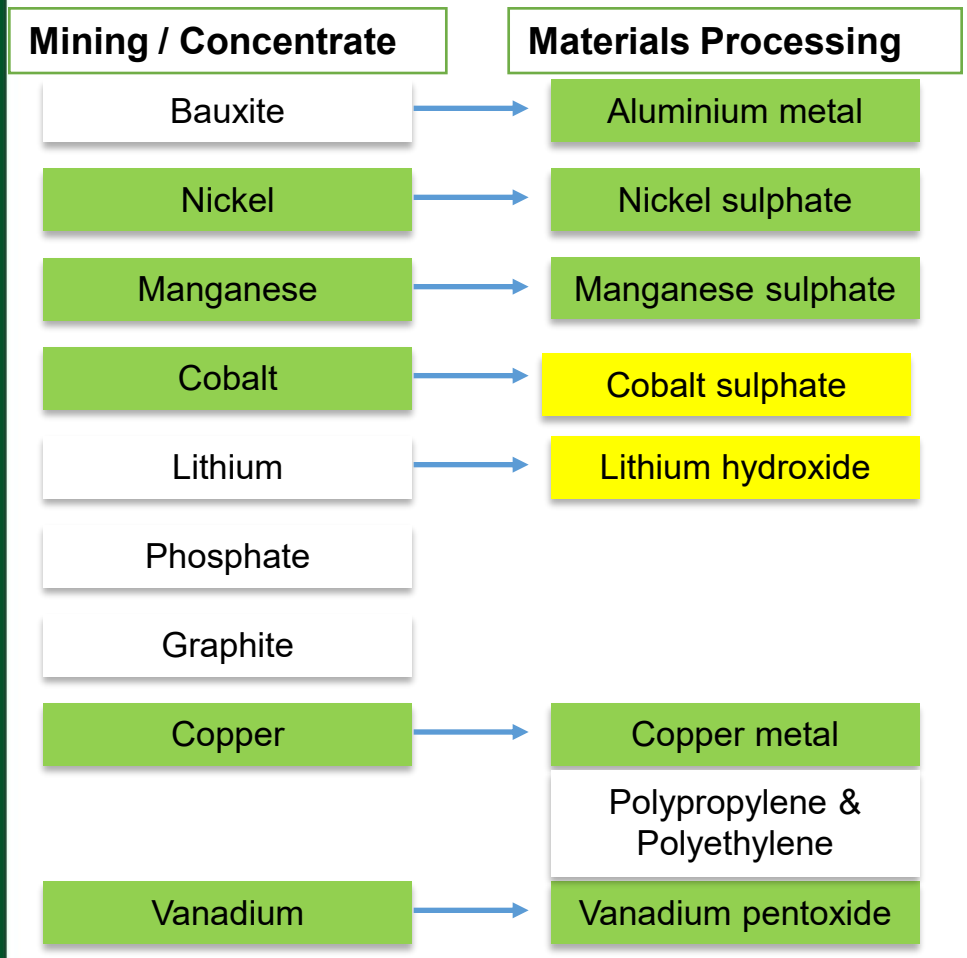


KEY: Highly feasible | Potentially feasible | Low feasibility

Source: LHA and Customized Energy Solutions

Cells, modules and packs are units gathered batteries, a pack includes a battery management system (BMS), cooling device and casing

Upstream battery value chain opportunities



Lithium-ion battery:

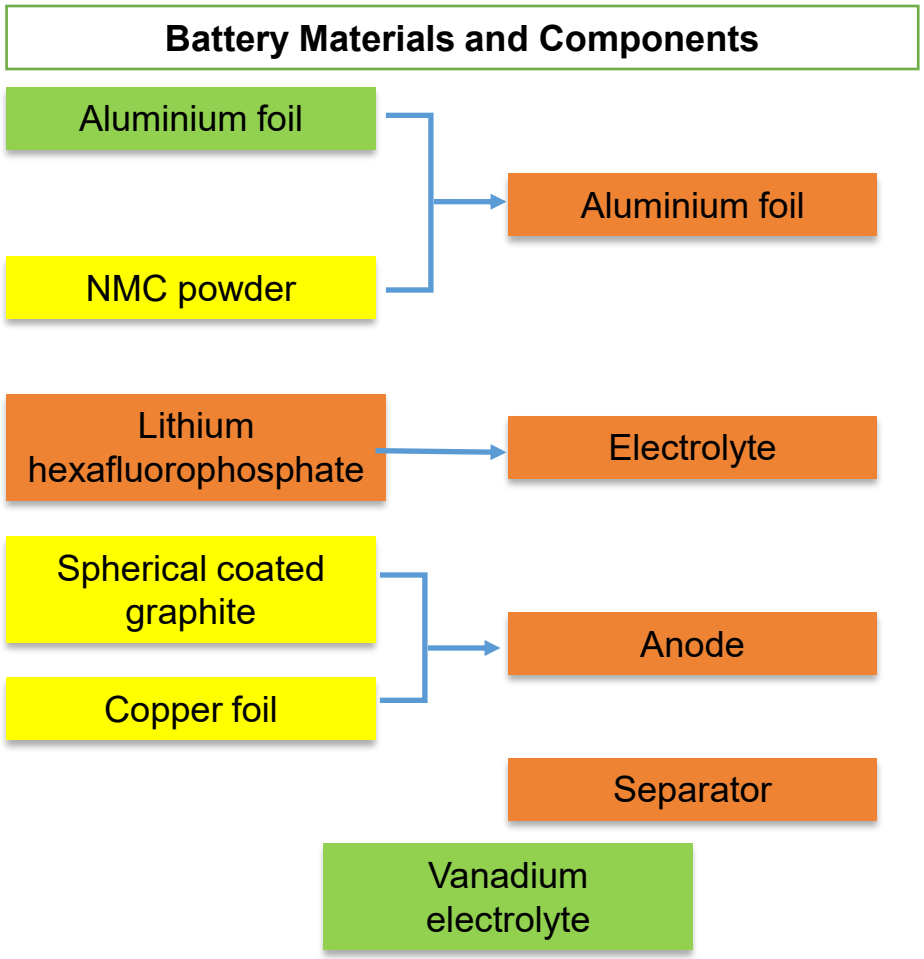
- **Manganese:** RSA Mn ores (~35% Mn) vs China carbonate ores (~85% Mn)
- **Nickel:** Thakadu Battery Materials has commissioned nickel sulphate plant
- **Cobalt:** Battery-grade cobalt sulphate has a limited shelf-life
- Copper, titanium, phosphate and fluorspar
- Lithium: DRC, Zimbabwe and Namibia
- Graphite: Mozambique, Madagascar and Tanzania

