

# Borderless opportunities

## Index

<b>Priority area 1 – Research and innovation</b> .....	<b>5</b>
<b>Innovations and Industrial Internet</b> .....	<b>6</b>
<b>NorFaST-HT</b> .....	<b>8</b>
<b>RESEM</b> .....	<b>9</b>
<b>New possibilities for CLT</b> .....	<b>12</b>
<b>Live Nord</b> .....	<b>13</b>
<b>MinNorth</b> .....	<b>14</b>
<b>Arctic Energy</b> .....	<b>15</b>
<b>Smart WPC</b> .....	<b>16</b>
<b>WAX</b> .....	<b>17</b>
<b>WIRMA</b> .....	<b>18</b>
<b>VanProd</b> .....	<b>19</b>
<b>C3TS</b> .....	<b>20</b>
<b>Sea-Surf-Snow</b> .....	<b>21</b>
<b>AMCA</b> .....	<b>22</b>
<b>NYEP</b> .....	<b>23</b>
<b>ARCTIC-ecocrete</b> .....	<b>24</b>
<b>Flexible Transparent Conductive Films as Electrodes</b> .....	<b>25</b>
<b>SmartCharge</b> .....	<b>26</b>
<b>MoreNPBiz</b> .....	<b>27</b>
<b>ON-SITE</b> .....	<b>28</b>
<b>Arctic Airborne 3D</b> .....	<b>29</b>
<b>Arctic 5G Test Network</b> .....	<b>30</b>
<b>Less PFAS</b> .....	<b>31</b>
<b>Ice Proof Arctic</b> .....	<b>32</b>
<b>Compact</b> .....	<b>33</b>
<b>InTeMP</b> .....	<b>34</b>
<b>TallWood</b> .....	<b>35</b>
<b>SolBat</b> .....	<b>36</b>
<b>RoboSol</b> .....	<b>37</b>
<b>NUVE</b> .....	<b>38</b>

<b>Priority area 2- Entrepreneurship</b> .....	<b>39</b>
<b>Nordic Business Support</b> .....	40
<b>Arctic Image</b> .....	41
<b>Visit Arctic Europe</b> .....	42
<b>New Food from the Arctic</b> .....	43
<b>Business Model Innovation</b> .....	44
<b>The Northern Calotte's border services business guidance</b> .....	45
<b>ICNB</b> .....	46
<b>CYNIC</b> .....	47
<b>CINEMA</b> .....	48
<b>VAE II</b> .....	49
<b>Nordic NaBS</b> .....	50
<b>Digitalisation as a driving force in the AEC-industry</b> .....	51
<b>Arctic Investment Platform</b> .....	52
<b>ArcticDC</b> .....	53
<b>DigiProcess</b> .....	54
<b>Export Cooperation</b> .....	55
<b>Two Contries – One Destination</b> .....	56
<b>My story – along the Northern Lights Route</b> .....	57
<b>Resource pool for entrepreneurship in the reindeer industry and subsidiary industries</b> .....	58
<b>Muittut, muitalusat – the story of the Sámi by the Sámi</b> .....	59
<b>Berry machine</b> .....	60
<b>NACCOP</b> .....	61
<b>Priority area 3- Culture and Environment</b> .....	<b>62</b>
<b>Giellagáldu</b> .....	63
<b>Watercourses discharging into the Gulf of Bothnia</b> .....	64
<b>Plupp</b> .....	64
<b>Biogas in Torne River Valley</b> .....	66
<b>Summer whitefish in Torne River Valley –culture and cultural heritage</b> .	67
<b>Summer whitefish in Torne River Valley – nature</b> .....	67
<b>Our stories</b> .....	69
<b>AIDA</b> .....	70

<b>Arctic Fox Together - Felles Fjellrev Nord</b> .....	71
<b>EEBAK</b> .....	72
<b>Tana River</b> .....	73
<b>SEAmBOTH</b> .....	74
<b>Aktene</b> .....	75
<b>HALTI</b> .....	76
<b>Viesso duobddága – Living landscape</b> .....	77
<b>Digital access to the Sámi heritage archives</b> .....	78
<b>VEKUVAKU</b> .....	79
<b>Arctic Pulse</b> .....	80
<b>Tana River II</b> .....	81
<b>Beavnardahke</b> .....	82
<b>GRUDE</b> .....	83
<b>EMRA</b> .....	84
<b>Nordic mountain cattle – cultural heritage and genetic resources</b> .....	85
<b>Collaboration platform for minority languages</b> .....	86
<b>The northern parts of the world heritage of Struve Geodetic Arc</b> .....	87
<b>SeaCombo</b> .....	88
<b>Felles Fjellrev II – Arctic Fox Together II</b> .....	89
<b>Folkverkstan – People’s workshop</b> .....	90
<b>AIDA II</b> .....	91
<b>Deanuleagis sámástit</b> .....	92
<b>ICH North</b> .....	93
<b>Beavnardahke II</b> .....	94
<b>ESBE</b> .....	95
<b>STIL</b> .....	96
<b>ViK</b> .....	97
<b>Priority area 4- Common labour market</b> .....	<b>98</b>
<b>Biegganjunázat</b> .....	99
<b>NORPÅ</b> .....	100
<b>The Ramp</b> .....	101
<b>Arctic Labour</b> .....	102

<b>Sámi Music Academy</b> .....	103
<b>Bothnian Arc Youth</b> .....	104
<b>Academic North</b> .....	105
<b>Filling the EU-Sápmi knowledge gaps</b> .....	106
<b>Working together</b> .....	107
<b>Live and stay in Torne River Valley</b> .....	108
<b>Dialogue and encounters in the Arctic</b> .....	109
<b>Interreg Battery Region</b> .....	110
<b>AB3C Supercluster</b> .....	111

**Appendices:**

- 1 – Prestudies
- 2 – Financiers
- 3 – Global goals for sustainable development

*Completed projects are presented with goal and result while still on-going projects are presented with goal, expected results and a project description*

## **PRIORITY AREA 1 – RESEARCH AND INNOVATION**

Prioritizing research and innovation can result in thriving innovative environments and meeting places in the region. Such innovative environments can be combined to create further development opportunities, into and even further than priority areas in our program. Furthermore, the Nord programme can also help in creating greater cross-border innovation support systems, resulting in the strengthening of innovative environment in the region.

### **Specific goals and granted projects**

**1) Companies' ability to commercialize innovation has been enhanced within the region's priority areas.**

*Nord:* CMT, MinNorth, I3, Arctic Energy, Nya möjligheter för CLT, Live Nord, Smart WPC, WAX, WIRMA, VanProd, C3TS, Sea-Surf-Snow, NYEP, SmartCharge, MoreNPBiz, Arctic Airborne, Arctic 5G, Ice Proof Arctic

**2) Actors in the innovation system have enhanced their ability to participate in the European research arena aligned with the region's priority areas.**

*Nord:* RESEM, NorFaST-HT, RENEPRO, SusMinNor, AMCA, ARCTIC-ecocrete, Flexible – Electrodes, ON-SITE, Less-PFAS, Compact, InTeMP, TallWood, SolBat, RoboSol, NUVE

## Innovations and Industrial Internet

### Goal

The project's goal was to identify crucial factors for innovation and the use of modern digital technology to increase SME's commercialization ability in product and service delivery.

### Result

Several national workshops have been carried out ex. with destination companies and business developers within Swedish Lapland, 23 participants; 3D printing seminar Centria Polytechnic Ylivieska, 50 participants from small businesses; international students with companies from the project, about 20 participants at each workshop, innovation workshop with Spinab, 10 participants.

Case studies have been conducted with 39 companies. The case studies have included investigations, feasibility studies, mapping and demonstrations. The companies have been a key factor for the project as the activities can be described as industrially oriented and applied research. The companies' participation and involvement in the project has therefore been crucial for formulating problems to work with, focusing on demonstrations and support developed and feedback on the project's activities.

Good examples from the project are successful introductions of new products and services, streamlining in manufacturing systems, smart solutions for logistics and inventory, increased knowledge of modern technology at SMF. In accordance with the purpose, the project has worked well as a neutral and creative environment for the companies where access to a broad competence has been offered.

This project's cross-border added value for companies lies in the project managers' understanding of small-scale that matches SME's diversified needs and that they have different skills that will benefit SMEs, ie. critical mass is obtained by collecting different competencies.

The project was nominated for the Regio Stars Awards 2017 and is described as a project example on the EU Commission's website:

[https://ec.europa.eu/regional\\_policy/en/projects/sweden/digitalising-business-from-a-to-sme](https://ec.europa.eu/regional_policy/en/projects/sweden/digitalising-business-from-a-to-sme)

<https://www.ltu.se/research/subjects/information-systems/Pagaende-projekt/Innovationer-Industriellt-Internet-I3-1.159567>

### Beneficiaries:

LTU, Centria, Högskolan Narvik

**Project Duration:** 2015-2018

**Project Budget:** 1 406 539 EUR

**EU-funds:** 663 532 EUR

**IR-funds:** 192 860 EUR

**Public co-financing:** 538 037 EUR

**Private co-financing:** 12 110 EUR



## CMT

### Goal

The aim of the project was to increase the international competitiveness of SMEs and to increase their knowledge of modern surface treatment technology (CMT + laser). The project also wanted to study the possibilities of participating in Horizon 2020.

### Result

Technological developments were focused on creating innovations to improve productivity, materials and energy efficiency, eg. within mining, offshore and process industry. There is potential for sustainable development by replacing expensive or rare material solutions with high performance coatings on cheaper or more environmentally friendly base materials.

Technical development was carried out in many ways and lots of new benefits were obtained for use in product development. There were goals that during the project, solutions would be ready to be released on the market, but CMT technology is very demanding as welding applications are usually, and participating companies have not yet reached that step yet. The participating companies have future project ideas to take advantage of the project results, but they have said it can take up to five years to get them ready for markets.

The project has delivered several useful and valuable data to help companies move forward in using the CMT technology in future projects. There were several companies that participated in the project, but the results from the research work have also been given a wide spread outside the project in order to benefit as many as possible. The project results would not have been achieved without this type of cooperation. For SMEs and also for larger companies, this has significantly reduced the threshold for using CMT technology. Results can also be compared with previous results in the FATLASE project, where the methods studied had similar goals and together there is now a broad basis for supporting decision-making in development projects.

The project collaboration has also led to applications and participation in Horizon 2020. The project TRINITY (within agile robotics in SMF) has been approved and starts in 2019. Another application, "REFINED - Robust Percussive Drill Technology for Single Descent", has during the time this was written proceeded to step two. Another application for "Refurbishment and remanufacturing of large industrial equipment" will be submitted in 2019.

<https://tki.centria.fi/hanke/cmt-nordic-business-opportunities-from-coating-and-additive/1239>

**Beneficiaries:** Centria, LTU, UiT

**Project duration:** 2015-2017

**Project Budget:** 1 465 634 EUR

**Approved EU-fund:** 683 444 EUR

**Approved IR-fund:** 121 951 EUR

**Public co-financing:** 504 937 EUR

**Private co-financing:** 155 302 EUR





## NorFaST-HT

### Goal

The main goal was to update the heat treatment technology from the traditional furnace and flame heating to technologies that are better in efficiency and properties, such as induction and resistance heating.

### Result

The NorFast (HT) project has linked the industry's Scandinavian research collaboration and created an attractive research environment for the industry's needs. The focus of the project was to investigate the possibilities and problems of short heat treatments in the production and processing of steel during different phases ranging from cast material to final product.

The collaboration has offered an exceptional research environment for casting, rolling, heat treatment and tailoring of products. The project has developed three different laboratories for industrial testing of induction heating.

The laboratories are in Nivala, Luleå and Lund. Compared to Japanese and American counterparts, NorFaST-HT co-operation has broader technical possibilities because it does not focus on a separate production process. The NorFaST-HT collaboration offers opportunities for a wide range of processes from the manufacture of bulk steel, to steel production, recycling and even sensors.

The utilization of results during the project is short-term (1-3 years), but one also continuously strives for long-term research collaboration with both those who participated in the project and companies that are not yet part of the consortium. In the project, there were several development areas, eg the possibility of making production machines with modern heat treatment lines based on induction heating, which enables the production of harder steels than before with more cost-effective and environmentally friendly processes than before.

More than 30 reference articles were published, 18 scientific articles were presented at international conferences and 12 were published in scientific journals. The cooperation has also led to an application being submitted to Horizon 2020, but it was not granted.

<http://norfast-ht.eu/>

**Beneficiaries:** Oulun yliopisto, LTU,  
Lunds Universitet, Mefos

**Project Duration:** 2015-2018

**Project Budget:** 1 669 107 EUR

**Approved EU-fund:** 1 084 921 EUR

**Approved IR-fund:** -

**Public co-financing:** 529 186 EUR

**Private co-financing:** 55 000 EUR



## RESEM

### Goal

The main objective of the project was to develop new opportunities to use remote sensing data from satellites in mining safety and environmental monitoring in northern conditions.

### Result

The research and the practical work carried out in the project focused on evaluating how remote sensing can be utilized in monitoring large dust structures for processing waste and how environmental monitoring can be done in large areas.

Monitoring the stability of the ponds is important for identifying problems at an early stage, so that measures can be taken, and accidents can be prevented. The ground movement can be carefully surveyed by analyzing radar satellite data using a technique called interferometry (InSAR). This project investigated how InSAR could be used to monitor the stability of ponds. The satellites studied could monitor possible movement, although the spatial and temporal resolution may vary and active work on a pond may complicate the interpretation of motion data.

11 companies participated in the project and a total of 15 organizations participated in initiatives that lead to new methods. The collaboration led to two applications; "Smart post-processing and utilization of my waste streams (ProMise)" and "Peatland Biodiversity: Coupling eco-hydrological observations and modeling to assess land use and climate change impacts on ecosystem functions and services" were submitted to Horizon 2020. However, none of the applications further.

<https://www oulu.fi/water/resem>

**Beneficiaries:** Oulun yliopisto, LTU,

Nurut

**Project Duration:** 2015-2018

**Project Budget:** 1 039 024 EUR

**Approved EU-fund:** 455 000 EUR

**Approved IR-fund:** 169 512 EUR

**Public co-financing:** 414 512 EUR



## RENEPRO

### Goal

The purpose of the research project was to develop, test and present a unique production concept that brings together bioeconomy, metal production and the production of chemicals / fuels. The project aimed at developing bio-based reducing agents that are suitable for use in blast furnaces and which can replace fossil reducing agents.

### Result

The results from the RENEPRO project show that bio-based reducing agents can be used as raw material in the blast furnace and that process gases from the steel industry can be used for fuel production. Positive results regarding scalability in the production of bio-based reducing agents were also obtained within the project.

An important conclusion from the project was that the use of bio-based reducing agents in metal production shows a significant CO<sub>2</sub> reduction potential. The project has been carried out in close collaboration between Finnish and Swedish partners. Unique results regarding the possibility of reducing carbon dioxide emissions in the Nordic region have been produced. It is envisaged that the study will benefit both employment and economic growth in the region.

<http://www.oulu.fi/pyometen/renepro>

**Beneficiaries:** Oulun yliopisto, LTU, Mefos, Future Eco

**Project Duration:** 2015-2018

**Project Budget:** 1 160 346 EUR

**Approved EU-fund:** 754 224 EUR

**Approved IR-fund:** -

**Public co-financing:** 385 494 EUR

**Private co-financing:** 20 628 EUR



## SusMinNor

### Goal

The purpose of the project was to strengthen cooperation between Lapland and Norrbotten in sustainable mining operations. The regions represent the most prominent regions for the extractive industries on a global scale. The SusMinNor project was implemented to support the recognition that the EU's northernmost regions are important in the mining sector.

### Result

The project worked with, among other things, the theme "Sustainable mining - Nordic advanced knowledge" and meant that an electronic and printed version of a guidebook that gathers the good methods for sustainable mining in the north was developed. Web publications can be reached here:

<http://ltu.diva-portal.org/smash/record.jsf?pid=diva2%3A1070321&dswid=-8637>  
<https://lacris.ulapland.fi/fi/projects/sustainable-mining-in-the-northernmost-europe--lessons-learned-and-practices-developed%286957fcd4-a410-4459-8aba-24881dcb7353%29.html>

In 2017, Mineral Economics published a special issue about the project

<https://link.springer.com/article/10.1007/s13563-017-0101-3>

The project organized a forum for EU mining regions and raw materials in the North together with DG GROW (Internal Market, Industry, Entrepreneurship and SMEs), The European Innovation Partnership (EIP) on Raw Materials and the European Regional Committee in November 2015. In place there were over 60 participants. The forum was a kick-off for cross-border cooperation and EU networks and the first milestone was to set up MIREU cooperation: <https://ec.europa.eu/growth/tools-databases/eip-raw-materials/en/content/mining-regions-eu>

Based on this collaboration, SusMinNor has supported at least 6 initiatives for applications within Horizon 2020, Interreg Europe, Interreg Nord and NPA.

"Interregional cooperation methods" was a work theme aimed at providing a wider number of regional actors in the mining sector. During the project, two network events were organized, which then continued their work in cross-border collaborations. The events were also used to share common ideas.

**Beneficiaries:** Lapin liitto, LTU,

Lapin yliopisto

**Project Duration:** 2015-2016

**Project Budget:** 220 572 EUR

**Approved EU-fund:** 143 368 EUR

**Approved IR-fund:** -

**Public co-financing:** 77 204 EUR



## New possibilities for CLT

### Goal

The main goal was to increase knowledge on production of CLT along with understanding varying CLT characteristics. This implies producing new varieties of CLT with new characteristics, introducing CLT in the existing construction processes as well as creating possibilities for an application in the Horizon 2020.

### Result

The project contributed to the submission of an H2020 application in October 2016 in collaboration with 9 partners. However, the application was rejected.

55 companies have participated in the project's activities, including 10 companies that have been supported to introduce new products.

New types of CLT designs such as new angles for laminating and CLT with reinforcement of aluminum have been studied during the project. The project has also studied CLT's behavior in moisture. Results from tests, analyzes and evaluations have led to the publication of the report "Water and Moisture in CLT".

A number of other scientific reports and publications have been produced during the project; e.g. "Impact of Board Width on In-plane Shear Stiffness of Cross-Laminated Timber" and "Shear Frame and Diagonal Compression Testing of Cross-Laminated Timber". After the pilot tests "Temporary Bridges" and "Fire protection of load-bearing structures" the publication "Increasing the use of CLT with fast product development" was written.

Case studies of experiences of CLT use in the construction industry have been conducted. One conclusion from the study is that CLT has a positive image and can be seen as an ecological choice for creating sustainable building environments. Wooden surfaces are considered aesthetic choices for high-quality indoor environments. During the project, 3 new CLT factories were initiated in Finland and Sweden. During the project, production of CLT increased by 15,000 m<sup>3</sup> in Sweden and similar developments are seen in Finland.

<https://www.ltu.se/research/subjects/Trateknik/Forskningsprojekt/Nya-mojligheter-for-CLT-korslimmat-tra-1.152159>

<https://tki.centria.fi/project/fclt-future-possibilities-for-clt/1101>

<https://www.youtube.com/watch?v=wIwuz32tYYs>  
(Wood Building Summit 2017)

**Beneficiaries:** LTU, Digipolis Oy,

Lapin amk, SP Sveriges Tekniska

Institut, Centria

**Project Duration:** 2015-2018

**Project Budget:** 1 305 840 EUR

**Approved EU-fund:** 858 392 EUR

**Approved IR-fund:** -

**Public co-financing:** 447 448 EUR



## Live Nord

### Goal

The main objective of the project was to collect, popularize and visualize various types of cross-border data at science centers in northern Norway, northern Sweden and in northern Finland.

### Result

The project has worked out three tools that will be used in the three science centers.

The first tool is a visualization tool that includes real-time data and statistics for a popular science visualization. Themes to be presented to the public in each science center:

- Climate: Snow depth, temperature, wind, CO<sub>2</sub> and historical data for snow depth and temperature.
- Aurora Borealis: About the Northern Lights, research (including All Sky camera films from the three countries) and historical data.
- Animal tracking with projects on moose, bear and wolf.
- Regional news.

The second tool is a collection tool that enables science centers and other stakeholders to create a data collection project where the public can contribute data and data, eg photos. The third tool is an interregional planning tool, which can be used to show regional infrastructures and other things with geographical location, as well as for other social topics where feedback can be visualized as a heat map. Topics such as the Health of Young People and Future Railway Plans were something that was used in demonstrations of the tool.

