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CLUSTERS MEET REGIONS



A SUSTAINABLE APPROACH
TO RAW MATERIALS

KITILÄ

FINLAND | 25 · 27
APRIL 2023

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MATCHMAKING EVENTS

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Setting the Scene – Input Paper for East & North Finland

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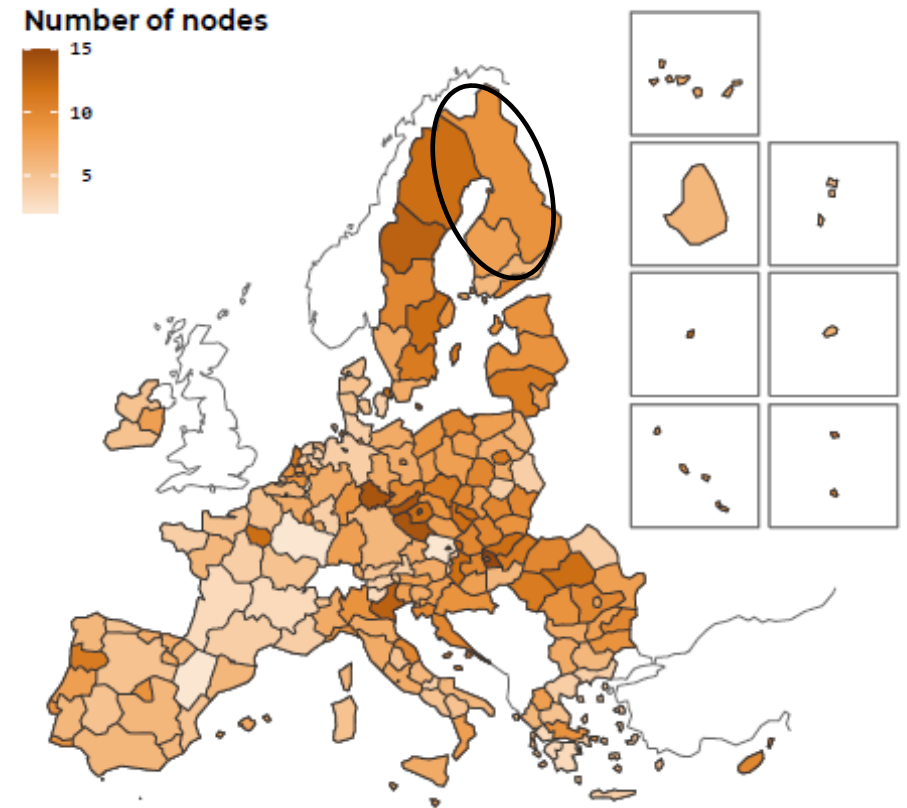
Economic profile of East & North Finland

General trends in the economy:

- Considerably large region in Finland with **€48.9 billion GDP** in 2021 (representing 19.5% of Finland's total GDP)
- 2021 GDP per capita of €28,000 (below EU & Finland averages), but growing at 3.7% (above EU & Finland averages)

Sectoral composition:

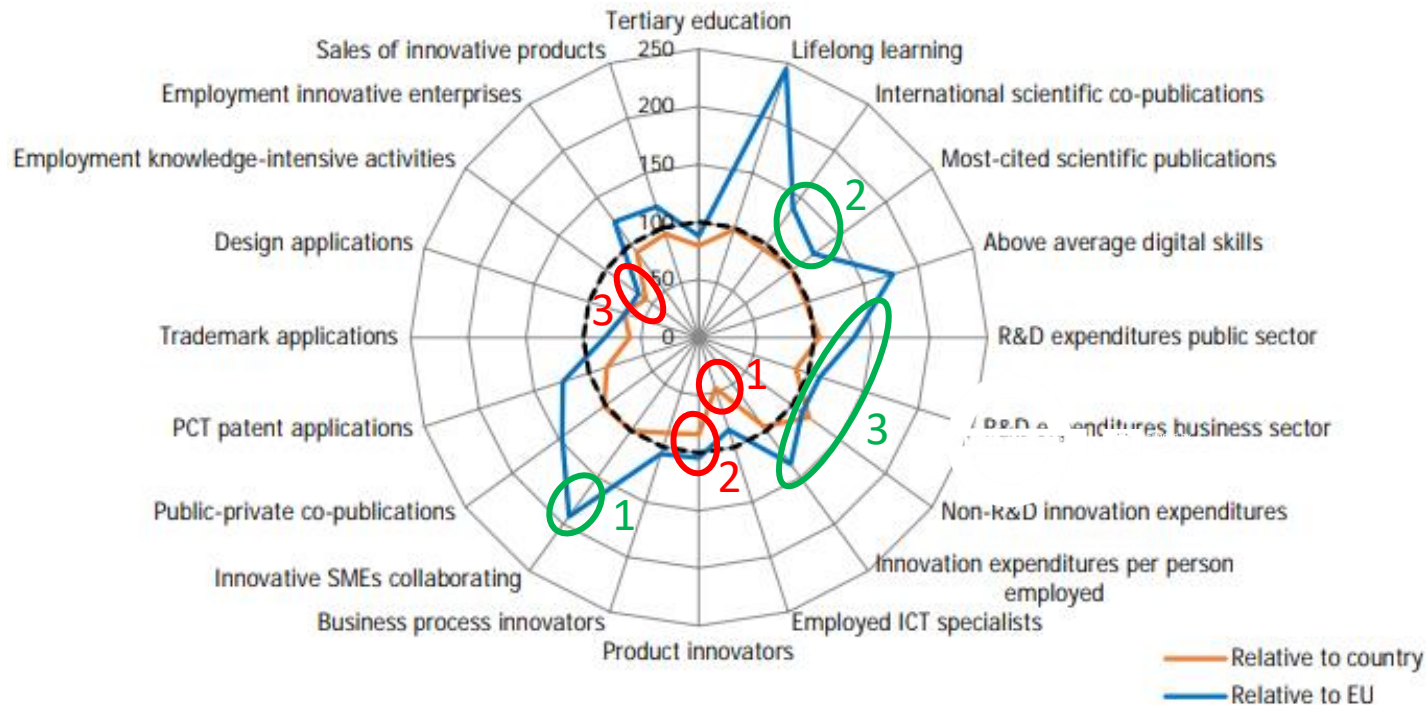
- Services make up two-thirds (66.1%), while Agriculture and Mining compose 7.8% of employment
- 2 regionally relevant **ecosystem nodes** (Electronics & Health) and **8 regionally relevant sectoral nodes**:
 - Forestry & logging
 - Manufacture of wood
 - Social work activities
 - Manufacture of computer, electronic & optical products
 - Residential care activities
 - Construction of buildings
 - Activities of membership organisations
 - Human health activities
- The region's focus on **raw materials** is reflected in the nodes (e.g., forestry & logging and manufacture of wood)



Source: European Cluster Collaboration Panorama Report (2021).

East & North Finland's innovation and regional competitiveness performance

RIS: FI1D – North and East Finland as a “Strong Innovator +”



Source: Regional Innovation Scoreboard 2021

Strengths

1. Innovative SMEs collaborating (*relative to EU*)
2. International scientific & public-private co-publications (*relative to EU*)
3. R&D expenditures business & public sector (*relative to EU & Finland*)

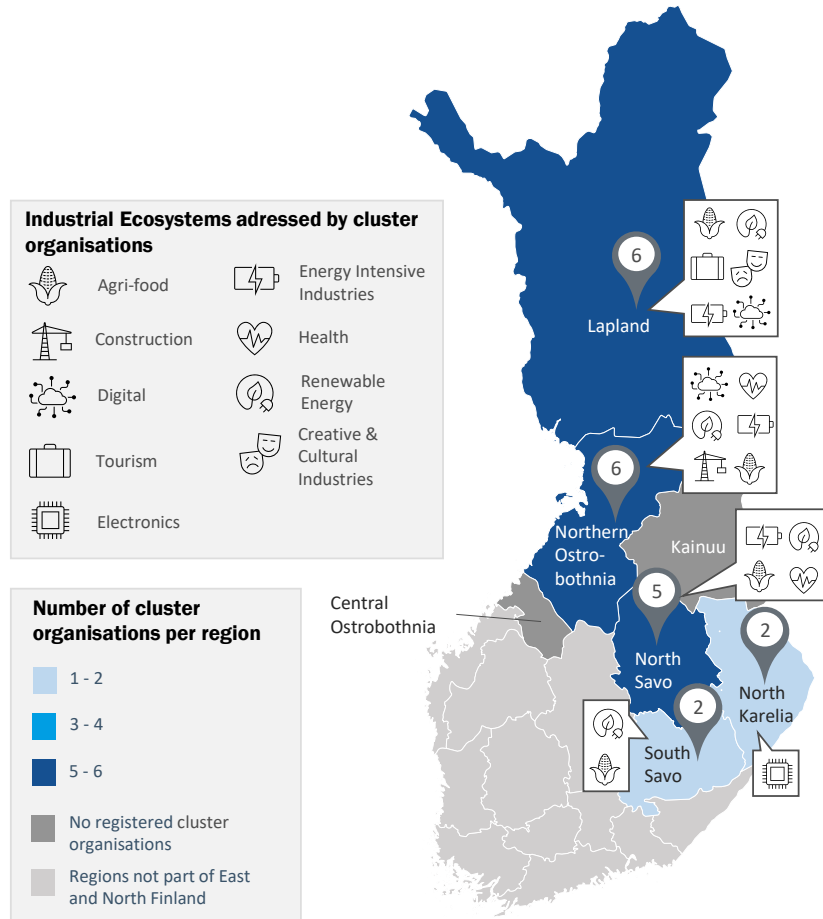
For future development:

1. Employed ICT specialists (*relative to EU & Finland*)
2. Product Innovators (*relative to EU & Finland*)
3. Employment knowledge-intensive activities (*relative to EU & Finland*)

Regional Competitiveness Index 2022

- Slightly above average performance in both the Basic and Innovation Sub-Indexes, with particularly strong indicators for institutions

Cluster organisations* in East & North Finland: Locations, sectors and structures



Cluster Organisations

- 21 Cluster Organisations (CO) registered on the ECCP from E&N Finland – more than any other Finnish region
- Covering 9 out of 14 EU Industrial Ecosystems
- 46 COs overall in E&N Finland (as listed by regional authorities)

Member Structure

- SMEs account for large majority of CO members (83%; ØEU: 84%)
- Large companies less than EU-average (7%; ØEU: 9%)
- Significantly larger share from the research sector: 10% (ØEU: 7%)

Collaborative Areas:

- Internationalisation & Partnering for projects
- Digitalisation
- Resource efficiency & Circular economy

Source: ECCP (2023). Own elaboration based on <https://reporting.clustercollaboration.eu/all>; last access 02.03.2023. *registered on the ECCP

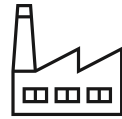
Importance of cluster organisations for regional economic competitiveness

Cluster organisations are **positively correlated** with a range of **economic competitiveness indicators**:



Business environment

- + Public R&D expenditure
- + Human resources in science & technology



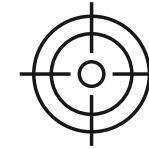
Firm behaviour

- ++ Business R&D expenditure
- + Employed ICT specialists



Intermediate performance indicators

- + Apparent labour productivity
- + PCT patents per Capita
- + ICT patents



Outcome indicators

- + GDP per Capita
- + Employment in technology & knowledge intensive sectors
- + Share of ICT in GVA

However: The presence of regional industrial agglomerations is also linked with **higher air pollution**.

++ Positive correlation

+ Weak positive correlation

Source: Own elaboration based on ECCP Summary Report 2022

The European Commission offers important programmes for collaborative projects among clusters & their members

2014-2020 funding period

2021-2027 funding period



INNOSUP-1

- Horizon 2020 initiative
- Development of new-crossectoral industrial value chains across the EU
- **One cluster involved in two INNSOP-1 projects (MINE.THE.GAP & DigiCirc)**



ESCP-4i

- COSME initiative
- Development and implementation of joint internationalisation strategies to support SME internationalisation
- **Three clusters involved in three ESCP-4i (REINA PLUS, PIMAP PLUS & PIMAP Partnership)**



ESCP-4x

- COSME initiative
- Boost the cross-cluster networking and learning within the EU and development of cluster management excellence
- **No cluster participation from East & North Finland in ESCP-4i.**



ESCP-S3

- COSME initiative
- Boost cluster cooperation in specific thematic areas in the field of regional smart specialisation strategies
- **No cluster participation from East & North Finland in ESCP-S3.**



Euroclusters

- Single Market Programme
- Support the implementation of the EC industrial strategy through cross-sectoral, interdisciplinary and trans-European cluster initiatives
- **Two clusters involved in two Euroclusters (CircInWater & PIMAP4SUSTAINABILITY)**

Source: ECCP (2023)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 871346

Three clusters from East & North Finland involved in going international with European partners

Overview of involvement in the ESCP-4i



PIMAP Plus: Photonics for International Markets and Applications Plus



PIMAP Partnership: Photonics for International Markets and Applications



REINA Plus: Renewables Energy Internationalisation ESCP project for European SMEs Finland



- **3 project participation in the ESCP-4i** by 3 cluster organisations from East and North Finland
- **European cluster partners** came from 7 different countries
- **Thematic focus:** Value chains of renewable energy businesses and photonics for international markets
- **Different target markets:** Mexico, Brazil, Colombia, North America, Chile, China and Japan

Source: ECCP (2023); based on information from COSME data hub.

