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# Kemi-Tornio regional skills assessment

Invest in Veitsiluoto -project

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# Summary

- 1 The Kemi-Tornio region is already a strong centre for export industries, and offers many opportunities for green transition investments.
- 2 The strengths of the region lie in its strategic location on the Finnish-Swedish border as a transport hub in the Barents region, and in its good accessibility via road and rail networks, sea and air routes. The region also offers a comprehensive infrastructure, including good electricity transmission and transport connections, a diverse industrial base, a wide range of education and skills and a close network of cooperation between the regional actors.
- 3 The expansion of NATO to Finland and Sweden underlines the strategic position of the region and further strengthens the need for services in various sectors.
- 4 The region is characterised by a high number of skilled process industry professionals.
- 5 Despite its potential, the region also faces challenges. It has lower levels of skills and education than neighbouring regions. In addition, structural unemployment and an ageing population are challenges for the future of the region.
- 6 The region's educational institutions Lappia Vocational College, Lapland Education Centre REDU and Lapland University of Applied Sciences respond to the needs of the labour market by providing education that supports both the traditional social and technical sectors and the skills needs of future investments in the region, such as logistics and process industries and clean energy transition. The universities located near the region, in Oulu, Rovaniemi, and Luleå, strengthen the availability of highly educated experts
- 7 Close and comprehensive cooperation across municipal boundaries is needed to fully harness the region's potential to attract new investment and skilled labour. Dialogue between the region's educational institutions, business and public sector actors is key to meeting the region's future needs.

# Background and objectives of the assessment

# The project created a snapshot of employment, skills and training provision in Kemi-Tornio region



The project produced an assessment for the Invest in Veitsiluoto project at Kemi Digipolis, and a concise visual presentation material.



The assessment examined the current labour force situation, skills and the specific characteristics of the educational institutions in the Kemi-Tornio region.



For the study, experts from Kemi Digipolis Oy, the City of Kemi, Lappia-Koulutus Oy, Lapland University of Applied Sciences and Lapland Education Centre REDU were interviewed. In addition, the following background material were used:

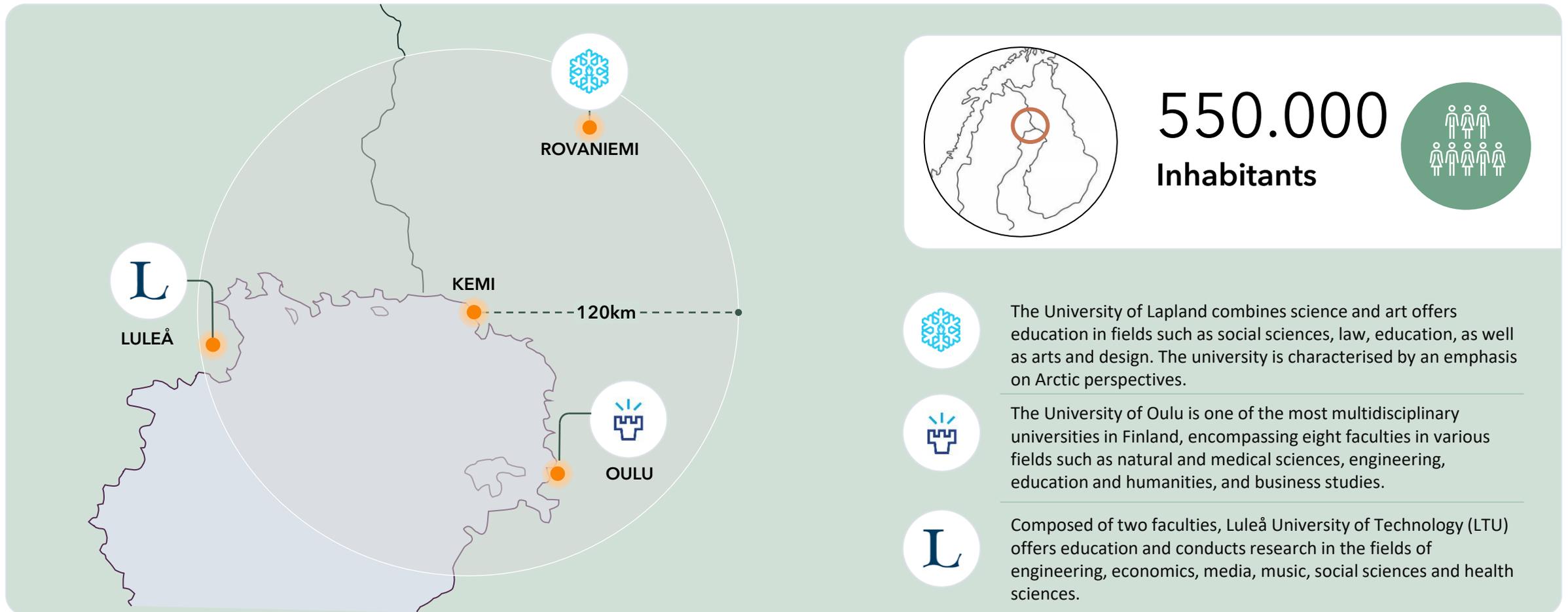


- Keisu, P. (29.6.2022). Seutukunnan kehityskuva. ÄRM Veitsiluoto. ELY. (*Regional development plan*)
- Keisu, P. (22.11.2022). ÄRM Veitsiluoto tilannekuva NRO 21. ELY (*Veitsiluoto snapshot*)
- Saarela, J. (2.2.2024). Jukka Herrala pääsi Veitsiluodon paperitehtaan lopettamisen jälkeen heti oman alan töihin - entisiä veitsiluotolaisia on enää noin 60 työttömänä. Lapin Kansa. (*News article on the current employment situation of the Veitsiluoto paper mill ex-workers*)

- Työvoimabarometri.fi (*Labour force barometer*)
- Työllisyyskatsaus Lappi. ELY keskus ja TE-palvelut. Tammikuu 2024. (*Employment in Lapland / January 2024*)
- Invest in Veitsiluoto. Regional statistics. PowerBI
- Opetushallituksen tilastopalvelu Vipunen.fi (*Education Statistics Finland*)
- StatFin database

# Labour force and skills in Kemi-Tornio region

Sea Lapland is located between three university cities, offering access to diverse and high-level expertise



# The region is characterised by expertise in the process industry

- Kemi-Tornio region has experienced structural unemployment since the 1990s. Although the employment rate has improved in the region since 2014, it continues to face challenges from structural unemployment, an ageing population and challenges to labour attraction and retention.
- The region is characterised by a high number of skilled process industry professionals. People seeking vocational education primarily orient towards the basic industries.
- The region has lower education level compared to neighbouring municipalities. Among the population aged 15 and over, the proportion of people with a higher education degree in 2022 was 25,4%. Of the employed population, around 56% have completed secondary education.
- However, the region's capacity to attract and retain talent, especially at tertiary level, is currently insufficient in relation to projected future needs.

## **Abrupt structural change: Closure of the Stora Enso's Veitsiluoto mill in Kemi**

- The closure of the paper mill in 2021 was a major blow to the region.
- In addition to the 550 factory workers, a large number of workers in the region were made redundant due to the knock-on effects.
- The closure triggered the implementation of the Adupt structural change (ÄRM) actions, including training programmes, diversification of the region's economic structure and the attraction of new businesses.
- To date, the majority of the factory's workers have found new employment in the industrial sector, in mechanical workshops that serve as industrial subcontractors, and in electrical companies. Some have also retrained and switched fields, for example, to the social and health care sector.

## Key figures for the Kemi-Tornio region

	Kemi-Tornio	Lapland	Finland
Population (2021)	55 000, of whom 56,9% are aged 15-64 and 2,5% are foreign nationals	176 500	5 550 000
Employment rate (2020)	68,0 %	67,5 %	72,1 %
Unemployed (2022)	2 330, of which 99 were laid off, 640 long-term unemployed and 1 350 in services	8 405	190 000
Unemployed jobseekers share of labour force (2022)	9,6 %	9,7 %	6,8 %
Business establishments (2022)	3455	19 483	606 810
Turnover (2022)	€11,5 billion	€18,9 billion	€545,3 billion
Staff of enterprises (in person-years) (2022)	14 154	39 900	1 497 449

# Economic development and employers in the region: a business and industry perspective



The biggest employers in the region are the health and social services sector, manufacturing industry, wholesale and retail trade, and the construction industry.



The number of jobs in the area was about 21,200 in 2022. The number of jobs has decreased from the 2007 figure (23,600), settling at the current level in 2014. The number of jobs increased slightly from 2014 (21,400) to 2018 (22,100) but has since fallen back to the 2014 level. The majority of jobs (63%) are in the private sector and the municipal sector (23%).



