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Zimbabwe Leveraging Critical Minerals for the Just Energy Transition

By

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Introduction

- ▶ The world is transitioning from the use of fossil fuels to renewable energy sources and green technologies as part of global efforts to combat climate change and reduce carbon emissions.
- ▶ The increased reliance on solar, wind, hydro and geothermal energy along with innovations in Electrical mobility is driving demand for critical minerals like lithium, cobalt, nickel, graphite, rare earth elements – key inputs in batteries, solar panels and other clean energy technologies.
- ▶ **However, the global shift to clean energy offers both opportunities and risks**
 - ❖ On one hand, demand is rising for key “transition minerals”.
 - ❖ On the other hand, market dominance by a few countries is creating supply chain vulnerabilities, price volatility and strategic dependence for less influential economies.

Effects of market dominance by a few countries

- ▶ **Price manipulation** – dominant countries can influence global prices by controlling supply (cutting or flooding markets)
- ▶ **Supply Chain vulnerability** – over-reliance on a few suppliers exposes importing countries to disruptions due to geopolitical tensions, natural disasters or policy changes
- ▶ **Global inequality** – wealth and benefits from resources are concentrated in a few nations, widening economic inequality
- ▶ **Strategic dependency** – countries may compromise political or economic decisions to maintain relations with influential countries
- ▶ **Stifled Diversification** – countries depending on dominant suppliers may delay local production or value addition, hindering economic diversification.

Strategic options for resource rich countries to escape commodity market volatility

Strategic Options.

► Value Addition and Beneficiation

- ❖ Instead of exporting raw minerals, resource rich countries (Zimbabwe included) must process them locally to capture more value.

► Economic Diversification.

- ❖ Diversifying beyond commodities protects economies from global price swings and demand shifts
- ❖ It cushions public revenues and unemployment from sector specific downturns
- ❖ Creates jobs across multiple sectors such as (manufacturing, tourism, ICT, agro-processing, etc)
- ❖ Diversification into value added goods and services strengthens trade balance and reduces reliance on a few exports.

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- ▶ **Strengthening Institutions & Policy Frameworks.**

- ❖ This will help ensure transparent governance, effective resource management and equitable distribution of wealth, thereby transforming natural endowments into sustainable development outcomes.

Zimbabwe — an illustrative case (what it shows us)

- ▶ The world demand for energy minerals is increasingly growing, making Zimbabwe stand at a strategic position in the global shift towards renewable energy and green tech.
- ▶ Zimbabwe is richly endowed with minerals like
 - ❖ Lithium
 - ❖ Platinum
 - ❖ Nickel
 - ❖ Graphite
 - ❖ Rare earth elements, etc
- ▶ The country rapidly scaled lithium production and attracted over US\$1bn of Chinese investment, becoming a leading African lithium producer.
- ▶ Though efforts to attract mining investment were made, beneficiation and value addition remains limited.
- ▶ Several Chinese firms (Huayou, Sinomine, etc.) have built concentrators and are investing in lithium sulphate plants;

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- ▶ Mining contributes over **70% of export earnings**, making Zimbabwe highly commodity - dependent.
- ▶ **This reliance creates exposure to external shocks like price volatility, geopolitical risks and declining global demand**
- ▶ Commodity price fluctuations continue to threaten Zimbabwe's fiscal and economic stability.

Current state of CEMs beneficiation

- ▶ Zimbabwe is steadily transitioning from a traditional **mine-port paradigm** towards a value-driven, beneficiation-based model.
- ▶ This has seen the establishment of mineral processing plants at key mining hubs across the country.
- ▶ **Existing Processing Plants**
 - ❖ ***Zimbabwe has at least 5 operational lithium processing plants, with several others under development.***
 - ❖ **3 major Platinum processors**– Zimbabwe is the second-largest producer of platinum group metals in the world after South Africa still exports semi-processed matte.
 - ❖ **Graphite milling and purification** – *Zimbabwe is currently milling graphite into concentrates, and lacks facilities for high-purity purification...., thus it is being exported as concentrate.*
 - ❖ **Limited cobalt processing locally** – *the country lacks dedicated processing and refining capacity.*

Government Policies supporting Beneficiation and value addition

- ▶ Zimbabwe's policies are shifting from raw mineral exports to local processing, with a strong push for beneficiation through;
- **Export Ban on unprocessed minerals**
- **Incentives for in-country value addition**
- **Legal obligations to beneficiate before export.**

Government Policies supporting Beneficiation and value addition Cntd

- ▶ **Raw minerals export ban (2022)** – SI 213 of 2022
 - *Banned the export of raw /unprocessed lithium ore and other unprocessed base and energy minerals*
- ▶ **Mines and Minerals amendment Bill**
 - *Includes provisions requiring mining companies to submit beneficiation plans*
 - *Encouraged the development of local processing capacity as a licensing condition*
- ▶ **Local Content Strategy (2023-2025)**
 - *Encourages mining firms to use local inputs, services and labour*

Government Policies supporting Beneficiation and value addition Cnt'd

► Zimbabwe National Industrial Development Policy 2 (ZNIDP2) 2026 – 2030

- The policy identifies mineral beneficiation and value addition as a core pillar to drive structural transformation and industrialization.