The project has resulted in:

- Three scientific exhibition stations containing the visualization tool, which are placed in the respective permanent exhibition of the partner institutions' science centers.
- A comprehensive planning tool that facilitates integrated interregional dissemination
- A tool for public participation that enables the acquisition of data via crowdsourcing and facilitates citizen science observation projects
- Improved knowledge in visualization technology
- Enhanced cooperation between Arctic, peripheral scientific exhibition centers
- Enhanced thematic knowledge of the region among the partner institutions
- Increased stakeholder networks for the partner institutions

[www.arcticcentre.org/EN/Arktikum/Projects/LiveNord](http://www.arcticcentre.org/EN/Arktikum/Projects/LiveNord)

[www.teknikenshus.se/partners-projekt/projekt/livenord/](http://www.teknikenshus.se/partners-projekt/projekt/livenord/)

**Beneficiaries:** Lapin yliopisto,  
Teknikens Hus, Agency 9, Nordnorsk  
Vitesenter/ Norut

**Project Duration:** 2015-2018

**Project Budget:** 1 202 788 EUR

**Approved EU-fund:** 490 257 EUR

**Approved IR-fund:** 224 273 EUR

**Public co-financing:** 420 591 EUR

**Private co-financing:** 67 667 EUR



## MinNorth

### Goal

The vision was to decrease the dispersion of population from mining areas with aim to preserve the unique environment in the northern regions.

### Result

Results from the project's activities have been published in 11 scientific articles and presented at several international and national conferences during the project.

One of the biggest benefits of the research project was the broader collaboration between partners in the project, but also with SMEs and mining companies. 33 actors have participated in the project's efforts. Through the project, 10 companies have received support to introduce new products.

Some conclusions from the project:

- GEM-2 surveys are an effective geophysical method for determining water flows and effluent water pathways. UAV-based drone surveys are not accurate enough.
- The combination of chemical and isotope data to trace geochemical processes in mining environments was successful for distinguishing different types of geochemical processes in a mineralogically complex mining environment.
- The geophysical methods showed the potential for tracing effluent pathways in the subsurface and could be important for curbing contaminated transport.
- Peatland-based wetlands can be used for a year-round mining water purification of metal and nitrogen from mining wastewaters.

<https://www.ltu.se/Min-North>

**Beneficiaries:** LTU, GTK, Oulun

yliopisto, UiT

**Project Duration:** 2016-2018

**Project Budget:** 1 411 346 EUR

**Approved EU-fund:** 663 904 EUR

**Approved IR-fund:** 185 468 EUR

**Public co-financing:** 556 974 EUR

**Private co-financing:** 5 000 EUR



## Arctic Energy

### Goal

The main goal of Arctic Energy was to help communities in the Arctic in Finland, Sweden and Norway to use local renewable energy in their energy production.

### Result

The project developed and tested a simulation method based on EnergyPLAN simulation tools that work in the Arctic. The simulation method was tested in several pilot areas in Sweden, Finland and Norway. The results from simulations of the pilot areas serve as a good basis for developing energy production in the pilot communities.

The simulation system can also be valuable for planning purposes when communities in the Arctic begin to replace energy systems with renewable energy. The tool is useful for determining how to achieve a more sustainable society with a higher degree of renewable energy and self-sufficiency.

25 players have participated in the project's activities and 3 companies have been supported to introduce new products.

<http://www.greenpolis.fi/en/projektit/arctic-energy/>

**Beneficiaries:** Iin Micropolis, LTU, Lapin amk, Centria, Norut Narvik, UiT Norges Arktiske universitet

**Project Duration:** 2016-2018

**Project Budget:** 1 316 127 EUR

**Approved EU-fund:** 585 968 EUR

**Approved IR-fund:** 207 317 EUR

**Public co-financing:** 518 769 EUR

**Private co-financing:** 4 073 EUR





## Smart WPC

### Goal

The project's aim was to develop functionalized wood plastic composites (WPC) and hybrid materials. This will be done by combining the functionalized WPC and high-performance fibers from regenerated cellulose (MMCFs) to extend the use of WPC to more advanced applications.

### Result

Some results:

- WPC which has been developed 60 years ago was successfully functionalized using the processing technology that is used for WPC processing, as conductive composites which could be used for electrostatic discharging protection, EMI shielding with simultaneously improved mechanical properties,
- lignocellulosic fibres such as regenerated cellulose fibres, natural fibres e.g. flax, hemp and just, etc., was successfully functionalized using a mild treatment, EPD. Furthermore, the EPD process is a continuous one compared to the most reported results. This could be beneficial for reducing the production cost and environmental impact of nanomaterials.
- developed dissipative/anti-static WPC exhibiting electrical resistivity within range of  $10^4 - 10^6 \Omega \cdot \text{cm}$ . An EMI-shielding enclosure was produced by 3D-printing from produced conductive WPC pellets and was validated for EMI-shielding effectiveness. The 24 hours water absorption for WPC with 20 wt% of wood and carbon black was found to be approx. 0.40%, which is similar to or lower than the water absorption values reported for commercial WPC decking.

The results have been clearly disseminated to a broad range of forest, manufacturing-, end user- and consumer companies as well as research organizations.

<https://tki.centria.fi/hanke/smart-wpc-development-of-functionalized-composites-based-on/1358>

**Beneficiaries:** Sicomp, LTU, Centria

**Project Duration:** 2017-2019

**Project Budget:** 1 049 500 EUR

**Approved EU-fund:** 682 174 EUR

**Approved IR-fund:** 0 EUR

**Public co-financing:** 367 326 EUR



## WAX

### Goal

The project's goal was to develop methods that enable extraction of natural wax from cranberries and blueberries. The project will increase awareness of this valuable Arctic natural resource.

### Result

During the project period, the project has disseminated information and created networks with new companies that could use berry wax in their products. A pilot test with cosmetic products has been conducted together with Lyckobio / Aamumaa. The test indicates that Arctic berry wax can be used for niche products in natural and organic cosmetics as the trend with natural products has proven to be increasingly important.

One of the most important achievements of the project was the finding of an effective and environmentally friendly method for extracting berry wax. The method (SCCO<sub>2</sub>) was able to deliver both high yields and selection of waxes and greases. This allows the method to be used in the production of high-quality waxes and greases for high-end applications.

The cooperation between project partners and companies involved has worked well, which was important for the project to achieve its goals. There are expectations of continued collaboration and development of new products in the future. The project has already contributed to increased awareness of the berry sector in the Arctic. In addition, the project has contributed to research institutes and universities having dialogues and bringing them closer together.

<https://www.oamk.fi/c5/fi/tutkimus-ja-kehitys/hankkeet/wax/>

**Beneficiaries:** Oulun yliopisto, Oulun amk, LTU, NIBIO

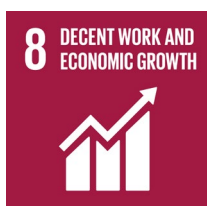
**Project Duration:** 2017-2019

**Project Budget:** 1 000 797 EUR

**Approved EU-fund:** 510 212 EUR

**Approved IR-fund:** 115 854 EUR

**Public co-financing:** 374 731 EUR



## WIRMA

### Goal

The project's vision is to achieve full readiness for rapidly changing weather conditions in the Arctic traffic. The project's ultimate aim is to research and demonstrate a viable industrial internet systems as decision support for road maintenance in winter through smart devices and sensors that are connected to computers, real-time analyzes and forecasts and simulations.

### Result

- Through dissemination of information, stakeholders became aware of new research and technology in winter road maintenance.
- Hybrid sensing technology was successfully tested as a joint collaboration using several non-intrusive sensors and measurement techniques.
- A fleet of trucks and buses was successfully instrumented with IoT systems that produced real-time data in the north.
- Vehicle data, weather information and open data were collected, processed and visualized using modern software development tools and cloud platforms.
- Vehicle data was successfully implemented for weather modeling and thereby improved the quality of the service. Evaluation of mobile observation data, statistical correction equation to calibrate mobile observations and information on how mobile observations affect the weather forecast.
- Decision support for maintenance planning and alarm management, including machine learning, was developed to move towards smart winter road maintenance in the north.

<https://www.wirma-project.eu/>

**Beneficiaries:** Lapin amk, Ilmatieteen

laitos, Foreca oy, LTU, Casselgren

Innovation AB, UiT

**Project Duration:** 2016-2019

**Project Budget:** 1 171 733 EUR

**Approved EU-fund:** 528 391 EUR

**Approved IR-fund:** 164 836 EUR

**Public co-financing:** 397 142 EUR

**Private co-financing:** 81 364 EUR



## VanProd

### Goal

The main goal was to develop vanadium recovery technologies for solid and liquid wastes, which are currently not utilized in Nordic area and additionally pose an environmental threat to the surrounding milieu.

### Result

The benefit of cross-border collaboration was that the consortium covered a range of skills and expertise such as water engineering, chemistry, geochemistry, geology, microbiology and environmental science. Moreover, the project investigated different types of wastes from different areas with a range of characterization methods available for all partners.

Vanadium was detected with high content in solid wastes in Mustavaara mining deposit in Finland (750-1029 ppm) and Titania's magnetite concentrate (3739 ppm). The highest vanadium concentrations in liquid samples were observed at the Mustavaara mine site. Therefore, Mustavaara and Titania mining samples were considered as a potential source for extracting vanadium from wastes.

The preliminary feasibility study on the leaching tests showed that the cost is much higher than the benefit and further optimization is still needed. The preliminary results on the recovery experiment showed that it is not feasible from economic perspective. In overall, the results support well the achievement the main goal of the project: to develop vanadium recovery technologies from solid and liquid wastes, which are currently not utilized in Nordic area and thereby, reduce the environmental threat from vanadium contamination in the surrounding environments. Characterization studies provided valuable information about vanadium content as well as about other elements existing in solid and liquid wastes in the Nordic region. Vanadium leaching and recovery studies provided promising results, which can be used as a basis for further optimization studies. These new results support the Interreg Nord's goal of increasing the amount of innovations. Project collaborated with other projects funded by the other programs such as Kolarctic CBC, Norwegian Research Council and Academy of Finland. There were synergies in these projects and work is also partly continued in other projects.

<https://www oulu.fi/pyokemen/node/48279>

**Beneficiaries:** Oulun yliopisto, UiT,

Kjeøy Research and Education Center

**Project Duration:** 2017-2020

**Project Budget:** 883 865 EUR

**Approved EU-fund:** 194 176 EUR

**Approved IR-fund:** 292 042 EUR

**Public co-financing:** 306 672 EUR

**Private co-financing:** 90 975 EUR



## C3TS

### Goal

The overall objective of the project was to increase international competitiveness for regional SMEs in the engineering industry by introducing 3D writing in metal as new manufacturing technology.

### Result

Collaboration between the universities resulted in collaboration with ~200 company representatives (150 SME and 50 large) from 95 companies in various degree. Dissemination of results or activities reached well over 900 experts (131 of these women), and many more that could not be counted. There were 13 organized seminars by the consortium and in addition attended and presented project material at 15 international seminars and conferences.

In addition, 27 scientific publications were produced (some of these were also presented at the conferences). In total, over 450 printouts were made, in 43 different variants. Of these, 12 different demonstrator cases were produced. Two new innovative methods for 3D-printing has also been explored. The first is feasibility study of a method to produce new components from scrap parts with the help of a high-power laser beam, i.e. CYCLAM. The other process is the feasibility to use iron ore as feedstock material for AM, simultaneously producing steel and the component, completely skipping the traditional steel and sheet production steps.

A new project called I2P (funded by Kolarctic) will continue the activities from C3TS-project but is also extended to include northwestern Russia, also arctic and sparsely populated area. All-in-all, the project has greatly contributed to increase knowledge about 3Dprinting whilst also increasing awareness to the region about metal 3D-printing as a feasible and industrially implementable new generation production method that can enable yet unthought possibilities and business opportunities to the region.

<https://www.ltu.se/research/subjects/Produktionsutveckling/Forskningsprojekt/C3TS/C3TS-arctic-platform-to-Create-3D-print-Test-and-Sell-1.169741>

**Beneficiaries:** LTU, Oulun yliopisto,

UiT

**Project Duration:** 2017-2019

**Project Budget:** 945 676 EUR

**Approved EU-fund:** 479 106 EUR

**Approved IR-fund:** 104 029 EUR

**Public co-financing:** 307 294 EUR

**Private co-financing:** 46 000 EUR



## Sea-Surf-Snow

### Goal

The project's aim was to create better utilization of the region's natural resources by producing lightweight, durable composite seaweed materials for surfboards and snowboards.

### Result

Seaweed and the potential for use in sporting goods have been shown in the form of a promising structure, possibility of impregnation, and mechanical properties. Foams prepared by freeze-drying the alginate / nanofiber mixture exhibited high mechanical properties which can be further improved by directing the nanofibers and cross-linking the structure. The structure consists of an open interconnected network which makes the foams suitable both in terms of swelling, robustness and impregnation of another polymer such as bioepoxy.

The potential applications ranges from, packaging as well as sporting goods or automotive. Since alginate is naturally flame retardant, the thermal behaviour of the foams were evaluated before and after crosslinking. The flame retardant properties were significantly improved after crosslinking, hence displaying potential uses as a biobased insulating material. These results have, in part, already been presented at conferences and are also intended to be published in the form of an article in the international journal of composites to further disseminate the results.

The valorization of Norwegian seaweed as a source for preparation of sustainable biomaterials have been explored with very promising application potential in widely different fields. Furthermore, the use of the stipe of the seaweed is very promising for separation into cellulose nanofibers, which is expected to further valorize the raw material. In turn, the prepared biobased nanocomposites from seaweed is promoting sustainable processing and material use from the nordic countries.

**Beneficiaries:** LTU, Treeform, Midnight

Composites AB, The Northern company AS

**Project Duration:** 2017-2018

**Project Budget:** 133 579 EUR

**Approved EU-fund:** 71 925 EUR

**Approved IR-fund:** 9 756 EUR

**Public co-financing:** 34 530 EUR

**Private co-financing:** 17 368 EUR



## AMCA

### Goal

The primary goal was to create an architecture of arctic communications and a roadmap.

### Result

Within the AMCA project, approaches to Arctic communication have been evaluated and it has been estimated when these ways will be possible and available, in form of a roadmap. The results have been disseminated in various seminars and at different conferences, for a very mixed audience, including for the "Arctic Council's task force on communications", in a "Senior Arctic Officer's meeting", in a conference organized by "University of the Arctic", and in several scientific ICT conferences.

A journal article and a conference article have been submitted for review and publication.

The project did not submit an H2020 application as appropriate calls for AMCA's ideas could not be identified. The collaboration, on the other hand, has resulted in three other project proposals submitted, of which one, which contains AMCA ideas, has already been accepted. Two of the project proposals include a Norwegian partner, as a result of the discussions conducted within the AMCA project. The project has increased Nordic research collaboration in the ICT area.

<https://www oulu.fi/amca>

**Beneficiaries:** Oulun yliopisto. LTU

**Project Duration:** 2017-2019

**Project Budget:** 375 713 EUR

**Approved EU-fund:** 244 215 EUR

**Approved IR-fund:** -

**Public co-financing:** 131 498 EUR



## NYEP

### Goal

The project will strengthen the competencies of participating actors in the field of flue gas purification and create an international reputation for the technology, which today is not used commercially to any significant extent.

### Expected result

- The long-term stability of the absorption plant is determined by at least one year of continuous operation
- A techno-economic evaluation of the market in the Nordic countries is presented as a basis for assessing the potential of technology
- A sustainability assessment of the technology has been carried out
- In positive research results, design of biofuel fuel systems should be developed in close cooperation with industry.
- Trying alternative fuels gives interesting suggestions to new markets for the mining industry
- Sewage combustion with levels of flue gases within the emission requirements of smaller plants allows for less locally located combustion plants

**Beneficiaries:** LTU, Lapin amk,

Oulun yliopisto

**Project Duration:** 2018-2020

**Project Budget:** 802 873 EUR

**Approved EU-fund:** 521 844 EUR

**Approved IR-fund:** -

**Public co-financing:** 281 029EUR

### Project description

Both northern Sweden and northern Finland have a significant engineering industry, which are potential stakeholders to produce a commercial product for flue gas treatment. Four Swedish and six Finnish companies will have access to knowledge about the technology that is built up through the project. The project will also investigate flue gas purification on the burning of biopellets containing residues from mining activities to investigate the potential for utilizing energy currently unused.

By jointly developing and disseminating knowledge about cheaper systems for flue gas purification that meet environmental requirements, technology can be of interest to municipalities in the region, while reduced transport results in less environmental impact. At Luleå University of Technology there is knowledge about flue gas purification with absorption technology. Luleå University of Technology and Oulu University also have skills in CFD technology that complement each other. Oulu University has competence in sustainability research as well as measurement and analysis of flue gases. Lapin AMK has specific expertise in the creation of pellets by mixing mines with biofuel. Lapin AMK and Oulu University also have knowledge about techno-economic analyzes.

<https://www oulu.fi/environmentalengineering/nyep>





## ARCTIC-ecocrete

### Goal

The overall objective of the project is to improve the competitiveness, vitality and employment of the arctic area by, in collaboration with the northern region's most important research and business partner, improving concrete species and production technologies that are environmentally friendly, energy efficient and utilize sustainable regional tributes from industry and power plants.

### Expected result

The expected result is a strong, regional and cross-border cooperation network between cement and concrete researchers and industry. Another significant result is an innovative, more competitive and vital business. The expected result in the technical part is for field conditions complete, organic concrete solution suitable for winter concrete and enables concrete casting at temperatures down to -25 ° C and withstand long transport distances.

### Project description

A significant disadvantage and brake for building and development in the northern area is avoiding building during the most demanding winter months to reduce risks. This leads to greater construction costs and layoffs of competent employees, which you sometimes lose. If it is not possible to find good solutions, all these factors can together prevent or reduce the desired development in the northern area. In the northern area millions of tons of inorganic industrial waste are generated annually. The bulk of this consists of the mining industry's waste stone and enrichment sand. Other significant waste materials consist of fly ash generated by burning peat and wood and the slag of the metallurgical industry. These wastes are currently mostly on dumps or landfills, although they could at least partly be used as raw materials in cement and concrete. Waste management costs are increasing as legislation limits the use of dumps and landfills. In the northern area surrounded by untouched and vulnerable nature there is a great need for sustainable use of this waste material. In addition, the use of these waste materials in local construction would reduce produced CO<sub>2</sub> emissions compared to traditional cement production and would enable growth of responsible and sustainable industry.

<https://www oulu.fi/pyokuinen/node/51813>

**Beneficiaries:** Oulun yliopisto, LTU

**Project Duration:** 2018-2020

**Project Budget:** 1 364 343 EUR

**Approved EU-fund:** 547 456EUR

**Approved IR-fund:** 261 029 EUR

**Public co-financing:** 409 516 EUR

**Private co-financing:** 146 342 EUR



## Flexible Transparent Conductive Films as Electrodes

### Goal

The project will channel the excellent but individual research competencies of coal-based nanomaterials in northern Sweden and Finland for the benefit of the region's technology-based industries.

### Expected result

- To develop a validation triangle between participating universities to manufacture, characterize and model carbon based nanomaterials, as well as thin film electrodes based on these.
- Developing computer models to effectively investigate the characteristics of the functionalized graph and metallic carbon nanotubes.
- To study the characteristics of the functionalized graph and metallic carbon nanotubes for use in thin film electrodes by means of simulations.
- To design and implement new experimental methods for inkjet writing of thin film electrodes.
- Experimentally evaluate the mechanical, electrical and optical properties of inkjet thin film electrodes.
- Identify new areas, technologies and industries that can benefit from improved thin film electrodes and disseminate knowledge to companies in the program area by organizing workshops.
- Publishing scientific articles in highly rated journals to maximize the spread of our knowledge to researchers and companies in the world.
- To jointly organize a session at an international conference focused on thin film electrodes made of carbon nanomaterials.
- To broaden cooperation between the three participating universities and industry-based partners in the region.

### Project description

Transparent, conductive and flexible electrodes are one of the most important components of the development and design of new consumer electronics for everyday use. Currently, such electrodes are based on expensive metals such as indium, which is one of the rarer metals in the earth's crust. Manufacturing is also done at high cost and with advanced technology. The project proposes technologies for developing flexible, transparent and conductive electrodes based on integrated metallic carbon nanotubes, functionalized graphs and abundant metals. The goal is that the electrodes should be able to manufacture with scalable processes, such as spray coating, or so-called scroll-to-roll printing.