Vanadium Redox Flow Battery:

- Vanadium (vanadium pentoxide)

Source: Customized Energy Solutions Analysis

Midstream battery value chain opportunities



For South Africa:

- **Vanadium electrolyte** (with downstream Vanadium Redox Flow Battery (VRFB) manufacturing, **and**
- **Aluminium foil production** are the two easy options (Hillside Aluminium produces Al and Hulamin produces Al foil)

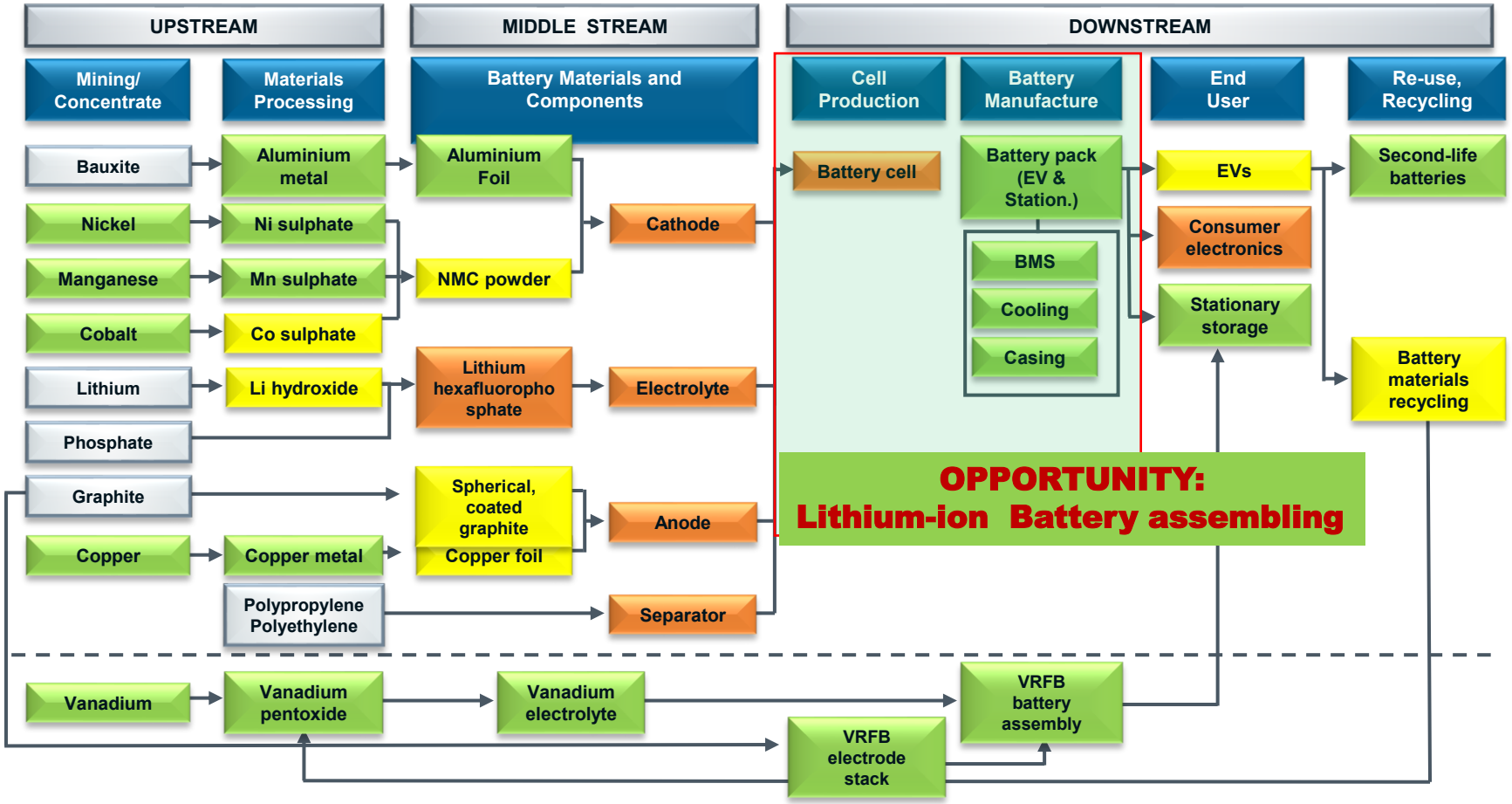
Mid-stream activities:

- Most mid-stream activities in battery value chain are **in major cell producing countries like China, Japan and South Korea**

KEY: Highly feasible | Potentially feasible | Low feasibility

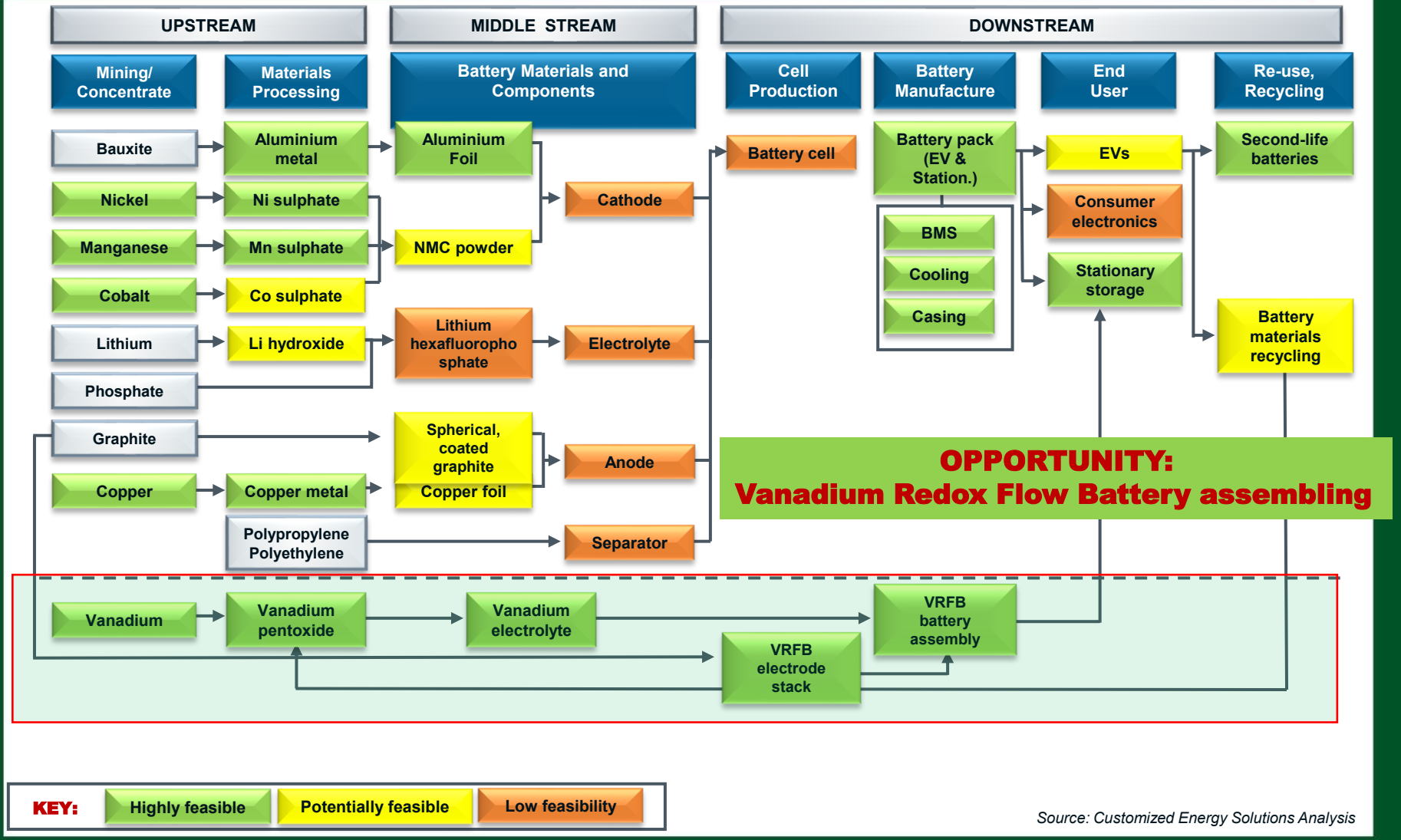
Source: Customized Energy Solutions Analysis

Opportunity identification – lithium-ion battery



RSA can advance to Lithium-ion cell manufacturing by 2030 at 10 GWh.

Opportunity identification - vanadium redox flow battery



Source: Customized Energy Solutions Analysis

Summary of Midstream Opportunities

- Production of nickel sulphate
  - ✓ **80 000 tons of nickel sulphate** to the value of **R5 830 million** in 2021 prices can be produced to satisfy the global demand for selected lithium-ion precursor materials.
- Production of **6 million litres of vanadium electrolyte**, **5000 tons of aluminium foil**, **100 000 tons of manganese sulphate**, and **20 000 tons of spherical graphite**.
- Overall, the various manufacturing opportunities are estimated at R9 770 million in 2021 prices

Source: Customized Energy Solutions Analysis

Summary of Downstream Opportunities in Battery Minerals

- The largest localization opportunities lie in the **establishment of lithium-ion battery assembly** activities for both electrical vehicles and stationary storage that could create additional R16 010 million worth of revenue in 2021 prices in the electrical machinery industry.

