

Commodities Branch

Division on International Trade and Commodities

Critical energy transition minerals in the Democratic Republic of the Congo: rapid assessment of value addition and diversification capacity within and beyond mineral value chains

Background

Economic diversification and complexity are essential for sustainable growth. Countries that produce complex goods, whose manufacture requires advanced skills, knowledge and technologies, tend to be more resilient and to grow faster. Diversifying into such products fosters structural transformation, improves productivity and reduces vulnerability to external shocks. This is particularly important for developing countries, especially those that depend on commodity exports, which are highly exposed to price volatility.

This need for diversification coincides with a pivotal moment in the energy transition, which is accelerating global demand for critical energy transition minerals (CETMs). These minerals are essential inputs for manufacturing renewable energy technologies, such as solar panels, electric vehicle batteries, energy storage batteries and wind turbines. As a major producer of CETMs (cobalt, copper and lithium), the Democratic Republic of the Congo is well placed to benefit from the energy transition and potentially foster inclusive and sustainable development of its economy.

However, to fully harness the development potential of its CETM endowments while avoiding deeper commodity dependence, the country would benefit from assessing its comparative and competitive advantages, as well as its capacity and institutional readiness to create more value added within CETM value chains and to diversify into other products and economic sectors. In this context, the project aims to help the beneficiary country identify accessible, high value-added products and sectors in order to support its value addition and economic diversification.

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The project builds on a methodology already applied in UNCTAD technical cooperation initiatives, notably the project “Critical energy transition minerals: rapid assessment of value addition and diversification capacity in Southern Africa”, implemented in Namibia,¹ Zambia² and Madagascar.³

In Namibia, the assessment identified 353 products across 23 sectors, of which 60 are directly linked to critical minerals value chains. In a global export scenario, 200 products show an estimated export potential of US\$ 811 million, including US\$ 221 million for 33 critical minerals-related products. Developing a priority set of these products could mobilize about US\$ 2.13 billion in investment and create nearly 26,460 jobs, particularly in iron and steel, mechanical machinery and equipment, articles of copper and other metals, and electrical equipment.

In Zambia, the analysis identified 412 products across 25 sectors, of which 73 are directly linked to critical minerals value chains. Of these opportunities, 226 products show an estimated export potential of US\$ 1.4 billion, including US\$ 538.6 million for 45 critical minerals-related products. Developing a priority set of these products would require about US\$ 1.21 billion in investment and could generate nearly 115,000 jobs, notably in iron and steel, plastics, paper and paperboard, chemicals, machinery and equipment, and articles of copper and other metals.

In Madagascar, the assessment identified 259 products across 23 sectors, of which 39 are directly linked to critical minerals value chains. In a global export scenario, 209 products show an estimated export potential of US\$ 1.1 billion, including US\$ 238 million for 29 critical minerals-related products. Developing a priority set of 124 validated products could mobilize about US\$ 1.82 billion in investment and create nearly 19,700 jobs, particularly in apparel and textiles, paper and paperboard, chemicals, plastics, electrical equipment and food processing.

Finally, the project builds on UNCTAD’s long-standing analytical and normative work on critical energy transition minerals and, more broadly, on commodities, and on their potential contribution to economic diversification and sustainable development. This work includes the Technical Note on Critical Minerals⁴ and the Commodities and Development Report 2023.⁵

It also draws on UNCTAD’s role as Secretariat of the United Nations Secretary-General’s Panel on Critical Energy Transition Minerals, integrating lessons learned from engagement with government representatives, intergovernmental organizations and non-State actors, including the International Energy Agency (IEA) and the International Council on Mining and Metals (ICMM). More recently, the project also benefits from UNCTAD’s role as Co-Chair of the United Nations Task Force on Critical Energy Transition Minerals⁶ and as co-lead of the technical clusters responsible for implementing Actionable Recommendations 1 and 2 of the Panel.

¹ https://unctad.org/system/files/official-document/tcsditcinf2026d2_en.pdf

² https://unctad.org/system/files/official-document/tcsditcinf2026d3_en.pdf

³ https://unctad.org/system/files/official-document/tcsditcinf2026d6_fr.pdf

⁴ https://unctad.org/system/files/official-document/ditcmisc2023d1_en_0.pdf

⁵ https://unctad.org/system/files/official-document/ditccom2023d2_en.pdf

⁶ <https://www.un.org/en/climatechange/critical-minerals>



Objectives

The project aims to strengthen the capacity of the Democratic Republic of the Congo to analyse its strategic positioning in selected CETM value chains and to identify new products and sectors that can drive economic diversification.

Methodology

1. **Mapping of stakeholders in CETM value chains**, in collaboration with government counterparts and relevant civil society actors.
2. **Economic complexity and product space analysis** to identify opportunities for local value addition and diversification. Using UNCTAD trade data covering some 49,000 products disaggregated by price range, the product space analysis will identify the products that best match the country's current strengths and capabilities, while highlighting related products and sectors to be developed.
3. **Private sector consultations**, to validate the results of the economic complexity analyses, and identify the portfolio of products that could be feasibly produced in the country based on existing productive capacities. On this basis, stakeholders will be able to prioritize products with above-average economic complexity and export potential, in line with national priorities.
4. **Identification of targeted policy instruments**, and of the institutional and regulatory frameworks needed to support strategic value creation and diversification, based on a priority selection of products to be developed. The focus will be on areas such as trade, investment, technology and skills, competition, the environment, social and financial policies, and inter-ministerial coordination.
5. **Dissemination of recommendations at the national and regional levels**, notably through United Nations country teams and at relevant intergovernmental meetings, including those of UNCTAD.

Deliverables

The main deliverable will be a final report, comprising:

- **Diagnostic of the productive structure:** assessment of national production based on relevant national data.
- **Economic complexity and product space analysis:** identification of new products and sectors with diversification potential.
- **Portfolio of products based on multi-stakeholder workshops and consultations:** validated results and priority sectors.
- **Policy recommendations:** recommendations on investment attraction, innovation and industrial policies to support economic diversification.

Partners

Project implementation will rely on partnerships with relevant ministries, chambers of commerce, industry and mines, industrial institutes, universities and vocational training centres, in order to mobilize sectoral expertise and support the validation of priority products and sectors. It will be carried out in close collaboration with regional and international institutions, including the African



Minerals Development Centre (AMDC), the Economic Commission for Africa (ECA), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organization (UNIDO) and the Secretariat of the African Continental Free Trade Area (AfCFTA), among others.

Timeline

The project is expected to be completed in less than 12 months and will include three in-country missions during this period:

Mission 1 – November 2026: Initial consultations to identify key stakeholders, define development priorities, and prepare and validate data processing for the analysis.

Mission 2 – November and December 2026: Multi-stakeholder workshops to present and validate preliminary results.

Mission 3 – May or June 2027: Presentation of the final report and validation workshops with stakeholders.

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