

# Enhancing EU Mining regional ecosystems to support the green transition and secure mineral raw materials supply





















## Takeaways of the OECD mission to Lapland

TSI OECD-DG REFORM project – March 15<sup>th</sup> to 19<sup>th</sup>

### **Introduction**

The OECD study mission to the Lapland region, Finland, took place from 15<sup>th</sup> to 19<sup>th</sup> March 2024, back-to-back with the missions to the regions of Central Ostrobothnia and Oulu. This visit allowed for a series of discussions and engagements with diverse regional stakeholders ranging from regional to municipal government representatives, universities, and the private sector. The peer reviewers were Paula Morais (Central Portugal, Portugal) and Lotta Sartz (Orebro, Sweden).

#### **Current state**

Lapland stands as Finland's mineral supply hub, hosting some of the country's largest mines and 80% of the mining exploration. At least three mining projects for critical minerals (e.g., copper, nickel, and rare earth elements) are going through the approval process to start activities. Municipal governments and local communities are generally supportive of new mining projects as a means to diversify the economy away from tourism and forestry, creating jobs and attracting population. Some municipalities with current mining activities (e.g. Sodankylä or Kitiila) have waived the regional trend of population decline. For example, Kitiila has benefited from the co-habitation of mining and tourism.

With over 30% of the land designated to nature conservation, the region has scope to establish sound governance frameworks to ensure that the increasing number of projects competing for land-use mining, eco-tourism, forestry and renewable energy-find a balance with environmental conservation.

Strengths	Bottlenecks
Mineral powerhouse in Finland and Europe,	Cumulative pressures on the environment from
providing important amounts of critical	multiple economic activities highly reliant on land-
minerals (e.g. Nickel) and unique minerals for	use (reindeer herders, renewable energy projects,
the EU (e.g Chrome).	forestry, mining, tourism).
Strong collaboration between mining companies and municipal governments and local communities, with long-mining history.	Limited transport infrastructure and large distances between industrial sites and municipalities impose high transport costs for industry and local governments.
Strong interest in improving the circularity of the mining value chain through digitalisation and resource efficiency practices, supported by educational and research institutions, as well as by a municipal development agency (Digipolis).	Limited cooperation between research institutions, vocational education and private sector to increase circular economy practices in mining and to ensure that EU funded innovation projects translate into business opportunities.
Local focus on ensuring support for future skills needed for mining, with delocalized vocational training supply and municipal activities to integrate foreign workers.	Lack of R&D initiatives for mining exploration and scope to improve coordination of the increasing number of mining exploration projects.

#### **Key Takeaways**

Governance of land use and land-based economic activities

- Promoting cooperation agreements between municipalities and mining companies can help ensure long-term benefits for local communities that go beyond the economic dimension (e.g. housing or environmental compensation).
- Promote the development of local mining programmes that can serve as guiding principles for the mining industry (Sodankylä is a good practice).
- There is scope to improve communication strategies with the support of national institutions in the region (GTK, TUKES and the universities) on the environmental risk of new mining projects to help clarify information about mining impacts.

#### Innovation and circular economy

- Continue supporting R&D and innovation projects to develop new technologies (and biotechnologies) that lead to environmentally more friendly exploration and mining, as well as recovery and recycling of mining waste.
- Promote stronger cooperation between researchers and the mining industry. Researchers need access to mines and their waste to develop basic research on new mining techniques, recovery of valuable materials from mining waste and new solutions for mine rehabilitation.
- Support the development of regional clusters that include the mining industry and SMEs, while promoting industrial symbiosis.

#### Sustainability

- There is scope to improve cooperation between universities and vocational education institutions for innovation projects on sustainable mining.
- Re-engagement of environmental NGOs and the reindeer herding association in the Towards Sustainable Mining Finland standard. Promote the use of this or other standard by municipalities.

#### **Good practices:**

#### **ESG** and Responsible mining

- Mining companies advancing in electrification of mines and refinery production using recycled raw materials.
- Mineral supply (e.g. zinc, nickel) with low CO2 emissions for international standards given the high share of renewable energy used for the mining operation.
- Mining companies have supported community infrastructure (sports center) and engaged in environmental compensation (management and conservation of forestry areas).
- New mining projects adopt environmental measures to gain social acceptance and improve their environmental performance.

#### **Governance of mining**

- Municipal governments with mineral development plans and a staff member in charge of current and future mining operations.
- Municipal business development agency in Kemi with potential to upscale entrepreneurs and SMEs in the value chain of sustainable mining.
- Policies to channel international funds to improve mining development for the region: networks across actors and innovation.

#### **Community-business engagement**

- Municipal level surveys to understand community support towards mining.
- Communication engagement practices at the municipal and regional level to facilitate mining companies communicate projects.