The largest sector in terms of number of enterprises is construction (19%), followed by wholesale and retail trade and professional, scientific and technical activities.



The self-sufficiency rate for jobs in the region in 2022 was 102. This means that there are more jobs in the region than are filled by the region's residents, allowing for an influx of labour from outside the region. The largest number of commuters comes from Oulu, with 1198 people, followed by Rovaniemi, with 754 people.



The number of employees in the region's enterprises has remained at the same level between 2018 and 2022, at around 14,000 person-years.



Business turnover development has been mixed, but there is a clear upward trend between 2020 and 2021. The largest companies in terms of turnover are Outokumpu Stainless Oy and Outokumpu Chrome Oy, reflecting the significant role of industry in the region.



The number of enterprise openings and closures has been fairly balanced between 2020 and 2023.

# The challenges of the employment situation in the region

1

## Population decline

The population is expected to fall from 55,000 today to less than 50,000 by 2040. The shrinking labour force potential poses economic challenges for the region.



2

## Deterioration of the dependency ratio

The decline in the working age population and the increase in the number of people aged over 65 is weakening the dependency ratio, which is putting pressure on social and health services and may put pressure on tax revenues.



3

## Net negative effect of migration

More people move out of the region than move in, which may have an impact on the labour market and economic activity.



4

## Employment mismatch

While the unemployment rate in the region is above the national average, there are labour shortages, especially in technology and social services. This could slow economic growth and affect access to services, reducing the attractiveness and retention of skilled labour in the region.



# New investments create demand for skills in different sectors



As the working age population of the Kemi-Tornio region is expected to decline in the future, the need for new skills in both the private and public sectors will increase. At the same time, the region is facing both structural unemployment and a shortage of skilled workers for jobs requiring specialised skills.



According to the 2022 Occupational Barometer, there is a widespread shortage of skills in the region, particularly in the social and health sectors and in manufacturing. The need covers occupational groups at different levels of education. Examples of oversupply in the region include process operators and general secretaries.



Planned investments in the region, such as recycled fibre and steel recycling investments and clean energy hydrogen and solar power projects, will increase the need for skilled labour. However, it has been recognised that the existing skills base does not fully match future requirements, especially in new and growing sectors. The region's capacity to attract and retain talent, particularly with higher education degrees, is currently low.



The region is characterised by a high degree of labour mobility across municipal and national borders, reflecting the dynamic nature of the region's labour market and cross-border labour mobility. Temporary work and travel-intensive work are common forms of employment in the region.



Positive net migration can help offset population decline and support labour needs. Employment of foreigners is particularly concentrated in cleaning and related sectors, although skills needs are also broader and higher level.

# Despite the challenges the region has a lot of potential



Strategic location and comprehensive infrastructure provide a solid basis for regional development.



The region's educational institutions respond to the needs of the labour market by providing training that supports both traditional social and technical sectors and new sectors such as logistics, process industries and the hydrogen economy.



Investment in the green transition will strengthen the region's sustainable development and knowledge base. Clean energy, security and security of supply will shape the region's economy, creating new opportunities through the green transition and technological development.



Efforts will be made to gear education and training provision to meet the demand for the future workforce, and business cooperation and partnerships will be used to develop teaching and promote employability. Close cooperation between different actors will provide the basis for innovative solutions to the challenges of the future.

# Education and training provision and specific features of educational institutions

# Three educational institutions provide educational services in the Kemi-Tornio region

## Lappia Vocational College

- A secondary vocational school offering a wide range of practical vocational training and services, including welfare, culture, nature, services and technology.
- Lappia has offices in Kemi, Tervola, Muonio and Tornio.
- Lappia offers basic, vocational and professional qualifications, apprenticeships, labour market training, licensing and qualification training and many other educational services.
- Lappia has around 3 500 students and 340 employees.



## Lapland Training Centre REDU

- Lapland Education Centre REDU is the largest vocational training institution in Lapland.
- The training centre covers the whole of Lapland, with operational units located in Kemijärvi, Keminmaa, Kittilä, Rovaniemi and Sodankylä.
- REDU offers a wide and varied range of courses, covering many different sectors to meet the needs of today's labour market.
- REDU has around 5000 students and 500 employees.



