

## Takeaways of the OECD mission to Kainuu, Finland

TSI OECD-DG REFORM project – April 8<sup>th</sup> to 11<sup>th</sup>

### Introduction

The OECD study mission to Kainuu region, Finland took place from 8<sup>th</sup> to 11<sup>th</sup> April 2024, conducted back-to-back with the missions to the region of North Karelia. This visit facilitated a series of discussions in two municipalities, including the regional capital, with diverse stakeholders ranging from local government representatives, universities, and the private sector. The peer reviewers were Mattias Backstrom (Orebro, Sweden) and Rosa Onofre (Alentejo, Portugal).

The mission concluded with an inter-regional workshop with representatives from all the five beneficiary Finnish regions. This workshop gathered about 30 people representing diverse sectors in each of the five Finnish regions, including private sector, the Geological Service Institute, Universities, Vocational education centres, municipal and regional governments. The presentation of these meeting is shared in a separate document at <https://shorturl.at/VbSFU>.

### Current state

Kainuu region is home of one of the biggest nickel mines in EU, Terrafame, which transformed itself after an ecological leakage accident in 2010 into a cutting edge mine site that uses a biological process (bioleaching) for separation of minerals. With about 800 direct employees and 1,000 subcontractors, this mine is the biggest private employer in the region, only behind the public administration.

Sotkamo municipality (population about 10,000) hosts Terrafame and the other two metallic mines in the region. This municipality has managed to combine the mining sector with an active sports tourism industry, achieving a better population growth than the regional average.

The region also hosts an active educational and research ecosystem for mineral related processes, particularly in the area of monitoring and water treatment.

Strengths	Bottlenecks
<b>A world-class nickel mine</b> that is the biggest private employer in the region and has created an economic ecosystem around the operation and its advance biological process for ore separation.	<b>Skills availability</b> for future needs in the regions, due to decreasing population.
<b>A university consortium with advance research</b> facilities in monitoring systems and water treatment.	<b>Uncertainty with new mining projects</b> (new mines and expansion) limits the investment and upscale plans for local companies linked to the mining industry
<b>A municipality- Sotkamo- hosting both mining and tourism sectors</b> in a successful way for development and attractiveness.	<b>Mixed social perception on mining new mining projects</b> , especially in municipalities without mining history

### Key Takeaways

#### Local labour market and skills

- Despite strong infrastructure and institutions to provide education and training, more efforts are needed in facilitating the path for students in vocational education to access to university programmes.
- Adding a gender focus in the promotion of mining education is needed.
- Finnish language is a common obstacle for international students to stay working in the mining sector.
- There is scope for greater promotion of the regional assets to attract families and workers.

### **Mining governance and Environmental considerations**

- There is a need to better share experiences among municipalities about the effects of mining in local development, by clarifying methods to partner with mining companies, updated legislations and monitoring systems for mining. The experience of Sotkamo can be a good guidance for other municipalities.
- Involving communities in the monitoring of environmental impacts of mining is a continuous effort to raise any environmental concern in the community and strengthen responsible mining.

### **Innovation and circular economy**

- The region can further leverage the existing effective partnerships among research institutions. CEMIS (Centre for Measurement and Information Systems)- research and training centre formed by the University of Oulu, the University of Jyväskylä, Kajaani University of Applied Sciences, among others can be a frontrunner in measurement technology and data expertise for mining.
- Terrafame is a hub for circular economy practices and biological processes that can be better linked to research centres and entrepreneurs. This should help to unlock further innovation for sustainable mining practices and revalorisation of tailings.

### **Good practices:**

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

- **Transparent and open engagement with community:** In Terrafame, a cooperation group consisting of the representatives of organisations located near the mine, was formed 3 years ago, with regular meetings with the mining company (2-4 times annually). The goal is to improve information about current processes, community concerns, insights to operations and plans for future years.
- **Academy project in 2020-2022** created an operating model between Kainuu Vocational College, Kajaani University of Applied Sciences and University of Oulu to partner with mining companies to meet the skills needed in the process industry.
- Terrafame has a cooperation with Kainuu Vocational College, for students to access training and internship opportunities in Terrafame.

#### **Governance and learning institutions.**

- **KAO (Kainuu Vocational College)**, the main vocational school in the region, takes a skills-based approach to teaching and assessments. Assessments are established through competency-based frameworks. There is also a focus on practical training through apprenticeship programs with mining companies in the region, run through co-financing.
- The region established a **coordination group for securing the availability of skilled labour in Kainuu** in 2023. It is formed from different public and private stakeholders.
- Regional council is partnering with other region to put in place a **project to address misinformation about mining.**