Agenda Item 5: Briefing on the UN Secretary General’s initiative on Harnessing Critical Energy Transition Minerals for Sustainable Development in Least Developed and Land-Locked Developing Countries Just Transitions in Low Carbon Technologies.

This background document has been developed by the Secretariat to inform the Committee of Permanent Representatives of the UN Secretary General’s initiative on Harnessing Critical Energy Transition Minerals for Sustainable Development in Least Developed and Land-Locked Developing Countries Just Transitions in Low Carbon Technologies.

The Committee will be invited to reflect on UNEP’s contributions to this initiative and to provide guidance on how to promote a larger impact.
A briefing on the UN 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’

Background Document

In 2020, as part of the Financing for Development in the Era of COVID-19 and Beyond Initiative, the UN Secretary General organized Regional Roundtables hosted by the Regional Economic Commissions. This process culminated in a Secretary-General policy brief with recommendations on how to transform the extractives sector for sustainable development. Subsequently, the Secretary-General created the Working Group on Transforming the Extractive Industries for Sustainable Development co-chaired by UNEP, the Regional Economic Commissions and UNDP. In 2023, the Working Group agreed to work on critical energy transition minerals to respond to an increasing demand for UN support in this area, particularly from LDCs/LLDCs as expressed at the LDC5.

The main purpose of this briefing is to inform the CPR of UNEP’s contributions to the UN-Secretary-General Initiative on Critical Energy Transition Minerals and seek its guidance to ensure impact. Feedback received during the session will be communicated to the Secretary General’s Working Group for further action. UNEP is drawing from the intergovernmental consultations held in the context of UNEA 5 Resolution 12 on environmental aspects of minerals and metals without pre-empting any decision by Member States at UNEA-6, and leveraging the SG initiative to bring the UNEA5/12 outcomes to the wider UN system through the SG initiative.

I. About the Initiative

The success of the transition from fossil fuels to renewable energy sources will depend on the availability and accessibility of critical energy transition minerals. Given the amounts required and expected pace of extraction and processing, these minerals are of particular importance to sustainability transitions and to relations between nations.

According to the World Bank, over 3 billion tons of minerals and metals will be needed to deploy wind, solar, battery and geothermal power and energy storage to remain below the 1.5°C global warming target by 2050. By 2040, the IEA estimates that the demand for lithium will grow by a factor of 40; for graphite, cobalt, and nickel by a factor of 20-25; and it will more than double for copper. The extraction and processing of these minerals are geographically concentrated, many of them found in Least Developed and Landlocked Developing Countries. This concentration may lead to geopolitical tension, which, if unaddressed, may hinder the pace and direction of energy transitions and climate responses.

The extraction will bring environmental and social challenges. These may include impacts on water (50% of global copper and lithium production are concentrated in areas with high water stress); impacts on biodiversity (mining indirectly causes 7% of global deforestation); impacts on human health (mining

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1 The International Energy Agency defines critical minerals as a “range of minerals and metals that are essential for developing clean energy technologies and other modern technologies and have supply chains that are vulnerable to disruption”. IEA (2022) World Energy Outlook
5 These include countries like Bolivia (lithium), DRC (cobalt), Lao PDR (copper), Bhutan (copper), Mozambique (graphite) and Guinea (bauxite), and Indonesia (nickel), among others.
6 World Bank (Hund and Reed (2019). A low-carbon future must protect the world’s forests.
is the largest waste-producing industry in the world\(^7\); and impacts on human security as mining can be a major source of conflict, displacement and food insecurity (54% of energy transition minerals are located on or near land owned by indigenous groups\(^8\)). Other potential social impacts include gender violence, forced and child labor.

LDCs and LLDCs are vulnerable to climate change, have overwhelming sustainable development needs and are commodity dependent.\(^9\) They also have large reserves of critical energy transition minerals and will have a 20-to-30-year window to tap into mineral investment flows. These could allow them to transform their economies, create new green jobs, secure sustainable local development, while creating safeguards to minimize negative environmental and social impacts. Investing in ‘on-site’ transformation, moving up the value chain and improved sharing of benefits also opens opportunities for developing countries to move away from commodity dependence.

To support a just energy transition and accelerate the achievement of the Paris Agreement and Sustainable Development Goals, the United Nations, through a Secretary General’s initiative, will work with countries across the value chains to: (1) build trust, reliability, resilience, and benefit-sharing in existing critical energy transition mineral supply chains; and (2) support producer countries in transforming these supply chains to harness opportunities and develop their productive, trade and regulatory capacities for long-term sustainable development.

Building on existing initiatives, processes and partnerships, the initiative will galvanize system-wide UN collective action for impact at scale. It will be implemented in 2 phases.

Phase 1 will focus on developing knowledge tools and framing solutions at the global and regional level. These include a UN Knowledge Hub on Extractives; a Toolkit on Critical Energy Transition Minerals for UN Resident Coordinators and other partners to engage with countries that host and produce these minerals; and a UN Framework on Just Transitions for Critical Energy Transition Minerals that will be developed in consultation with member states, experts, civil society organizations, and other stakeholders working in this space. It will draw from good practice and existing frameworks and consultations, including the ones held in the context of UNEA 5 Resolution 12 on environmental aspects of minerals and metals management, to identify guiding voluntary principles; policies and measures; and partnerships, communities of practice, networks and initiatives on critical minerals that could enable the development of durable institutional capacities along value chains in mineral-rich developing countries and in countries where processing and consumption take place, to enhance the sector’s resilience and sustainability by leveraging circularity to maintain minerals in use for as long as possible, by reducing demand for virgin material, and by enhancing responsible approaches where mining is unavoidable. In this context, guidance will be proposed across 4 pillars (production capacities; trade competitiveness capacities; environmental and social stewardship; and governance and regulation).