## Lapland University of Applied Sciences

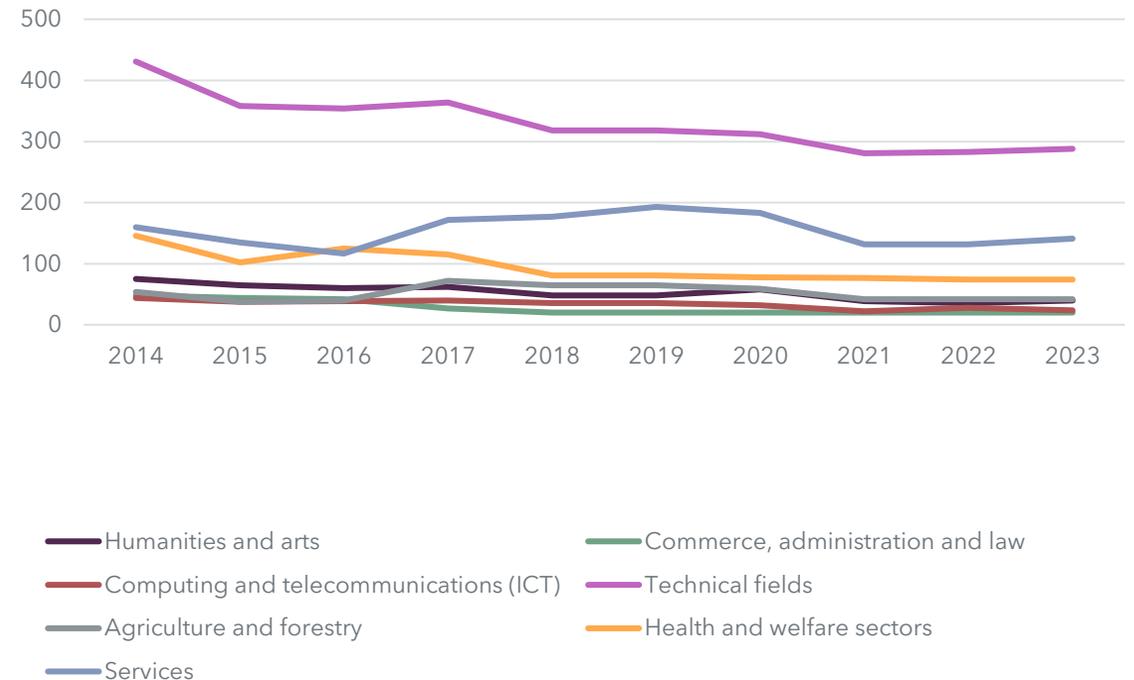
- Lapland University of Applied Sciences responds to the region's needs for expertise by offering comprehensive education across various fields, including health and welfare, technology, business and administration, agriculture and forestry, and ICT.
- The campuses are located in Kemi, Tornio, and Rovaniemi.
- The university offers 32 degree programs, including five Bachelor's programs in English and two Master's programs.
- Lapland UAS is research, development, and innovation-intensive and a sought-after development partner, working closely with over 60 contractual partners.
- Lapland UAS has about 5,700 students and around 450 employees.



# Lappia Vocational College

- Lappia has a significant number of adult learners and career changers. Some of them deliberately choose fields where there is a noticeable labor shortage, such as the social and health care sectors. Lappia also offers integration education for immigrants, including Ukrainians.
- The vast majority (99%) of graduates are located in Finland within a year of graduating between 2015-2021. Most of the graduates were situated in Lapland (78%) and Northern Ostrobothnia (13%).
- The educational offering of Lappia is largely targeted to meet the current needs of the region's business.
- A distinctive feature of Lappia is the close cooperation with municipal actors due to its ownership base. In addition, the institution has various cooperation agreements with local businesses, which include visits, company presentations, and staff encounters.

