

Harnessing Critical Energy Transition Minerals for Sustainable Development

A UN Interagency effort on Critical Minerals

María José Baptista Interagency and Intergovernmental Affairs, UNEP

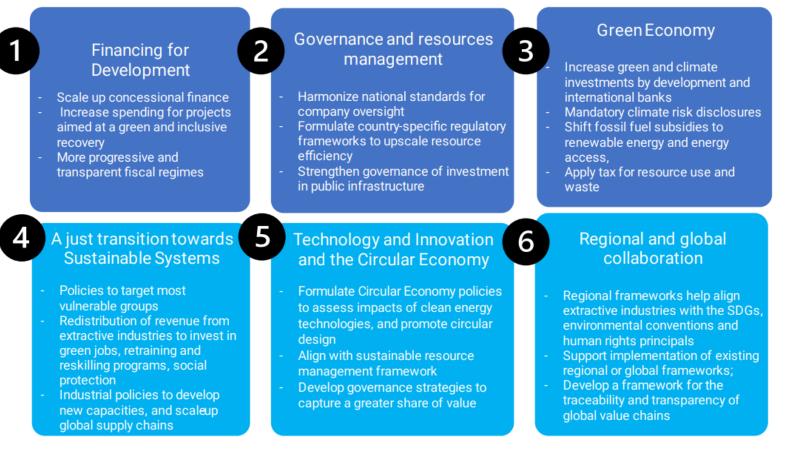
EMG Nexus Dialogue on the Environmental Aspects of Minerals and Metals Management 29 August 2023

This Presentation

- 1. The Secretary-General's Working Group on Extractives
- 2. The Secretary General's Initiative 'Harnessing Critical Energy Transition Minerals for Sustainable Development in Least Developed and Land-Locked Developing Countries: Just Transitions in Low Carbon Technologies'



Priority Areas of the UN SG on Extractives





Objectives of the UN SG Working Group on Extractives



Develop a common narrative and framework



Develop **policy recommendations**, tailored to national governments, non-state actors.



 Provide a central hub of information and
knowledge exchange on global policy actions, global standards, tools and best practices.

Frame an implementation initiative to

deploy recommendations



Foster collaboration to respond better to existing and emerging needs for state and non-state actors.



Align efforts with ongoing processes and events relevant to extractive industries

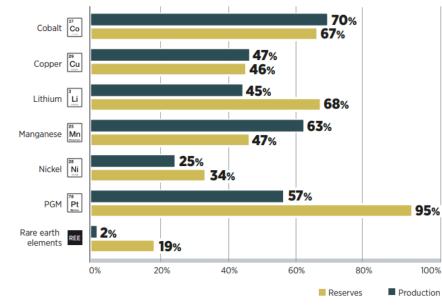


Mapping of strategic minerals for the low-carbon transition and respective main producers

Developing countries have an important share of critical energy transition minerals

Critical raw materials	Main uses	World production (tons), 2021	Main producers (tons), 2021
Rare earths	iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	280 000	Australia, Brazil, Burundi (100) , China, India, Madagascar (3 200) , Myanmar (26,000) , Russian Federation, Thailand, United States, Vietnam; South Africa* and the United Republic of Tanzania*
Magnesium	1 2 X 1	950 000	Brazil, China, Israel, Kazakhstan, Russian Federation, Türkiye, Ukraine, United States
Niobium		67 700	Brazil, Burundi (23), Canada, China, Democratic Republic of the Congo (560), Ethiopia (6.9), Mozambique (9.1), Nigeria, Russian Federation, Rwanda (156), Uganda (6.6)
Lithium	🗰 🛍 🎾 😿	100 000 [®]	Argentina, Australia, Brazil, Chile, China, Portugal, United States, Zimbabwe; Democratic Republic of the Congo*, Mali*
Borates	iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	5 676 106	Argentina, Bolivia (Plurinational State of), Chile, China, Iran (Islamic Republic of), Kazakhstan, Peru, Russian Federation, Türkiye, United States**, Guinea**, Madagascar**
Strontium	🕮 🔭 🔀	360 000	Argentina, China, Iran (Islamic Republic of), Mexico, Spain
Cobalt	İ ■ 十 國 ア マ ⑤	170 000	Australia, Canada, China, Democratic Republic of the Congo (120 000) , Cuba, Indonesia, Madagascar (2 500) , Morocco, Papua New Guinea, Philippines, Russian Federation, United States, Zambia (367) **
Nickel		2 700 000	Australia, Brazil, Canada, China, Indonesia, France (New Caledonia), Madagascar (9 900)** , Philippines, Russian Federation, United States, Zambia (3 251)**
Copper		21 000 000	Australia, Canada, Chile, China, Democratic Republic of the Congo (1 800 000), Eritrea (21 725)**, Indonesia, Kazakhstan, Mauritania (28 491) **, Mexico, Peru, Poland, Russian Federation, United Republic of Tanzania (12 000) **, United States, Zambia (830 000)
	\mathbf{X}	Source: UNCT	AD (2022), The Least Developed Countries Report 202

