



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

# **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

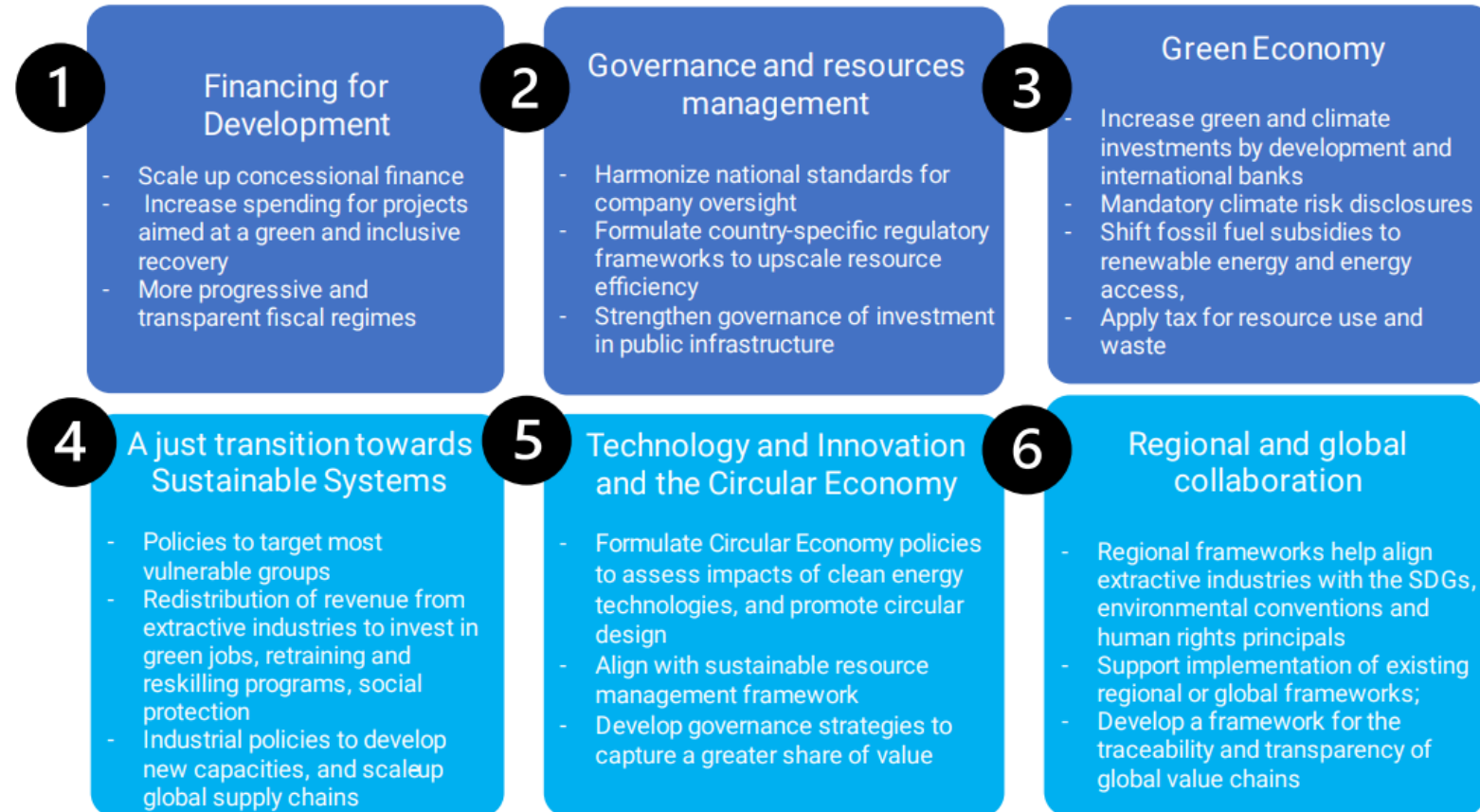
---

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'



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

# Priority Areas of the UN SG on Extractives



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

# Objectives of the UN SG Working Group on Extractives

---



Develop a **common narrative and framework**



Frame an implementation initiative to **deploy recommendations**



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.



