

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





















Takeaways of the OECD mission to Centro Ostrobothnia

TSI OECD-DG REFORM project – March 11th to 14th

Introduction

The OECD study mission to Central Ostrobothnia region, Finland took place from 11th to 14th March 2024, conducted back-to-back with the mission to the region of Lapland 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 reviewer was Antonio Francos (Andalusia) from Spain.

Current state

Central Ostrobothnia is emerging as a hub of innovation and sustainability in Finland. The region blends traditional industries with cutting-edge technologies, focusing on renewable energy and the circular economy while developing new resource extraction industries, such as the region's first lithium mine. This initiative, in development for over two decades, marks the EU's first comprehensive high-quality lithium production effort. Such a new economic activity based on natural resource extraction enriches Central Ostrobothnia's export-focused economy, leveraging synergies with KIP (Kokkola Industrial Park), the thriving industrial park, for enhanced collaboration

The region is well-positioned to lead in transitioning towards a sustainable model, underpinned by a robust supply of renewable energy and a strategic plan with defined objectives, including the goal of achieving carbon neutrality by 2035. Yet, expanding current operations and introducing new investments poses challenges in infrastructure development and workforce enhancement. Moreover, it necessitates ensuring that economic growth benefits municipalities and workers across various sectors, particularly those in non-tradable sectors and agriculture, all while maintaining a commitment to minimal environmental impact.

Strengths	Bottlenecks
Strategic investments in lithium mining and	Potential shortage of qualified workforce if all
other clean technology sectors (hydrogen,	envisioned projects come to life (estimation of 6k
wind, and solar) build on an existing advanced	needed professionals).
industrial ecosystem (KIP).	
The regional government is diversifying the	Lack of future-proofing infrastructure planning,
economy towards sustainable technologies,	particularly in transport, impacting the efficiency
which will lead carbon neutrality by 2035.	of industrial and mining operations.
Strong emphasis on community engagement	The absence of a Centre for Economic
and participative approaches in planning and	Development, Transport, and the Environment
executing industrial and mining projects.	(ELY) is hindering national-regional coordination
Existing collaboration with educational	There's room for collaboration between Mining
institutions for research and development in	Companies, Regional and Environmental
clean technologies and sustainable practices	authorities to speed up permitting and develop
(Centria University for vocational programs	improved risk prevention strategies.
and international students' attraction).	

Key Takeaways

Labour Market and Skills

- There is a need for targeted education and training programs to meet the demands of emerging industries such as mining/chemical industry and hydrogen, wind, and solar energy production.
- Address the skills shortages by enhancing branding around the mining specific sectorial benefits and the overall regional assets for further talent attraction and retention.
- Mobilise the 6% silent workforce to the usual 2%, which signifies an inclusive approach to workforce engagement and re-education within the green transition framework.

Future proofing

- Planning to future-proof infrastructure capacities, particularly in transport and logistics, is important for the efficiency of industrial and mining operations.
- Collaborating closely with local communities to maintain a communicative channel that strengthens the perception and acceptance of mining and other industrial operations increase.
- Requiring coordination and digitalisation processing across various levels of government and clearer regulatory frameworks.

Environmental and Social Governance (ESG)

- Streamlining ESG practices for new projects in the region, particularly in mining, is essential for maintaining trust and cooperation between all stakeholders.
- Develop a standarised template for public reporting for environmental and social aspects. This would help further investments inform communities under user friendly settings and could be inspired in the Kokkola lithium mine company-region informative frame.

Good practices:

Responsible mining

- Research projects on soil remediation using tailings from the lithium mine indicates a proactive approach to mitigating environmental impacts and rehabilitating mining sites.
- Investments in biogas and other renewable sources to feed the refinery plant of Keliber highlight a commitment to low carbon industrial activities.

Merge of modern and traditional industries

- Targeting achieve carbon neutrality by 2035 demonstrating a commitment to environmental stewardship by prioritising green investment and sustainable practices.
- Investment in renewable energy sources with a €12 billion investment in technologies such as hydrogen, wind power and solar farms.
- The City of Kokkola holds 27% of Centria University reaching almost 10M euros in 100 RDI projects for regional relevant industries such as bioeconomy and chemicals.

Community-business engagement

- Early community participation across the informative and exploratory phase of the Keliber lithium exploitation which led to high acceptance of the project.
- Public workshops and forums on municipal development priorities, facilitating community input into regional planning and project design as it happens in Kaustinen municipality.