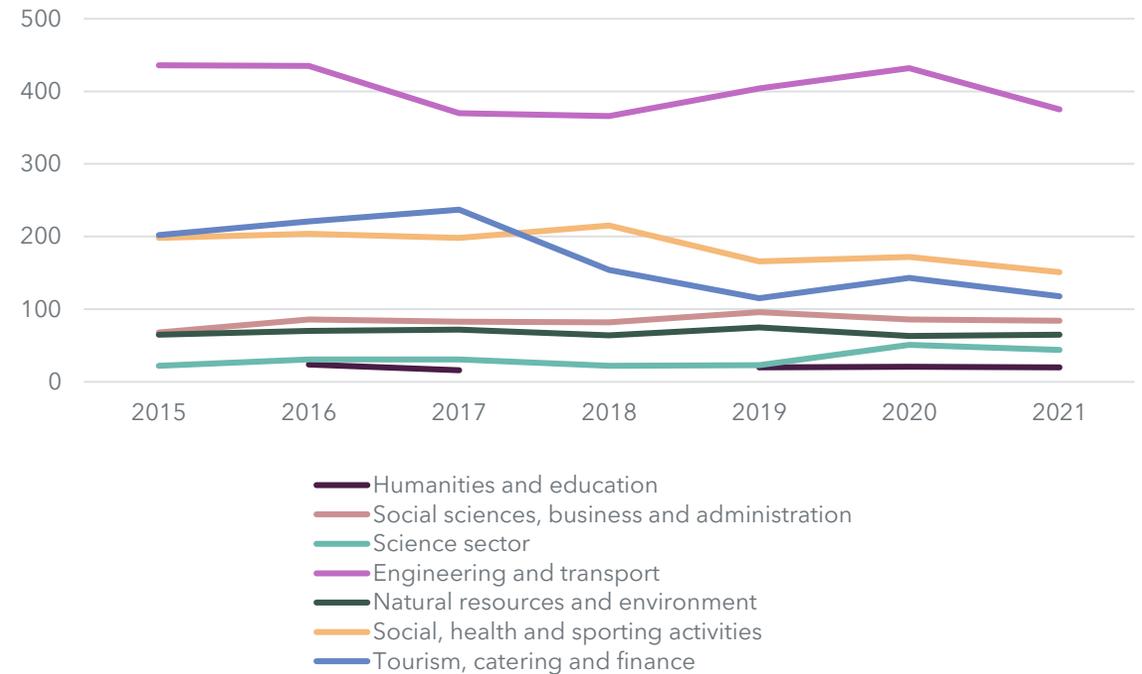
Admissions per year by sector



# Lapland Training Centre REDU

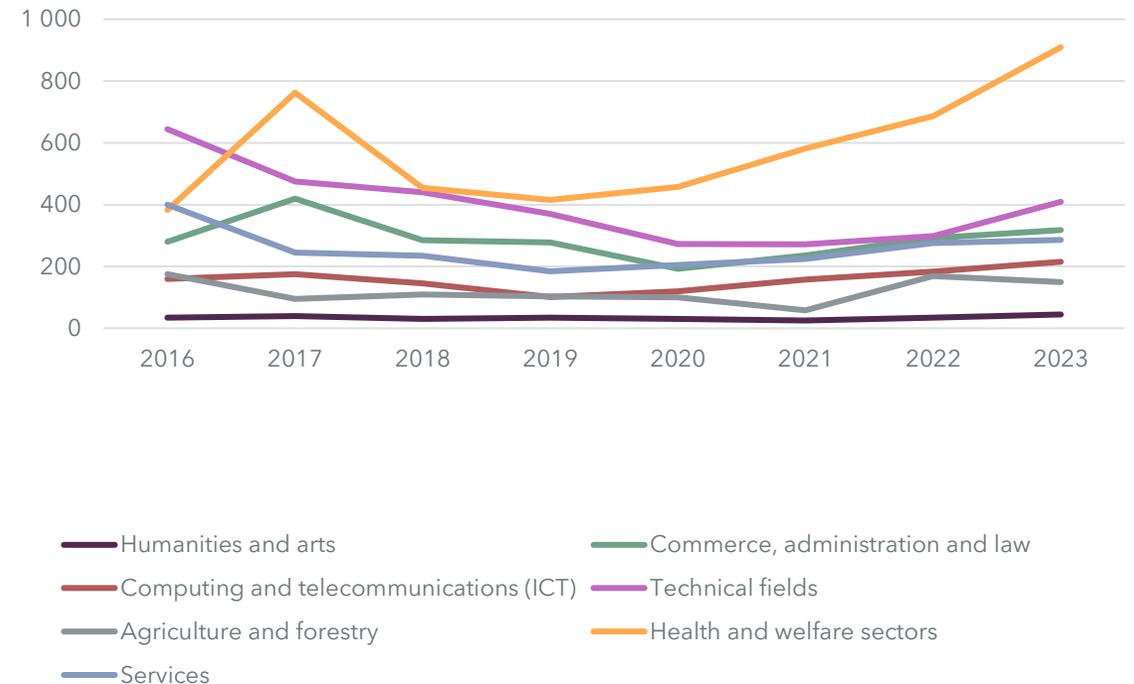
- The REDU has offices in different locations, which helps to attract students from a wide geographical area.
- The vocational orientation of the training is a key focus, with a wide range of disciplines on offer, of which civil engineering in particular sets REDU apart from other institutions in the region.
- The Keminmaa office is specialised in civil engineering and logistics. However, due to the low number of applicants, it will be closed in the near future and replaced by a mobile learning environment that is more flexible to support the training needs of the region.
- REDU offers a wide range of training pathways to support the skills needs of future investments in the region, such as clean energy and mining projects.
- The majority of graduates (over 99%) remained in Finland one year after completing their degree between 2015-2021. Most of the graduates were situated in Lapland (81%) and Northern Ostrobothnia (10%).
- REDU together with REDU Edu Oy offers companies, employers and municipalities a wide range of training and expert services. These include vocational training and business partnership modules tailored to the target groups.
- In its cooperation with companies, REDU focuses on on-the-job training and the development of on-the-job training. Future opportunities will focus on integrated short training for immigrants, combining the development of professional skills with Finnish language learning.