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



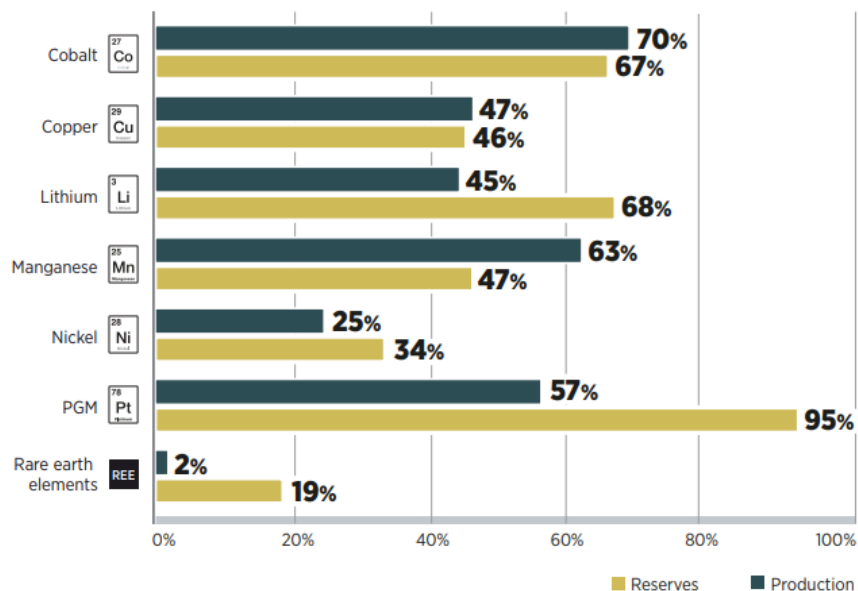
**Align efforts with ongoing processes and events** relevant to extractive industries



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

# Developing countries have an important share of critical energy transition minerals

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



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

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

| Critical raw materials | Main uses                                                                             | World production (tons), 2021 | Main producers (tons), 2021                                                                                                                                                                                                                                                                        |
|------------------------|---------------------------------------------------------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rare earths            |    | 280 000                       | Australia, Brazil, <b>Burundi (100)</b> , China, India, <b>Madagascar (3 200)</b> , Myanmar (26,000), Russian Federation, Thailand, United States, Vietnam; South Africa* and the United Republic of Tanzania*                                                                                     |
| Magnesium              |    | 950 000                       | Brazil, China, Israel, Kazakhstan, Russian Federation, Türkiye, Ukraine, United States                                                                                                                                                                                                             |
| Niobium                |    | 67 700                        | Brazil, <b>Burundi (23)</b> , Canada, China, <b>Democratic Republic of the Congo (560)</b> , Ethiopia (6.9), Mozambique (9.1), Nigeria, Russian Federation, <b>Rwanda (156)</b> , Uganda (6.6)                                                                                                     |
| Lithium                |    | 100 000 <sup>®</sup>          | Argentina, Australia, Brazil, Chile, China, Portugal, United States, Zimbabwe; <b>Democratic Republic of the Congo*</b> , Mali*                                                                                                                                                                    |
| Borates                |    | 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                 |   | 170 000                       | Australia, Canada, China, <b>Democratic Republic of the Congo (120 000)</b> , Cuba, Indonesia, <b>Madagascar (2 500)</b> , Morocco, Papua New Guinea, Philippines, Russian Federation, United States, <b>Zambia (367)**</b>                                                                        |
| Nickel                 |  | 2 700 000                     | Australia, Brazil, Canada, China, Indonesia, France (New Caledonia), <b>Madagascar (9 900)**</b> , Philippines, Russian Federation, United States, <b>Zambia (3 251)**</b>                                                                                                                         |
| Copper                 |  | 21 000 000                    | Australia, Canada, Chile, China, <b>Democratic Republic of the Congo (1 800 000)</b> , Eritrea (21 725)***, Indonesia, Kazakhstan, <b>Mauritania (28 491)**</b> , Mexico, Peru, Poland, Russian Federation, <b>United Republic of Tanzania (12 000)**</b> , United States, <b>Zambia (830 000)</b> |

