



United Nations  
Economic Commission for Africa

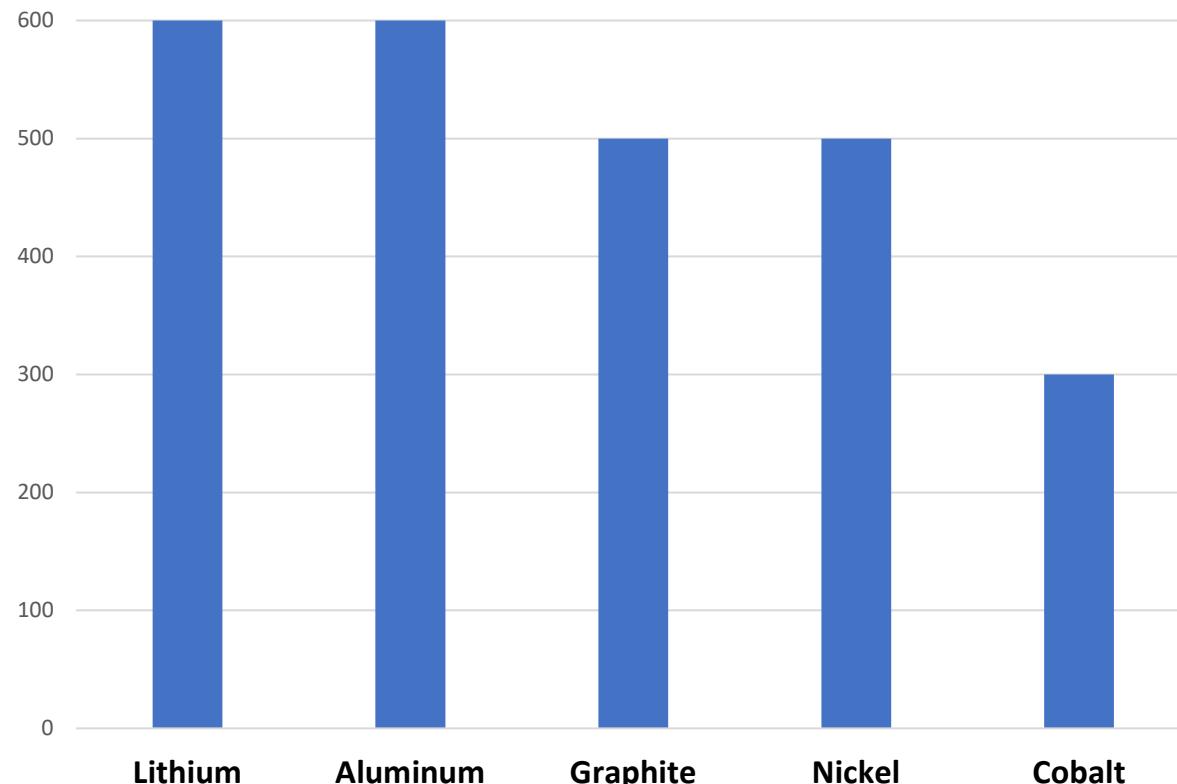
# Transforming Critical Minerals in Africa