- Over long-term, **the establishment of the Lithium-ion manufacturing facility** with a production capacity of 5000 MWh.
  - ✓ This could potentially generate about R6 750 million worth revenue
- Establishment of **vanadium redox flow battery manufacturing** activities

DOWNSTREAM

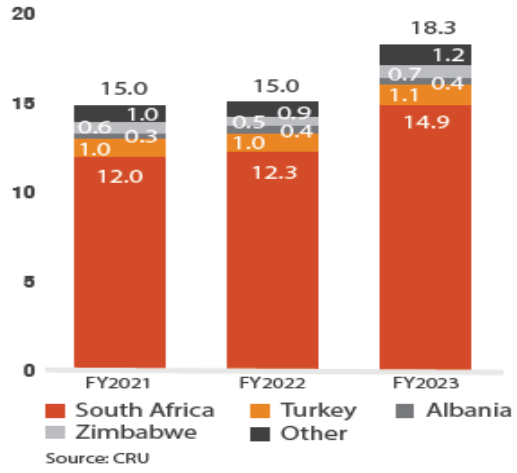
Source: Customized Energy Solutions Analysis

2.2 Revive Ferrochrome Smelters & Incentivize Stainless Steel Production

Objectives:

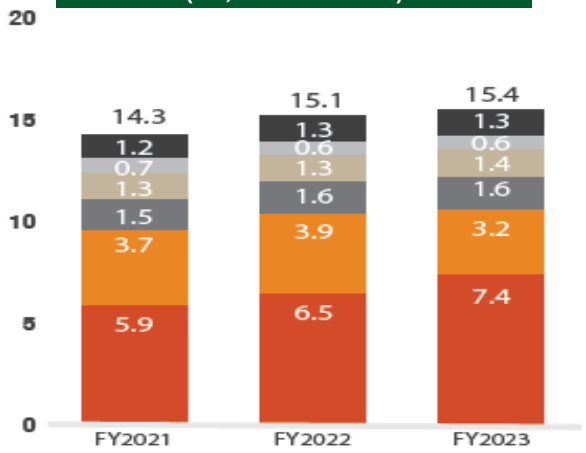
This intervention seeks to restore the competitiveness of South Africa's ferrochrome and ferroalloys sector by addressing electricity tariffs and export market constraints, while unlocking value addition through incentivizing local stainless steel production.

China Chromium Ore Imports (Mt, FY2021 – 2023)



Source: CRU

Global Ferrochrome Production (Mt, FY21 – FY23)



Source: CRU

Policy interventions critical in stimulating mineral beneficiation

COUNTRY	POLICY ACTION	POLICY OUTCOME
AUSTRALIA	• Developed a **US$ 7 billion incentive programme** • Programme to start in 2027 with the intent of stimulating value addition of critical minerals and green hydrogen production	Programme to start in 2027
BOTSWANA	• Government incentives (**discounted diamond prices**) • **Security** of rough diamond supply • 50/50 government **investments (infrastructure)** • **Skills development**	The number of cutting and polishing companies operating in Botswana doubled from 23 to 46, and employment in the sector increased by 92% over a two-year period (2207 – 4239).
INDONESIA	• **Export ban** on copper and nickel ores • Obligating mining companies to **invest in the construction of smelters locally**	Number of nickel and copper smelters increased from 19 to 38, thus boosting the country's exports of intermediate copper and nickel products.
SINGAPORE	• Government **infrastructure investment** • **Tax reductions** and **exemptions**	Singapore is one of the world's largest oil refining countries, but the country's lack of space limits the possibility of project expansions.
CHINA	• Production and smelting **quotas** to ensure **security of supply** for domestic market • **State funding of R&D** into **Rare Earth Elements** (REEs) • **Export bans** (Rare Earth Elements) and **increased taxes** on exports • **Support offered to companies:** equity infusions, low cost loans, debt relief, direct grants and below market prices for energy and rent	Leading producer of REEs and REE derived finished products

Case Study: Indian Chrome Market

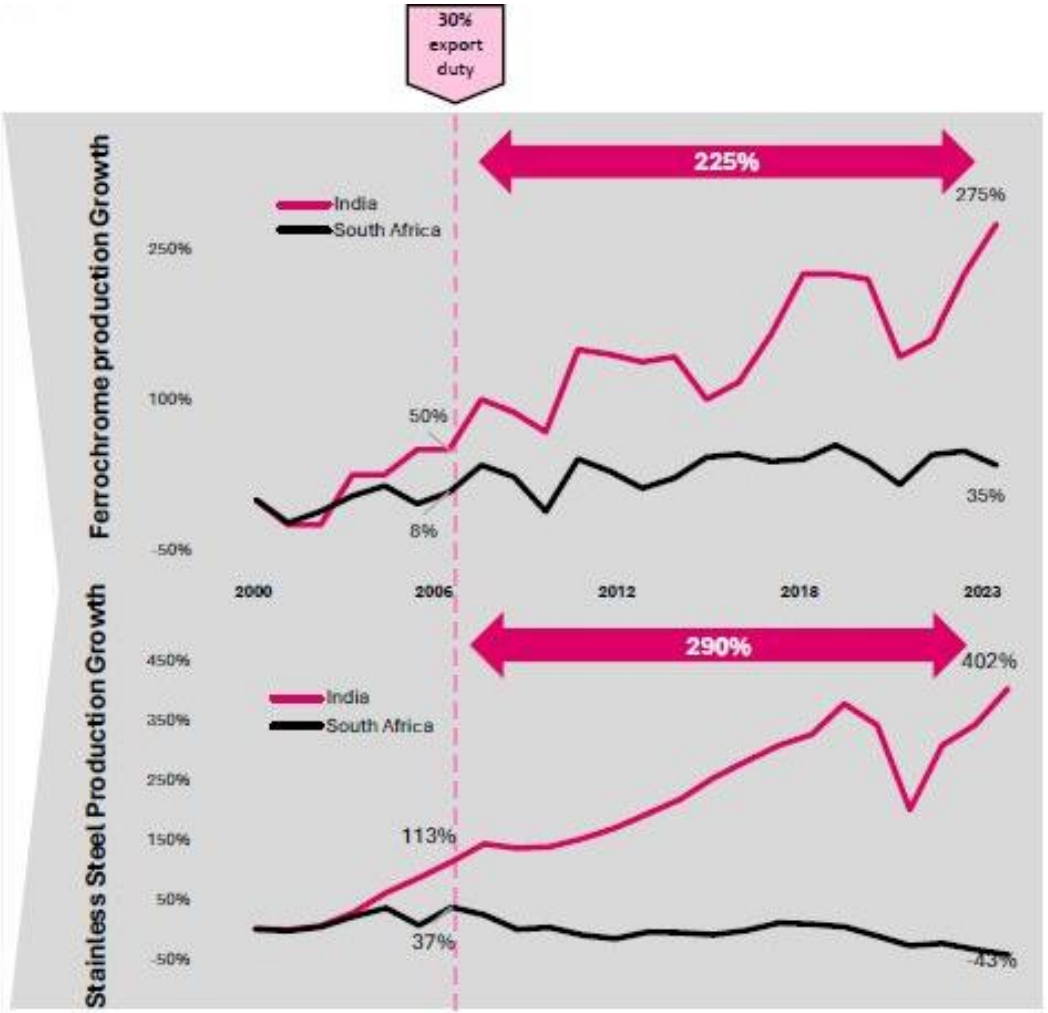
India holds <1% of global chromite ore reserves VS SA holds >80% of global chromite ore reserves).