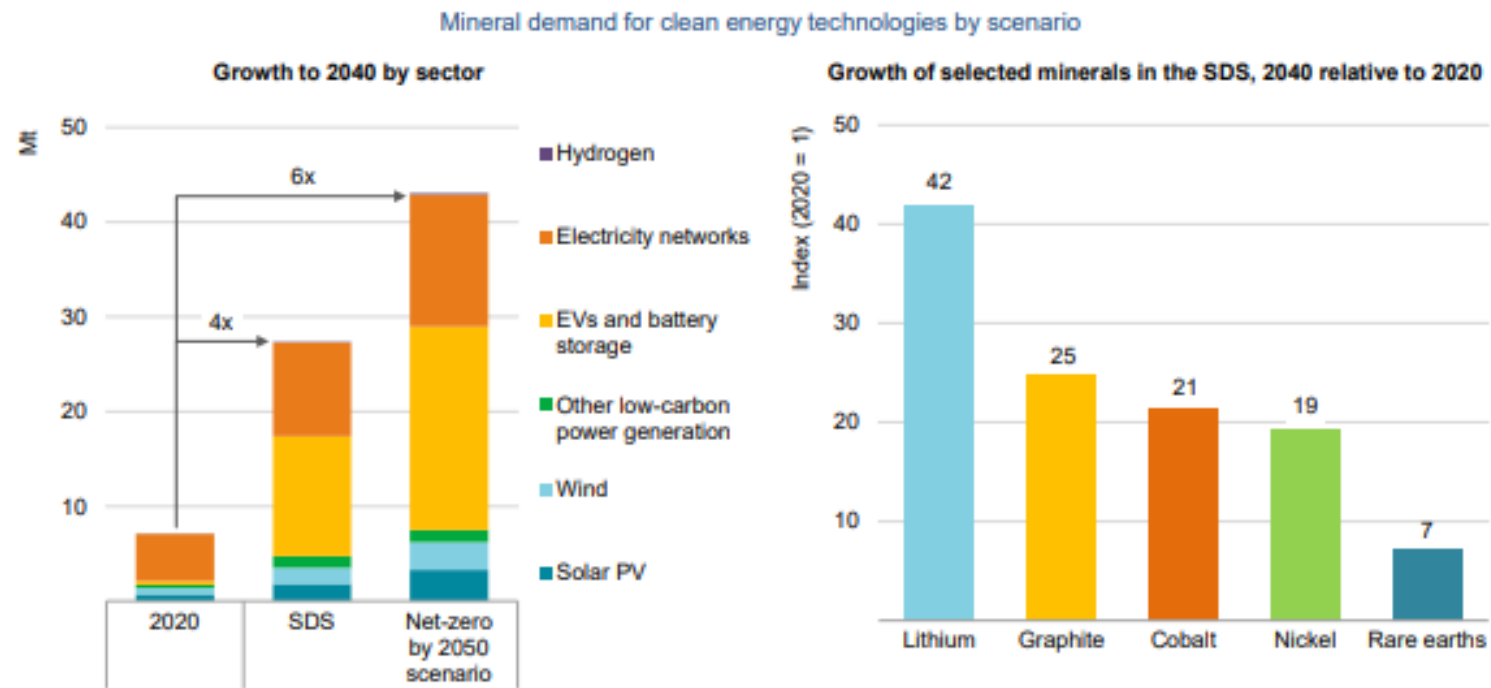
Source: UNCTAD (2022), The Least Developed Countries Report 2022

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

Growing demand for energy transition minerals is expected to bring **USD\$1.7 trillion** in global mining investment ([Wood Mackenzie](#)).

Countries will have a **20/30-year window** to tap into these investment flows

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



IEA. All rights reserved.

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.