**John Sloan**  
**Economic Affairs Officer**  
**ECA**

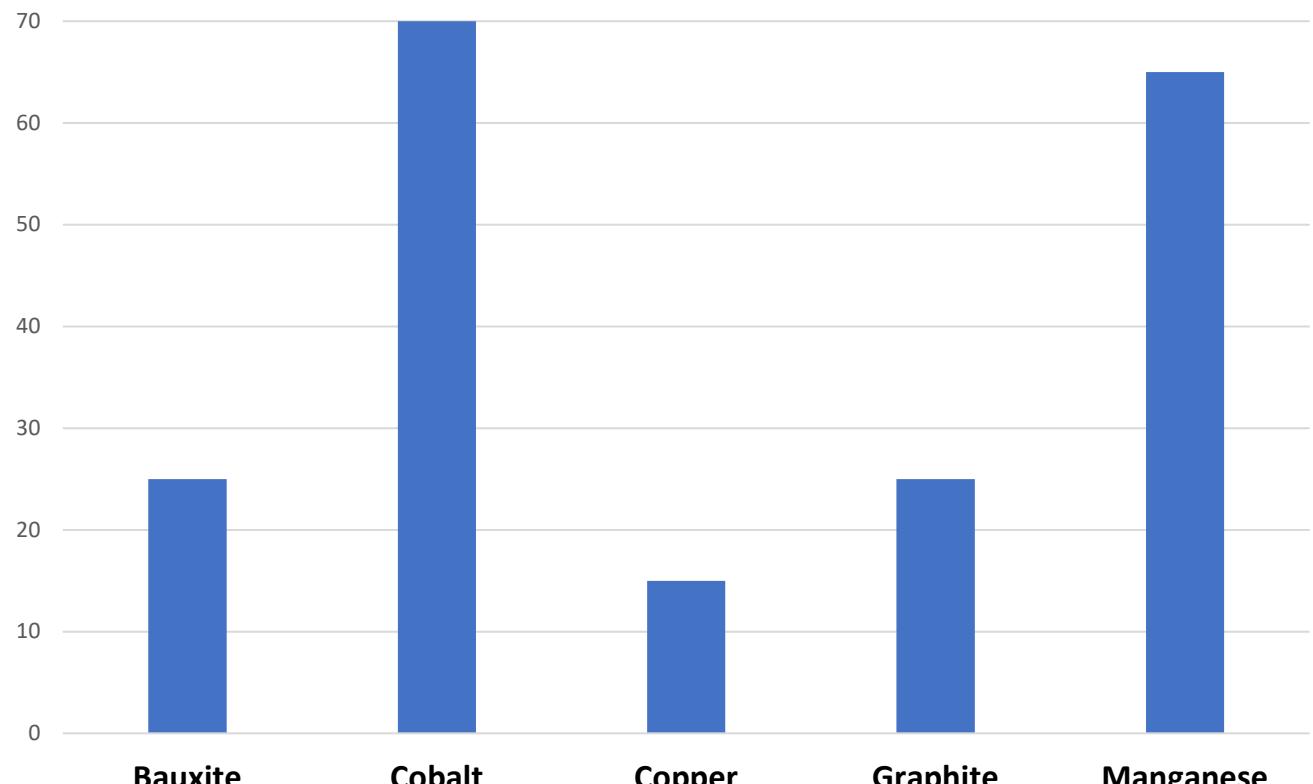


10<sup>th</sup> Nigeria Energy Forum  
Day 2 - Virtual  
20 November 2025

**Estimated mineral demand increase by 2030 (%)**

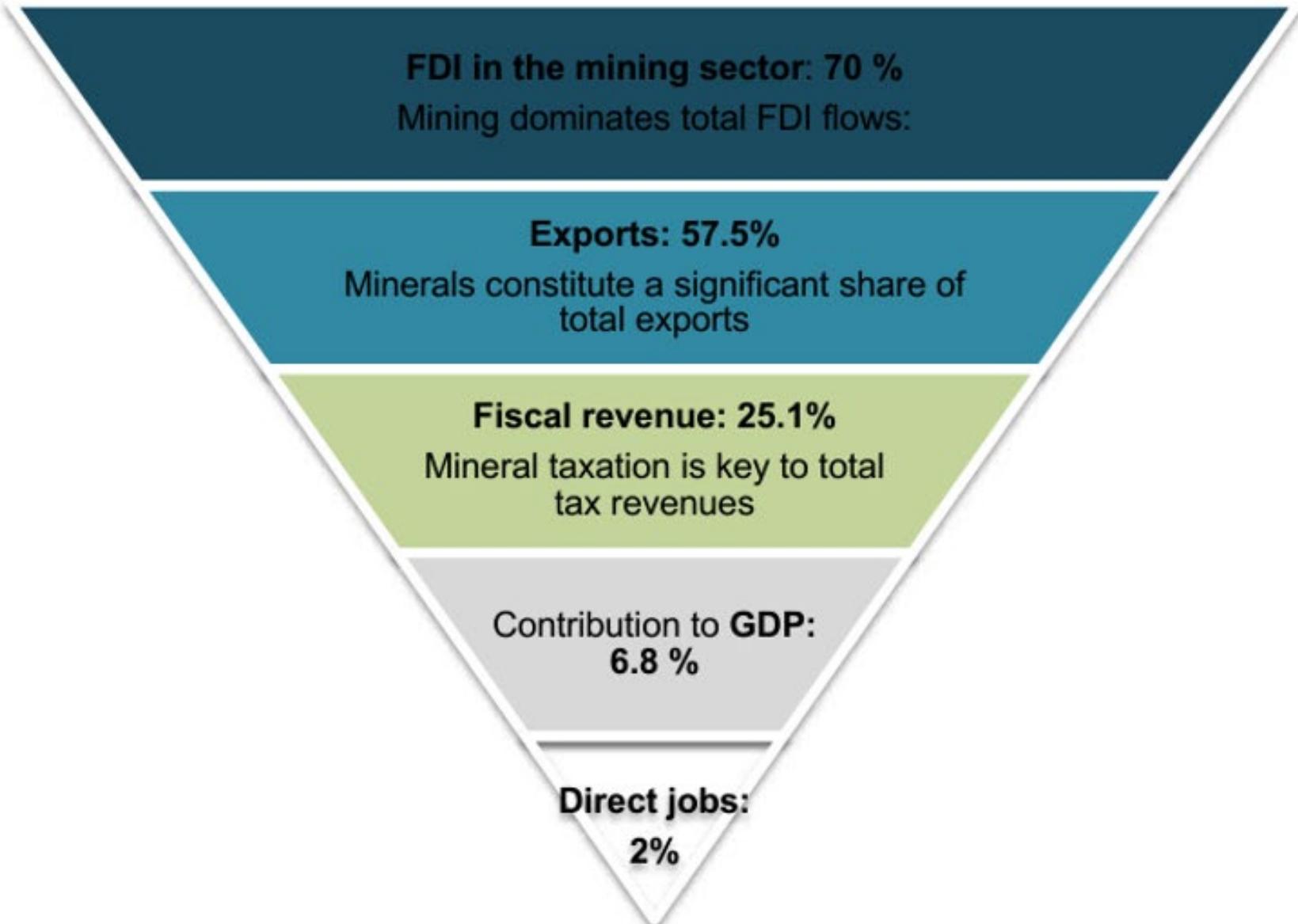