Export policy for chrome ore:
India made changes to its chrome ore export policy. **Chrome ores and concentrates now require specific authorization**, limiting exports to ensure domestic availability.

30% export duty on chrome ore:
Introduced in 2006, re-imposed to prioritize domestic processing and support the ferrochrome industry.

Ferrochrome exporters received an incentive of up to 4%:
Exporters received up to 4% incentive through schemes like MEIS and RoDTEP, reducing export costs and enhancing competitiveness.

Conclusion:
These measures were aimed at incentivizing domestic beneficiation and protecting India's ore resource.



Case Study: Indonesian Nickel Ore Market

Indonesia holds 42% of global nickel ore reserves
(SA holds >80% of global chromite ore reserves)

Initial Ban:
2012: Government announced plans to ban nickel ore exports to promote domestic refining and smelting.
2014: Official implementation of the **ban on unprocessed mineral ore exports**.

Partial Relaxation:
2014-2016**: Allowed exports for miners committed to building smelters**. Nickel ore with <1.7% grade could be exported if smelter construction was planned.

Reimplementation of the Ban:
January 1, 2020: Export of **nickel ore banned again to boost domestic nickel processing** and **retain more value-added benefits within Indonesia.**

Impact and Current Status

52 smelters in 2024, only 2 smelters in 2014

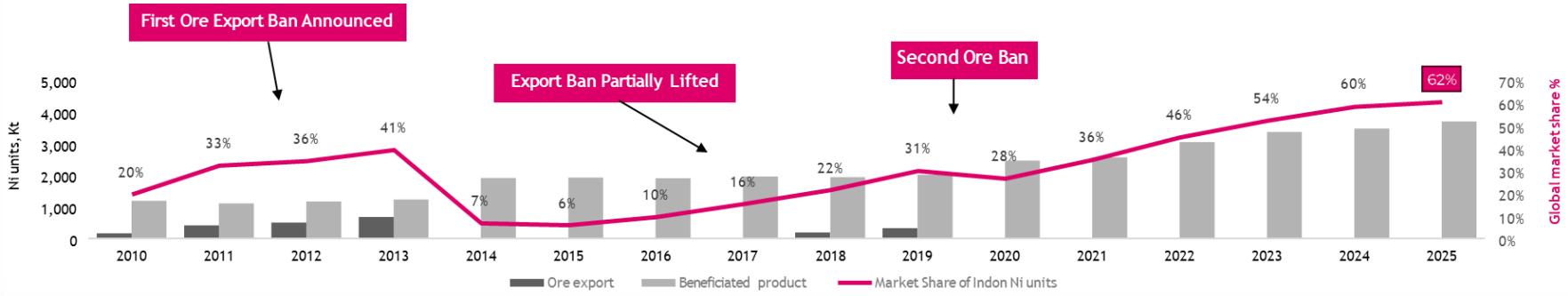
$7.3bn Foreign Direct Investment in 2023

$6.8bn Export value in 2023

Development of Downstream Industries

Domestic Processing Growth:

- There has been significant investment in nickel smelters and processing plants in Indonesia.
- The country has attracted substantial foreign investment, particularly from China, to develop nickel processing facilities.



3. R&D & Building a Skilled Workforce

3.1. Develop Resource Development Zones (RDZs)

3.2. Develop a Future-Ready Critical Minerals Workforce

OBJECTIVES:

"This pillar seeks to **build South Africa's capacity for innovation in mineral processing**, **clean energy technologies**, and **advanced manufac**turing. It includes the creation of RDI hubs, support for startups, and investment in technologies such as fuel cells, battery materials, and titanium processing.