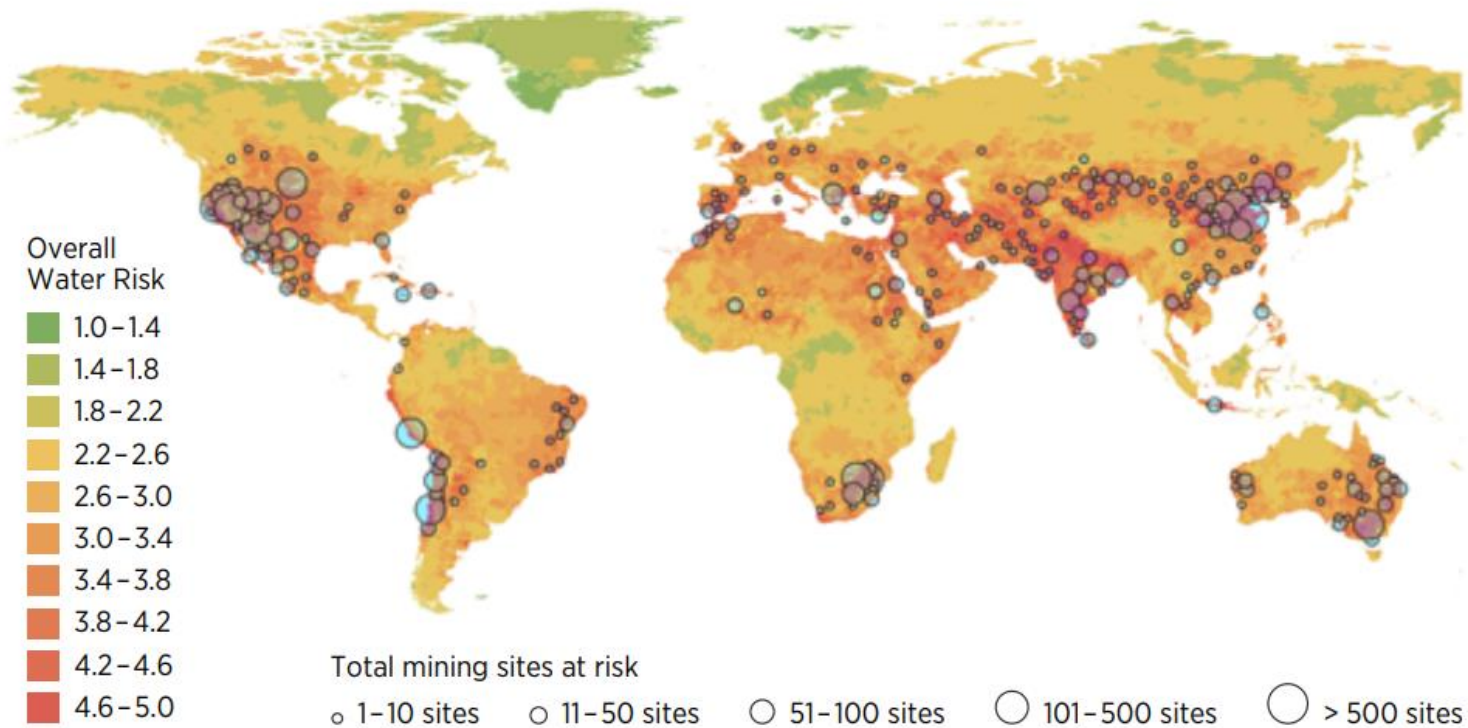


WORKING GROUP  
ON TRANSFORMING THE EXTRACTIVE INDUSTRIES  
FOR SUSTAINABLE DEVELOPMENT

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

## ...while creating safeguards for people and planet

**FIGURE 3.5** The majority of mining sites face high water risks



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

**Active Mining conflicts in LAC**



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 social-environmental risks linked to mining