**Africa's share of current green mineral production (%)**



*Source: ECA*

## National contribution of the mineral sector\* (per cent)



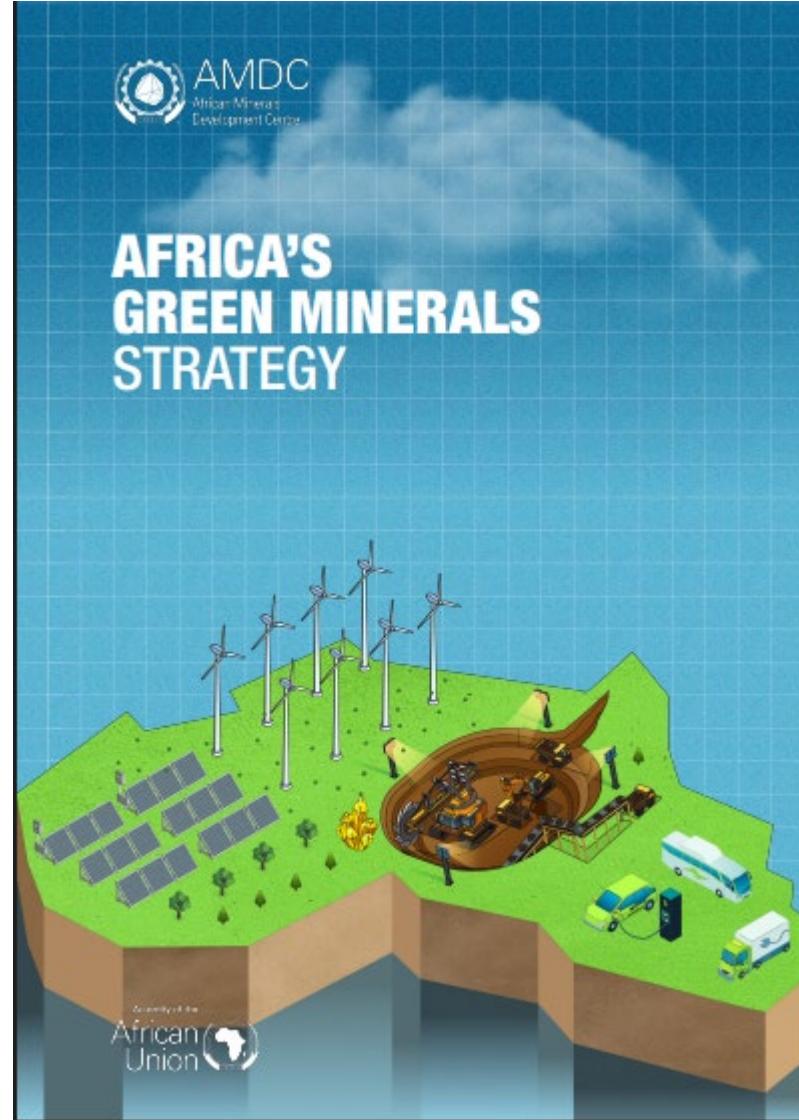
↑ Contribution of mining is generally **more significant** in terms of FDI inflows, export and fiscal revenues