## Admissions per year by sector



- The Lapland University of Applied Sciences emphasises the importance of continuous learning and, in addition to degree training, offers continuing education and transformation training to meet the growing need for highly skilled employees.
- Partnership agreements with major industrial companies in Sea Lapland are an essential part of achieving this goal, while also helping student employment and promoting teacher work-life phases.
- The vast majority (98%) of graduates were settled in Finland one year after completing their degree from 2015-2021. Most of the graduates were placed in Lapland (53%) and Northern Ostrobothnia (26%).
- Close cooperation with the business community supports the anticipation of the competency needs of the region's businesses and organisations. Future competency needs exist in both the technical fields and in health and welfare sectors.

## Admissions per year by sector



# The region's educational institutions are characterised by dynamic cooperation with a wide range of actors



As the working age population of the Kemi-Tornio region is expected to decline in the future, the need for new skills in both the private and public sectors will increase. At the same time, the region is facing both structural unemployment and a shortage of skilled workers for jobs requiring specialised skills.



The institutions stand out for their strong networks and dynamic collaboration, including close partnerships with local businesses, other educational institutions and the public sector. This cooperation enables synergies between the different actors, thus strengthening the educational offer of the region and contributing to the achievement of common objectives.



Partnerships build a shared understanding of the future skills needs of the region, which in turn drives the development and renewal of learning environments. Investments in learning environments are always based on careful planning, ensuring that they support the economic development and employment opportunities of the region.

# Conclusions and recommendations



### **New investment plans will diversify the region's economic structure**

The new green transition investment plans will enrich the economic fabric of the region, contributing to the development of ecosystems between different sectors and businesses and the importance of the region in strengthening, among other things, security of supply. This diversity is a key element of risk management, reducing dependence on individual actors and mitigating the impact of problems in a single sector or company. In addition, a rich ecosystem provides a more sustainable platform for different partnerships and talent, and broadens the funding base.



### **Cooperation helps in foresight**

It is essential that the region recognises the current employment and skills challenges and the opportunities offered by the future prospects of Meri-Lappi. The actors in the region should clarify the added value of the region in relation to both national and international competitors and prioritise efforts to strengthen and market it. This understanding will support the joint efforts of the actors in the region to develop the attraction and retention of talent and to make the necessary efforts to find new solutions.



### **Competition for skilled labour**

Competition to attract talent is constantly increasing. A region's attraction and retention depends not only on access to education and training and jobs, but also on the availability of basic services and the smooth running of services that support a good daily life. The Kemi-Tornio region has the strength of its strategic location and close cooperation between different actors, but action is needed to develop the overall attractiveness of the area in order to attract skilled workforce.

# Recommendations

1

**We recommend that regional actors actively continue to diversify the economic structure by strengthening projects in new, innovative sectors and attracting new investment to the region.**

2

**We recommend that actors in the region develop their cooperation networks to anticipate labour and skills needs, which will allow them to be better prepared to respond to employment challenges and changes.**

3

**We recommend a comprehensive development of the attractiveness of the region, which will contribute to attracting and retaining a skilled workforce. Development efforts should focus on expanding educational opportunities and improving access to health care and basic services. It is also important to promote the quality of everyday life and living in the region as a tangible asset through various channels.**

OUR CLIENTS MAKE THE WORLD  
CLEANER AND SAFER