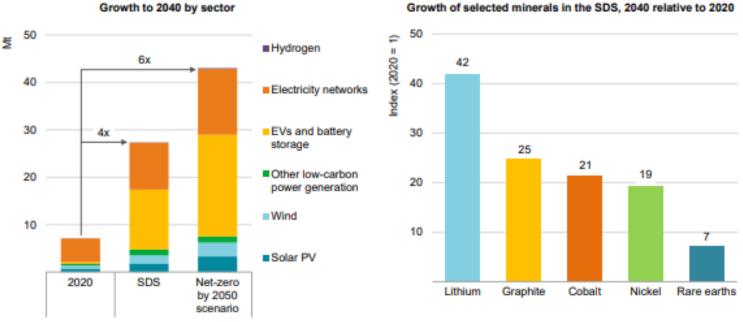
Share of global mineral production and reserves held by developing countries (2017)



Source: IRENA (2023), Geopolitics of the Energy Transition: Critical Materials

How can developing countries harness the increasing demand for critical energy transition minerals for Sustainable Development...

Mineral demand for clean energy technologies would rise by at least four times by 2040 to meet climate goals, with particularly high growth for EV-related minerals



Mineral demand for clean energy technologies by scenario

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Notes: Mt = million tonnes. Includes all minerals in the scope of this report, but does not include steel and aluminium. See Annex for a full list of minerals.



Growing demand for

is expected to bring

Mackenzie)

energy transition minerals

USD\$1.7 trillion in global

mining investment (Wood

Countries will have a

20/30-year window

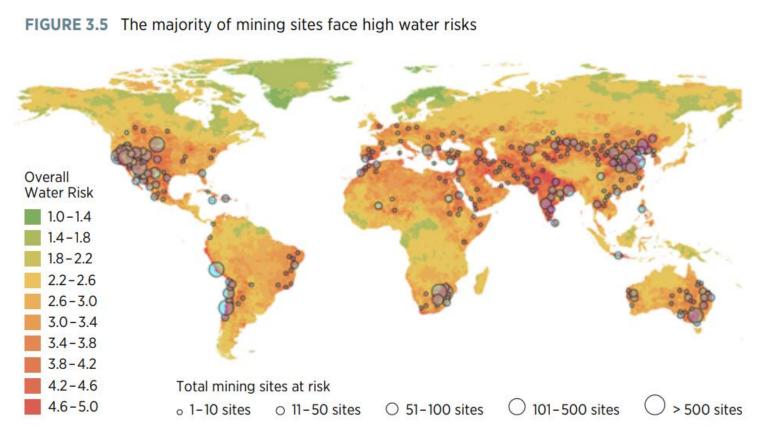
to tap into these

investment flows

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Source: IEA(2022), The Role of Critical Minerals in Clean Energy Transitions (World Energy Outlook Special Report)

...while creating safeguards for people and planet



Active Mining conflicts in LAC



Source: IRENA (2023), Geopolitics of the Energy Transition: Critical Materials

Source: Observatory of Mining Conflicts in LAC (2023)

Assess and manage **risks**

Plan settlements for mining and beyond ensure the well-being of local communities

Decarbonize, mitigate, plan for site remediation, enhance circularity

Protect community and human rights, particularly vulnerable groups like women and children