↓ But much **less impressive** in terms of local value added, business spillovers and employment creation



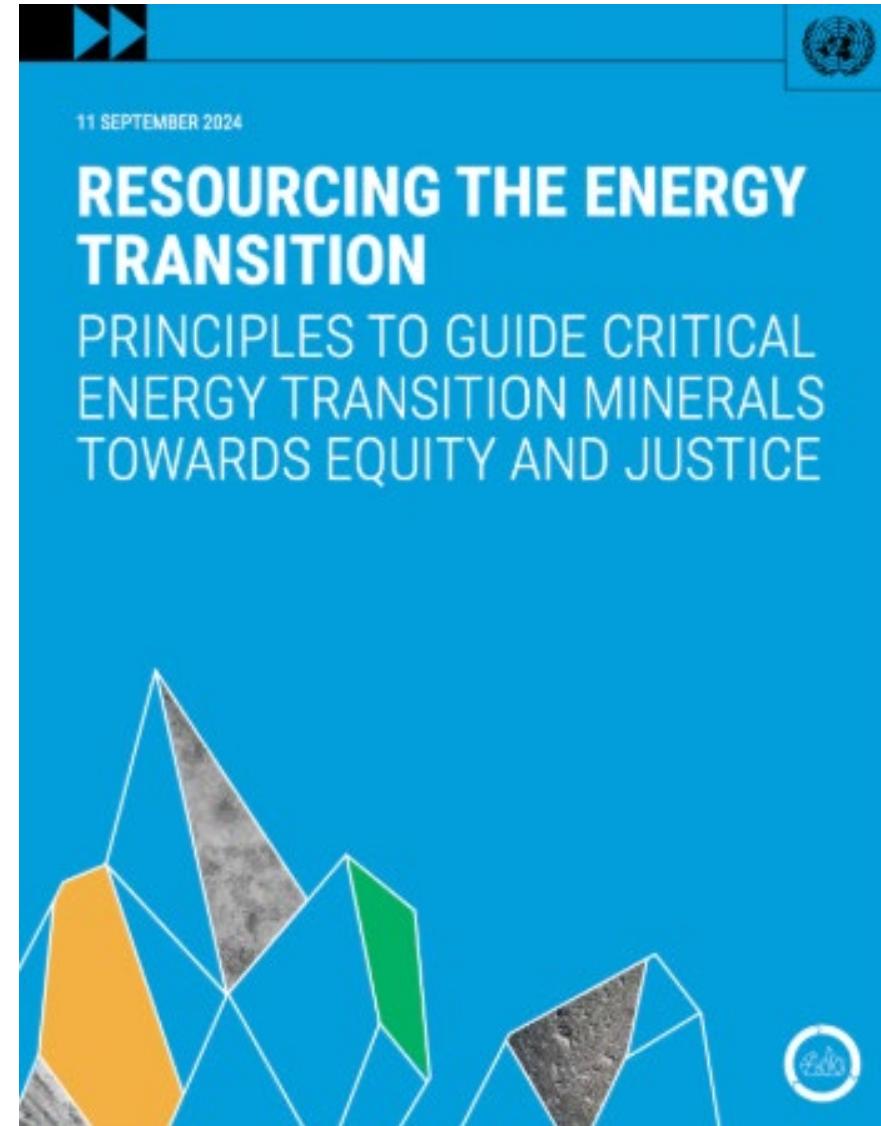
## Africa Mining Vision

February 2009



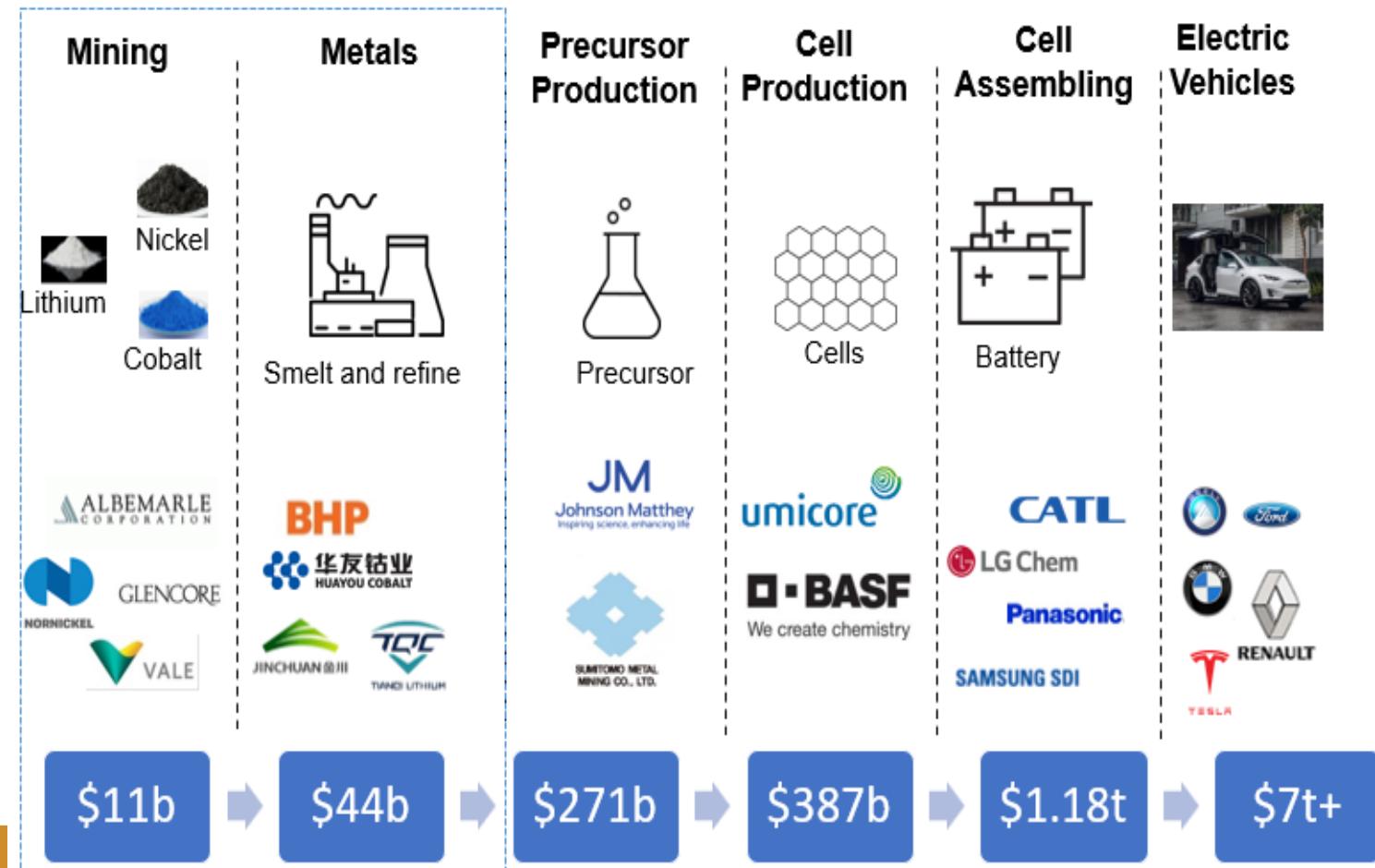
# Secretary General's Panel on CETMs

- Landmark high-level panel convened in 2024
- AMV as foundational input document
- Major participation from African countries
- Yielded 7 guiding principles and 5 actionable recommendations
- AR1 on benefit sharing is particularly relevant and holds potential for region
- Next steps – to be taken forward by UN, partners, member States



## Example of value-addition initiative: DRC-Zambia Cooperation and SEZ

- Context of surging demand for renewable energy products and mineral inputs; low level of value chains DRC and Zambia currently sitting in.
- Agreement by Presidents (2021)
- MoU signed (2022)
- Prefeasability Study (2023)
- Current/next steps:
  - Acquisition of land
  - Policy environment
  - Infrastructure investment
  - Investor / business engagement



