



CONCEPT NOTE

**Sustainable CRM Management
Strengthening Policy, Technology,
and Accountability**

29 October, 09:00 – 17:00 (Skopje/Geneva)

Background

The accelerating global shift towards low-carbon, digital, and circular economies is increasing demand for critical raw materials (CRMs) such as lithium, cobalt, rare earth elements, and nickel. These materials are vital for clean energy technologies, electric mobility, and advanced digital infrastructure. However, their extraction, processing, and trade often cause environmental damage, social conflicts, and governance issues—especially if there is a lack of institutional, technological, and regulatory capacities. With climate change impacts intensifying, meeting the urgent need for a faster energy transition will require rapidly scaling up CRM extraction and processing. Therefore, the sustainable management of CRMs has become a key area in aligning resource governance with the 2030 Agenda for Sustainable Development.

While the potential for economic transformation through CRM development is significant, the risks of mismanagement are equally serious. Extractive industries have historically caused tensions between economic growth and environmental protection, as well as between national interests and local rights. In this context, building capacity across the policy-technology-transparency interface is not only a technical challenge but also a governance necessity. Achieving this requires a deliberate and inclusive approach that brings together government officials, private sector actors, local communities, and civil society to co-develop sustainable and fair resource utilisation pathways.

Recognising this momentous urgency, the United Nations Regional Commissions have launched a coordinated initiative under the 16th Tranche of the UN Development Account to improve country-level capacities for sustainable CRM production. Rooted in the voluntary guiding principles and actionable recommendations of the Secretary General’s Panel on Critical Energy Transition Minerals, and the principles of the United Nations Resource Management System (UNRMS), the project supports national efforts to strengthen governance frameworks, incorporate circular economy principles, promote green technologies, and ensure social inclusivity and gender responsiveness in

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the CRM value chain. Accountability, transparency and regional value addition are key pillars of this work, along with a commitment to human rights and intergenerational equity.

Under this project, this full-day capacity-building session offers a dedicated forum for addressing these critical and multifaceted challenges. Drawing on lessons from various regions the session aims to equip participants with knowledge, tools, and peer networks to implement sustainable CRM management. In doing so, it supports broader regional and global efforts to ensure that the transition to net-zero and digitally-enabled futures is not only rapid and resilient but also responsible and inclusive.

Objectives

- Enhance understanding of the United Nations Resource Management System (UNRMS), Secretary General’s Panel on CETMs and other international frameworks and standards for sustainable CRM governance.
- Strengthen national capacities to develop legislation, establish robust regulations and institutions, and implement coherent policies that support responsible extraction, local value-addition, innovation, and circularity in the CRM sector.
- Introduce emerging technologies and best practices for environmentally sound and resource-efficient mining and mineral processing.
- Promote transparency and accountability across the CRM value chain, including tools for traceability, due diligence, and certification.
- Foster inclusive stakeholder engagement, with a focus on gender-responsive governance, social safeguards, and benefit-sharing mechanisms.

Target Group

The session is designed for representatives from ministries responsible for mining, energy, environment, and industry; private sector actors across the CRM value chain; financial institutions supporting extractive projects; international and regional organizations; and civil society groups engaged in transparency, environmental stewardship, and community rights. Participants from academia and research institutions are also encouraged to join and enrich the evidence-based policy dialogue.