**Stronger** governance and safeguards against illicit flows, corruption



WORKING GROUP  
ON TRANSFORMING THE EXTRACTIVE INDUSTRIES  
FOR SUSTAINABLE DEVELOPMENT

# 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.



**WORKING GROUP  
ON TRANSFORMING THE EXTRACTIVE INDUSTRIES  
FOR SUSTAINABLE DEVELOPMENT**

### 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

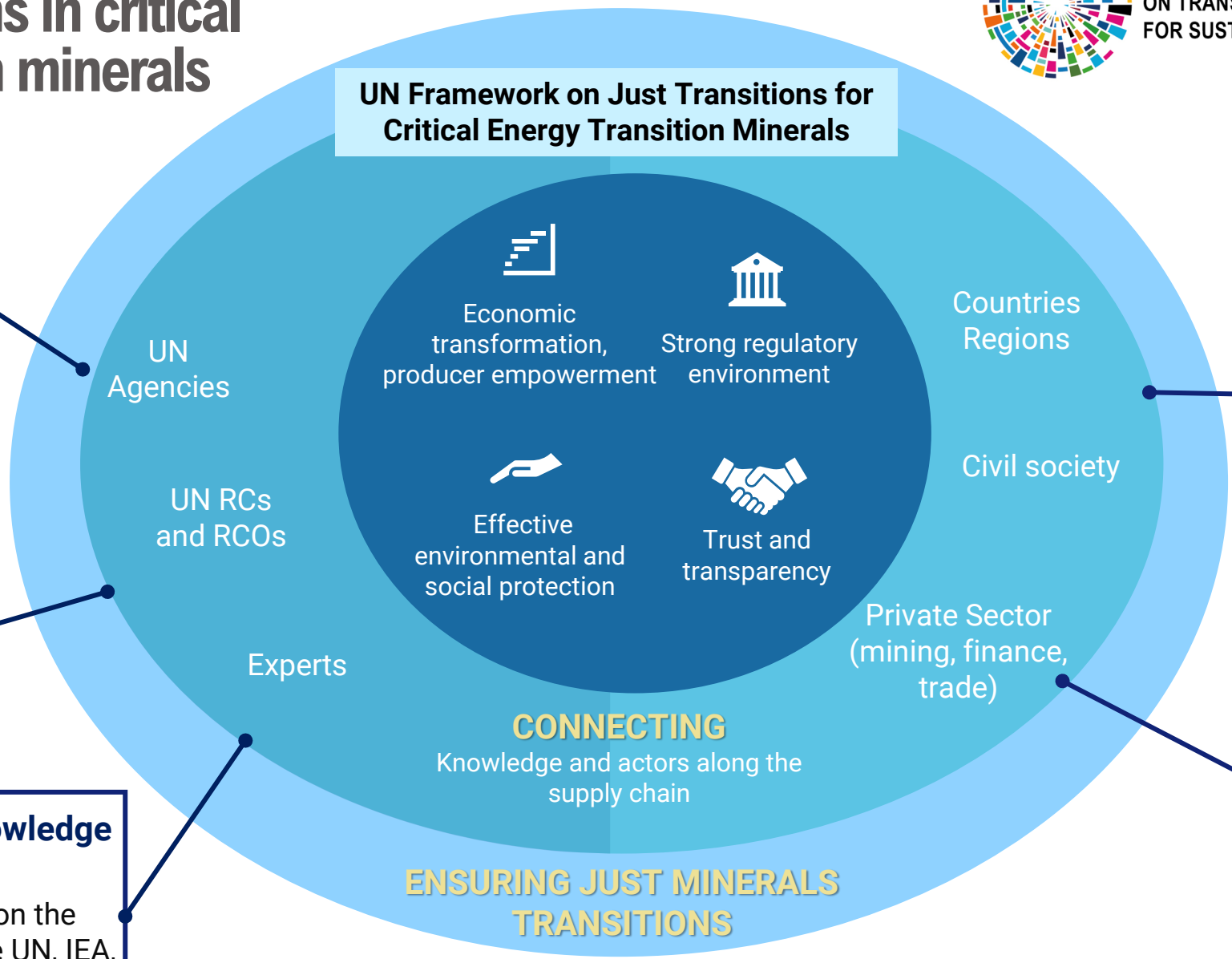


UN SECRETARY-GENERAL'S WORKING GROUP  
ON TRANSFORMING THE EXTRACTIVE INDUSTRIES  
FOR SUSTAINABLE DEVELOPMENT

**Breaking silos**  
A framework co-developed by UNDP, UNEP, UN Regional Economic Commissions, UNCTAD, ILO, UNIDO, OHCHR

**Action-Oriented**  
A framework that will be guided and applied by UNCTs

**Building on years of knowledge and experience**  
A framework that will build on the work and expertise from the UN, IEA, IRENA, IGF, OECD, World Bank, EITI, IRMA, and others.