## Inclusivity and environmental protection in SEZs

**Undertaken to support policies governing forthcoming manufacturing SEZs**

### **Underlying Questions and issues to address:**

- What have been the experiences in SEZs in the region thus far?
- What policies (local, national, regional) are needed to ensure inclusivity in new SEZ? And in what timeframe/phasing?
- What is the role of other partners (local community organizations; private-sector facilitator of zone; investors and businesses...)
- How to balance external-facing SEZ with internal needs of community?
- How to balance mining and manufacturing sector needs with environmental considerations for citizens and industries (agriculture, forestry, fisheries)



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## POLICY REPORT

### Special economic zones as a tool to foster inclusive and green industrialization in Zambia

#### Key messages

There is great potential for the green energy transition to yield significant opportunities for industrialization and job creation in mineral-producing communities across Africa. As electric vehicles, wind turbines and other products require significantly more mineral inputs, of which Africa is an important contributor, the region is in a position to invest in mineral-based value-added activities that generate greater income than mining alone.

Special economic zones are one potential tool for resource-based industrial development when they are operated in a manner in which the aspirations of all stakeholders, including governments (local and national), private investors (domestic and foreign), micro-, small and medium-sized enterprises, labour, local communities and civil society organizations, are fully considered. In the context of the proposed electric vehicle battery cross-border special economic zone in the Democratic Republic of the Congo and Zambia, key considerations relating to the benefits of the zones have emerged. They are described below.

**Contribution to the creation of sustainable jobs and inclusive industrialization.** Special economic zones can be important drivers of economic transformation by fostering a dynamic and innovative business environment and thus contributing to the country's transition towards higher value-added activities and creating a resilient and globally competitive economy. That

of the cross-border special economic zone in the Democratic Republic of the Congo and Zambia, the development of ancillary supply industries within the zone would provide opportunities for stakeholders and would contribute to skills development and enhancement along the battery value chain, while increasing job opportunities and incomes and contributing to inclusive growth. For local government operations in Ndola, Zambia, higher income levels would boost the local economy and reinvigorate the mining town.

**Contribution to economic, environmental and social sustainability.** Special economic zones can be designed to incorporate enhanced green technologies and eco-friendly initiatives and thus contribute to responsible green industrialization, in which economic growth is aligned with environmental conservation and socioeconomic stewardship. As observed by Bost (2019), Cane and others (2018) and Castells (2013), and in the Zambian setting, a mature legal framework for environmental management is important to underpin the greening of the electric vehicle battery special economic zone. The initiative will be anchored in the best available technologies in environmental management and will adhere to national environmental and labour standards.

**Driving regional economic transformation.** Special economic zones can be important drivers of economic transformation by fostering a dynamic and innovative business environment and thus contributing to the country's transition towards higher value-added activities and creating a resilient and globally competitive economy. That

### RÉPUBLIQUE DÉMOCRATIQUE DU CONGO



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## Rapport

### Zone économique spéciale destinée à la fabrication des batteries en République démocratique du Congo : Industrialisation inclusive et verte

Prof. Arthur Kaniki Tshamala

Consultant

avril 2024



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### Note d'orientation de la CEA

### Les zones économiques spéciales pour les batteries : un outil de promotion d'une industrialisation inclusive et verte en République démocratique du Congo

#### Industrialisation inclusive et verte

##### Introduction

Le monde va bientôt passer à des sources de production d'énergie et à une technologie de stockage à faible émission de carbone. Cette évolution va nécessiter une augmentation sans précédent de la production de minéraux dont l'Afrique est une source mondiale clé (ISS, 2023).

Avec ses importantes réserves de lithium, de cuivre, de manganèse, de nickel et de cobalt, la République démocratique du Congo (RDC) occupe une position stratégique dans cette transition énergétique. En effet, ces minéraux sont des composants essentiels pour la production d'énergie verte et la fabrication de batteries de véhicules électriques. L'expansion de la demande mondiale ouvre à la RDC des possibilités de se positionner comme un acteur déterminant.

Les décideurs africains souhaitent que ce boom minier aide à mettre en place de nouvelles industries à plus forte valeur ajoutée et créatrices d'emplois sur le continent, pour alimenter ainsi l'économie verte de la région.

