



## **ECO FIVE-YEAR ROADMAP ON MINERALS COOPERATION FOR 2026-2030**

### **A. Overview and State of Play**

The ECO region is abundant with diverse mineral resources and enjoys the leading positions globally for some deposits. The minerals sector represents one of the major contributors to the economies and industrial growth of the ECO Member States.

The uptake of the minerals agenda has always been pertinent for ECO, through which the Organization strives to transform this sector into a catalyst of greater economic growth and social progress in the region. ECO avails several full-fledged platforms, which could trigger mutually beneficial regional cooperation in the field of minerals. These mechanisms entail the ECO Heads of Surveying and Mapping Organizations (HSMO) at the managerial level, ECO Minerals Experts Group Meeting (MEGM) at the expert level, and the ECO Geomatics Committee (GC).

Notwithstanding certain progress and achievements over the past few decades, the pace and dynamics of cooperation in minerals were not steady and impactful for the region. In fact, one must admit that the sluggish implementation and evolvment ratio of the targeted projects and activities in this sector was notably due to the complexity of systemic challenges of the Organization.

ECO Member States are yet to unlock new avenues and optimal solutions for regional cooperation in the minerals sector. The continuous pressure on resource production systems and supply chains, and fierce competition over resource access negatively affect the minerals sector. This competition also creates opportunities, while the ECO Region stands as a key current and future demand centre for minerals production. Its Member States have ample opportunities to take advantage of the growing demand for minerals and new commodity markets in view of the long-term forecasts of an increase in both traditional and new applications of minerals. To this end, ECO needs to develop resilient, competitive, and sustainable value chains for critical raw materials, as well as advance circularity, resource efficiency and risk mitigation in the minerals sector.

Currently, minerals markets receive limited attention globally, and where governments engage, they are often pursuing a narrow national agenda. Both large mineral producers and consumers are confronted with serious challenges in elaborating coherent mineral policies. One of the key challenges is the cross-sectoral nature of these policies that encompasses economic policy, trade, environmental protection, and development. In this vein, ECO should also find synergies in cross-cutting and emerging issues in response to global mineral and mining industry opportunities and challenges, notably from clean energy transition, low carbon economies, resource-efficiency and circularity, digitalization

and the Fourth Industrial Revolution, and the overall thrust towards sustainable development and green growth.

From the mineral resources viewpoint, ECO remains a highly decentralized and fragmented region. The ECO Member States are divergent in terms of the regulatory framework, classifications of mineral resources, laws on ownership of subsurface resources, types of licenses for exploration and exploitation, and many other aspects.

Exploiting mineral resources does not automatically translate into industrial or sustainable development. Raw materials are often extracted and exported without being processed domestically or integrated into local supply chains. Companies and countries reap huge benefits, often at great cost to the immediate surrounding communities and environment.

Along with the national agenda, the enhancement of global and regional cooperation in the field of minerals within different IGOs has been explicitly observed over the past few decades. There is a dire need for the ECO to consolidate collective efforts, enhance ownership and streamline project-oriented cooperation in minerals. This regional cooperation should also be aligned with and contribute to the implementation of the 2030 Agenda for Sustainable Development.

## **B. Rationale and Objective**

Indeed, the mineral sector is one of the unnoticed promising areas, which can play a crucial role in the enhancement of economic cooperation in the region through tangible projects. Regional cooperation is an effective tool to address all the outlined opportunities and challenges in the minerals sector. The Member States may promote their economies of scale, a competitive sustainable minerals market and business sector through stronger regional action in the areas of policy, capacity development, knowledge management, awareness raising, as well as business and investment. Furthermore, the transition to clean energy has led to a drastic increase in the need for critical minerals as renewable energy systems require more minerals than their fossil fuel-based counterparts.

In this particular context, the current “ECO Five-Year Roadmap on Minerals Cooperation for 2026-2030” (hereinafter referred to as “the Roadmap”) was charted by the ECO Secretariat as an overarching, all-inclusive and guiding framework document for cooperation in the field of minerals in the ECO region. ECO lacked such a concept document in minerals in the past and the Roadmap therefore seeks to fill this gap.

Translating the regional goals in minerals into tangible steps responsive to the needs and aspirations of ECO Member States and to the rapidly evolving global resources landscape necessitates mapping out the agile and targeted regional policies in an integrated manner by finding complementarities between global, regional, and national dimensions.

The objective of the Roadmap is to contribute towards the consolidation of a sustainable, resilient and resonant minerals sector in the ECO region through enhanced cooperation and capacities. The Roadmap predominantly captures the mid- and long-term cooperation

framework in minerals focusing on the key action areas. It derives from the ECO's recent annual Work Programmes, "ECO Vision 2025" and builds on the long, extensive track of regional cooperation over the past years. The Roadmap delivers these key action areas in a concise, streamlined and straight-forward manner. Building on the Roadmap, a Plan of Action shall be developed to embed it with the implementation framework, including concrete activities/actions, their timeframe, outcomes, responsibilities, and monitoring.