<https://www.ltu.se/research/subjects/Tillampad-fysik/Forskningsprojekt/Flexibla-transparenta-ledande-filmer-som-elektroder>

**Beneficiaries:** LTU, UmU, Oulun

yliopisto

**Project Duration:** 2018-2020

**Project Budget:** 944 363 EUR

**Approved EU-fund:** 613 836 EUR

**Approved IR-fund:** -

**Public co-financing:** 330 527 EUR



## SmartCharge

### Goal

The main objective of the project is to promote the introduction of smart and energy-efficient solutions for responsible service production and to support the emergence of new innovations in forward-looking sectors, such as construction, energy, vehicle and tourism industries.

### Expected result

1. How electric vehicles, e.g. powered scooters can have two roles.
2. Plan and test a complete V2G / B concept, which is based on open standards and protocols (eg, ISO 15118, OCPI, OCPP v1.6 & amp; 2.0)
3. The influence of Arctic conditions on battery energy storage and bidirectional energy transfer
4. Determine the technological and economic and social impacts of innovation policy related to points 1-3 above.
5. Promotes and disseminates the results obtained via multiple channels, e.g. seminars, courses, trade journals and conferences, including CIRED, Powertech and EVCC.  
Publications and reports: a) Report on the situation on the markets and for the technologies, assessment of the most important interest groups and recommendations for the development of business models. b) A scientific report on the research results, c) General information in all countries
6. 3-4 scientific / professional articles

### Project description

The main objective of the project is to produce new knowledge of the Vehicle-to-Grid (V2G) solutions' commercial and technical opportunities and challenges using three pilot projects. The pilot projects are carried out in Mehamn (Norway), Jukkasjärvi (Sweden) and Lehtojärvi (Finland). In these pilot projects, local systems are created with the help of electric vehicles (electric scooters, electric cars) used as energy storage, and at the same time the implementation is examined from a technical and commercial perspective. Through research and development, the project wants to speed up the companies' investments in energy-efficient solutions with renewable energy, which would also reduce greenhouse gas emissions.

<https://www.lapinamk.fi/fi/Yrityksille-ja-yhteisoille/Lapin-AMKin-hankkeet?RepoProject=521833>

**Beneficiaries:** Lapin amk, UiT

**Project Duration:** 2019-2022

**Project Budget:** 513 144 EUR

**Approved EU-fund:** 181 190 EUR

**Approved IR-fund:** 116 707

**Public co-financing:** 215 247 EUR



## MoreNPBiz

### Goal

The aim of the project is to develop / improve the competitiveness and establishment of the natural product companies in the international market by:

- promoting the development of energy-efficient drying methods so that the quality of the products is maintained
- developing appropriate quality verification methods that companies can use to demonstrate the level of vital substances in, among other things, dried raw material

### Expected result

Expected results are:

- a mapping of potential sources of energy within the program area
- an information package on energy-efficient drying techniques for selected plants
- instructions on the function of the drying units
- recommendations and examples of how the energy efficiency and the quality of dried plants can be improved in selected existing drying systems
- examples of how alternative drying techniques and drying processes affect the quality of selected plants
- information packs on tested and economically profitable quality verification methods and laboratory services for various plants
- assessment of the energy models and process industry partnership models
- proposals for commercial symbiosis
- strengthened cooperation networks between organizations active in the industry.

### Project description

Health and environmentally conscious consumers are a trend that greatly changes the market. Outside the world, the demand for natural products that are perceived to be healthy has become a megatrend. Drying fresh plant material is a very common conservation / treatment method in the natural product industry. However, drying requires a lot of energy and this cost can amount to 70 percent of the manufacturing process. The economic profitability of business operations in the natural product industry can be improved only if the drying technologies and the use of waste energy are made more effective. Dryers have been developed mainly in Northern Finland, but they have not been commercialized. The EU 2020 strategy emphasizes smart and sustainable growth. New work opportunities can be created in the countryside if the Nordic natural product industry is developed and the raw materials are processed in the home country.

<https://tki.centria.fi/hanke/morenpbiz/1936>

**Beneficiaries:** Centria, LTU,

Hushållningssällskapet, Oulun amk

**Project Duration:** 2019-2020

**Project Budget:** 915 722 EUR

**Approved EU-fund:** 578 344 EUR

**Approved IR-fund:** -

**Public co-financing:** 337 378 EUR



## ON-SITE

### Goal

To examine in Finland, Sweden and Norway the principles for how such sewage systems are handled that are not connected to sewage networks, as well as highlight best practices, strategies and regulations that generate the best result in terms of both environmental protection, socio-economics and sustainable development.

### Expected Result

- review of the principles for the management of sewage systems that are not connected to the sewer network, as well as best practices and operating models.
- examination of possible shortcomings in the knowledge of the purification effect and environmental impact of the small-scale sewage systems (regulated and non-regulated substances).
- Increased competence on the sewage systems' cleaning effect and environmental impact.
- increased competence in wastewater treatment, monitoring and impact assessment of the state of the environment.
- innovative biotechnology processes and methods.
- increased collaboration between interest groups, research institutes and industry, and improved business relationship between research, innovation and technology in the program area

### Project Description

The Nordic countries have partly similar rules when it comes to environmental protection and sewage, but there are clear differences in the control of the small sewers (regulations / laws / supervision). The project will examine the guiding principles for small sewers in Finland, Sweden and Norway. The project will describe and compare the strategies for small sewers in the three countries in terms of permits, supervision and function control. The project will also build cooperation between the countries and the various actors in the industry, ie. universities, companies, municipalities and authorities in Sweden and Finland to work together to implement innovative solutions and sewage systems with good function. Through the cooperation of different actors in the two countries, experiences and knowledge will be shared and problems will be solved by learning from each other.

<https://www oulu.fi/water/on-site>

**Beneficiaries:** Oulun yliopisto, SYKE,

LTU

**Project Duration:** 2019-2021

**Project Budget:** 776 503 EUR

**Approved EU-fund:** 504 728 EUR

**Approved IR-fund:** -

**Public co-financing:** 271 777 EUR



## Arctic Airborne 3D

### Goal

The main objective of the project is to conduct pilot studies in northern conditions that enable companies to increase their competitiveness and find a more sustainable way of working. The main purpose of the project is to create innovations through drone technology. The technology innovations are demonstrated across borders for the partners in tourism, municipal activities, road maintenance and reindeer husbandry.

### Expected Result

1. Solve the current problems of the Arctic municipalities and tourism companies and their service providers using the latest drone technology
2. Solving problems for reindeer husbandry and service providers in the Arctic region using the latest drone technology
3. Developing business models and demonstrating their added value to help entrepreneurs start using drone technology and create drone-based services
4. Adapt the latest drone technology to solve the problems in sub-goals 1-4, where the problems to be solved are: 1) more refined analyzes and forecasts of road and snow conditions, as well as analyzes of snow depth and ice thickness, 2) snow and ice formation in hydro power plants and on wires, 3) extended flight time from 30 minutes to 2-5 hours, extended flight distance from today's 5 km so that it is possible to operate within the entire 3G network area (hybrid communication) and outside (3D / GPS), analysis and visualization of the coverage in the positioning network and improve coverage for the reindeer positioning band with drone-based "preliminary masts".

### Project Description

The Arctic Airborne 3D project focuses on industrial research that utilizes innovative drone technology, visualization and sensor and localization technology. Research experts from Finland, Sweden and Norway create a whole that meets the needs of the planned innovations and demonstrations. Interaction methodology is also used in the project to develop and demonstrate business models for drone applications in the Interreg Nord area.

<https://tki.centria.fi/hanke/aa3d-arctic-airborne-3d/1916>

**Beneficiaries:** Centria, Ilmatieteen

laitos, LTU, Maailmasta Oy

**Project Duration:** 2019-2021

**Project Budget:** 952 071 EUR

**Approved EU-fund:** 616 417 EUR

**Approved IR-fund:** -

**Public co-financing:** 306 013 EUR

**Private co-financing:** 30 000



## Arctic 5G Test Network

### Goal

The main objective of the project is that the region's SMEs expand their markets geographically and through cross-border partnerships in partnership successfully offer competitive, innovative and high-quality products, services and solutions within the 5G area.

### Expected result

At the end of the project, significant steps have been taken towards achieving the vision of becoming a leading player in the European 5G arena. Sustainable cross-border cooperation has been established and strengthened. Companies' participation in R&D projects has increased and become a natural part of new projects.

### Project description

The Arctic 5G Test Network aims to link the 5G test networks in Oulu and Luleå by connecting them and engaging in active collaboration. This enables cross-border testing and increases overall testing capabilities in the 5G networks. In addition to scientific experiments, the industry is also planned to benefit from the improved testing environment. In addition to connecting the 5G test networks to each other, they will be used to verify the studies being done in the project. The work is planned to be carried out jointly. The studies include work in:

- 1) 5G Network Intelligence
- 2) Multi Access Edge Computing
- 3) 5G applications and
- 4) End User Experience.

**Beneficiaries:** LTU, Oulun yliopisto

**Project duration:** 2019-2022

**Project budget:** 1 500 000 EUR

**Approved EU-fund:** 975 000 EUR

**Approved IR-fund:** -

**Public co-financing:** 525 000 EUR



## Less PFAS

### Goal

The main goal of the project is to develop a treatment methodology for materials contaminated with Per- and polyfluoroalkylated substances (PFAS) that can be applied on a large scale.

### Expected result

The expected result of the project is a developed and functioning method for PFAS degradation in water and soil. In the long term, the project will help reduce the amount of toxic PFA substances and thereby improve environmental quality and human health.

### Project description

Development of methods for effectively removing and destroying PFAS from polluted masses is very important. The purpose of this project is, in collaboration between partners from Sweden, Finland and Norway and with the support of industry, to optimize the existing and most promising finishing methods, and scale them up into practically feasible solutions in the field. The project will contribute to opportunities for companies with innovation activities in the region to grow and capitalize on environmental technology solutions developed during the project's time. The overall social benefit in the long term will consist of reduced soil treatment costs and improved environment through lower pollution spread risks and reduced amounts of toxic substances in the cycle.

**Beneficiaries:** LTU, Oulun yliopisto, UiT

**Project duration:** 2019-2022

**Project budget:** 854 306 EUR

**Approved EU-fund:** 508 509 EUR

**Approved IR-fund:** 35 976 EUR

**Public co-financing:** 309 821 EUR





## Ice Proof Arctic

### Goal

The project aims to increase the number of companies participating in the innovation activities in Interreg Nord's program area by developing and validating solutions that reduce the damage caused by ice and snow loads.

### Expected result

The project results in several concrete, commercializable innovations, with the help of which the risks associated with snow and ice can be managed in a reliable and cost-effective way, for example in power lines, renewable electricity generation (wind power) and public buildings. The same products or solutions can also be used in other business areas such as aviation, shipping and road traffic.

### Project description

The efficiency of innovation activities is enhanced (i) by researching and developing new ideas, (ii) washing out the best ideas and (iii) initially assessing their business potential. Damage from snow and ice loads means damage and downtime in the critical infrastructure, such as electricity distribution, energy production, data traffic and buildings due to the accumulation of snow and ice and the additional costs that they entail. The starting point for the validation is to collect several technically and commercially interesting solutions for the elimination of ice loads on the electricity lines, optimization of the efficiency and safety of electricity production and monitoring of the snow loads on the roofs of the buildings. In all applications, several different solutions are tested.

Testing takes place in real operating environments, in parallel with existing infrastructure in operational operation. The purpose of the validation is to find solutions that can best support the implementation of the main purpose of the project. This is done through an assessment of the solutions' ability to (i) manage the risks associated with the accumulation of snow and ice, (ii) produce cost savings (iii) enable the development of commercially profitable products or services.

**Beneficiaries:** Lapin amk, LTU, UiT

**Project duration:** 2019-2022

**Project budget:** 1 233 327 EUR

**Approved EU-fund:** 663 972 EUR

**Approved IR-fund:** 94 442

**Public co-financing:** 453 813 EUR

**Private co-financing:** 21 100 EUR



## Compact

### Goal

A general goal is to build up expertise in electronics production.

### Expected result

- A new 3D production process for "Ultra High Density" electronics, which has competitive manufacturing costs.
- A new production process improves the reliability of the products.
- The environmental effects of electronics production are reduced by less use of chemicals and thus easier waste management.
- Scientific results, which increase regional expertise and international attractiveness.
- Serves as a basis for future development of technologies, markets and the commercialization of the EU's major research and innovation projects.

### Project description

The project focuses on the development of advanced electronic packaging methodology. Reduction and scaling technology is a priority area for all manufacturers in the electronics industry. Demand for the development of High-Density Interconnection (HDI) is growing due to increased use of smart electronics. The consumer market thus requires portable and high-performance solutions that leave little impression on the environment. The manufacturing method the project focuses on is a cost-effective and flexible method suitable for bulk production. Currently, less than 2% of manufacturers have the opportunity to meet the rising demands, and none of the industries located in the northern parts of Sweden and Finland meet these requirements. Given the promising market size for HDI interconnections, it is important to develop the small and medium-sized companies located in the program area in an economical way.

The project consists of three steps:

1. Design and development of interconnections using SBU (Sequential Build Up) technology based on Covalent Bonding Metallization (CBM).
2. Perform reliability analysis of developed structures. This is necessary to make the process suitable for commercial production.
3. Standardization of the process for commercial use will be done by researchers from both parties.

**Beneficiaries:** Luleå tekniska universitet,

Oulun yliopisto

**Project duration:** 2019-2022

**Project budget:** 953 180 EUR

**Approved EU-fund:** 619 567 EUR

**Approved IR-fund:** -

**Public co-financing:** 333 613 EUR



## InTeMP

### Goal

The main objective of the project is to strengthen the unique Nordic research community, which focuses on academic research and industrial applications. The main focus of the research community is rapid heat treatments and the primary objective of the project is to switch from rapid heating to ultra-rapid heating.

### Expected result

The project promotes the transition of heating technology from conventional furnace heating to induction heating, but especially to high frequency induction heating in various research and industrial sectors. It provides knowledge about shorter and more efficient production lines and gives the industry an opportunity to assess the technology's compatibility with its own processes.

### Project description

The project focuses on studying how high frequency induction heating affects the material and its properties. This is a continuation of the work that was carried out in the project Nordic Community for Fast Steel Heat Treatment, which was funded by Interreg Nord. At the same time as this project was in progress, Lund University and a company developed a prototype of a modular 0.015–1.1 MHz (15 kW) inverter for induction heating. This project includes activities in both development and research, both with innovative approaches with new ideas. The project focuses on implementing the newly developed induction heater in both industrial applications and academic research by developing new technical solutions for steel in manufacturing, finishing and recycling. The new high-frequency technology enables the heating to be focused on a controllable surface layer and provides exceptionally short cycle times for heating at both curing and tempering, but also for more specialized applications such as material separation in the recycling of metallic composites. The project strengthens infrastructure and increases the attractiveness of the community that NorFaST-HT established, while intensifying cross-border cooperation between Finland and Sweden, by also providing a forum for discussion and thought media for regional companies.

**Beneficiaries:** Oulun yliopisto, Swerim AB,

Lunds universitet

**Project duration:** 2019-2022

**Project budget:** 1 681 930 EUR

**Approved EU-fund:** 1 093 254 EUR

**Approved IR-fund:** -

**Public co-financing:** 454 083 EUR

**Private co-financing:** 134 593 EUR



## TallWood

### Goal

The project's main goal and purpose is to support and increase the use of wood as a building material by developing innovative methods when using different materials (hybrid solutions), especially in tall buildings.

### Expected result

The project will develop, innovate and improve planning tools for the planning of tall wood / hybrid houses. The project also seeks to find and remove key barriers to the additional use of wood in construction, and to find and develop optimal cost-effective hybrid solutions in which steel and concrete can be used in support structures and wood in volume elements. The project is expected to involve an increased number of subcontractors of wood components, who can deliver their products to house factories and independent contractors, thereby increasing commercial opportunities for SMEs in the program area.

### Project description

The TallWood project aims to develop new solutions around hybrid structures for the benefit of the construction of tall wooden houses. The project involves three countries and about ten companies. Especially Finland and Sweden have great potential for using wood, since annual growth is 10-15% greater than the annual harvesting of forests. When this extra potential will be used, it will benefit from reducing the environmental impact of carbon dioxide and thus prevent global warming. The project aims to develop innovative components and computational tools, processes and systems based on hybrid designs to increase the competitiveness of wood construction.

**Beneficiaries:** Oulun amk, Lapin amk, Lappia, LTU, RISE AB, Nordlandsforskning

**Project duration:** 2019-2022

**Project budget:** 1 299 157 EUR

**Approved EU-fund:** 654 239 EUR

**Approved IR-fund:** 146 341 EUR

**Public co-financing:** 478 577 EUR

**Private co-financing:** 20 000 EUR



## SolBat

### Goal

The aim of the project is to manufacture a lithium ion battery which is based on the use of solid electrolyte (organic / inorganic) by using as raw material, among other things, industrial by-products / flows.

### Expected result

The expected results of the SolBat project are as follows:

- new knowledge about the research theme and increased collaboration between the project's various implementing parties and interest groups
- Increased knowledge about the manufacture of batteries with solid electrolyte and battery components (electrolytes, electrodes), both from researchers and important interest groups participating in the project
- new knowledge on the production of solid electrolytes and new knowledge on the cell's manufacturing technology
- creating and strengthening networks between different players in battery research, which is a key business within the Interreg Nord program area and whose importance will increase in the coming years.

### Project description

The project uses biomass-based waste streams for the production of solid organic electrolyte based on ionic liquids and for the production of anode carbon. As an inorganic electrolyte, a geopolymer having the desired ionic conductivity is produced from inorganic by-products such as ash. The manufacture of a solid electrolyte battery also differs from the current lithium-ion battery technology, and the project has therefore integrated intelligent electronics and printing technology as part of the future manufacture of lithium-ion batteries. The aim of the project is to produce small battery cells with a capacity of 40-360 mAh, and to determine the functionality of solid electrolyte made from waste masses in the battery cell. The main goal of the project is to strengthen the already existing battery value chain (from lithium-ion chemicals to batteries) in the program area by creating new competence and strengthening the value chain for lithium-ion batteries for future batteries in collaboration with stakeholders. The results are published in scientific journals and the results of the project are presented at international conferences, project seminars and workshops.

**Beneficiaries:** Oulun yliopisto, LTU

**Project duration:** 2020-2022

**Project budget:** 969 925 EUR

**Approved EU-fund:** 630 451 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 339 474 EUR



## RoboSol

### Goal

The main goal of the project is to increase the international competitiveness and capacity of the Interreg-Nord area companies, and to make the labor market more equal by means of technological solutions in accordance with sustainable development, such as by producing and conveying knowledge through intelligent automation and by demonstrating and simulating the benefits one can achieve with their help through demonstrations taking place at companies.

### Expected result

- Companies' international competitiveness is improving
- The companies' skills for utilizing robotics and automation technology are improving
- In the project, 2 Horizon applications are created as partners or coordinators and catalyze 4 applications "Horizon open call" for companies.
- Production processes become more efficient through automation-assisted solutions, thereby improving energy consumption and resource efficiency.
- Production capacity increases, productivity and the quality of operations improve with the use of automation
- New business opportunities arise for companies, and collaboration between micro, SME and the basic industry increases as new technology is introduced
- Exports and internationalization of small businesses are increasing.
- Cooperation between research and development organizations and companies is increasing
- Research and development organizations, as well as companies' skills to participate in the Horizon2020 program and realize its goals are improved.

### Project description

The project will provide necessary knowledge, demonstrations and knowledge of concrete solutions to improve the competitiveness and productivity of companies. This is to be achieved with the help of the new generation of robotics, intelligent automation and simulation. During the implementation, an innovative international network in research and development is developed, as well as a concept for technology transfer for the latest technology in robotics, automation and simulation. This should serve both education and research and development in the area. Horizon 2020 projects are also being implemented within the framework of RoboSol.

**Beneficiaries:** Centria, LTU, Trä- och teknikcollege i Skellefteå AB

**Project duration:** 2019-2022

**Project budget:** 863 060 EUR

**Approved EU-fund:** 560 988 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 285 283 EUR

**Private co-financing:** 16 789 EUR



## NUVE

### Goal

The main purpose of the project is to create a scientifically validated international platform for new vehicle and work machine technology for use in the Nordic research and development work.

### Expected result

The project results in the establishment of a new Nordic digital collaboration platform for commercial vehicles. This increase and deepens the cross-border collaboration in the automotive and work machinery industry and yet combines the measurement possibilities in a physical laboratory with modeling in a virtual environment including the latest research on autonomous vehicles.

On the platform, the region's research institutes, and operating companies can increase mutual research and development activities in terms of more energy efficient and autonomous commercial vehicles. As a result of the project, it is possible to develop vehicles and work machines that have less impact on the environment. The project leads the research and education organizations to deepen their competence and yet in the northern areas supplement international cutting-edge research and development of vehicle and work machine technology.