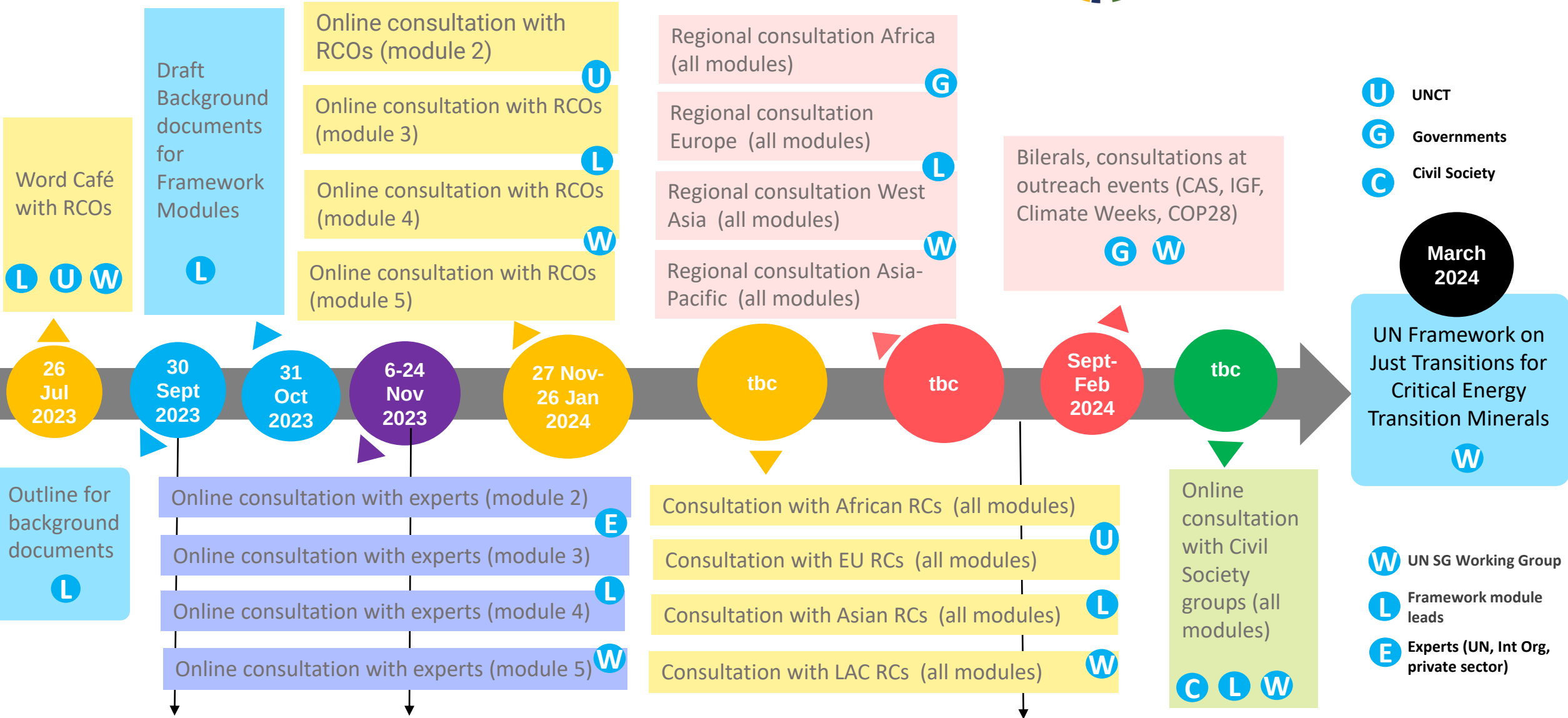
**Bringing together producers and consumers**  
A framework that will be developed through meaningful and broad multistakeholder consultations, offering a space to exchange views and best practices

**Harmonizing effective approaches**  
Bringing in voices from several parts of the value chain to harmonize safeguards, create enabling conditions for economic transformation, reliability, resilience and benefit-sharing

# 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