Recognising the need for a skilled workforce, this pillar promotes education and training aligned with the needs of the critical minerals value chain. It supports partnerships with universities and TVET colleges, development of accredited programmes, and targeted workforce planning to address skills gaps."

4. Infrastructure & Energy Security

4.1. Invest In Strategic Rail & Port Upgrades for Mineral Exports

- This intervention directly supports the Critical Minerals Strategy by unlocking logistics infrastructure critical for the transport of highly prioritised minerals such as coal, manganese, and chrome. It enhances the competitiveness of South Africa's critical mineral exports

4.2. Implement Special Electricity Pricing for Energy-intensive Industries

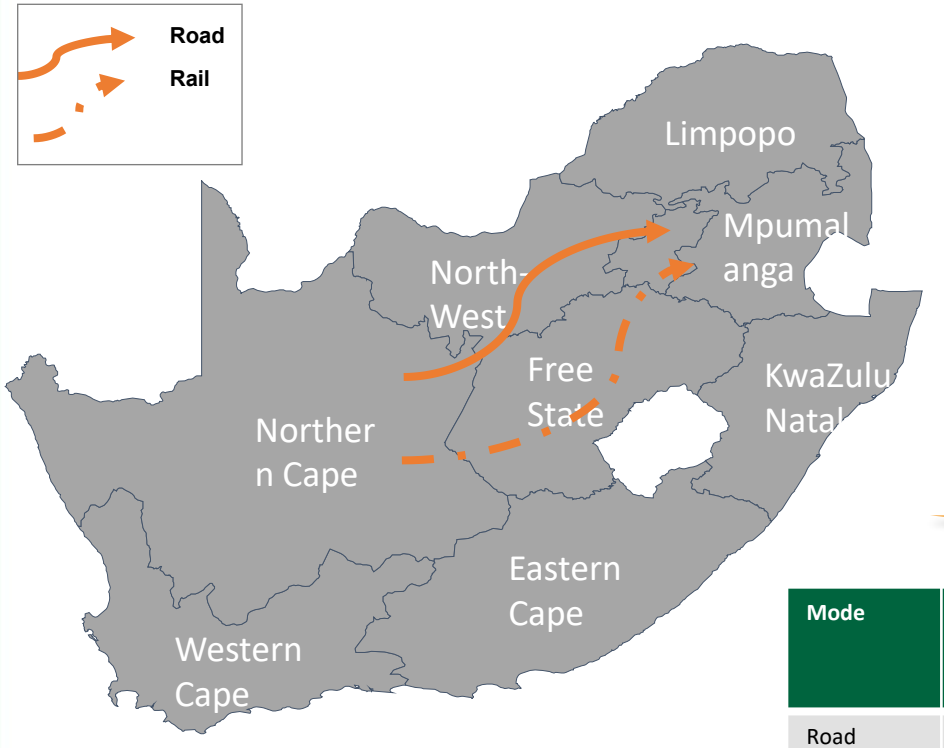
- This intervention aims to develop and implement a special electricity pricing framework for energy-intensive industries—particularly mineral beneficiation and smelting operations—to improve industrial competitiveness, support localisation, and enable downstream value addition in the critical minerals sector.

OVERALL OBJECTIVES:

"Enhance mineral logistics efficiency and industrial competitiveness by unlocking investment in strategic rail corridors and implementing special electricity pricing for energy-intensive industries to support beneficiation and processing."

Improve Logistical Infrastructure to Enhance Predictability and Lower Costs

Map of MMC's Transportation of Manganese



Case Study of MMC Challenges

- Manganese Metals Company (MMC) is based in South Africa, Mpumalanga
- MMC transports Manganese from the Northern Cape to Mpumalanga
- Road transport takes 3 days, whereas rail transport takes 30+ days and is prone to delays.
- Trucking is more predictable but damages roads and poses safety risks.
- Rail transport, while safer, is inefficient and requires urgent investment.