Two cluster organisations from East & North Finland part of first Eurocluster call

Overview of involvement in the Euroclusters



CirclnWater: Support the European industry to tackle the water challenges of consumption and pollution and contributing to Europe's economic sovereignty



PIMAP4SUSTAINABILITY: Connect together all key stakeholders along the photonics value chains to enhance the resilience capacities of European SMEs and their industrial ecosystems



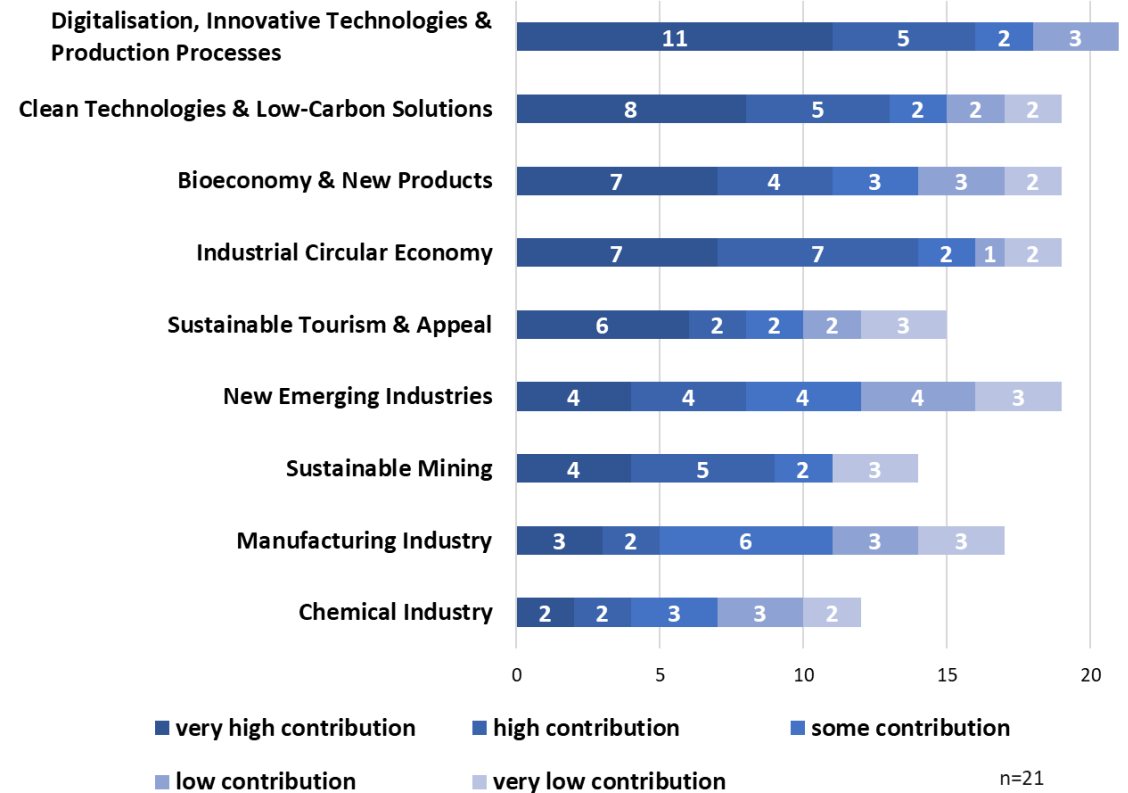
- The 2 cluster organisations Photonics Finland and Mikkelin Kehitysyhtio from East and North Finland in 2 different Euroclusters
- **Thematic focus** on sustainable water consumption and photonics value chains to increase European resilience
- **11 cluster partners** come from 7 different MS

Source: ECCP (2023); based on information from Funding & Tender Portal

Overarching priorities of the joint S3 2019-2023 of East & North Finland and survey results



