



CONCEPT NOTE (Draft v.1)

ECA/AFC/AU convened session at COP28

On the theme:

SUPERCHARGING AFRICA'S BATTERY & EV AMBITIONS

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Summary

What: A dynamic session with the draft theme *Supercharging Africa's Battery & EV Ambitions* will consist of presentations, keynotes, a high-level panel discussion and announcements.

Where: At the Africa Pavilion in the Blue Zone at COP28 in Dubai, UAE.

When: A 90-minutes session suggested for the 4th, 5th or 6th of December, 2023.

Who: Co-convened by the UN Economic Commission for Africa (UNECA), Africa Finance Corporation (AFC), and the African Union Commission (AUC).

(Proposed media partner: Africa Business Magazine)

Purpose

This strategic and dynamic session at COP28 is designed to be a "call to action" to investment and business communities, policymakers and all major stakeholders, to collaborate and invest in the rapid realisation of an African Battery Electric Vehicles (BEV) value chain. African Heads of State will engage with fellow policy makers, the private sector, global investors, business communities and heads of multilateral agencies to identify which investment and policies are needed to spur the creation of an sustainable and inclusive African value chain for the production of battery electric vehicles and the

repositioning of the continent in the global supply chain of value-added metals and minerals essential for the world's transition to renewable energy.

The session objectives include:

- Identify collaborative approaches to capitalising on Africa's major competitive advantages in the production of battery and electric vehicles;
- Explore the most effective and innovate finance solutions and the integrated investment approaches necessary to crowd in investment in key areas of Africa's BEV value chain;
- Identify the local content policies and incentives necessary to onboard local enterprises into the global value chain for batteries and electric vehicles;
- Explore the potential of the African Continental Free Trade Area (AfCFTA) as a lever to accelerate the processing of critical minerals for battery production;
- Identify the pathways to recalibrating the policy, legal and regulatory environments and natural resource governance to foster the developments of the battery and electric vehicles sector.
- Explore how to accelerate the implementation of ancillary infrastructure such as road, rail, and ports, that will play a vital role in advancing Africa's critical mineral beneficiation and BEV value chain agenda;
- Understand the strategic significance of Special Economic Zones (SEZs) and Industrial Parks as critical tools to fast-track industrial infrastructure development, promote Intra-African Trade, accelerate the implementation of the AfCFTA, and facilitate export development in relation to the production of battery precursors, batteries, and electric vehicle;
- Showcase startups and innovators most likely to play a critical role in the realisation of the BEV value chain.

Prospective participants

- Governments of DRC, Zambia and other African Governments
- International and Pan-African investment communities
- DFIs and multilateral agencies
- SMEs and innovators
- Business communities in mining and related sectors
- International media, and Pan-African media

Next steps

- ECA to secure 90-minute slot on the Africa Pavilion;
- AFC/ECA to assemble a technical team made up of representatives from the co-conveners ECA, AFC and AU;
- Draft programme to be written and approved;
- Speakers identified and engaged;
- Attendee list compiled;
- Invitation letters to be drafted and sent out.

Background

A global transition towards green energy and rapid decarbonization has exponentially increased demand for Electric Vehicles (EVs) as well as investment in battery-powered storage systems. A typical electric vehicle battery pack, for example, needs around 8 kilograms of lithium, 35 kilograms of nickel, 20 kilograms of manganese and 14 kilograms of cobalt, while charging stations require substantial amounts of copper. For green power, solar panels use large quantities of copper, silicon, silver and zinc, while wind turbines require iron ore, copper, and aluminium. Experts agree that the clean energy transition needed to avoid the worst effects of climate change could unleash unprecedented metals demand in coming decades, requiring as much as 3 billion tons of metal and minerals. Current supply and reserve

levels indicate an impending shortage that could ultimately jeopardise global ambitions to reach Net Zero. The road to achieving net-zero targets is going to be resource intensive. For certain minerals, the world will need 500 times more than what it is currently producing.

Africa is the continent most blessed with an abundance of these critical minerals and metals necessary for the global transition, including aluminium, cobalt, copper, lithium, graphite, bauxite and manganese. Consider the DRC and Zambia. These two countries are well positioned to establish leadership in the strategically pivotal electric vehicle sector, being well-endowed with the resources necessary to produce battery minerals. The DRC accounts for approximately 70% of global cobalt supply and 88% of cobalt exports, and the two countries collectively contribute 11% of all copper supply globally. Mining is also a critical sector for both states, contributing 70% of Zambia's foreign exchange, while cobalt accounts for 26% of the DRC's exports.

With global supply chains severely impacted by geopolitical events and the fallout from the Covid-19 pandemic. The world has an urgent need for more metals and minerals if there is any hope of achieving the transition to cleaner energy that is necessary to reach Net Zero. The combination of the supply chain turmoil and the quest for a low-carbon, climate-resilient future offers Africa the opportunity to *seize the moment* and become a major manufacturing hub for the tech-intensive industries that will produce the batteries and the electric vehicles central to a sustainable future powered by green energy. Put simply, Africa must use this climate of geo-political change to *add value* - so-called beneficiation - to its raw metals and minerals, while *localising production* to spur sustainable industrialization that will transform economies, builds resilience within societies, improves lives and livelihoods, and helps countries achieve the Sustainable Development Goals.

With some of the world's largest reserves of battery metals Africa is positioned to fill the gaps left by Russia's absence from the global mineral supply chain. However, the critical minerals that Africa mines are currently shipped to Europe and China, where value is added to the product. For Africa to truly capitalise on the "green energy boom", the global energy transition and the subsequent demand for critical raw materials, the continent should not only position itself as a key supplier of value-added materials but also ensure that infrastructure is built to bring a fully integrated African EV value chain into reality.

The continent offers advantages in battery and EV production such as shorter and simpler access to primary inputs as well as a youthful workforce. The continent also offers lower production costs. *The Democratic Republic of the Congo (DRC)–Africa Business Forum*, organised by UNECA in November 2021 to articulate the pathways for developing the battery and electric vehicle value chain, highlighted a BloombergNef study demonstrating that the production of battery precursors, the chemicals used in batteries, was three times cheaper in the DRC than in China and India, and two times cheaper than in Poland. And with very positive emission scores.

Achieving the ambition of the beneficiation of battery minerals and the production of electric vehicles on the continent would see Africa tapping into a global market projected to be \$8.8 trillion by 2025 and \$46 trillion by 2050. However, a rapid upscale in investment in mining, production, assembling and other steps in the value chain is essential to realise Africa's potential as a battery production powerhouse. With a wide funding gap in the African mining sector for example, significant intervention is required with the current levels of investment vastly inadequate. While over 30% of the world's minerals can be found in Africa, less than 5% of global development funding is invested in African mining projects.

Special Economic Zones (or SEZs) can also play a pivotal role. Arise Integrated Industrial Platforms, which is majority owned by Africa Finance Corporation, is the technical consultant on the ECA led BEV initiative. Arise has launched a pre-feasibility study for SEZ in DRC and Zambia to establish battery plants, solar panel plants, and other essential components, creating a complete ecosystem. The batteries will enable further deployment of solar energy on the continent to power green industrialization. The zones will be owned by a consortium of public and private investors, including sovereign wealth funds of the Democratic Republic of the Congo and Zambia and African multilateral development banks.

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