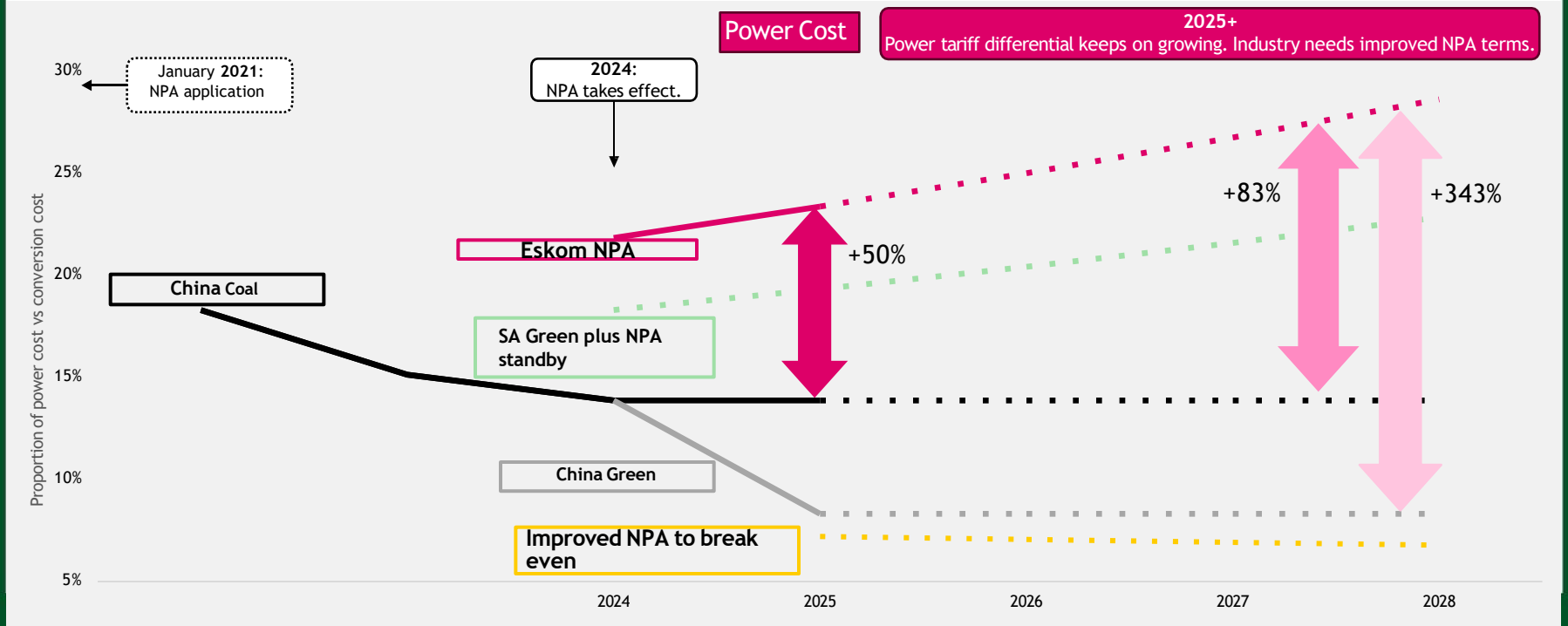
Mode	Transport Time	Reliability	Infrastructure Impact	Safety	Economic Cost
Road (Trucking)	3 Days	More predictable	Damages roads	Higher accident risk	Higher due to road maintenance
Rail	30+ Days	Prone to delays	Requires rail upgrades	Lower accident risk	Lower but requires investment

Comparative Study on Energy Costs to Create a Competitive Environment for Smelting Sectors

Policy Decisions

1. Improved NPA Terms: The gap between the NPA tariff and China's power costs is projected to be approximately 50% in 2025, widening further to an estimated 83% by 2028. Improved NPA terms are required to remain competitive amidst the widening gap.

2. Introduction of a Renewable Electricity Program for Smelters: A dedicated renewable energy procurement initiative modelled on the Renewable Energy Independent Power Producer Procurement Program (REIPPPP) will enable smelters to procure cost-competitive renewable energy through long-term Power Purchase Agreements (PPAs) reducing their electricity costs and improving the competitiveness of SA beneficiation sector.



5. Financial Instruments

5.1. Research fiscal and financial incentives to support

- This intervention aims to design and propose a package of fiscal and financial instruments that incentivize mineral beneficiation and downstream manufacturing, with a strong focus on critical minerals.

OBJECTIVES:

“Develop and propose fiscal and financial instruments that incentivize local value addition through mineral beneficiation, including refining, smelting, and manufacturing, with a focus on critical minerals and support for industrial users and investors in downstream processing”

6. Harmonisation of the Regulatory & Policy Framework

6.1. Harmonize Mineral Licensing Regulations

- This intervention aims to streamline and align the regulatory and administrative processes across departments involved in licensing, with a focus on reducing approval timelines and improving investor confidence in the mining and exploration sector.

OBJECTIVES:

"Streamline and harmonize mineral licensing regulations and institutional processes across departments and agencies to reduce delays, enhance policy clarity, and improve investor confidence in mineral exploration and development."

DESIRED IMPACT:

- Improve regulatory efficiency
- Enhance ease of doing business
- Attract and retain investment in exploration and mining

Governance & Reporting Structure – "Whole of Government Approach"