During Phase 2, the solutions proposed in the Framework will be customized and tested in a set of pilot countries, leveraging identified partners and initiatives to build local capacities. UN agencies, UN Regional Economic Commissions, the World Bank, UN Resident Coordinators and UN Country Teams of selected countries will play a key role in this phase. Based on interest, demand, and importance for the energy transition, countries for support could include the Democratic Republic of Congo, Ethiopia, Burundi, Mauritania, Senegal, Zambia, and Kyrgyzstan; Bolivia Plurinational State, Guinea, Kazakhstan, 

\(^8\) Owen et al. (2022). Energy transition minerals and their intersection with land-connected peoples.
\(^9\) According to UNCTAD, LDCs have 14% of the world population but only emit 10% of world average GHG emissions per capita, while suffering most from its impacts. In the last 50 years, 69% of global deaths caused by climate-related disasters occurred in LDCs. In 2020, of the 1.1 billion people living in LDCs, 244 million were undernourished, 466 million had no access to electricity, 665 million lacked access to drinking water, and 874 million had no access to clean fuels and cooking technologies. Between 2018 and 2020, 78% of LDCs were classified as ‘commodity dependent’. This means more than 60% of their exports were primary products. UNCTAD (2022). The Least Developed Countries Report 2022. UNCTAD/LDC/2022.
Lao People’s Democratic Republic, Madagascar, Malawi, Mali, Mongolia, Mozambique, Rwanda, Sierra Leone, Tajikistan, Tanzania, Turkmenistan, Uganda, Uzbekistan, South Sudan, and the Sudan.\(^{10}\)

### I. UNEP’s contribution to the Initiative

UNEP, as one of the Co-Chairs of the Secretary-General’s Working Group on Extractives helps steer the work for this initiative. More specifically, it has been asked to coordinate the preparation of the above-mentioned UN Framework on Just Transitions for Critical Energy Transition Minerals, to be co-developed with other UN agencies, the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) and the World Bank.

UNEP with UNDP and OHCHR are also co-drafting a background document for module 4 of the UN Framework entitled ‘Protecting People and Planet’. This module will include principles, policies and partnerships that can help countries assess and manage the negative environmental and social impacts of mining; adequately plan activities and human settlements for mining (including site remediation); ensure well-being of local communities; support decarbonizing of mining activities; enhance circularity in the critical minerals value chain; and protect human rights, particularly of vulnerable groups.

### II. Relationship to UNEP’s Programme of Work

UNEP has advocated for a well-managed and responsible extraction of critical energy transition minerals that supports reaching net-zero by 2050, while not imperiling other environmental goals. The UNEP International Resource Panel (IRP) report on mineral resource governance issued in 2020 explored practical actions to improve the international mining governance architecture.

UNEP is bringing the existing knowledge to the UN Secretary General’s initiative as part its work on mineral and metal resources. The initiative contributes to the following goals of the mining high impact sector: (i) Uptake of circular and sustainable practices among high-impact industry actors; (ii) Shift in government policy and regulatory environment to create change in the mining sector value chains; (iii) Alignment of financing and leveraging public/private investment for circularity in mining; (iv) Social action and behavioral change of stakeholders, including consumers of products and services from mining; and (v) Knowledge and science to orient decision-making in high-impact sectors.

The UN-Secretary-General’s Working Group will take into account the outcomes of the UNEA resolution 5/12 on environmental aspects of minerals and metals management, including the 24 non-prescriptive proposals developed during the UNEA 5/12 intergovernmental process focusing on policies and tools; value chain aspects; and platforms for international cooperation. The non-prescriptive proposals will inform the activities of the Working Group. Furthermore, the Secretary General’s initiative on critical minerals represents a major opportunity to build on and expand the impact of the UNEA 5/12 consultation process.

### III. Next steps

The guidance and feedback received through this briefing will be communicated to the Working Group. UNEP, with other UN agencies, UN Regional Economic Commissions, IGF and the World Bank will work on deliverables throughout Phase I; while reaching out to UN Resident Coordinators and UN Country Teams to assess interest in relevant countries to implement Phase II. The latter will involve developing

\(^{10}\) The final selection will cover various regions to reflect geographic and economic specificities.
institutional capacities and support to harness opportunities for sustainable development through partnerships as explained above.

IV. Recommendations/relevance for the CPR

This initiative is relevant to section C of the Report of UNEP’s Executive Director for UNEA-6 'Ensuring responsible mining and sustainable minerals and metals use for the sustainability transitions needed'. Paragraph 45 recommends ‘Member states may also consider requesting UNEP, working with UN partners and other stakeholders, to accelerate progress on the Secretary General’s Working Group. Such work could include technical guidance and capacity support to developing countries with critical energy transition minerals.’