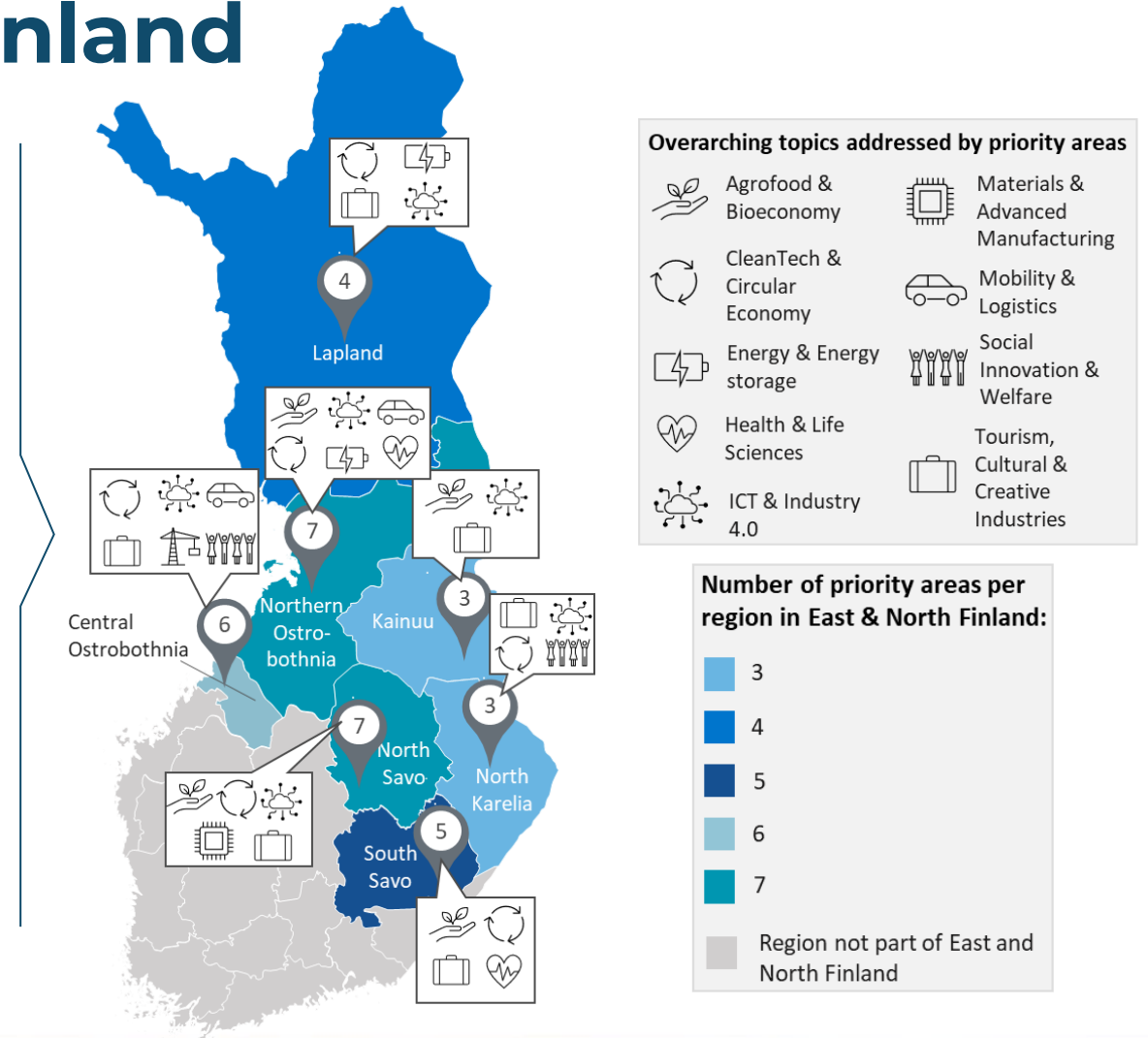
Contribution of competencies of East & North Finland cluster organisations to priority areas



Source: ECCP (2023) own elaboration based on the joint S3 of East & North Finland 2019-2023

Key findings on the S3 21-27 of the 7 underlying regions of East & North Finland

- S3 in Finland are traditionally designed on at a granular regional level (NUTS3).
- A total of **35 priority areas** have been identified in the S3 of the 7 underlying regions of East & North Finland
- These priority areas address a **wide range of topics**, ranging from “Food products” over “Wellness and experience economy services from nature” to “Energy production and storage”.
- A number of the priority areas have a direct link to the topic of **raw materials** (e.g. Excavation Industry in Kainuu, Forest industry in North Savo, etc.)



Final Remarks

1. Economic profile of East & North Finland

- Economic structure historically focused on forestry & mining. In recent years, the service sector has become an increasingly important player in the region.
- Above EU-average innovation performance (“Strong Innovator +”)

2. East & North Finland clusters and their importance for regional economic development

- East & North Finland reports the highest absolute number of registered cluster organisations on the ECCP of all Finnish regions.
- Many cluster organisations are engaged in providing assistance in the areas of circular economy & digitalisation.

3. Cross-border cooperation & European networks

- East & North Finland cluster organisations were involved in several cross-border projects in the 2014-2020 period. 2 cluster organisations from the region are involved in 2 Euroclusters

4. S3 in East & North Finland

- The S3 of the 7 underlying regions and the joint S3 2019-2023 of East & North Finland address a wide range of topics where also raw materials play a key role.
- The importance of priority areas related to the Green & Digital Transition for cluster organisations stands out.

Thank you!