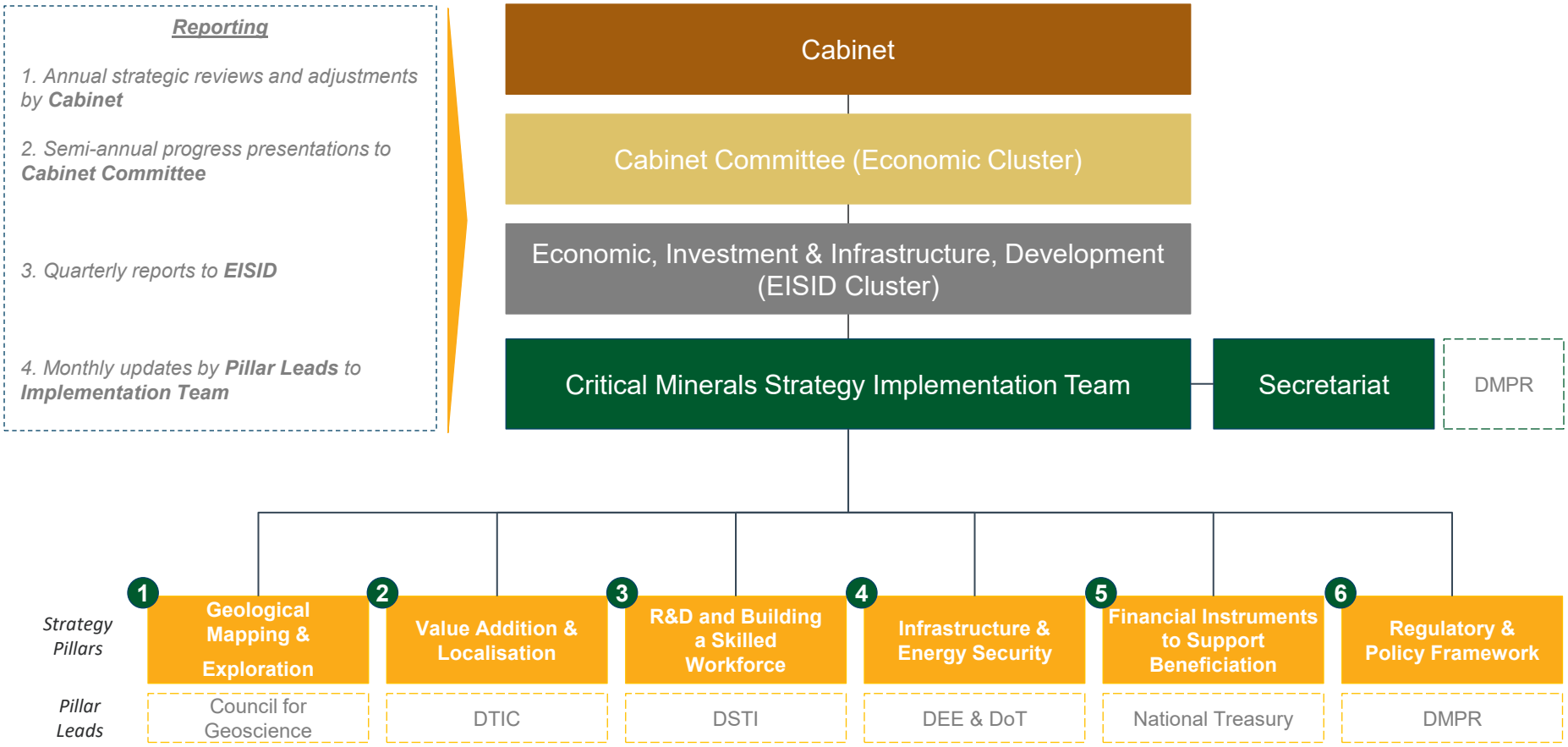
Reporting

*1. Annual strategic reviews and adjustments by **Cabinet***

*2. Semi-annual progress presentations to **Cabinet Committee***

*3. Quarterly reports to **EISID***

*4. Monthly updates by **Pillar Leads** to **Implementation Team***



Implementation Plan 1/2

Constraint	Proposed Actionable Item	Output	Lead Department	Support Departments	Timelines
Favourable Electricity Tariffs to support Beneficiation	Design electricity tariffs for the **beneficiation** sector - **review negotiated pricing framework** **Power Options** e.g. green power – added benefit: CBAM	Competitive and stable electricity tariffs for energy intensive smelters such as the ferroalloys sector	DEE	DEE, NT, DMPR, Eskom	3 to 24 months
Inefficiency in Rail and Port Operations	Improve and protect **rail** and **port infrastructure**	Increased Rail Capacity	DoT	DMPR, DTIC, NT	2 years
	Improve Port Handling Capacity Design mechanisms for **reducing port handling costs**	Increased Port Efficiencies Reduced port handling costs for ferrochrome exports	DoT	DMPR, DTIC, NT, TFR	1 year

Implementation Plan 2/2

Constraint	Proposed Actionable Item	Output	Lead Department	Support Departments	Timelines
Strengthen regional and International Strategic Partnerships	Negotiate trade agreements for mineral exports and value-added products Position South Africa as a key supplier of processed minerals to international markets while securing ores for domestic market	Supply of value-added products into the market Balance strategic supplies of unprocessed minerals	DMPR	DTIC, DIRCO, NT	1 year
Increase Investments into Exploration	Increase **exploration budget** and strategic partnerships to drive exploration	More discoveries of critical minerals	DMPR, NT	CGS, IDC	12 months
Regulatory Framework & Governance	Strengthen governance in mineral and mineral processing sector operations.	Harmonised licensing processes Simplified licensing processes to improve operating environment	DMPR, DFFE, DWS	NT, DTIC	1 year
Fiscal instruments to attract investments	**Repurpose existing instruments** to create an attractive operating environment across the value chains.	More investments into exploration, mining and mineral processing and manufacturing	NT	DMPR, DTIC, CGS, MINTEK	6 months years

Summary of Pillar Interventions

Pillar	Programme	Lead Department/Entity
1. Geological Mapping and Exploration	1.1 Increase geological mapping at 1:50 000 scale	Council for Geoscience
	1.2 Expand JMEF to support critical minerals	Department of Mineral & Petroleum Resources
	1.3 Research tax incentives to attract exploration capital	National Treasury
2. Value Addition & Localisation	2.1 Revive ferrochrome smelters & incentivize stainless steel production	Department of Mineral & Petroleum Resources
	2.2 Establish battery manufacturing & precursor processing hubs	Department of Trade, Industry & Competition
3. R&D & Building a Skilled Workforce	3.1 Develop Resource Development Zones (RDZs)	Department of Science, Innovation & Technology
	3.2 Develop a Future-Ready Critical Minerals Workforce	Mining Qualifications Authority
4. Infrastructure & Energy Security	4.1 Invest in strategic rail & port upgrades for mineral exports	Department of Transport
	4.2 Implement special electricity pricing for energy-intensive industries	Department of Energy & Electricity
5. Financial Instruments	5.1 Research fiscal and financial incentives to support	National Treasury
6. Regulatory & Policy Framework	6.1 Harmonize Mineral Licensing Regulations	Department of Mineral & Petroleum Resources

Thank You

Department of Mineral & Petroleum Resources