### Project description

The project develops a common virtual platform for universities and research institutes where several technologies as well as virtual modeling of the real environment and existing laboratory spaces have been linked to the commercial vehicles research and development activities. The project includes work packages to create a VR environment of the actual natural environment with the help of collected data. Furthermore, to create a digital twin regarding the commercial vehicle's motion technology and create an interface for the users between the VR system and the laboratory Mobilab. The project builds an interface between the laboratory measurements and the VR system. The work platform's approach (methodology) is validated in a pilot project on maritime transport logistics in the port of Narvik in northern Norway. Research findings and networks are published at EU level and consequently a joint research project application is submitted to the EU Framework Program on Research and Innovation.

**Beneficiaries:** Oulun amk, Oulun yliopisto,

LTU, Norut Narvi

**Project duration:** 2019-2022

**Project budget:** 1 634 055 EUR

**Approved EU-fund:** 848 112 EUR

**Approved IR-fund:** 164 634 EUR

**Public co-financing:** 621 309 EUR



## **PRIORITY AREA 2- ENTREPRENEURSHIP**

This priority area in the program aims towards strengthening of a long-term and competitive business market with focus on sustainable growth. A number of small and medium enterprises (SMEs) in the region have limited resources and therefore have inability to create a sustainable competitive advantage. By prioritizing this priority area and putting more focus on the resources, there are possibilities to increase the chances to develop competitive and international companies.

### **Specific goals and granted projects**

**1) Increased proportion of SMEs with cross-border business models.**

*Nord:* NBS, Ny mat från Arctic, BMI, Utveckling av Nordkalottens gränstjänsts näringslivsvägledning, ICNB, CYNIC, Nordic NaBS, Digi-AEC, AIP, ArctiqDC, DigiProcess, Two contries, Resurspool, Berry machine, NACCOP

**2) Increased export among SMEs in the region.**

*Nord:* Arctic Image, VAE, CINEMA, VAE II, Export Cooperation, My story, Muittut



## Nordic Business Support

### Goal

The aim of the project was to create collaborations, form clusters, to enable larger and better business between the region's small and medium-sized companies.

### Result

The project has used business support models and working methods developed in previous projects to support existing and new companies in the northern parts of Finland, Sweden and Norway. One of the most important long-term effects was to promote trade and cooperation between SMEs in the region and also in cross-border activities.

The NBS project has increased the competitiveness of small and medium-sized companies, has strengthened international cooperation between small and medium-sized companies, has increased the understanding of regional similarities and differences in trade and sales and it became new opportunities for clusters or group activities for participating companies.

TK-Eval has evaluated the project. The result of the evaluation was mostly positive, eg that a large part of the companies has received new customers or cooperation contacts via the project.

72 companies participated in cross-border marketing efforts for internationally oriented companies. 761 people participated in business development initiatives and 1,533 people participated in competence development initiatives for SME's internationalization.

**Beneficiaries:** Oulun kaupunki,  
Norrbottens Handelskammare,

Bedriftskompetanse AS

**Project duration:** 2015-2018

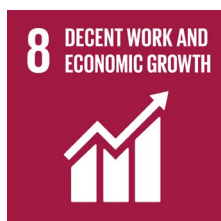
**Project Budget:** 1 885 657 EUR

**Approved EU-fund:** 800 800 EUR

**Approved IR-fund:** 310 244 EUR

**Public co-financing:** 651 362 EUR

**Private co-financing:** 123 251 EUR



## Arctic Image

### Goal

The aim of the project was to create an intensified and more strategic cooperation between the AV industry and other industries, especially with the tourism industry and regional marketing.

### Result

One of the project's sub-goals was an increased production volume within the project region. During the project period, 24 feature films, 8 documentaries, 13 short films and 18 television productions were produced in the project region. 24 of these were international productions. Arctic Image helped the production to find suitable film recording locations in the project area through location scouting, which was carried out for 60 productions, of which 17 were international, during the project (22 in Norway and 38 in Finland). 20 of these were then produced in Norway and 18 in Finland.

The project also wanted to increase the visibility of the region, but it is difficult to estimate how large the total visibility is from the productions that were filmed in the regions during the project, but for example the series Chongqing cuisines alone had 5.2 million viewers in China. The project's rough estimate is that a total of 11.3 million viewers (in home markets) have seen the productions that have been filmed in the region in which the Arctic image project worked. Project results will continue to be realized even after the project period, when productions are still on the market.

During the project, a total of 42 companies participated in project activities and received support from the project by allowing them, for example, to participate in international marketing activities. In addition, productions that have been filmed in the region have used services from approximately 178 companies, which then indirectly received benefits from the project activities. Several cross-border co-productions have been made during the project, which would not have been possible to co-produce without the support of the Interreg Nord program. Networks created during the project have helped producers find partners from other regions. Feature films Oskars America, produced between Norway and Sweden, the National Team (co-produced between Finland-Norway-Sweden), Starboy (co-produced between Finland and Sweden) and Heavy Trip (co-produced between Finland-Norway) are some examples of cross-border cooperation projects as partners from Arctic image has been part of or facilitated.

**Beneficiaries:** Oulun kaupunki,

Naturpolis Oy, Keskipohjanmaan

koulutusyhtymä, Kainuu ammattiopisto,

FilmCamp AS

**Project Duration:** 2015-2017

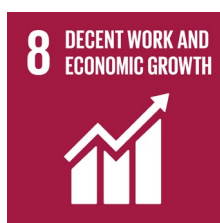
**Project Budget:** 1 749 417 EUR

**Approved EU-fund:** 654 874 EUR

**Approved IR-fund:** 279 367 EUR

**Public co-financing:** 724 263 EUR

**Private co-financing:** 90 912 EUR



## Visit Arctic Europe

### Goal

The aim of the project was to increase networking and cross-border cooperation by, for example, improve accessibility, exercise joint tourism marketing and develop new products and joint product packages that meet the requirements of international tourists.

### Result

During the VAE project, 13 different network events have been held with about 100 participants at each occasion. The participants worked in workshops with various challenges, eg. cross-border themes and packages, accessibility, market needs, low season opportunities and challenges. According to the overall feedback, the companies have found networking between companies from different countries and areas as very important and this has also been the focus of VAE and the basis for the cooperation.

To learn and gain input from the markets and gain deeper insight into the market, it was decided to set up a reference group consisting of tour operators. Selected tour operators have been involved in networking events and have had a significant role in spreading knowledge about the markets that VAE focused on. The best way to show the attractiveness of the VAE area and its potential as a destination is to experience the area itself. The VAE project therefore organized 40 cross-border familiarization trips (Fam trips), with a total of 242 participants from nearly 100 different tour operators. One result of the project's activities is that tour operators have created different cross-border tourist packages for different seasons.

The project has also gathered knowledge from research on future travel trends and digital trends. Lapland University completed the report "Disoriented travelers or disoriented destinations? - An analysis of future travel trend studies for Visit Arctic Europe project" in August 2016 and LTU completed the report "Digital tourism - An analysis of digital trends in tourism and customer digital mobile behavior for the Visit Arctic Europe project" in May 2017. The project has also identified obstacles to cross-border cooperation. In the report "Cross-border cooperation - An analysis of challenges and obstacles for cross-border cooperation in the Visit Arctic Europe area" which was completed by UiT, LTU and the University of Lapland in April 2017.

[www.facebook.com/visitarcticeurope](https://www.facebook.com/visitarcticeurope)  
<https://visitarcticeurope.com/>  
<https://www.youtube.com/watch?v=iWYwLkD0mq8>

**Beneficiaries:** Finnish Lapland

Tourist Board ry, Swedish Lapland

Visitors Board, NordNorsk Reiseliv AS

**Project Duration:** 2015-2017

**Project Budget:** 6 491 802 EUR

**Approved EU-fund:** 2 780 161 EUR

**Approved IR-fund:** 487 805 EUR

**Public co-financing:** 2 580 406 EUR

**Private co-financing:** 643 430 EUR



## New Food from the Arctic

### Goal

The project had three clear goals:

1. Increased processing of nature-based raw materials from the area.
2. Create a platform for cross-border collaboration
3. Development of new markets

### Result

The project wanted to promote the innovation climate in small-scale food production as well as increase knowledge and collaboration on innovation processes in companies and the companies' internationalization. A total of 180 people have participated in the project's activities.

The project evaluation shows that the companies have specifically developed new products, they think more in terms of processing and processing which is innovative. They work together, even across borders.

- Increased cross-border collaboration, exchanges of experience and commercial exchange of raw materials and products.
- At least 20 new innovative products.
- Increased knowledge of demand in new markets, brand development and product development

Several companies indicate in the evaluation that they have expanded their markets geographically and to new target groups.

- New platforms for collaboration within food processing, nationally and across borders in the program area, both regional and cross-border initiatives are underway to strengthen collaboration. As an example, a web platform is planned, and several are planning to attend the Grüne Woche in Berlin 2019.

New platforms have been developed, formal as well as informal. One example is the innovation partnership on refining within reindeer herding which has been formed as a side effect, but also interest formally and informally for cross-border cooperation where personal meetings and contacts between individual companies and groups of companies have been developed.

- An innovation partnership in clean processing (Sweden) has been formed as a direct consequence of the project, funding has been applied for from EIP Agri.
- Increased knowledge of and models for processing new markets, eg the idea of a more local fair has resulted in an approved application for funds to regionally implement a mini-fair and thereby create a common platform for the local companies.

<https://hushallningssallskapet.se/?projekten=ny-mat-i-arctic>

<https://www.bothnianarc.net/-se/ny-mat-fran-arctic/>

**Beneficiaries:** Hushållningssällskapet

i Norrbotten-Västerbotten, ProAgria,  
Oulu ry/Oulun Maa- ja kotitalousnaiset,  
Bioforsk

**Project Duration:** 2015-2018

**Project Budget:** 604 525 EUR

**Approved EU-fund:** 221 721 EUR

**Approved IR-fund:** 101 220 EUR

**Public co-financing:** 220 608 EUR

**Private co-financing:** 60 976 EUR



## Business Model Innovation

### Goal

Main goal of the project is to increase the competitiveness of small and medium enterprises (SMEs) catering to industrial customers in the region.

### Result

The project has developed several models and tools for business model development, which have proven their value through practical work together with SMEs and process industries. Here are the most prominent: Business Model Innovation Tool and a model for workshops. Furthermore, a roadmap for the development needs in IT and automation for the process industry has also been developed. This is already well used in the process industry and those who develop national and international RDI policies as well as those who fund research in the area within Sweden, Finland, Norway and the rest of the EU. The above will be further developed and used even after the project.

119 companies were involved in the project's activities.

One conclusion from the project is that the focus and needs in the close future need to be about digital ecosystems.

<https://process-sme.eu/process-sme/processsme-project/>

**Beneficiaries:** Lapin amk, Nivalan Teollisuuskylä, NIHAK, Oulun yliopisto, IUC, LTU

**Project Duration:** 2016-2019

**Project Budget:** 1 706 574 EUR

**Approved EU-fund:** 873 191 EUR

**Approved IR-fund:** 181 626 EUR

**Public co-financing:** 544 607 EUR

**Private co-financing:** 107 150 EUR



## The Northern Calotte's border services business guidance

### Goal

The long-term goals of the project were to improve the total number of small and medium sized enterprises (SMEs) operating across the border, to promote the internalization of SMEs, to provide opportunities for reaching to new markets.

### Result

During the project's operating time, the number of business contacts has increased at the North Calotte's Border Service. The project's information initiatives have had a direct impact on the number of inquiries in both Finland and Norway. The border service's customer base has become broader.

160 companies and 347 people participated in the project's activities.

Corporate issues clearly show that public advice and information are on a general level. It is especially small and medium-sized companies that need the services of an actor who has time to delve into industry-specific issues in the neighboring country and who also has a good overview of the complexity of the issues.

An authority can answer questions concerning its own area of responsibility in its own country, but in order to provide a comprehensive picture and enough answers to the companies in cross-border cases, information from several different authorities in both countries must be obtained. This task can be carried out by the North Calotte's Border Service on behalf of the entrepreneur. The project has developed a model for the business guidance that the North Calotte's Border Service could work with in the future. Entrepreneurs often know the rules and practices of the home country, and by getting a structured picture of what the corresponding practices are in the neighboring country, it will be easier to understand and recognize the differences between the countries. The work done by the Border Service's employees will contribute to the building and strengthening of cross-border competence when the results of completed investigations are saved on the Border Service's website. Thus, in the future, companies may also be able to take part of the overall knowledge.

**Beneficiaries:** Lapin liitto, Storjord

kommune

**Project Duration:** 2016-2019

**Project Budget:** 1 030 852 EUR

**Approved EU-fund:** 325 000 EUR

**Approved IR-fund:** 291 677 EUR

**Public co-financing:** 414 175 EUR



<https://granstjanst.se/naringslivsprojektet/>

## ICNB

### Goal

The project's aim was to enhance competence in construction industry in the northern region by introducing and studying the usage of Building Information Modelling (BIM).

### Result

First, and foremost notion that was confirmed during the ICNB-project activities, was the fact that there was (and still is) a definite demand in the construction marketplace to help and support companies (especially SMEs) and public stakeholders to increase use of digitalization. The key component of digitalization is Building Information Modelling (BIM). Most of the companies related to ICNB consider increasing activities concerning the use of BIM (and other digital working methods) to enable better communication with public authorities and increase cooperation with larger enterprises in big international projects.

**Beneficiaries:** Oulun amk, Oulun kaupunki, Umeå universitet, LTU, UiT  
**Project Duration:** 2017-2019  
**Project Budget:** 1 293 075 EUR  
**Approved EU-fund:** 598 461 EUR  
**Approved IR-fund:** 197 351 EUR  
**Public co-financing:** 497 263 EUR

Experiences and feedback from the industry and other stakeholders show that the timing of ICNB-project has been perfect: building and construction field as very traditional industry is now in the verge of digitalization and all help, advice and support are in high demand in order to get this big step to succeed. As a true evidence of this fact is the message from Northern Finland Construction Cluster which has requested OUAS to organize an educational course for BIM-coordinators (funding has already been applied from The Finnish Ministry of the Environment). Second finding is the fact that many SMEs in Nord-region find somewhat challenging to start cross-border business. Nord-projects make good efforts to help lower this obstacle, but still more work is required.

ICNB-project initiated the total of 33 student projects (11 in Norway, 10 in Finland, 12 in Sweden). This contributes to long-term influence in construction sector by these young professionals in their current/future jobs. Finally, the outcome of this ICNB project has encouraged the partners to work on and create some new ideas of how to utilize digitalization and to enhanced sustainability of built environment in the region by collaboration with over 10 cities who are willing to participate. In this regard, a proposal has been submitted under ESBE proposal application to the Interreg Nord call.

<https://www.icnb.eu/>



## CYNIC

### Goal

The project will promote the development of the digital service industry in the region by providing a cross-border development environment for testing and learning, resulting in business models tailored for digitization and digital services.

### Expected result

In the short term (Year 1), identify the specific situations and challenges related to business security and risks to SMEs that hinder new business models and new digital services. In the medium term (year 2), compile and offer demonstrations, testing and training to the target group, regarding the opportunities and risks of different business models. In the long term (3 years), develop and formalize custom business models with included strategic information security.

A mobile application to visualize risk reviews, standards and policies for SMEs activities will also be presented within the project

### Project description

Uncertainty and risk focus is an obstacle to SMEs to dare to invest in new business models tailored to digitalization and digital services. Better insights and risk awareness of the organization's Cyber behavior can be gained by testing and evaluating new business models in a safe testing environment. The project will help SMF access a physical and virtual experimental and learning environment at LTU and Centria AMK's IT and Information Security lab. These will serve as a test bed for SMF missing today.

Traditional service development follows a process where service problems as well as information risks are usually discovered when the solution is launched at the customer. By having access to a neutral test environment, in this case a cross-border physical and virtual lab environment, companies can learn from each other and learn about common challenges and problems. The initially involved companies consist of information security consultants, business services companies, manufacturing companies and digital service providers, which is a mix of needs owners and suppliers. The project also includes spreading project results and lessons to more companies and organizations.

<https://www.ltu.se/research/subjects/information-systems/Pagaende-projekt/CYNIC-Foretagsmodeller-for-digital-innovation-och-informationssakerhet-1.180027>

**Beneficiaries:** LTU, Centria

**Project Duration:** 2018-2021

**Project Budget:** 632 503 EUR

**Approved EU-fund:** 411 127 EUR

**Approved IR-fund:** 0 EUR

**Public co-financing:** 214 376 EUR

**Private co-financing:** 7 000 EUR





## CINEMA

### Goal

The project will strengthen the region's business community and increase cross-border trade, exports and internationalization at the region's SMEs, using the new business opportunities that a circular economy offers.

### Expected result

The project will help the manufacturing processes, services and products developed after the project to be applied in corporate production so that:

- The number of innovative companies working with circular economics is increasing
- Exports and internationalization of the region's SMEs are increasing
- The company's production is streamlined and competitiveness is improved
- The supply of energy and raw materials in production is decreasing

### Project description

In the heavy industry, there is a desire to transition from the "produce, use and discard" concept to a more circular economy where materials and components are re-manufactured using additive methods. A paradigm shift will therefore take place and, if that is possible, specialized SMEs are required to handle the re-manufacturing of the basic industry using new surface treatment technologies. Since it is about new methods, development work, tests, demonstrations and simulation are required to prove that the methods favor both the SME and the basic industry. In many cases, completely new business models need to be developed in order for the transition to circular economy to be possible. SMEs who choose to switch to circular economics must specialize in a certain surface treatment method due to major investments in development and machinery. Through the project, participating companies get improved knowledge of opportunities and methods for repairing and re-manufacturing components in a cost-effective manner.

<https://tki.centria.fi/hanke/cinema/1656>

**Beneficiaries:** Centria, TTY, LTU

**Project Duration:** 2018-2021

**Project Budget:** 936 054 EUR

**Approved EU-fund:** 608 435 EUR

**Approved IR-fund:** 0 EUR

**Public co-financing:** 249 819 EUR

**Private co-financing:** 77 800 EUR



## VAE II

### Goal

The aim of VAE II is to increase overnight stays by 10% in certain market areas, focusing on developing year-round tourism in the region. The development of the quiet periods in the travel destinations and companies contributes to increased sales and profitability, which in turn helps to create new year-round workplaces and new investments.

### Expected result

- 10% increase in overnight stays from selected market areas, development of the year round tourism for participating companies and areas.
- The VAE area is known in selected market areas as a high-class tourist destination all year long.
- Availability and mobility all year round in the VAE area have been developed to serve the tourists who come from outside and those who travel within the region.
- Sustainable tourism development is recognized as a competitive advantage, and companies develop their activities according to the principles of sustainable development.

### Project description

The main objective of the second phase of Visit Arctic Europe is to increase tourism companies' profitability, create new year-round jobs and increase opportunities to start businesses and invest in the Arctic. The project's goal is to strengthen cross-border networking and commercial cooperation so that the Visit Arctic Europe area can be further developed, and the region becomes a high-quality and sustainable tourist destination all year round.

The project's activities are concentrated in three main areas:

- Marketing (image and tactical)
- development of accessibility (internal and external)
- development of the region and companies' competitiveness (digitization, sustainable development, market awareness and product development)

All activities in the project focus on cross-border networking and sustainable development.

<https://visitarcticeurope.com/>

**Beneficiaries:** Finnish Lapland Tourist

Board, Swedish Lapland Visitors Board,  
NordNorsk Reiseliv

**Project Duration:** 2018-2021

**Project Budget:** 6 413 474 EUR

**Approved EU-fund:** 2 675 542 EUR

**Approved IR-fund:** 609 755 EUR

**Public co-financing:** 2 163 919 EUR

**Private co-financing:** 964 258 EUR



## Nordic NaBS

### Goal

The aim of the project is to develop joint Nordic business and service models within Green Care / Green Arena / NUR / Inn på tunet which is particularly suitable for northern natural and cultural conditions. The business and service models are created in collaboration between northern companies in the natural resource and tourism industry, as well as social and healthcare and pedagogical industry actors. The cross-border development work benefits from the expertise and resources in the various industries.

### Expected result

The project has led to the establishment of joint Nordic business and service models within Green Care / Green Arena / NUR / Inn på tunet that are particularly suited to northern nature and culture conditions. The northern companies in the natural resource, cultural and tourism industries and actors in the social, health and pedagogy industries cooperate among others to execute business and service models.