❖ Key focus of the pillar on mineral beneficiation

1. **Promote local processing of minerals** - to semi-processed and finished products
2. **Downstream Value Chain Development** – support industries that use locally processed minerals (e.g battery manufacturing, chemicals etc)
3. **Incentivize Investment in Beneficiation Infrastructure** – through tax and policy incentives for smelters , refiners and mineral based manufacturing plants.
4. **Strengthening of Regulatory Framework** – Enforce export ban/ restrictions on unprocessed strategic minerals (the government is working on aligning mining policy with industrial development goals)

ZNIDP 2 Cont'd

5. **Government is encouraging Public-Private partnerships** in beneficiation projects as combining public goals with private efficiency is likely to contribute to national development.
6. **Boost Technological Capacity and Skills** – the pillar further promotes local Research and Development, training institutions and technology transfer in processing technologies.
7. **Integrate into Regional Value Chains** - leveraging AfCFTA to supply processed mineral products regionally and globally.

Success Stories & achievements

- ▶ Zimbabwe is making notable strides in mineral beneficiation and value addition as evidenced by key achievements across several strategic minerals.
- 1. **Ban on raw Lithium export** – is encouraging local processing as it has attracted investments into lithium processing plants and encouraged value retention.
- 2. **Establishment of key minerals processing plants**
- 3. **Policy and institutional support- emphasizing beneficiation**
- 4. **Community Empowerment – (thru CEETs)** – mining linked projects are contributing to local development
- ❖ *Zimbabwe now ties new mining licenses to mandatory beneficiation commitments, which ensures alignment with the country's industrialization and value addition goals, while discouraging raw mineral exports.*

Zimbabwe's diversification efforts

- ▶ Zimbabwe is actively working to reduce over-reliance on mining by promoting growth in another key sectors-Diversification;
- ❖ **Agriculture** – government is pushing agriculture as a core sector in its diversification strategy.
 - The sector is contributing significantly to food security and export earnings.
 - **Wheat self-sufficiency** - production improving **375,000 mt -2023 season, 468,000mt-2024 ; 640,195mt in 2025** ---reducing import dependence and ensured stable bread supply
 - **Export Earnings**
 - **Tobacco** – remains Africa's top producer and exporter
 - the industry has rebounded strongly over the past few years, achieving record production, earning over **US\$ 1 billion** export earnings.

Diversification efforts cont'd

- ▶ **Manufacturing** – the country is actively positioning its manufacturing sector as a central pillar in its economic diversification strategy.
 - ❖ Government (through supporting policies) is prioritizing industrialization to stimulate inclusive growth, generate jobs, and improve value addition.
 - ❖ Manufacturing is being promoted as a means to process raw materials locally, reduce exports of unprocessed goods and increase export earnings.
- ▶ **Growth in the sector**
 - improved from **-18.5%** in 2020 to **2.2%**
 - Manufactured exports grew by **42%**.
 - Shelf space occupancy of locally manufactured goods improved from **55% in 2020** to **80%**
 - **The sector overtook mining in 2024 as the top single contributor, contributing 15.3% to GDP**, indicating a structural shift towards industrialization and value addition

Promoting tourism to diversify Zimbabwe's economy from mining

- ▶ The country is strategically promoting this sector as a diversification pathway to reduce overdependence on mining and build a more resilient and inclusive economy.
- ▶ The country is rich in world-renowned attractions such as
 - ❖ Victoria Falls
 - ❖ Hwange, Mana pools and Gonarezhou national park
 - ❖ Great Zimbabwe and Matobo ruins
 - ❖ Mutarazi falls

Challenges

- ▶ Infrastructure gaps (energy and transport)
- ▶ Technology and skills shortages
- ▶ Capital-intensive plants
- ▶ Regulatory and Policy inconsistencies
- ▶ Market volatility

Lessons from Zimbabwe

- ▶ 1. Local processing policy is necessary but not sufficient.
 - ❖ Banning concentrates creates incentives for downstream plants, but without investment financing, technical partners, power, and logistical support it can produce unintended consequences (smuggling, legal disputes, investment delays).
 - ❖ Zimbabwe's large Chinese investments in processing capacity are positive — but the country must also manage transitional support and enforcement coherently.
- ▶ 2. Higher volumes ≠ higher revenues.
 - ❖ Weak prices can reduce revenue despite output growth, underscoring the need for prudent fiscal buffers and conservative budgeting.
- ▶ 3. Governance matters – there's need for stronger tax administration as they are as important as industrial policy.

Conclusion(s)

- ▶ Zimbabwe stands at a pivotal moment in its development journey, richly endowed with critical minerals essential for the global shift towards clean energy.
- ▶ By leveraging these resources strategically, the country has potential not only to contribute meaningfully to the global energy transition, but also to transform local economy through beneficiation, value addition and inclusive growth.
- ▶ **However**, to fully harness this opportunity, the country must continue strengthening its policy and institutional frameworks, promote sustainable mining practices and deepen investments in local processing and innovation.
- ▶ Partnerships, both public and private, domestic and international –will be key to building capacity, enhancing transparency and ensuring that communities benefit equitably.

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- ▶ Economic diversification is also not just an option, but a necessity for building a resilient, inclusive and sustainable Zimbabwean economy.
- ▶ By expanding beyond traditional sectors, and investing in value addition, Zimbabwe and other resource rich countries can reduce vulnerability to external shocks, create quality jobs and drive long-term development.
- ▶ Zimbabwe's path is one that is trying to balance economic ambition with social justice and environmental sustainability.
- ▶ Zimbabwe is looking forward to position itself as a model for resource-rich countries seeking to drive long-term development through the just energy transition.