Harnessing Critical Energy Transition Minerals for Sustainable Development in LDCs and LLDCs Just Transitions in Low Carbon Technologies

Technical and political support based on carefully curated solutions from a diverse range of UN actors to develop safeguards, standards, policy incentives, and strategies for a Sustainable and Just Mineral Development. Mobilization of actors along the supply chain to build trust, introduce development perspective and enable new market opportunities (Global Compact on Critical Minerals)

Enhanced national capacities to negotiate, attract investment, create partnerships, develop skills for new business model, manage job transition

Tools to effectively assess and manage socialenvironmental risks liked to mining

Stronger governance and safeguards against illicit flows, corruption



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Harnessing Critical Energy Transition Minerals for Sustainable Development in LDCs and LLDCs Just Transitions in Low Carbon Technologies

Objectives

- Support and accelerate a just energy transition focusing on minerals
- Support LDCs and LLDCs and developing countries with critical energy transition minerals in capitalizing from the green transition to drive economic growth, support sustainable development, and reduce poverty and inequality while minimizing negative environmental and social impacts of minerals development.

Partners

UNEP, UNDP, UN RECs, UNCTAD, UNIDO, UNICEF, UN Women, IRENA, IEA, ILO, OHCHR, the Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, UN Country Teams, the IFC and the World Bank.

'Sustainable Critical Minerals Alliance'; WEF's 'Securing Minerals for the Energy Transition Working Group'; ICMM, the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development, and the Principles for Responsible Investment.

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Outputs

Phase I (year 1) [target audiences: developing countries with mineral resources] Building on available material and thinking within the UN and other partners and through stakeholder consultations:

- 1. UN Knowledge hub on extractives
- 2. UN Toolkit on critical energy transition minerals
- 3. UN Framework on Just Transitions for Critical Energy Transition Minerals

Phase II (years 2 and 3):

[target audiences: LDCs and LLDCs with mineral resources]

- 1. UN Framework on Just Transitions for Critical Energy Transition Minerals tested and customized in 12 LDCs/LLDCs for tools, capacity laws, skill building and leveraging funds (in year 2).
- 2. Recommendations from UN Framework are implemented to enhance production and trade capacities, plan for investment financing, develop skills, and put in place environmental/social safeguards. These will be implemented in year 3 in 12 selected countries.

Possible Countries identified by the WG*:

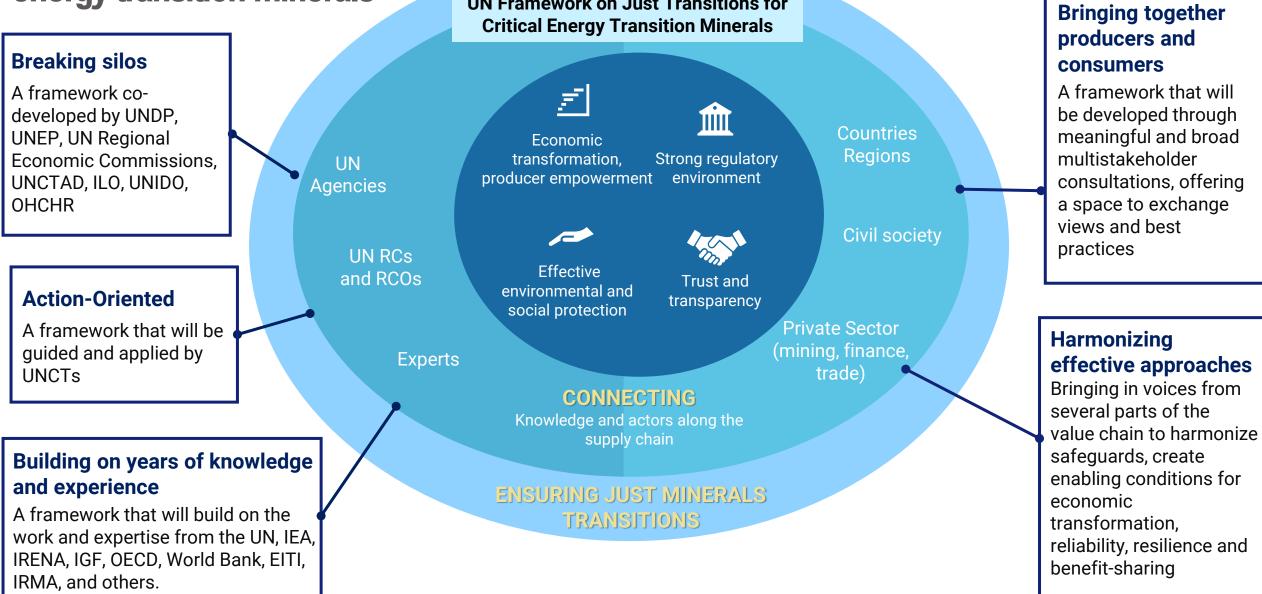
Latin America: Bolivia Plurinational State