### Project description

For the people in the northern areas, nature is important in terms of livelihood but important also for recovery and as a source of power. Research shows that natural environments give people peace, as well as better mood, concentration ability and stress recovery. The services offered by the Finnish Green Care, the Swedish Green Arena and the NUR (Natural Supported Rehabilitation) and the Norges Inn på tunet have a common starting point that is based on nature's beneficial effects. To solve the challenges in terms of the accessibility, effect and cost-effectiveness of social and health care and pedagogy services, a new type of social innovation and forms of cooperation are needed. The varying profitability as a result of seasonal activities among rural enterprises can be leveled out by broadening the range of services and target groups. Special efforts are required to develop the cooperation between small and medium-sized companies and public services, and this is desirable also according to the companies in Green Care / Green Arena / NUR / Inn på tunet which produce nature-based services in the area. In order to start up the collaboration, external support is required and that you find key people in different sectors and bring them together.

<https://www.lapinamk.fi/fi/Yrityksille-ja-yhteisoille/Lapin-AMKin-hankkeet?RepoProject=221634>

**Beneficiaries:** Lapin amk, LTU, Oulun

amk, Vasa universitet

**Project Duration:** 2019-2021

**Project Budget:** 1 266 605 EUR

**Approved EU-fund:** 827 487 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 439 118 EUR

**Private co-financing:** - EUR



## Digitalisation as a driving force in the AEC-industry

### Goal

The goal of the project is to:

- Increase the knowledge and understanding of how digitalization contributes to streamlining and cost savings.
- Increase the use of digital models and processes with the aim of reducing costs in planning, design, operation and maintenance.
- Contribute to cross-border cluster collaboration and development.
- Through strategic business support, increasing cross-border cooperation between SMEs.
- Increase knowledge on how requirements-making in public procurement becomes a driving force for digitization in the construction and civil engineering industry.

**Beneficiaries:** Oulun kaupunki,

Norrbottens Handelskammare,

Nordnorske entreprenörers

serviceorganisasjon

**Project Duration:** 2019-2021

**Project Budget:** 1 583 816 EUR

**Approved EU-fund:** 726 132 EUR

**Approved IR-fund:** 188 435 EUR

**Public co-financing:** 495 764 EUR

**Private co-financing:** 173 485 EUR

### Expected result

The common development of digitization throughout the value chain creates the right conditions for the construction and civil engineering industry to continue to be the leader in digital development, while at the same time increasing global competitiveness. The establishment of cross-border collaboration gives the conditions for the knowledge that is built in the project to continue to develop even after the end of the project period.

### Project description

The construction and civil engineering industry in the program area cannot, in the same way as other industries with clarity, show that digitization has had an impact and made the industry more efficient and cost-saving. Parts of the industry are world leaders in digital development today, but problems exist in utilizing this knowledge throughout the value chain and transferring the acquired knowledge sufficiently quickly and efficiently. The smaller companies do not have the resources themselves to drive this development, while there is a developed cooperation in the industry. Many of the individual companies are on key competencies, which means that the entire industry is part of a well-developed network. To develop this knowledge structurally and with the same vision in collaboration regionally and across borders is the objective of this project. The project will support the public purchasers so that together they can develop their methods and models for procurement and how they should put the requirements in the tender documents, so the procurement process becomes a driving force of the digital development in the entire industry

<https://www.ouka.fi/documents//Digi++AEC>



## Arctic Investment Platform

### Goal

The main objectives of the project were to analyse the demand and feasibility of a structured funding cooperation between the NSPA regions, propose a framework for such a support system, provide a tangible roadmap for the set-up of such a support system and ensure credible resources to engage in a dialogue with the institutions relevant to the set-up of such a system.

### Result

The project followed up on experienced challenges of the participating regions in the field of SME financing as well as recommendations from the European Commission and the OECD to work closer together in this field. The feasibility study was dearly needed, in order to discover, if and how the regions could develop the regional challenges into common cross-regional European opportunities. The cooperation continues among a minimum of 9 regions across Finland, Sweden and Norway, into the implementation phase, preparing the launch of the Arctic Investment Platform in 2022.

The added value of the cross-border cooperation has been multidimensional. Johannes Lith says “first of all, the cooperation has enabled everyone to learn from each other new ways to develop their own regions. Even in the times of corona and lack of physical meetings, we have been able to agree on points that can make us stronger together”. The most tangible added value has of course been the concrete road map and structure for future cooperation, with the aim of a continued guaranteed added value, in the form of more growing SMEs, for the regions involved.

<https://arcticsmartness.eu/arctic-investment-platform/>

**Beneficiaries:** Lapin liitto, Oulun

kaupunki, Region Norrbotten, Region Västerbotten, Norrinova

**Project Duration:** 2019-2020

**Project Budget:** 746 251 EUR

**Approved EU-fund:** 305 420 EUR

**Approved IR-fund:** 138 187 EUR

**Public co-financing:** 278 254 EUR

**Private co-financing:** 24 390 EUR



## ArcticDC

### Goal

The aim of the project is to strengthen the regional data center industry's products, services, solutions and offerings to customers (parties) outside the region, nationally or internationally. This should be done by demonstrating and demonstrating and proving that; Investing and operating data centers in Arctic regions have low and among the lowest investment and operating costs in the world in terms of cooling and power distribution.

### Expected result

The benefit of the project is the development, testing and demonstration of unique technology that can be implemented effectively in the Arctic region. The demonstrations and evaluation results can be used long after the end of the project in marketing of sites and services / products. Regional product companies, both large and SMEs, will be able to deliver solutions and products to their customers based on results from the project. The result that is sought in the long term is that in the Arctic region about 40 new large and small data centers will be built and run within a five-year period, which must be met partly or completely and preferably exceeded.

### Project description

The purpose of the project is to develop the regional data center industry by small and medium-sized companies with products, services or the region's establishment offers together in a cross-border project. This is done by showing and proving that building and running data centers in the Northern Nordic have very low investment (CAPEX) and operating costs (OPEX) with respect to cooling and electric power. Comparisons should be made with the rest of the world. The basic techniques in air cooling, electricity stability, heat recovery and IT operation at a distance need further development and evaluation with measurements and studies, but above all, testing and demonstration is needed in real test facilities, "Seeing is believing". By developing and displaying together in the Northern Nordic countries, the project helps companies in the region in the long term to establish, operate or deliver to energy-efficient data centers. The companies that are part of the project are also being developed and their business models, solutions and products are being improved to become more successful in a global market.

**Beneficiaries:** RISE AB, Hydro66,

Xarepo, Älvsbyns kommun, LTU, Oulun

Datacenter, Aurora DC Finland, Oulun

yliopisto, SFTec, Hushållningssällskapet

**Project Duration:** 2019-2021

**Project Budget:** 1 429 668 EUR

**Approved EU-fund:** 929 306 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 429 501 EUR

**Private co-financing:** 70 861 EUR



## DigiProcess

### Goal

The overall goal of the project is to support the digitization and development of digital services and ecosystems for SMEs that produce services to the process industry.

### Expected result

- identify development plans, needs and opportunities in the digitalisation industry
- Identify the potential of digitalization and consult with SMEs serving the industry: state-of-the-art; maturity; plans
- Identify digitization cases with potential with the help of intercompany collaboration incl. horizontal and cross-border opportunities
- Initiate collaboration and new ecosystem business models in digitalization ecosystems around specific needs and opportunities
- To pilot and view digitization cases with SMEs, industry and possibly large suppliers
- To help business groups seek funding in digitization cases where development is needed
- To build European collaboration networks that support business development, find potential R&D partners and projects (do not prepare)
- To evaluate and analyze the work throughout the management of the project
- To build an ecosystem digitization method and pilot tool kit for further use
- To build digitalization education and training materials in digital technology that will be used by companies

### Project description

Digitization can increase the sustainability and competitiveness of the process industry. Small and medium-sized companies in this area often lack the overall business readiness to transform technology (such as sensors and analysis) into commercially attractive offers. An important challenge to exploit the opportunities in digitalization is to understand value-adding applications of digital technology and development and implementation of new ecosystem business models to achieve win-win-win relationships and offer advanced service solutions. The SMEs will benefit from the projects practically through ecosystem business modeling, technical pilot projects, preparatory proposals for research and innovation funding and building ecosystem collaboration with major suppliers.

**Beneficiaries:** Lapin amk,

Oulun yliopisto, NIHAK ry, Kemin

Digipolis, IUC Norrbotten, Luleå

tekniska universitet

**Project Duration:** 2019-2022

**Project Budget:** 1 825 621 EUR

**Approved EU-fund:** 1 186 653 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 609 511 EUR

**Private co-financing:** 29 457 EUR



## Export Cooperation

### Goal

The purpose is to develop support processes for companies' internationalization as well as companies' export operations. The goal is also to develop cross-border ecosystems consisting of companies and increase cooperation between them in the area.

### Expected result

- Increased cross-border trade between SMEs, clusters, increased business activities for potential companies in new business areas, including in global market areas such as the US, Central Europe, China and Japan.
- Increased knowledge of the use of export, financing, advisory and support services by public actors. Increased cooperation and exchange of information between public actors on the development of their support services and export activities, which affect the development of companies' business activities in ecosystems. Many players in the region offer internationalization services, which companies find difficult to identify and identify. The project aims to help the service companies identify each other's different forms of support and their suppliers, enabling them to help companies find the right support service for the right situation and in the right time.

### Project description

In Northern Sweden and Northern Finland there is a great need to increase companies' exports and growth activities as well as develop ecosystems for business operations. Internationalization and exports increase growth and prosperity in the regions. The project aims to find and identify the best services for the companies in different situations, develop the internationalization of the companies' business operations and increase export activities outside the Interreg area. In this project, the parties try to reach the ecosystems of the business operations.

Many players in the regions offer internationalization services. Companies find it difficult to find and identify a service that meets their needs. The project aims to help service providers identify each other's various forms of support and their suppliers, enabling them to help companies find the right support service in the right situation and at the right time.

**Beneficiaries:** Oulun kaupunki,  
Norrbottens Handelskammare

**Project Duration:** 2019-2022

**Project Budget:** 1 320 000 EUR

**Approved EU-fund:** 860 775 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 360 340 EUR

**Private co-financing:** 98 885 EUR





## Two Countries – One Destination

### Goal

The aim of the project is to increase the degree of internationalization of the Tornio-Haparanda tourism area, the number of international tourists, tourism companies' turnover and future investments, and employment in tourism.

### Expected result

- There should be a business model and a functioning tourism development organization in HaparandaTornio
- A common destination profile for HaparandaTornio should have been developed and implemented
- Increased knowledge of product packaging, pricing and sales among tourism entrepreneurs, and increased cooperation between companies regarding the packaging of common products and services
- Increased networking and cooperation between tourism companies on both sides of the border.

**Beneficiaries:** Team Botnia Oy,  
Haparanda kommun

**Project Duration:** 2020-2022

**Project Budget:** 1 272 776 EUR

**Approved EU-fund:** 827 304 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 432 473 EUR

**Private co-financing:** 12 729 EUR

### Project description

The project aims to develop an organization and business model for the development of HaparandaTornio as a tourist destination, define and develop a joint destination profile and jointly market the destination on an international basis. In addition, the project will create permanent cross-border networks and collaborations between tourist entrepreneurs and develop plans for infrastructure and land use as part of the development process towards an established tourist destination. To achieve these goals, collaboration measures are planned to develop a functioning business model and destination profile, workshops, benchmarking trips and product planning for increased cooperation between tourism companies, marketing measures towards targeted target markets both physically and digitally, and work to develop feasibility studies and plans for infrastructure and land use within designated attractive areas for cross-border tourism.



## My story – along the Northern Lights Route

### Goal

The main goal of the project is to promote the business operations of the small businesses along the Northern Lights Route (NLR), by developing their digital presence.

### Expected result

The project produces:

- Cross-border collaboration between companies in the creation of stories and marketing plans
- Practical skills for storytelling and spreading the story on digital platforms
- knowledge and examples of the use of new digital tools and content construction along the NLR
- knowledge of standards for tourism's sustainable development
- a common vision and roadmap of the NLRs joint story on which the companies' brand work is based and
- regional and international visibility for the area's entrepreneurs and stories.

### Project description

The project supports the development of new history and location-based digital business ideas, skills development and cross-border collaboration with innovative digital tools and solutions. By allowing companies to individually and in groups package the company's offerings, a holistic picture is created with visitors' perspectives in focus, which in turn creates good conditions for common strategies across national borders. The My Story project enables small-scale companies and other stakeholders (ie municipalities and associations working with tourism) along NLR to refine the core history of the company, use a variety of digital tools to communicate this to customers and connect it to the region along NLR. The project is aimed at complementing and deepening the companies' existing business models by providing a process sprint for brand development and storytelling.

**Beneficiaries:** Lapin amk, Pellon

kehitys Oy, Turun yliopisto, Halti

næringsshage AS

**Project Duration:** 2020-2022

**Project Budget:** 824 622 EUR

**Approved EU-fund:** 339 955 EUR

**Approved IR-fund:** 150 000 EUR

**Public co-financing:** 296 230 EUR

**Private co-financing:** 38 437 EUR



## Resource pool for entrepreneurship in the reindeer industry and subsidiary industries

### Goal

The main goal of the project is to complete a well-functioning, educational and innovative course package for reindeer slaughter with structured quality validation for small and medium-sized companies.

### Expected result

The project's expected results are:

- A quality assured and gender equal integrated course package for slaughter, where slaughter techniques and cutting is designed.
- About 30 people will be trained in slaughter and cutting in accordance with current regulations and high requirements for animal ethics, cutting technology and hygiene.
- Traditional and Sami cultural competence has been utilized in the development of course content and pedagogy. Specifically, a brochure with Sami vocabulary on slaughter and cutting has been produced and made available in the project and in other ways.
- A market survey has been conducted regarding demand and structural conditions for cross-border trade in e.g. horns and skins.

### Project description

Human resources are a bottleneck in reindeer slaughter and cutting for local slaughterhouses but also for local processing and development in food, craft, catering and much more. The slaughter industry needs renewal and new business models that are linked to innovative vocational training for staff and entrepreneurs are one of the basic prerequisites, which need to be included in such a broad investment. The training in the project will be part of a business model where the companies join a resource pool and can thus effectively offer their services to local slaughterhouses. This has a potential in Sápmi as it gives SMEs associated to reindeer husbandry one more source of income. Women's interest in traditional slaughter courses, which have been offered in recent times, has proven to be great. Gender mainstreaming should ensure that both women and men benefit, and equal treatment should be included in the analysis for the project's activities. The project contributes to sustainable development by focusing on the collection of materials for crafting and other by-products.

**Beneficiaries:** LTU, Lapin amk, Sáji

Innovation AB

**Project Duration:** 2020-2022

**Project Budget:** 416 859 EUR

**Approved EU-fund:** 270 958 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 135 749 EUR

**Private co-financing:** 10 152 EUR



## Muittut, mitalusat – the story of the Sámi by the Sámi

### Goal

The goal of the project is to strengthen the Sami identity by creating a modern way of presenting the cultural heritage in Sami museums, ie creating a new Sami exhibition language.

### Expected result

The project will:

1. Create multi-sensory, engaging experiences that generate togetherness and new learning opportunities for all Sami museum visitors (Sami, national and international visitors)
2. Present the Sámi cultural heritage by combining science, technology, art and traditional knowledge
3. create a new way of presenting Sami collections in their own context
4. Make the Sami community aware of the role of museums in reviving culture and language
5. use multilingual solutions to provide better access to Sami exhibitions (3 Sami languages in Finland, Northern Sami in Sweden and South Sami in Norway as well as Finnish, Norwegian, Swedish and English)
6. strengthen cohesion in Sápmi by creating cross-border exhibition solutions with remote access
7. Develop solutions that allow content to be created and updated in a flexible way.

### Project description

Sami museums belong to the few public forums where Sami can present their culture on their own terms as well as ponder and convey their self-image. Sami museums are currently developing practices for indigenous museums. Therefore, it is now important to also develop a new exhibition language for them, that is, a modern way of reproducing the Sami stories from the Sami perspective. With the new exhibition language, the exhibitions become flexible, scalable and easy to update to be living examples of the Sami identity during different eras. This will make the Sami community more viable, support people's creativity and strengthen the culture. The three Sami museums of the project together represent the entire Sápmi from north to south. The project gives the museums a unique opportunity to collaborate with Lapin yliopisto and Luleå University of Technology when it comes to modernizing and digitizing cultural experiences.

### Beneficiaries:

Saamelaismuseosäätiö, Ájtte,

Arktinen keskus, LTU

**Project Duration:** 2020-2022

**Project Budget:** 2 005 545 EUR

**Approved EU-fund:** 1 096 026 EUR

**Approved IR-fund:** 159 676 EUR

**Public co-financing:** 749 843 EUR



## Berry machine

### Goal

The main goal of this preparatory project is to digitize the current manual method for making berry forecasts

### Expected result

- A software for image processing of photos during the berries' different maturation phases.
- Tested the system's functionality during the berries' different maturation phases.
- Established a co-operation network consisting of development organizations and private companies in Finland, Norway and Sweden for an upcoming main project.

**Beneficiaries:** Lapin amk, LUKE,

Bioforsk

**Project Duration:** 2021-2022

**Project Budget:** 184 431 EUR

**Approved EU-fund:** 93 880 EUR

**Approved IR-fund:** 20 000 EUR

**Public co-financing:** 70 551 EUR

### Project description

At present, berry observations are made by registering a test box where the objects are counted manually. It can involve counting thousands of items. The main goal of the project is to simplify the calculation of the objects by using modern technology in the form of machine learning, image analysis and a mobile application. By photographing the test box with a mobile phone and sending the photo together with the date and location information to a server, the number of objects in the image can be calculated. The information is then sent to both the observer and to a website.

During this preparatory project, a functioning co-operation network will be established in Finland, Norway and Sweden, consisting of development organizations and private companies for a forthcoming main project. In the main project, the companies will test the new forecasting tool in their business operations and an international database for recording bear observations will be established. The new method of carrying out berry observations will be implemented in all three countries during the time when the main project is in progress.



## NACCOP

### Goal

The main goal is to strengthen the innovation of small and medium-sized enterprises (SMEs) in the health and welfare sector with the help of a co-creating quadruple helix model, by developing a Nordic Arctic cross-border platform that offers a network of services and innovation environments.

### Expected result

The expected results are that the parties have:

- Designed and implemented the co-creative platform for ecosystem collaboration.
- Strengthened cross-border networks and the sharing of good practice
- Organized cross-border activities with a co-creative quadruple helix model, with a focus on the development of new services / technology and new business models / concepts for the health and welfare sector.
- Further developed innovation environments for small and medium-sized companies consisting of several skill levels and technology.
- Developed, tested and validated new digital services / technology
- Explored regional preparedness in creating new innovations based on health data and identified recommendations for regional data collaborations within the NACCOP platform
- Involved students in the project activities throughout the project

### Project description

The NACCOP project continues the collaboration initiated in the NAIE feasibility study, and will use good experiences and knowledge from previous projects and cross-border collaborations.

**Beneficiaries:** Oulun amk, Oulun yliopisto, LTU, Kalix kommun, Luleå kommun

**Project Duration:** 2020-2022

**Project Budget:** 461 400 EUR

**Approved EU-fund:** 299 910 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 161 490 EUR



## PRIORITY AREA 3- CULTURE AND ENVIRONMENT

By prioritizing the region's culture and environment, the program area's resources can be optimized and the potential added-value can be created where many get a change to participate in the region's rich culture and cultural heritage. Furthermore, a collective effort to increase the use of Sami language, preservation and retainment of the region's nature areas as well as collective efforts towards green development and resource efficiency.

### Specific goals and granted projects:

**1) The region's culture and heritage have become stronger and more vital**

*Nord:* Tornedalens sommarsik – kultur och kulturarv, Our stories, VEKUVAKU, Arctic Pulse, Pohjoiset tunturikarjat

*Sápmi:* AIDA, Aktene, Viesso duobddága/Levande landskap, Digital access to the Sámi heritage archives, Beavnardahke, AIDA II, ICH North, Beavnardahke II, STIL, ViK

**2) Strengthened Sami language within the Sami population**

*Sápmi:* Giellagáldu, Plupp, Deanuleagis sámástit

**3) Improved conservation status of natural environments**

*Nord:* Kustmynnande Vattendrag i Bottenviken, Tornedalens Sommarsik, natur och miljö, Felles Fjellrev Nord, Tana River, SEAmBOTH, HALTI, EMRA, SeaCOMBO, Felles Fjellrev Nord II

**4) The knowledge and expertise about green growth and resource efficiency in the region has increased in the public sector**

*Nord:* Biogas i Tornedalen, EEBAK, Tana River II, GRUDE, Folkverkstan, ESBE

## Giellagáldu

### Goal

The aim of the project was to strengthen the use of Sami languages in various sectors in Finland, Sweden and Norway. The main purpose was to permanently establish the trade and resource center for the Sami languages, Sámi Giellagáldu.