### **C. Key Action Areas and streamlined priorities:**

#### *Action Area 1*

#### **SUSTAINABLE MANAGEMENT OF MINERAL RESOURCES (SMR)**

The recent global outlook demonstrates that the minerals sector is evolving towards a more sustainable and responsible industry. With continued efforts to promote sustainable practices and ensure responsible mineral extraction, this sector has the potential in the ECO region to contribute positively to economic growth and development while minimizing its negative impacts.

**The objective of this action area is to prioritize the sustainable management of mineral resources and mining practices in the ECO region. It will develop and adopt a set of regional actions for sustainable minerals development** to underpin the progressive track of cooperation. These actions can help to build trust along the supply chain between producers and consumers of critical minerals for the energy transition (supply chain stability, security, sustainability, benefit-sharing, transparency, and value-added activities). Promoting environmentally sound and socially responsible mineral development practices in the sustainable management and optimum utilization of mineral resources are the major deliverables for the success of this pivotal component of regional cooperation. The implementation of the Regional Initiative on Resource Efficiency, Sustainability, and Circular Economy in the ECO Region (RESCUE), launched in November 2024 could be instrumental in the delivery of this action area, while this initiative advocates for a just transition to a resource-efficient, circular and regenerative economy and sustainable mineral development. This could allow our countries to ensure that they expand their share of benefits while tapping the booming demand for minerals, especially the critical ones, in an equitable, environmentally, and socially responsible manner.

Although the green energy transition necessitates an exponential growth of metals and minerals demand, circularity can turn this challenge into opportunity by bringing about high-value and high-impact solutions along mineral supply chains. Inefficient, wasteful, and polluting processes for extracting and processing critical raw materials call for more R&D to improve their performance, durability, recyclability, and safety. Decisive action is required to diversify sustainable material sources and integrate circular solutions in the mining sector. Assessment and decarbonisation of mining activities; mitigation of negative environmental and social impacts; and enhancement of circularity in the critical minerals value chain could be in focus.

The end result of this process will be the value-added to a sustainable, low-carbon mineral-based system, where, 1) critical minerals are extracted and processed in a circular and low-carbon manner, using innovative technologies and practices that minimize water use, land disturbance, waste generation, and greenhouse gas emissions; 2) benefits of the transition are shared equitably among countries and communities, by ensuring good governance, transparency, social responsibility, value addition, and regional cooperation.

## *Action Area 2*

### **MULTI-STAKEHOLDER APPROACH IN REGIONAL COOPERATION (MSARC)**

Globally, the minerals sector undergoes increased collaboration between governments, industry stakeholders, and civil society organizations to address the ongoing challenges. Engaging actors beyond national governments, including cities and other local authorities, intergovernmental organizations, non-governmental organizations, local communities, the business and finance community, the scientific community, academia, citizens at large, and other stakeholders is critical and represents one of the success factors of regional cooperation in this area.

To this end, **a lasting, self-sustainable and efficient network of relevant stakeholders shall be established. The network will entail all relevant stakeholders**, including but not limited to the line agencies/geological and geo-science authorities, businesses, think-tanks, academia and training/excellence centres, as well as other public and private sector stakeholders of the ECO Member States. Besides, worldwide institutions and partners may also be involved in the subject network, which is expected to be the ECO's permanent communication hub in minerals. The network's overall goal is to promote and mobilize all relevant stakeholders and international partners in addressing the challenges of the ECO Member States in minerals, building on existing global and regional cooperation and dialogues on minerals. It could identify key gaps and emerging needs, and elaborate ways and means for enhancing ECO's outreach, thus functioning as the agenda-setter. The network could develop recommendations for institutional reforms and evolve into an international platform where producer and consumer countries could meet regularly to exchange views and develop joint solutions to market challenges.

## *Action Area 3*

### **MINERALS DATABASE AND INFORMATION (MDI)**

The meetings of the ECO platforms in the minerals sector produced a number of collaborative activities in mapping and led to developing several specialized regional maps as well as the "Atlas of the ECO Member States Thematic Maps" in the past.

This cluster envisages **setting effective mechanisms for collecting, managing, updating, and exchanging minerals data and information. A key target of this action area is to improve the quality and availability of precompetitive web-based geo-science data as well as mineral development and production data, and, package and promote datasets to**

### **scale up investments in the minerals sector.**

Under this action area, ECO shall also explore the opportunities for enhanced international cooperation by systematic surveys of state-of-affairs in the global minerals field, the relevant strategies and instruments, including production, consumption, trade, and investment trends in the mineral markets. Understanding the nature of trade agreements, the use of technology and innovation (artificial intelligence, big data, enabling blockchain) to enhance transparency, sustainability, and competitiveness could also be focused.

Bridging knowledge gaps on complex and prospective markets might be appropriate, for instance, by conducting a review of pricing mechanisms, market platforms and the associated regulatory mechanisms for major traded minerals. This could consequently fuel actions through the identification of weaknesses in current arrangements and national authorities that require targeted support and capacity-building. These efforts may consequently lead to new opportunities in trade and investment cooperation in the minerals sector, as well as to better planning, and bringing out new technologies and innovative solutions.