Provisional Programme

Time	Session
09:00 – 09:15	Opening Session

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	<ul style="list-style-type: none"> • Welcome • Elisa Morgera, UN Special Rapporteur on Climate Change and Human Rights - Opening remarks (Online) • Overview of objectives and structure of the session.
09:15 – 10:15	<p>Session 1: Strengthening Global Resource Governance</p> <p>Moderator: John Sloan, UN ECA</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Karen Hanghoj, Director, British Geological Survey and Chair, Expert Group on Resource Management - Strengthening Global Governance of Critical Raw Materials: The Role of UNFC and UNRMS • Teresa Ponce de Leão, President, Laboratório Nacional de Energia e Geologia, Portugal - Integrating Artificial Intelligence in Sustainable Resource Management: A UNRMS Perspective • Radia Sedaoui, Chief of Energy Section, ESCWA - Critical Raw Materials and the Energy Transition in the Arab Region: Policy Pathways for Resilience, Equity, and Value Addition • Discussions
10:15 – 10:45	<p>Coffee Break</p>
10:45 – 12:00	<p>Session 2: Transforming Critical Mineral Value Chains: Intelligence, Innovation, and Regional Strategies for Sustainable Development</p> <p>Moderator: Radia Sedaoui, UN ESCWA</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Simon Michaux, Geological Survey of Finland - How Mineral Intelligence is changing and how it might be used • Hari Tulsidas, UNECE - Bridging the Gap: Mid-Stream Value Addition for a Resilient and Equitable CRM Supply Chain. • Chokan Laumulin, Professor, Kazakh-British Technical University & Vice Chair, UNECE Committee on Sustainable Energy - Strategic Raw Materials for the Future: Advanced Materials and the Quantum Technology Frontier • Adrian Bylyku, General Director of the Albanian Geological Survey - Geological Readiness for the Energy Transition: Critical Raw Materials in Albania • Navruzbeq Jurabekov, Institute of Mineral Resources, Uzbekistan - A New Financial Instrument for Mineral Resources and Energy in Uzbekistan and Central Asia

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	<ul style="list-style-type: none"> • Discussions
12:00 – 14:00	Lunch Break
14:00 – 15:15	<p>Session 3: Aligning Resource Strategies for the Energy Transition: National Pathways and Strategic Partnerships in CRM Development Moderator: Charlotte Griffiths, UNECE</p> <ul style="list-style-type: none"> • Dario Liguti, Director, Sustainable Energy, UNECE Opening Remarks - Aligning Resource Governance with Energy Transition Goals: A Global Imperative <p>Speakers:</p> <ul style="list-style-type: none"> • Ghadi Shabra, Consultant, UNECE – Operationalizing the EU Critical Raw Materials Act: Strategic Projects and Global Partnerships • Mücella Ersoy, Deputy Operations Manager, Turkish Coal Enterprises - From Coal to Critical Minerals: Aligning Resource Strategies for the Energy Transition • Farkhat Abytov, Deputy Chairman of the Board • National Geological Survey, Kazakhstan - Digital Transformation of the Geological Sector for Sustainable Resource Management • Arkady Rogalsky, Adviser of the Minister of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic- Critical Raw Material Potential in Kyrgyzstan: National Priorities and Geological Perspectives • Discussions
15:15 – 15:45	Coffee Break
15:45 – 16:45	<p>Session 4: From Geology to Growth: Advancing Critical Raw Materials through Stakeholder Engagement and Resource Readiness Moderator: Karen Hanghoj</p> <p>Speakers:</p> <ul style="list-style-type: none"> • John Sloan, UN ECA - Engaging Stakeholders in mineral-based Special Economic Zones: Lessons from DRC, Zambia and SADC • Adekunle Sunday Makinde, Co-chair of the Nigeria Energy Forum - Lithium mining and processing • Marina Gil, Natural Resources Division, ECLAC - Status and evolution of foreign direct investment in critical minerals in Latin America and the Caribbean

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	<ul style="list-style-type: none"> • Rustam Khalmatov, Rustam Khalmatov, Uzbekistan - Geochemical Characteristics and Modes of Occurrence of Critical Raw Materials • Discussions
16:45 – 17:00	<p>Closing Session</p> <ul style="list-style-type: none"> • Hongpeng Liu, Director, Energy Security and Water Resource Section, Environment Development Division, ESCAP – Closing remarks.

Mode of participation

The workshop will take place in a hybrid format (in-person and online).

Contact

Harikrishnan Tulsidas, UNECE, Harikrishnan.tulsidas@un.org

Matthew Wittenstein, UN ESCAP, matthew.wittenstein@un.org

Radia Sedaoui, UN ESCWA, sedaoui@un.org

John Sloan, UN ECA, msloan@un.org

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