### Result

During the project, Sámi Giellagáldu had the task of producing the necessary terminology and vocabulary, new standards for use in Sami languages and providing advice to the users of the Sami languages. Cross-border cooperation in the Sami languages is natural because the areas where the languages are spoken are not limited to national borders. Protecting and promoting the use of languages is one of the tasks of the Sami parliaments for all three countries in the project: Finland, Sweden and Norway.

An equal cross-border perspective was also maintained with respect to the five language divisions - South, Lule, North, Inari and Skolt - which were set up for the Sami Giellagáldu project. The same number of representatives in each state was allowed for the Sami language divisions spoken in most of the states concerned. An exception was made for Skolt, for which there was only one member on the Russian side of the border. This was because Russia was not a project partner, but Russia's representation for Skolt was considered important to ensure Skolt's representation in the language section. During the project, the language departments accepted a total of 4,131 new terms/words and 362 standardizations. In accordance with the project plan, a new website was created for Sámi Giellagáldu [www.giella.org](http://www.giella.org). The websites are available in Southern, Lule, North, Inari and Skolt Sami languages, and in Finnish, Swedish and Norwegian. However, the content of the web pages is not identical between the languages, but each Sami language website focuses on presenting new terminology, standardizations and other important linguistic information for the Sami language in question. The pages in Finnish, Swedish and Norwegian provide information about the Sami language. The site continues to be used after the project. During the project, Sámi Giellagáldu provided various activities for users of the Sami language. The purpose of these activities was to provide free advice and language services for users of the Sami language, regardless of where they live. Another goal was to provide information on new terms, words and standardizations and to disseminate information in the Sami languages. Ten seminars organized by Giellagáldu, minor events, users of FB pages, website users, contacts via e-mail and telephone and personal contacts all included in the project activities. A total of 52 378 people was contacted during the project via these activities.

<https://www.giella.org/split>

### Beneficiaries:

Sámediggi/Saamelaiskäräjät, Finland

Sámediggi-Sametinget Sverige

Sámediggi-Sametinget Norge

**Project Duration:** 2015-2018

**Project Budget:** 3 062 053 EUR

**Approved EU-fund:** 922 439 EUR

**Approved IR-fund:** 163 415 EUR

**Public co-financing:** 1 976 199 EUR





## Watercourses discharging into the Gulf of Bothnia

### Goal

The main goal of the project was to develop common methods that reduce the watercourses' transport of environmental toxins to the Baltic Sea.

### Result

- Increased knowledge of the region's acidic sulphate soils and what possible measures can be taken to reduce the negative effects of these soils on the watercourses.
- Increased knowledge of whitefish, lake, salmon, trout and other species' stocks in the project area.
- Implemented biotope-improving measures in the watercourses of our waterways to improve the conservation status.

**Beneficiaries:** Länsstyrelsen i

Norrbottnens län, Lapin ELY-keskus,

GTK, SGU, LUKE

**Project Duration:** 2015-2018

**Project Budget:** 2 083 727 EUR

**Approved EU-fund:** 1 239 640 EUR

**Approved IR-fund:** -

**Public co-financing:** 844 097 EUR

The project promoted sustainable development as the goal was to get ecologically sustainable watercourses in the Gulf of Bothnia. The fish studies that have been carried out have led to increased knowledge about the living conditions of the sea and the salmon in order to be able to implement life-improving measures for these species and habitat. The physical measures implemented through the restorations increase the vitality of the watercourses, primarily by creating free walking paths to the fish's play areas, which in turn leads to larger and more viable fish populations with a greater genetic variation.

The project's method development also contributes to reduced environmental impact. A fish path in composite has significantly lower climate impact than concrete. This method / innovation will partly be able to reduce carbon dioxide emissions during production compared to concrete, but also increase the opportunities for fish migration in watercourses where there are dams for electricity production. The pilot study on acidic sulphate soils will be able to reduce the negative effects of these soils, both directly in place but perhaps primarily through the dissemination of information on the substance to the farmers. Through this, the project has contributed to an increased conservation status throughout the program area.

The work in the project improves and promotes opportunities for maintaining a vital salmon strain in the Simojoki water system. A strong salmon stem also promotes the river bead mussel in the watercourse. Leaching of metals from acid sulphite soils degrades water quality and adversely affects watercourses and can cause, for example, fish deaths in watercourses. When planning is based on enough knowledge of acid sulphate soils and their risks, situations can be prevented that can be devastating for, for example, tourism in the area. The work that has been done to develop restoration methods can be used in the restoration work of various watercourses in the Barents area.

[https://www.ely-keskus.fi/sv/web/ely/peramereen\\_laskevat\\_joet\\_kunnostus](https://www.ely-keskus.fi/sv/web/ely/peramereen_laskevat_joet_kunnostus)



## Plupp

### Goal

The project's ambition was to implement 50 performances as an educational arena, where an artistic experience should act as a transfer of Sami language and culture in a natural and uplifting atmosphere.

### Result

The story of Plupp – about the invisible on the mountain is a dramatization and setting up of a selection of Inga Borg's story books from 1955-2006. The performance is a musical dramatic depiction built up with yoiks composed by the southern Sami Frode Fjellheim. The performance with its newly composed music in the form of yoiks follows Plupp for one year. Dramatization describes the nature of Sami basic assumptions in a simple, educational and, not least, entertaining approach. The performance is aimed at children aged 6 to 10 years, and by mixing Sámi and Scandinavian language on stage, the young crowd could learn a few simple Sami words and expressions.

**Beneficiaries:** Jämtlands läns

landsting, Åarjelhsaemien Teatere

**Project Duration:** 2015-2017

**Project Budget:** 563 853 EUR

**Approved EU-fund:** 153 735 EUR

**Approved IR-fund:** 146 341 EUR

**Public co-financing:** 263 777 EUR

The project has taken place across a large geographical area, major parts of the southern Sami area in Norway and Sweden. The project has made visible the southern Sami language importance in the area, a pedagogical work through material and programs concerning Sami culture and southern Sami language in the schools that visited. The project has strengthened the collaboration between the theaters Åarjelhsaemien theaters, Estrad Norr and Beavivas Saminational teahter. This has given common competence both in performing arts and administration as well as knowledge of video projection and southern Sami language. The use of several languages in the project and in the performance, Southern Sami, Norwegian and Swedish was an educational and interesting process. The project continues through guest shows and invitations from various organizers on both sides.

The result of the project was that 8 136 people got to take part of 77 performances where Sami language and culture have been conveyed.

The project has come up with a new term in the theater world, namely yoikikal. Yoikikal is an extended concept of musicians, with dance, music, song, yoik and text. Mixed use of language in the performance is a form that has been a satisfying way of working. At the same time, the mixture of languages is natural for people in border areas between Sweden and Norway.

<https://www.regionjh.se/regionalutveckling/utvecklingsprojekt/avslutadeprojekt/pluppochdeosynligapafjallet.4.53b5af6315f5ce550f56686.html>



## Biogas in Torne River Valley

### Goal

The project wanted to show the conditions for a biogas plant with cogeneration production or upgrading to vehicle gas and to form a working group consisting of stakeholders with interest and commitment to a local biogas plant.

### Result

In addition to the project group of 7 people, the project had 35 participants (of which 8 women) on the activities plus the municipal councils in Ylitornio and Övertorneå.

Some results from the project:

- Technical and economic analyzes of the conditions for a local biogas plant
- A working group has been formed that works with the issue.
- Increased knowledge about biogas and the management of organic waste
- Contacts on the issue have been created.
- Cross-border cooperation in waste management has begun

The project's conclusion is that one should work on biogas, both municipal and private (farm buildings). The project proposes:

- That a long-term plan for the management of organic waste is produced for the municipalities.
- Investigation of a collaboration with Överkalix municipality concerning the management of sewage sludge.
- More accurate calculations are made on a biogas plant based on organic waste from Övertorneå and Ylitornio municipalities.
- That a cooperation agreement regarding the management of sewage sludge is signed by Övertorneå and Ylitornio municipalities to ensure access to substrates in a future municipal biogas plant.
- That Övertorneå and Ylitornio municipalities stimulate the construction of private farm-based biogas plants through advice and knowledge-enhancing activities.

<http://www.overtornea.se/sv/Naringsliv/EU-projekt-och-Internationellt-samarbete/Tidigare-projekt/Biogas-i-Tornedalen/>

**Beneficiaries:** Övertorneå kommun

Ylitornion kunta

**Project Duration:** 2016

**Project Budget:** 41 000 EUR

**Approved EU-fund:** 26 650 EUR

**Approved IR-fund:** -

**Publicco-financing:** 14 350 EUR



## Summer whitefish in Torne River Valley –culture and cultural heritage

### Goal

The primary goal is to increase awareness about Tornedalen's unique hereditary fish culture and to improve its attractiveness among the area's fishermen, residents, tourists and most importantly, the youth.

### Result

During the project, there were over 50 contributing organisations and around 388 people from Finland and Sweden, developed the content together with partners. The project slogan was "One river, two banks and a lively fishing culture".

Within the framework of the project, folklore about fishing has been collected for three years and over 70 local fishermen have been interviewed. The results are presented in forms of videos and info books of whitefish culture. The production covers

- Traditional fishing methods
- Equipment and infrastructure needed for fishing like "krenkku", which is a wooden pier or bridge enabling fishermen to get close
- Fishing environment, organization of fishing and habits in different villages
- Whitefish in traditional and modern cooking

In addition, the project documented whitefish research methods implemented in adjoining nature project. There are 33 videos and 12 info books available on project website, mainly in Finnish and in Swedish.

In 2017, the rapids fishing cultures were chosen for Finland's National Inventory of Living Heritage, and in 2018, the similar nomination was given in Sweden, too. Project documentation was in key role at the application process, and the project participated and helped local actors in application process.

[www.kesasiika.wordpress.com](http://www.kesasiika.wordpress.com)

[www.sommarsik.wordpress.com](http://www.sommarsik.wordpress.com)

[www.facebook.com/kesasiika](https://www.facebook.com/kesasiika)

**Beneficiaries:** Lapin amk, Haparanda stad, Tornion kaupunki

**Project Duration:** 2015-2018

**Project Budget:** 850 716 EUR

**Approved EU-fund:** 552 314 EUR

**Approved IR-fund:** -

**Public co-financing:** 223 213 EUR

**Private co-financing:** 75 189 EUR



## Summer whitefish in Torne River Valley – nature

### Goal

The projects primary goal was to create conditions for a sustainable preservation of fish stocks in the Torne River in order to support the living fishing culture in the region.

### Result

4,265 hectares of living space with habitats have been supported to achieve better conservation status.

Some actual conclusions from the project:

- Large (more than 38.5 cm) female fish should be released and all small fish (even below 30 cm) caught. On the basis of the sample, 90% of the caught fish can then continue to breed while the catch of small and slowly growing male fish leads the selection to larger fish.
- It is advisable to consider 2 catch-free days per week to ensure an increase in whitefish
- Phishing in the river should be limited and the knot should be at least 50 mm to maintain fast growing and larger sizes.
- Planting larvae supports a larger population, placement of planting sites should be in the upper river area up to Matkakoski.
- An annual monitoring of age and size distribution of whitefish on the basis of samples collected from Kukkolankoski and Matkakoski is important for monitoring whether the changes have affected the status of the stock.
- Statistical collection for the whitefish should be organized in the area below Pello on both Swedish and Finnish side.
- Along with fishing organizations on the Torne River, changes in fisheries should be discussed and updates of regulations should take into account the whole life cycle of the whitefish and the factors that affect it.

**Beneficiaries:** Lapin amk, LUKE,

Länsstyrelsen i Norrbotten,

Tornedalens folkhögskola

**Project Duration:** 2015-2018

**Project Budget:** 462 258 EUR

**Approved EU-fund:** 300 468 EUR

**Approved IR-fund:** -

**Public co-financing:** 157 800 EUR

**Private co-financing:** 3 990 EUR

<https://kesasiika.com/>



## Our stories

### Goal

The project's main goal was to promote regional storytelling and to strengthen the local identity by localizing inspirational narratives across the border

### Result

110 stories in the form of 18 pieces of music, 19 films / animations, 14 texts, 23 interviews and 38 works of art and 53 news articles were published via the project's website. "The Storybook" was published both as an e-book and in a printed version. All stories are available for use.

The project also produced an illustrated map image of Northern Lights Route and story-based postcards.

70 companies and 418 people participated in the project's activities.

The project tested many different collection methods such as road trips, company interviews, school visits, workshops and library events.

<https://ourstories.info/sv/>

<https://ourstories.info/fi/>

<https://ourstories.info/no/>

<https://ourstories.info/> (engelska)

<https://www.youtube.com/channel/UCMNnMGXvoB1NGB7Gc1vLESw/featured>

<https://www.facebook.com/northernlightsroute/>

**Beneficiaries:** Lapin amk, Studio E-city Ky, Jord Ek. För., Sverigefinska folkhögskolan

**Project Duration:** 2016-2019

**Project Budget:** 1 102 289 EUR

**Approved EU-fund:** 513 105 EUR

**Approved IR-fund:** 133 102 EUR

**Public co-financing:** 400 316 EUR

**Private co-financing:** 55 766 EUR



## AIDA

### Goal

The overall project objective is to strengthen and bring to life the region's culture and heritage through duodji. The aim is furthermore to strengthen entrepreneurial skills among duodji students on Sami college.

### Result

The project received 21 archival donations during the project time. Education materials to highlight the thinking behind duodji was produced from these archives. These are to be used in schools when teaching about the Sámi culture.

The archival material from Finnish side was also digitalized and can be found from the digital archives of The National Archives of Finland.

Sámi Allaskuvla arranged education on duodji with focus on helping the students to raise the level of their skills in entrepreneurship and helping them to create extra value for their works by using storytelling (stories behind the duodji) as part of their work processes and end products.

The project also arranged two workshops for students from local schools of Inari and Jokkmokk. Within these workshops the students were able to use sámí languages and learn about both duodji and what was done in the project. These workshops gave the opportunity to test some of the education materials produced in the project.

The project opened new opportunities for the participating institutions for crossborder cooperation. The cooperation was also across disciplinary borders - partners being a museum, an archive and a university of applied science. There was a lot learned from each other's work cultures, regulations, know-how and best practices. The crossborder nature of the project also helped all institutions to get better knowledge of the cultural differences within Sápmi.

<https://aida-archives.blogspot.com>

<https://twitter.com/AIDAduodji>

<https://www.facebook.com/aidaduodji>

<https://arkisto.fi/aida/>



### Beneficiaries:

Kansallisarkisto/Saamelaisarkisto/  
Samearkivet, Ájtte, Sámi allaskuvla

**Project Duration:** 2016-2019

**Project Budget:** 718 683 EUR

**Approved EU-fund:** 316 017 EUR

**Approved IR-fund:** 99 756 EUR

**Public co-financing:** 300 910 EUR

**Private co-financing:** 2 000 EUR

## Arctic Fox Together - Felles Fjellrev Nord

### Goal

The aim of the project was to create conditions for a more cost-efficient conservation work of arctic foxes.

### Result

Thanks to a great deal of work from both previous projects and those that have been ongoing until 2019, in combination with regular lemming cycles, the number of mountain foxes has increased and there are now around 400 adult arctic foxes in Scandinavia. A viable arctic fox population in the Northern Calotte is a central component for long-term conservation further south, as the Northern Calotte provides a link to the arctic fox population on the Kola Peninsula and Siberia. No puppy litter has been born in Finland during the project period. However, there have been an increased number of occurrences of arctic foxes recorded over the three years. Lairs have been temporarily inhabited by couples, arctic foxes have been caught in the image of wildlife cameras at feeders and excrements have been collected.

**Beneficiaries:** Länsstyrelsen i

Norrbottens län, Metsähallitus,

Stockholms universitet, NINA

**Project Duration:** 2017-2019

**Project Budget:** 1 279 203 EUR

**Approved EU-fund:** 582 236 EUR

**Approved IR-fund:** 140 147 EUR

**Public co-financing:** 556 820 EUR

The fact that there is now a common inventory methodology and database for all three countries is incredible valuable for future management. This means that the data is comparable and can be used in different analyzes to evaluate, for example, various measures. There is already a public interest in Scandinavia for the arctic fox, but hopefully the large number of media events, scientific articles and information material produced within the project have helped to increase this interest further. By learning more about arctic foxes, the public has also gained more knowledge about the vulnerable northern ecosystems, the influence of climate change in the mountains and more.

Work on the future of the arctic fox in the northern parts of Scandinavia will continue in the project Felles Fjellrev Nord II with support from Interreg Nord during 2020-2022. FFN has produced good results but it has been the beginning of a longer journey to reach the end goal of increasing the mountain fox population in the north to the extent that they can do without support measures.

<http://www.fellesfjellrev.se/>





## EEBAK

### Goal

The overall project objective was to improve the competence of the municipalities in the border region regarding green community development with a focus on energy efficiency of buildings in the arctic.

### Result

New cooperation between LTU and public property owners has been established in the area of energy efficiency in buildings in the Arctic region. Increased knowledge has been gained, particularly concerning the situation of energy efficiency of the public property owners' building stocks (e.g. current strategies, targets and methods as well as opportunities and barriers).

The cooperation between LTU and municipal property owners PiteBo in Piteå and Kirunabostäder in Kiruna has been further deepened. LTU has developed two different project proposals in collaboration with Pitebo and Kirunabostäder, respectively. Both proposals are related to methods of evaluating energy efficiency in buildings and were developed as spin-offs from the EEBAK project.

A completed report on the case study in Nonshaugen have been completed with the results focusing on thermal comfort and energy consumption in high thermal mass buildings in the arctic.

Lapland UAS compiled a collection of articles entitled "Energy Efficiency of the Property Portfolio - the Key to Reducing the Environmental Impact" in Finnish. This was published under Lapland UAS publication series and will be available for participants and interested parties during and after the project.

LTU reported and discussed key results and reflections from the different case studies performed with stakeholders, including representatives from the municipal sector, at the workshop in Kiruna. Results and reflections from the case studies were also documented in a video recorded presentation to enable spreading to a wider audience. During the entire project, direct dialogues with owners and other stakeholders of the studied buildings that took place at meetings, study visits and workshops have been used to collect data but also to communicate (preliminary) results and capture needs for further/complementary studies and analyses.

<https://www.lapinamk.fi/en/Cooperation/RDI/EEBAK>

**Beneficiaries:** Lapin amk, LTU, Norut

**Project Duration:** 2017-2019

**Project Budget:** 1 453 444 EUR

**Approved EU-fund:** 595 166 EUR

**Approved IR-fund:** 243 902 EUR

**Public co-financing:** 454 925 EUR

**Private co-financing:** 159 451 EUR



## Tana River

### Goal

The main goal of the project was to document, protect and maintain the environmental status and biodiversity of the River Tana catchment area.

### Result

- Research data on the distribution of juvenile salmonids gathered on both sides of the Finnish and Norwegian border has been organised into a single database and displayed on digital maps: Teno River Salmon Maps (kalahavainnot.luke.fi). The new salmonid database helps Finnish and Norwegian authorities and local fisheries organisations to formulate fishery regulations based on biological data in the River Tana tributaries area.
- The project assessed the obstacles caused by road culverts to fish migration and continued the elimination of migration barriers from tributaries of the River Tana that begun in the 2000s. The updated assessment of the fish migration barriers formed by road culverts in tributaries of the River Tana can be found in the report Joint Environmental Management of the River Tana – WP2 Migration barriers.
- The Norwegian and Finnish environmental authorities have put together a joint monitoring programme for the River Tana basin. Environmental status assessments and monitoring data on emissions and impacts of wastewater treatment plants located in the river basin can be found on the website of the Finnish-Norwegian Transboundary Water Commission: Jätevedet SuomalaisNorjalainen rajavesistökomissio).
- Municipalities and environmental authorities have exchanged information on endangered species and protected habitats. The cooperation project collected information on rare habitats of poorly known species, such as small-fly species.