### ***Action Area 4***

#### **CREATING STRONGER REGULATORY ENVIRONMENT FOR MINERAL RESOURCES (SREM)**

This action area primarily envisages **the possible harmonization of standards, where appropriate, engagements for identification of optimal classification system for the ECO region in terms of conducting inventories of mineral resources at the country level, and leveraging a unified set of definitions and intergovernmental comparable terms.**

Currently, shared or coexisting systems are still lacking, and while some countries have adopted the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources (UNFC) as a classification system for their mineral resources, others use their own system or even none at all. Recently, the United Nations also developed the United Nations Resource Management System (UNRMS) as a voluntary global standard for managing natural resources sustainably that goes beyond classification, offering a holistic approach to resource management. ECO may engage in deliberation to align between UNFC and UNRMS. ECO can also leverage the UN Framework on Just Transitions for Critical Energy Transition Minerals.

ECO may further tap into progressive and transparent fiscal and regulatory measures that can strengthen the management of mineral revenue, diversify economies, and re-distribute financial flows for investment in social and economic development needs.

## **Action Area 5**

### **CAPACITY-BUILDING AND PUBLIC AWARENESS-RAISING IN MINERALS (CPAM)**

ECO needs to better capitalize on its institutional and human resources. Over the past period of time, ECO has been active in conducting regular training courses and sharing best practices in the region on various pertinent topics of geosciences under the auspices of the Geomatics Committee. However, these activities were rather fragmented without a strong strategic goal.

Many benchmarks set by the leading global stakeholders of the minerals sector present an opportunity for ECO to harness the best and most inspiring practices in the world and adapt them to suit regional circumstances. This action area thus aims at **building international skills and knowledge, increasing access to advanced expertise and experience, and promoting communication, education, and public awareness systematically**. This objective will be achieved through coherent training and capacity-building programs, scientific events, exchange of technical visits, technology transfer, joint research projects, and knowledge management. CPAM could improve regional institutional and technical capabilities with a programmatic approach to activities in a longer-term framework. It may also include enhancement of producer capacities (contractual and negotiation skills; attracting investment, financing, and developing effective partnerships, etc.). This action area should deliver the opportunity to create jobs, income, and value addition by developing local capacities and capabilities.

## **Action Area 6**

### **INTERNATIONAL PARTNERSHIPS IN MINERALS (IPM)**

This cluster envisions the building and enhancement of effective integration with the multilateral partners and other relevant international processes in the mineral sector through inter-agency and inter-sectoral collaboration, coordination, and consultation mechanisms to exchange best practices and lessons learned and develop common positions in the global arena, where appropriate.

ECO shall engage in **enhanced intergovernmental and inter-sectoral collaboration with potential international development partners for the advancement of its minerals agenda**. ECO shall build and enhance partnerships with key global entities and platforms in the field of minerals, including but not limited to the following:

1. Explore possibilities to coordinate activities on mining and minerals in the framework of the Intergovernmental Forum on Mining, Minerals, Metals, and Sustainable Development (IGF), as a unique intergovernmental forum for dialog and consultation to enhance the mining sector's contribution to sustainable development. Its Mining Policy Framework lays out comprehensive recommendations on best practices and policies in the minerals sector.

2. The collaboration with the International Resource Panel (IRP) of UNEP, which is tasked to disseminate scientific information on the sustainable use of natural resources and environmentally compatible economic growth, could be meaningful to advance circularity-related agenda and sustainable mineral development.
3. The World Resources Forum (WRF), which is a non-profit organization, could be leveraged as a platform for sharing knowledge about the economic, political, social, and environmental implications of global resource use.
4. United Nations Economic Commission for Europe (UNECE) has been developing the UNFC and UNRMS classifications, which were outlined under Action Area 4. ECO may engage in the deliberations to align between UNFC and UNRMS.
5. The UN Working Group on Transforming Extractive Industries brings together governments, industry, civil society, academia, and international organizations. The Member States may cooperate within this platform to be provided with guidelines, standards, and indicators for responsible resource management, capacity building and innovation, and facilitation of dialogue and cooperation.
6. The minerals sector is also an important component of development cooperation. One way of benefiting from it could be ECO's collective appeal addressed to the key training centres to pool mining sector capacity-building efforts in the ECO Member States, which can be an integral part of Action Area 5.

#### **D. Implementation and Monitoring Mechanism**

The Roadmap will be a guiding framework document of the relevant platforms of ECO in the minerals sector, outlined in "Chapter A". These platforms shall regularly supervise and monitor the implementation of the Roadmap and the achievement of its objective. ECO Secretariat will discharge the duty of coordination of activities for the implementation of the Roadmap on a daily basis.

The role of the lead country is very important to ensure that the result-oriented respective action areas of the Roadmap are carried out and accomplished in an efficient manner. The Member States shall thus be designated as Country Coordinators of each action area to lead and coordinate relevant activities.

The Roadmap shall be underpinned by a program logic that ensures clear linkages among objective, action areas, outcomes, and long-term impacts. The Roadmap will be implemented in line with this logic framework and associated monitoring, evaluation, research, and learning (MERL) mechanism to enable that the monitoring outcomes and impacts lead to continuous improvements and revisiting.