Africa: Burundi, DRC, Ethiopia, Guinea, Madagascar, Malawi, Mali, Mauritania, Mozambique, Rwanda, Senegal, Sierra Leone, Tanzania, Uganda, Zambia, South Sudan, and the Sudan.

Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan. **Southeast and East Asia:** Lao People's Democratic Republic, Mongolia

*Identified based on partner capacities in these countries but need further discussion.

Galvanizing collective action for just transitions in critical energy transition minerals

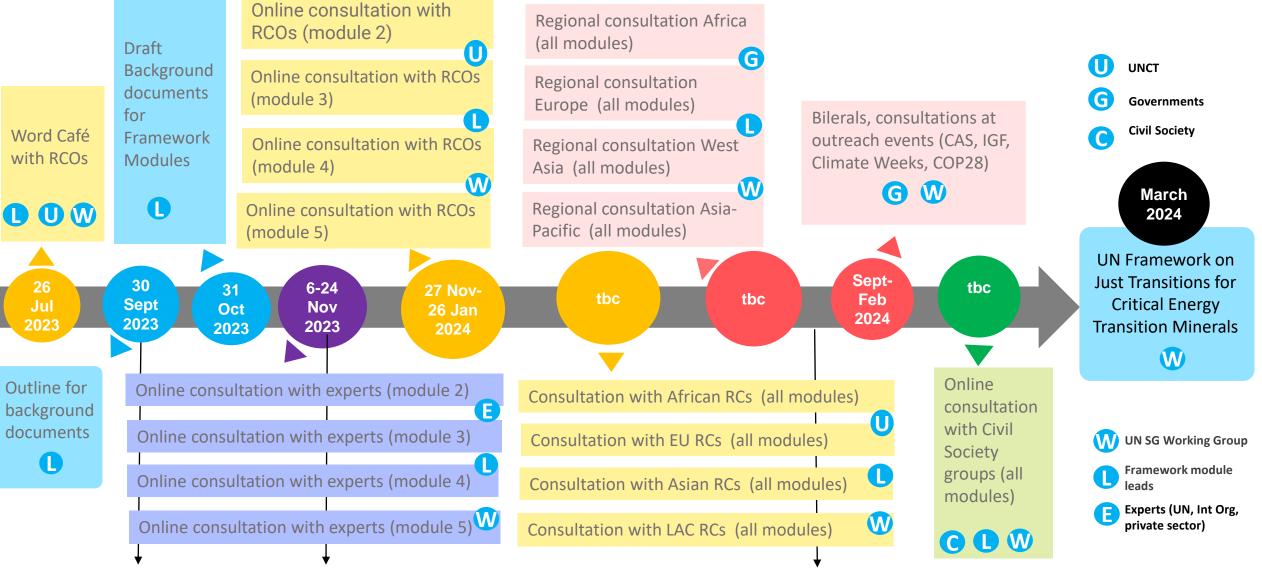


UN Framework on Just Transitions for

Consultations for the UN Framework on Critical Energy Transition Minerals



UN SECRETARY-GENERAL'S WORKING GROUP ON TRANSFORMING THE EXTRACTIVE INDUSTRIES FOR SUSTAINABLE DEVELOPMENT



Strategic guidance from a Multistakeholder Advisory Group in September 2023, November 2023, and Jan 2024