The project outputs and reports can be found on the website of Lapland Centre for Economic Development, Transport and the Environment: <http://www.elykeskus.fi/web/ely/lappi-projektit-ja-hankkeet>

<https://www.ely-keskus.fi/web/ely/ely-lappi/joint-environmental-management-of-the-river-tana>

**Beneficiaries:** Lapin ELY-keskus, LUKE, Tana kommune, NVE, Fylkesmannen i Finnmark, Karasjok kommune, TF

**Project Duration:** 2017-2019

**Project Budget:** 902 059 EUR

**Approved EU-fund:** 276 320 EUR

**Approved IR-fund:** 235 000 EUR

**Public co-financing:** 374 641 EUR

**Private co-financing:** 16 098 EUR



## SEAmBOTH

### Goal

The project's main goal is to help ensure the conservation of the Bothnian Bay's biological diversity, its habitats and ecosystem and the ecosystem services it provides.

### Result

The project had a focus on sustainable management of the northern Bothnian Bay, as well as increasing the knowledge of the marine environment and promoting collaboration across the border. The end products of the project (e.g. marine maps, species identification guides and workshop reports) are intended for use by environmental agencies, the general public, and any other organization that may need them.

There is a lot more work to be done in the northern Bothnian Bay. The project has shown how important the collaboration between countries and organisations is, but there are many more areas to potentially expand the collaboration in.

While a lot of data has been collected in the Bothnian Bay, it is important to keep up the field inventories. Bothnian Bay is very different to the rest of the Baltic Sea, so the project had to adapt common methods in mapping and inventory for it. This has led to new techniques being developed for these different areas. As climate change alters the environment, it is hard to exactly know what the effects will be, so the Knowledge gathered during this project is crucial for the continued well-being of the underwater nature of the northern Bothnian Bay.

<https://seamboth.com/>

**Beneficiaries:** Metsähallitus, Länsstyrelsen i Norrbottens län, SYKE, GTK, SGU, ELY-keskus

**Project Duration:** 2017-2020

**Project Budget:** 2 912 718 EUR

**Approved EU-fund:** 1 893 268 EUR

**Approved IR-fund:** -

**Public co-financing:** 1 019 450 EUR



## Aktene

### Goal

The aim of the project was to start a long-term interregional cooperation between the Sami cultural centres in Tärnaby (Sweden) and Hattfjelldal (Norway) focusing on developing the cultural heritage, Sami languages and traditional knowledge in new interactive and innovative ways and learn from the shared traditions and history, with the aim to strengthen the cultural heritage and communities for the future.

### Result

One of the goals of the Aktene project was that a Sami center would be established in Tärnaby. Aktene project have collaborated with the Leader project "Establishment of a Sami center" which was run by Storuman municipality. The mentioned project has worked with the establishment of a physical Sami center in Tärnaby. The Aktene project have had activities such as courses and lectures and other events that can be conducted in a Sami center. In this way, the two projects have complemented each other. A Sami center Aejlies opened in 2020 in Tärnaby. The center has initially received funding for three years. Storuman Municipality and the Västerbotten Region are responsible for part of the financing.

Aktene's participation in the establishment has been to show that there is a need and an interest in Sami activities in the Tärna area and in Västerbotten County. Through Aktene's work, we have highlighted and shown the interest that exists. The large number of participants that the project has had has been important for the establishment of Aejlies. Through Aktene's work, there has also been a more formalized collaboration between the Sami in Tärna and the Sami center Sijti Jarnge in Hattfjelldal. Through the establishment of Aejlies, the close collaboration with Sijti Jarnge can be deepened and lead to new joint efforts. The co-operation between two Sami centers strengthens the Sami in the area and makes it easier to show that the area has a common history. It will also be easier to make joint investments in the future with regard to e.g. language and handicraft. But cooperation between Sami small companies in Sweden and Norway, respectively, should also be simplified if there is an established Sami cooperation.

<http://www.aktene.no/>

**Beneficiaries:** Storumans kommun, Sámi Duodji Sameslöjdstiftelsen, Giron Sámi Teáhter, Abf Mitt i Lappland, Sijti Jarnge

**Project Duration:** 2017-2020

**Project Budget:** 1 123 907 EUR

**Approved EU-fund:** 325 892 EUR

**Approved IR-fund:** 335 532 EUR

**Public co-financing:** 462 483 EUR



## HALTI

### Goal

The project's goal is to organize and plan dynamic, long-term and cross-border cooperation between local communities, authorities and companies with an interest in preserving and developing natural and cultural values in the Halti landscape area. The project will apply for the Europarc Transboundary Park status for the cooperation area.

### Expected Result

The project will establish a long-term sustainable annual activity plan and a common visitor management plan for the Halti cooperation area. Protection of sensitive nature as well as follow-up and control of visitors has been improved with the help of new GIS tools and mobile exhibits. The cooperation has improved nature conservation in the area, increased its attractiveness as a travel destination and improved cooperation with the river industry and other land use.

### Project description

The project includes the Käsivarren erämaa nature conservation area in Finland as well as the Reisa National Park and Raisduottarhaldi Landscape Protection Area in Norway. The area is a significant reindeer husbandry area, and, in cultural terms, it is a Sami core area. Cultural wealth is also reinforced by the fact that Finnish, Norwegian and Swedish majority culture and a minority culture of finnish kvens meet in this area. The rich nature and culture provide opportunities for different industries but can also cause contradictions and endanger the sustainable use of the area. The area has traditionally been used for outdoor activities. In recent years, the interest in developing tourism in the area has grown strongly. Storfjord Municipality, Nordreisa Municipality and Visit Lyngenfjorden participate in the project's activities.

<http://www.metsa.fi/halti>

**Beneficiaries:** Metsähallitus, LUKE,

Halti nasjonalparksenter, Gáivuotna

Kåfjord, Nasjonalparkstyret for Reiska

nasjonalpark og Raisdouttarhaldi

landskapsvernområde, UiT

**Project Duration:** 2018-2020

**Project Budget:** 960 982 EUR

**Approved EU-fund:** 271 000 EUR

**Approved IR-fund:** 195 122 EUR

**Public co-financing:** 494 860 EUR



## Viesso duobbdága – Living landscape

### Goal

The main objective of the project is to increase understanding of the Lule Sami area as a common, composite landscape in Sweden and Norway, and to convey Sami use and understanding of the landscape as a basis for experiences and natural tourism in northern areas.

### Expected Result

The result will be new knowledge of Sami natural history, history and culture generated in cross-border cooperation. The direct result of the project will be mediation and communication linked to the mediation via the digital exhibition Viesso duobbdága / Living landscape and the Sáme duobbdága / Sami landscape.

### Project description

The project includes three areas:

- Research area lulesamic landscape with four thematic areas
  1. Gielas / Kjølen - Sami landscapes for 1000 years
  2. The Sami farm
  3. Hiking trail Hellmobotn - Vájsáluokta
  4. Sami city names and landscaping
- Digital Exhibition Viesso Duobbdága / Living Landscape for Mediation on the Swedish / Norwegian Platform Digital Museum and Europeana
- The Sáme duobbdága / Sami landscape application for the development of service design and digital user solutions.

**Beneficiaries:** Ájtte, LTU, Árran

**Project Duration:** 2018-2020

**Project Budget:** 803 703 EUR

**Approved EU-fund:** 284 602 EUR

**Approved IR-fund:** 182 927 EUR

**Public co-financing:** 336 174 EUR



## Digital access to the Sámi heritage archives

### Goal

The main objective of the project is to improve the accessibility of the Sami cultural heritage.

### Expected result

- Access to the Sami cultural heritage has improved. The developed tool enables digital access to Sami culture in various existing archives.
- The project has resulted in knowledge of where Sami material and Sami archives exist throughout Europe. It improves the knowledge of remote and lesser-known historical sources and provides a more comprehensive database for searching the Sami cultural heritage.
- The project has investigated the existing instructions for indigenous archives and has established common ethical guidelines for the use and utilization of material relating to the Sami culture.

### Project description

In the project, an information and communication technology application unit are created according to the principle of a single instance of the already existing digital collections of Sami-language culture and heritage. The system links the user to various available collections in a way that facilitates information retrieval and request, supports information retrieval using metadata, and helps the user to access digital material from different locations and databases. The developed whole works as a search registry and search tool, helping you reach the digital content. The metadata of the collected data is retrieved from the metadata of existing collections using multiple computer-supported methods.

<https://digisamiarchives.com/>

**Beneficiaries:** Lapin yliopisto, Oulun

yliopisto, Umeå Universitet,

Kansallisarkisto/Saamelaisarkisto/

Samearkivet, Arkivverket

**Project Duration:** 2018-2020

**Project Budget:** 1 380 880 EUR

**Approved EU-fund:** 761 180 EUR

**Approved IR-fund:** 104 916 EUR

**Public co-financing:** 514 784 EUR



## VEKUVAKU

### Goal

The waterways of the Ule river and the Lule river power plant as well as the village communities and their history are cultural heritage and a diverse resource. Thanks to the cross-border cooperation, the cultural heritage of the power plant architecture in the northern river valleys is well known on a broad front as well as an important local and regional identity factor. The common business models have removed various barriers to preserving this heritage as well as opening new opportunities to make use of it.

### Expected result

The modern industrial building tradition is increasingly visible in national and international media. The knowledge base has been updated and strengthened in view of what the cultural heritage and the traditional power plant architecture along the Ule river and Lule river stand for, and in addition their cultural-historical value has deepened.

### Project description

The project highlights the hydroelectric power stations along the Ule and Lule rivers and its communities, as a cultural heritage and a diverse resource. The project is based on a common challenge; There is a low knowledge of the power plant architecture and the cultural values of the hydropower communities in the public. There is potential to utilize the cultural heritage as an identity-creating cultural resource to a much greater extent than is done today. The main purpose of the three-year project is that today's and future residents and actors identify and use values that are currently undefined. Through this, the power plants' cultural heritage is brought to life and the conditions for a conservation are improved.

Through the cross-border cooperation, the northern river valleys' hydroelectric heritage is made known and the identity of the local community is strengthened. Placing the cultural heritage in a larger context further supports the preservation and use of the cultural heritage. To utilize the cultural heritage as a business resource, local anchoring and long-term preservation are required, which is an effect of the project's implementation.

[https://www.pohjois-pohjanmaa.fi/aluesuunnittelu/vesivoiman\\_kulttuuriperinto](https://www.pohjois-pohjanmaa.fi/aluesuunnittelu/vesivoiman_kulttuuriperinto)

**Beneficiaries:** Pohjois-pohjanmaan

liitto, Region Norrbotten

**Project Duration:** 2019-2021

**Project Budget:** 994 677 EUR

**Approved EU-fund:** 645 151 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 324 526 EUR

**Private co-financing:** 25 000 EUR





## Arctic Pulse

### Goal

The aim of the project is a unique collaboration where culture and business, especially the visiting industry, meet. An Arctic culture brand should be created - Arctic Pulse. With live music and cultural cooperation, well-packed experiences of the region's intangible cultural heritage are delivered to a large audience in the North Calotte.

### Expected result

The project has created a "cultural infrastructure" around the Arctic Pulse brand. The business sector, primarily the visitor industry, can use a new and interesting brand in the marketing and packaging of its products and services. In the project activities, 1150 people have actively participated and 135,000 have been in the audience and listened to the project's productions. Participants and audience figures can be converted to an increased number of guest nights in the next step.

### Project description

The project's key words are Arctic Pulse. With the expression, the project will convey an exciting diversity of musical and artistic expressions that represent the North Calotte's intangible cultural heritage. The project will communicate, package and visualize the breadth of the region's intangible cultural heritage with the help of the latest technology, knowledge and a modern approach that creates curiosity and pride.

The project has three target groups:

- The region's cultural workers - participants in the project's activities. At least 25% of the project's cultural productions will clearly focus on the program area's minority cultures. Indigenous peoples, Sami and, among other things, Kven perspectives are the starting point for the artistic expressions in these productions.
- Residents and tourists in the region in the form of audiences who visit the project's productions.
- The business sector / visitor industry - the users of the new brand "Arctic Pulse".

<https://www.facebook.com/TheArcticPulse/>

**Beneficiaries:** Region Norrbotten,

Oulun kaupunki, Kultur i Troms

**Project Duration:** 2019-2021

**Project Budget:** 1 260 992 EUR

**Approved EU-fund:** 548 492 EUR

**Approved IR-fund:** 170 732 EUR

**Public co-financing:** 541 768 EUR



## Tana River II

### Goal

The public sector's knowledge of cooperation options that improve resource efficiency in water and wastewater services within the Tana River's water area has increased

### Expected result

- 1) General plan for the coordination of water and sewage services between the municipalities of Utsjoki, Karasjok and Tana. The General Plan contains technical and financial investigations on various alternatives that are later used for decision-making regarding the cooperation. If one finds that cooperation to some extent is profitable, one lets establish closer investment and construction plans based on the master plan.
- 2) Investigation on property-specific wastewater management systems in the area of Tana River, and on the decontamination needs of these systems. The investigation concerns wastewater systems that are within the Tana River's area of influence and which have not been remedied to comply with the national environmental regulations. Based on the investigation knowledge, one should choose the most environmentally friendly and cost-effective remediation solution if measures are required from the properties.

### Project description

The first work package will include Karasjok and Tana municipalities together with Inarin Lapin Vesi Oy. The result is a feasibility study with cost calculations and proposals for technical solutions that will serve as a basis for decisions on collaborative projects. The second work package in the project will be carried out in the municipalities of Karasjok, Tana and Utsjoki. The result will be a mapping of the current state of the smaller private individual sewage plants along the river and to define any necessary renovation measures.

The project enables a future common cross-border water and sewage treatment. Common water and wastewater services provide a more cost-effective and safe water supply of high quality.

**Beneficiaries:** Inari Lapin Vesi Oy,  
Utsjoen kunta, Karasjok kommune,  
Tana kommun

**Project Duration:** 2019-2022

**Project Budget:** 868 877 EUR

**Approved EU-fund:** 279 167 EUR

**Approved IR-fund:** 182 927 EUR

**Public co-financing:** 366 783 EUR



## Beavnardahke

### Goal

The project will strengthen the Sami area's competitiveness and attractiveness by creating strong travel reasons based on Sami cultural environments and stories.

- By developing and utilizing modern information technology / applications, managing, making available and marketing Sami cultural environments and stories.
- To create incentives for the development of Sami and other visitor industries through a modern accessibility.
- To further develop the organizations as visitor destinations in themselves, but also as knowledge banks and centers for information on Sami cultural history.

### Expected result

A technical application that describes Sami, cultural visits has been developed and used for two purposes;

- by visitors to find and experience Sami cultural environments with positive effects on other visitor industries and services
- by the organizations to document the Sami cultural landscape and create a basis for further development of visitor destinations

### Project description

The Gaaltije and Saemien Sijte foundations have in the past made an inventory and documented the Sami cultural heritage that today is gathered in databases and electronic documents. In the project, one wants to use this material to strengthen competitiveness and attractiveness by creating travel reasons based on Sami cultural environments and stories. The project focuses on documentation and protection of Sami cultural heritage and Sami cultural landscapes.

<https://saemiensijte.no/beavnardahke/>

**Beneficiaries:** Stiftelsen Gaaltije,

Stiftelsen Saemien Sijte

**Project Duration:** 2019-2020

**Project Budget:** 523 308 EUR

**Approved EU-fund:** 164 314 EUR

**Approved IR-fund:** 61 263 EUR

**Public co-financing:** 297 731 EUR



## GRUDE

### Goal

The aim of the project is to:

- 1) raise the level of knowledge primarily in the municipalities on green growth by highlighting the best models and methods in different areas.
- 2) disseminate information on growth potential through communication methods and gatherings.
- 3) create a network / cluster for sparsely populated areas so that the best method for efficient use of resources can be utilized.

### Expected result

The project's expected results are:

- 1) The level of knowledge and competence on green growth and circular economy has increased in the public sector, in the education sector and the business sector.
- 2) the region has a new attitude that is environmentally conscious and that focuses on resource efficiency.
- 3) the cross-border and cross-border cooperation as well as the exchange of experience and best practice have been streamlined.
- 4) Through increased knowledge of green growth and collaboration, the project has promoted the realization of green growth's potential for business activities in the program area.
- 5) the project has built up an understanding of the importance of a network / cluster and the importance of collaboration between all community actors.

### Project description

The northern regions of Finland, Sweden and Norway face common challenges such as an aging population, urbanization and reduction of traditional large areas of activity. A transition to a green economy can be an engine for innovation and growth while strengthening the attractiveness of the regions.

The Nordic countries are well placed to transition to the green economy, such as strong scientific competence, extensive renewable natural resources and versatile expertise in the development of bio economy. The development must be based on knowledge and understanding of the area's strengths and characteristics. Individual actors often do not have enough resources and networks for a transition to the green economy, which is why cross-border collaboration between the public sector, business, companies, research and other social actors is important.

**Beneficiaries:** Lapin amk, LUKE,

Strukturum i Jokkmokk, Sintef AS

**Project duration:** 2019-2022

**Project budget:** 1 006 548 EUR

**Approved EU-fund:** 482 981 EUR

**Approved IR-fund:** 126 750 EUR

**Public co-financing:** 304 277 EUR

**Private co-financing:** 82 540 EUR



## EMRA

### Goal

The main objective of the EMRA project is to improve the natural environment and recreate important habitats for aquatic organisms in river systems that are affected by large-scale hydroelectricity and rafting.

### Expected result

Authorities and operators in both Sweden and Finland will improve their knowledge of implementing measures in watercourses that are affected by hydroelectric and raft joints, both in main rivers and tributaries. Through various biotope measures, the project will increase biodiversity and provide better conditions for outdoor life, recreation and sport fishing. The project will develop new and innovative restoration and restoration methods and test and evaluate a method for environmental adaptation and environmental design of large-scale regulated rivers. The project will also conduct fish studies that will provide the conditions for sustainable fish management.

### Project description

Common to both countries are challenges in the area related to the possibility of recreating natural reproduction of grayling and trout in regulated waterways. The EMRA project sees great potential in working together to gain a broader knowledge base. Knowledge of fishermen's genetics is an important part of being able to manage fish stocks in a sustainable way. Small isolated populations are much more sensitive than large populations that exchange with other populations.

The need for action is extensive, and long-term cross-border cooperation between operators, authorities and various organizations is crucial in order to achieve national and international environmental goals and conservation goals.

**Beneficiaries:** Länsstyrelsen i

Norrbotten, ELY, LUKE, Metsähallitus

**Project duration:** 2019-2022

**Project budget:** 3 154 410 EUR

**Approved EU-fund:** 2 050 365 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 814 788 EUR

**Private co-financing:** 289 257 EUR



## Nordic mountain cattle – cultural heritage and genetic resources

### Goal

The aim of the project is to map and store information on the history of the mountain cattle breeds, cultural traditions and genetic resources. The versatile conservation of cattle's genetic resources has proven to have a positive effect on the preservation of cultural traditions. The goal is to reach younger generations, who have not been in live contact with mountain cattle.

### Expected result

The project's expected results are:

- Collection of historical data and mapping of archaeological remains
- Mapping the cultural heritage and creating a network for conservation
- Studies of the current relationship within and between breeds
- The development of a digital game for educational purposes
- Dissemination of project results to ensure the preservation of the mountain cattle breeds.

### Project description

The Nordic countries' three mountain breeds, northern Finnish livestock or Lapland cow, Swedish mountain cow and Norwegian sidet troendefe og nordlandsfe (STN) are probably derived from a common Scandinavian ancestor, who lived in the program area before dividing into national races. Over the millennium, the mountain cattle breeds have adapted to the demands of the natural and cultural environment and ensured human survival under extreme conditions. The mountain cattle breeds are part of the unique, northern, cultural traditions that are important to bring to life even for future generations.

The Lapland cow are classified as a threatened species, the STN are also considered to be in danger. The status of the mountain cow is stable at present. No thorough mapping of the common history and phases of the three Nordic breeds has been made. In general, efforts to preserve rare original breeds have focused on preserving their genetic resources in gene banks or preserving live animals elsewhere than in their original environments. The idea of preserving cultural heritage and genetic resources together is new.

**Beneficiaries:** Nordiskt genresurscenter,

LUKE, Ahlman, University of Southern

Denmark, Sveriges Lantbruksuniversitet

**Project duration:** 2020-2022

**Project budget:** 953 644 EUR

**Approved EU-fund:** 619 868 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 310 017 EUR

**Private co-financing:** 23 759 EUR



## Collaboration platform for minority languages

### Goal

Overall vision: developing education, culture and business based on the social capital (language and culture) of national minorities.

### Expected result

- The collaboration platform, a physical and virtual meeting place for knowledge and experience exchange among language teachers and cultural educators, researchers and educators, cultural workers and language bearers. The platform will focus on common development areas linked to the region's specific environment and cultural heritage. At the end of the project period, the value of social capital has increased in education, culture and business.
- Development plan - step by step for establishing a translation training for Meänkieli and Kven in cooperation between Sweden, Norway and Finland. Qualified education and vibrant cultural life stimulate business and especially cultural tourism in the North Calotte, increasing the region's visibility and attractiveness.