La Commission économique pour l'Afrique (CEA) fait partie d'un consortium régional qui accompagne la République démocratique du Congo et la République de Zambie dans leur démarche visant à établir une chaîne de valeur régionale des métaux entrant dans la fabrication de batteries pour véhicules électriques (BVE). Dans le cadre de cette initiative, les deux pays pourront exploiter leur cobalt, leur cuivre et d'autres métaux nécessaires à la transition verte et passer à des segments à plus forte valeur ajoutée de fabrication de batteries lithium-ion.

Les zones économiques spéciales (ZES) sont des outils conçus pour répondre à des situations économiques très précises, caractérisées par des facteurs concurrentiels particuliers d'un pays, à savoir la dotation en ressources, la demande, l'emploi, l'intégration régionale, la situation géographique et la compétitivité de l'environnement des affaires au sens large (CNUCED, 2021). Ce sont des moteurs de création d'emplois, qui favorisent une industrialisation inclusive par des opportunités d'emploi pour une main-d'œuvre diversifiée. Le développement des industries contribue au renforcement des compétences et à l'amélioration des conditions socio-économiques, et favorise ainsi une croissance inclusive (CEA, 2021).

#### Aperçu du secteur minier de la RDC

La République démocratique du Congo recèle un potentiel minier très diversifié, mais inégalement réparti dans les provinces du pays. Depuis la promulgation de la première version du Code minier en 2002, la recherche géologique et minière en RDC a notablement évolué. Cette première version du Code minier et ses mesures d'application ont

## Findings - Zambia

- Five formally established “multi-facility economic zones” and Two industrial parks, **but with different levels of scale, operationalization**. Often linked with targeted investment (China, Japan)
- Sectors of focus include mining and processing but also pharmaceuticals, textiles, logistics...
- Cumulative 44,000+ jobs created attracting \$2bn investment and 211 companies (since 2007)
- ASM major part of sector
- Up to 25% of copper production earmarked for local processors – implications...
- Government-led zone is ‘most successful’ and with greatest accountability/transparency.
- Mining-adjacent zone (Chambishi) holds potential to link closer with sector, including DRC
- Policy and law exists for environmental protection, gender equity – need to link with Critical Minerals Strategy and boom; strengthen monitoring/enforcement agencies and mechanisms, including through local parties
- More outreach to community and domestic industry can raise investment and bring in more firms.

## Findings - DRC

- CAEB (centre of excellence) – strong promoter of research into battery technologies, located in region (Lubumbashi)
- Several planned SEZs identified in industrialization plan, by region. Specific tax incentives noted.
- Environmental impact: policy environment exists and requirements for permits (Mining Code); similar to Zambia, needing further enforcement.
- Recognition of local languages, religions, climates, biodiversity in areas considered for this Zone.
- Main stakeholders identified: Ministries of mines, industry and environment; CAEB, SEZ authority; ALSO local/regional authorities; interviews with local groups and organizations
- Recommendations: decarbonization through large- and small-scale renewables; forest preservation surrounding zone; waste re-usage; develop opportunities across value chain especially for locals; suggest developing critical mineral strategy; need framework to attract green investments;

# Green and Inclusive Mining and Manufacturing in SADC

- Full project title “**Fostering environmentally and socially responsible, decarbonized, inclusive, and transformative value chains for energy transition minerals in the SADC region**”
- To be implemented in **6 countries** in SADC region
- **6 organizations** involved in the project consortium: ECA, AUC, WITS University, WWF (Zambia, Zimbabwe, Germany), BGR, Projekt-Consult
- **Focusing** on 4 distinct but linked outputs:
  1. A regional policy framework for environmentally sound and socially responsible raw material extraction and processing
  2. Developing a system for environmental and climate monitoring and strengthening regulatory oversight bodies
  3. Civil society, local communities and traditional leaders are empowered to influence and enforce environmental standards and benefit sharing in the minerals value chain
  4. Actionable pilots in de-carbonization, mineral value addition, climate, water and biodiversity smart-mine closure and opportunities for women and youth in mineral value chains



# THANK YOU!

A large, dark blue rectangular graphic with a series of thin, light blue diagonal lines running across it, creating a striped effect. Centered within this graphic is the "Ideas to Action" logo. The word "Ideas" is in a large, white, sans-serif font, with "to" in a smaller, white, sans-serif font positioned between "Ideas" and "Action". The word "Action" is in a large, white, sans-serif font. The logo is partially obscured by the blue striped background.

Ideas  
to  
Action