**Beneficiaries:** Övertorneå kommun,

Oulun yliopisto, Kvensk institut

**Project duration:** 2020-2021

**Project budget:** 267 279 EUR

**Approved EU-fund:** 130 726 EUR

**Approved IR-fund:** 32 926 EUR

**Public co-financing:** 103 627 EUR

### Project description

As requirements for the general public have increased, the need for authorized translators and quality-assured translations has also grown, especially in the public sector but also with production companies, book publishers and the media. The Legal, Financial and Administrative Services Agency in Sweden (Kammarkollegiet) does not currently have an authorized translator in Meänkieli. The challenges among Meänkieli-speakers in Sweden and Kven-speakers in Norway are similar. Relationships between these groups exist, but the contacts have been sporadic.

By establishing a collaboration platform for minority languages in the North Calotte, forms and structures are created for a continuous exchange of skills, which helps to identify concrete challenges and jointly address them. Within the framework of the collaboration platform, as a first concrete cooperation, the translator situation in each country will be mapped and a joint development plan for a translator education in Meänkieli and Kven will be developed.



## The northern parts of the world heritage of Struve Geodetic Arc

### Goal

The main goal of the project is to create a foundation for sustainable, responsible and attractive cultural and tourist products and services, as well as new educational concepts linked to the world heritage Struve Geodetic Arc by increasing the cultural heritage offerings in the Torneå-Haparanda area to Hammerfest.

### Expected result

The project will strengthen the conditions for using Struve Geodetic Arc as a sustainable, responsible and attractive target for learning, culture and tourism among various target groups. The project's communication opens the door for maximum use of the results and for increased knowledge of Struve Geodetic Arc and about the North Calotte's shared cultural heritage and identity.

### Project description

Along Struve Geodetic Arc there are 265 main points and 34 of the points are listed in UNESCO's World Heritage List quite recently (2005). Eleven points lie within the Interreg Nord program area. Science, history and nature are intertwined with the discovery journey that was carried out in 1816-1855. The trip also intertwines Finland, Sweden and Norway all the way from the Haparanda-Torneå area to Hammerfest.

The project's vision is to help develop the northern part of the world heritage Struve Geodetic Arc into a smart and sustainable world-class cultural destination by 2030. Struve Geodetic Arc will have a social, cultural and economic impact in the North Calotte area and beyond by lifting Northern and European cultural identity and cooperation according to UNESCO's values and its spirit.

<https://whc.unesco.org/en/list/1187/>

**Beneficiaries:** Lapin amk, Haparanda

Kommun, Tornion kaupunki, Alta museum

**Project duration:** 2020-2022

**Project budget:** 1 469 900 EUR

**Approved EU-fund:** 644 527 EUR

**Approved IR-fund:** 167 664 EUR

**Public co-financing:** 578 442 EUR

**Private co-financing:** 79 267 EUR





## SeaCombo

### Goal

The main goal of the project is increased collaboration and exchange between Sweden and Finland in terms of knowledge about and carried out by conservation work and management in the marine environment in the northern Gulf of Bothnia.

### Expected result

Expected results from the project activities are:

- Increased knowledge of the northern Bottenviken marine environment, conservation measures and management of the relevant professional groups such as, for example, administrators, decision-makers and consultants, and a strengthened and expanded network between them across the border.
- An investigation into the possibilities for a transnational marine protected area in the northern Gulf of Bothnia with guidelines and recommendations for establishment and management.
- A proposal for a restoration action plan in the northern Gulf of Bothnia, based on an investigation of needs, appropriate methods and execution in the local conditions within the project area.
- An increased public awareness of the northern Gulf of Bothnia and that the sea is unique and worth preserving.

### Project description

With the project SEAmBOTH, the partners have gained access to more information and knowledge about the Gulf of Bothnia, its natural values and impact pressure. This means that the project has a better basis for making informed decisions about activities that affect the sea and where, when and what conservation measures may be needed. Since the sea is borderless, cooperation is also needed across the border to ensure that measures for and in the northern Gulf of Bothnia will have the best effect. The SeaCOMBO project thus becomes a natural next step in which the project uses the marine knowledge bases produced in SEAmBOTH, develops and deepens the cooperation between partners in the marine administration and thus can produce customized plans and proposals for conservation and restoration. This contributes to increased opportunities for a sustainable managed sea in the northern Gulf of Bothnia with improved conservation status. The project provides an opportunity for cross-border cooperation that would otherwise not have been allowed within the project participants' regular activities within their respective national assignments. The effects of collaboration are not limited to project time and participating organizations. Project activities will involve most actors, whose networks across the country border will also be expanded. Initiated collaboration also makes it easier for the future to expand and seek further forms and funding for working together.

**Beneficiaries:** Länsstyrelsen i

Norrbottnen, ELY

**Project duration:** 2020-2021

**Project budget:** 388 525 EUR

**Approved EU-fund:** 252 541 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 135 984 EUR



## Felles Fjellrev II – Arctic Fox Together II

### Goal

The long-term goal of the project is to increase sub-populations of Arctic foxes in the northern parts of Norway, Sweden and Finland, to re-establish more subsets and to reduce inbreeding.

### Expected result

Expected results of the project are:

- preparation for translocation and / or release of Arctic foxes. The hope is to implement translocation / release within the time frame of the project.
- close cross-border cooperation in the management and research of Arctic foxes in the northern parts of Finland, Sweden and Norway.
- Establish contact with authorities and organizations in the Murmansk region that will make mapping and hopefully conservation measures for Arctic foxes on the Kola Peninsula start soon.
- to have conducted an information tour in the project area for public and schools, produced information material that can be used on the Kola peninsula and produced an exhibition on Arctic foxes.
- develop and test a method for reducing predation of birds of prey in a non-harmful way for both the mountain foxes and the birds. If it is successful, the method will also be spread to Arctic fox management outside the project area.

### Project description

In order to achieve a favorable conservation status where the Arctic fox populations are so large that they can cope with few or no conservation efforts, it is important to work cross-border across the entire Northern Calotte. The efforts that have been made within Felles Fjellrev Nord (Arctic Fox Together) have begun to produce results, but there is still a critically low number of Arctic foxes in most subpopulations and in order to strengthen them, further efforts are needed at a level that cannot be achieved by national means alone. It is important to build on what has already been achieved and while the organization between the countries is still in place. The goal of the Felles Fjellrev Nord II (Arctic Fox Together II) project is to harmonize conservation work by allowing Finland to formally participate in the joint action plan that Sweden and Norway have. Finland is an important area, considering, among other things, its geographical location. Finland is an important corridor for immigration of Arctic foxes from the east. Today, very little is known about the plumage fox situation on the Kola Peninsula, but the foxes found there can be an important puzzle piece to reduce the inbreeding among the Arctic fox population in general.

**Beneficiaries:** Länsstyrelsen i

Norrbottnen, Metsähallitus, Stockholms universitet, NINA, UiT

**Project duration:** 2020-2022

**Project budget:** 1 052 798 EUR

**Approved EU-fund:** 684 319 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 368 479 EUR



## Folkverkstan – People’s workshop

### Goal

The main goal is to develop a platform that increases the possibility of circular consumption behavior and to build a concept where the public can repair and fix simple everyday objects.

### Expected result

- The public sector has become more aware of how they can work with circular economics.
- The public sector has been given a validated concept of how they can work preventively to reduce waste and work with Agenda 2030 goal 12 responsible consumption.
- We have strengthened collaboration in the Northern Calotte area to solve our societal challenges together and through each other's knowledge and experience
- The public's knowledge has increased about how we can use our resources more efficiently by repairing and repairing our everyday objects and how our current consumption patterns contribute to climate change.
- More residents use their resources for longer and more efficiently.
- More residents are using their consumer power and questioning whether the products can be repaired and repaired when purchasing a new product.
- We have built partnerships between civil society, business, public sector and research to work with goal 12 within Agenda 2030.
- The project has helped to identify what craft skills will be needed in the climate change.

### Project description

The environment and climate are important future issues, not least for young people, and the recycling trend is also clear to the public. The public sector as the project's target group has a great responsibility for the work on the UN agenda.

The project idea comes from, among other things, the UN global goal 12, Responsible Consumption, in the resolution of Agenda 2030. The goal is for the repair shops (Folkverkstan-People’s workshop) to be in places easily accessible to households. There should be access to tools and knowledge support that help everyone who wants to fix their things instead of throwing them away. By using both traditional and new craftsmanship, the possibility of reuse increases.

**Beneficiaries:** Föreningen Norden,

Pohjola-Norden

**Project duration:** 2020-2022

**Project budget:** 678 371 EUR

**Approved EU-fund:** 441 941 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 237 430 EUR



## AIDA II

### Goal

The goal of the project is to strengthen and make the Sami cultural heritage visible in collaboration with craftsmen, artists and other cultural workers.

### Expected result

The expected result is that the institutions, through joint activities, will strengthen their knowledge of each other's activities and build new platforms for future collaborations.

The project will also contribute to the development of methodology for the work at archives and for public work with the archives. These two institutional results will be visible on a web platform.

### Project description

AIDA II builds on the results achieved during the interreg project Arctic Indigenous Design Archives 2017-2019. Sámi allaskovla will engage trainees. They will work with the material in the established archives at the Sámi archive and Ájtte museum while creating duodje and find new solutions for staging and displaying duodje and archive material. The trainees will also develop a material that will be presented to students, the general public and the duodjes. It may consist of own products, portraits of duodjár and their works, or an analysis of their works. Emphasis is placed on the use of Sami languages and terminology.

The Sámi archive and Ájtte museum will also work on opening up the archives, displaying the archives in new ways as well as developing a web platform. Collection of new archives will also take place. Sámi arkiiva and Ájtte will make effort for the working methods in the work with the cultural heritage from a Sami perspective, that is, adapted to a Sami understanding and practice. The project will work on the development of collection, classification, digitalization and storage of materials. The project also goes on to develop the view of the relationship between institutions and donors and how the relationship can be regulated in different forms of agreements.

**Beneficiaries:** Ájtte, Samearkivet

**Project duration:** 2020-2022

**Project budget:** 843 074 EUR

**Approved EU-fund:** 349 826 EUR

**Approved IR-fund:** 149 389 EUR

**Public co-financing:** 343 859 EUR



## Deanuleagis sámástit

### Goal

The goal of the project is to create a network for the Tana river valley language center, which increases the use of the Sami language in various cross-border language arenas and at the same time promotes the transfer of knowledge about the cultural heritage between the generations.

### Expected result

Expected results, utilization and benefit of the project for the target groups per work package:

- The project results in Tana river valley acting as a network for the language centers.
- The network has access to Tana river valley's virtual teaching environment.
- The network functions as an expert and provider of distance education by organizing courses, camps and events. The network will also produce information on the situation of the Sami language.
- The network actively develops and maintains different physical and virtual language arenas.
- The language centers are well-known as places where you can get advice on language situations.

### Project description

The project will strengthen the position of the Sami language in the Tana river valley and among the Sami population. Due to the sparse population and long distances, the project develops solutions that enable the survival and development of the language and culture despite the long distances. Among other things, the project establishes a language center in Utsjoki, which enables cross-border revitalization of the language together with the actors in Norway.

**Beneficiaries:** Utsjoen kunta, Kajaanin

amk, Samisk naerings- og

utredningscenter

**Project duration:** 2020-2022

**Project budget:** 1 009 245 EUR

**Approved EU-fund:** 542 998 EUR

**Approved IR-fund:** 86 931 EUR

**Public co-financing:** 379 316 EUR



## ICH North

### Goal

The main goal of the ICH North project is to support the preservation of folk music's intangible cultural heritage, make it more visible to future generations, and develop a cross-border collaboration on cultural heritage.

### Expected result

- After the end of the project, a network with a rewarding exchange of knowledge and experience has been established. The network shares practices for the preservation of folk music's intangible cultural heritage and they have carried out a survey of the material that exists in folk music.
- A plan for what is missing and needs to be produced for a digital archive has been drawn up.
- The content of a training in how to produce digital, intangible material has been established.
- 400 people have participated in initiatives that emphasize folk music's intangible cultural heritage.

### Project description

The project will establish a network that will share practice on how to proceed when preserving the intangible cultural heritage. The network will then go on to create a common, digital archive that will consist of films, photographs, notes and text documents, but it can also be about examples of playing and singing styles. The archive is established in a future main project. The archive will then be used by folk musicians, young people and students to increase knowledge about folk music, but it will also be able to serve as inspiration for business opportunities, especially in culture, tourism and education.

They will also create an educational plan for how to preserve the intangible cultural heritage with the help of digital technology. The idea is then to go ahead with this in a main project where material banks are established and where you also start the education in the form of a MOOC course (Massive Open Online Course).

**Beneficiaries:** Centria,

Kansanmusiikki-instituutti ry, UiT

**Project duration:** 2021-2022

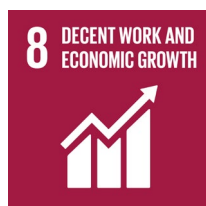
**Project budget:** 203 220 EUR

**Approved EU-fund:** 87 081 EUR

**Approved IR-fund:** 34 625 EUR

**Public co-financing:** 77 486 EUR

**Private co-financing:** 4 029 EUR



## Beavnardahke II

### Goal

Upon completion, the project will have increased the general and organizational knowledge of the Sami cultural landscape in the coastal areas of southern Norrland and Trøndelag by having made available existing and in the project gained knowledge about its Sami cultural environments and stories.

### Expected result

- The already existing website [www.baalka.se](http://www.baalka.se) which describes Sami, cultural destinations has been developed and supplemented with relevant information about Sami cultural heritage in the form of environments and stories in the coastal areas in southern Norrland and Trøndelag.
- The project has created a greater, general knowledge of Sami history and presence in the area and thereby strengthened the situation for administrative municipalities and authorities in the area
- The knowledge of inventory and documentation of cultural heritage and environments has been developed in the local and regional organizations and individuals.
- The [www.baalka.se](http://www.baalka.se) developed in the previous project "Beavnardahke" has grown stronger and has become even more used by people with an interest in Sami cultural heritage and the environment.

### Project description

Through the Sámis on the coast - Beavnardahke II project, the Gaaltije and Saemien Sijte foundations want to inventory, document and make available the Sami cultural heritage and cultural landscape along the coasts of southern Norrland and Trøndelag with the ambition of supplementing and increasing interest in the foundations' developed collection website ([www.baalka.se](http://www.baalka.se)) and by extension the propensity to visit the area.

**Beneficiaries:** Stiftelsen Gaaltije,  
Stiftelsen Saemien Sijte

**Project duration:** 2020-2022

**Project budget:** 327 163 EUR

**Approved EU-fund:** 93 121 EUR

**Approved IR-fund:** 39 879 EUR



## ESBE

### Goal

The main goal is to increase the public sector's competence to make the right assessments in the planning phase of new construction and in the maintenance of properties.

### Expected result

Achieving the goals of the project requires good cooperation and exchange of information and experiences between the project's actors.

- Assessment of the municipal organizations' opportunities to benefit from the digital tools when planning in accordance with sustainable development in everyday life.
- Exchange of knowledge and experiences via the digital tools.
- Increased knowledge in conducting life cycle analyzes (LCA) when building in cold climates.
- Basic introduction to regional tools for life cycle analysis in order to prevent climate change during construction.
- Increased knowledge of how green growth and sustainable development are created through cross-border exchange of knowledge and experience.
- Increased awareness of the benefits of using digital tools, among decision-makers in public and private organizations (authorities, municipal officials in property development, property owners and managers.)

### Project description

The purpose is to increase the public sector's knowledge of tools that lead to correct assessments in the planning phase of new construction and in the maintenance of properties. Life cycle analyzes create an image of the total environmental impact that a building will have during its lifespan. ESBE develops effective digital solutions, data modeling and life cycle analysis (LCA) methods that support sustainable and green growth in the built environment. In order to be able to use more effective methods, better cooperation is required between the actors at the local level and the project will show good examples of this.

**Beneficiaries:** Oulun amk, UmU, LTU

**Project duration:** 2020-2022

**Project budget:** 478 050 EUR

**Approved EU-fund:** 310 732 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 167 318 EUR





## STIL

### Goal

The main goal of the project is to develop summer tourism in the north by using cross-border natural and cultural values when packaging excursion cycle paths in the northern parts of Finland, Sweden and Norway.

### Expected result

The project is expected to result in a survey of suitable cycle excursion routes in the north and their range of services.

### Project description

Cycling tourism is increasing in popularity in Europe. At the same time, there is a need to develop summer tourism in the north. This fact, combined with the effects of the Corona pandemic, which is expected to create a demand for travel to nearby places and outdoor activities, creates good conditions for the project.

**Beneficiaries:** LUKE, Lapin amk, Lapin yliopisto, Pajala kommun, UiT

**Project duration:** 2020-2022

**Project budget:** 507 960 EUR

**Approved EU-fund:** 251 303 EUR

**Approved IR-fund:** 27 227 EUR

**Public co-financing:** 229 430 EUR



## ViK

### Goal

The main goal of the project is that tourist entrepreneurs in the project area have gained knowledge about the cultural landscape / cultural tracks in the area and received tools to use that knowledge in their businesses.

### Expected result

The project expects that knowledge of cultural environments and cultural trails along hiking trails in the project area has increased and that entrepreneurs use these in their businesses through the tools developed by the project. Knowledge about cultural environments and cultural traces and what they can tell about the area's cultural history has also increased among the public who use the hiking trails. This has contributed to increasing the attractiveness of the trails as a tourist destination. The project's partners and entrepreneurs in Sweden and Norway have been brought together and given opportunities for increased cross-border cooperation.

### Project description

There are many hiking trails in the program area of Interreg Nord. Several of them go through national parks, nature reserves or other protected nature areas. What is rarely known is that these trails run in a landscape where humans have lived and wandered for almost 10,000 years. This presence has left traces that can tell about the area's history and deepen the experience of walking in the area's cultural landscape. Developing methods for locating the cultural tracks in the landscape in connection with hiking trails and then making them available to entrepreneurs in tourism and to the public provides opportunities to develop and broaden the range for entrepreneurs and for new experiences for the public who use the trails.

The project will work around the hiking trails Kungsleden in Sorsele municipality in Sweden, Vindelvaggleden between Ammarnäs in Sorsele municipality and Krokstrand in Rana municipality and the trail Nordlandsruta in Helgeland. This is a Sami area and a large part of the cultural landscape and cultural monuments tell of Sami history.

**Beneficiaries:** Västerbottens museum

AB, Nord Universitet, Salten regionråd,

Sijti Jarnge, Helgeland museum

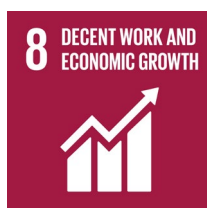
**Project duration:** 2020-2022

**Project budget:** 522 621 EUR

**Approved EU-fund:** 145 787 EUR

**Approved IR-fund:** 149 144 EUR

**Public co-financing:** 227 690 EUR



## **PRIORITY AREA 4- COMMON LABOUR MARKET**

Cross-border collaboration can provide access to varying skills and competences within different areas and branches, equally in new and extended network promoted at the greater scale. Furthermore, an enlarged and more diversified job market support in increasing possibilities for both public and private labor market players as well as for the manpower. Prioritizing this area will lead to improvement in employment along with free movement of manpower across the borders.

### **Specific goals and granted projects:**

#### **1) Cross-border mobility in the labour market has increased**

*Nord:* NORPÅ, The Ramp, Arctic Labour, Bothnian Arc Youth, Academic North, Working together, Live and stay in the Torne River Valley, Interreg Battery Region, AB3C

#### **2) Strengthened skills and knowledge development in the Sami enterprises**

*Sápmi:* Biegganjunázat, Sámi Music Academy, Filling the EU-Sápmi knowledge gaps, Dialogue and encounters in the Arctic

## Biegganjunázat

### Goal

The main purpose of the project was to try out and provide cross-border training modules for the Sápmi region.

### Result:

The project organized a total of 8 training modules in each participating country. The education focused on themes for Sami reindeer husbandry.

Among other things, the project resulted in:

- the reindeer herders have come to know each other, built new contacts and learned about each other's reindeer husbandry,
- the Sami identity has been strengthened and the feeling of youth cohesion and integrity has increased beyond current boundaries
- young students, experts, teachers and other project players have gained new knowledge about the Sami reindeer husbandry method
- Sami reindeer herders were used as educational experts
- topics related to reindeer husbandry have been discussed and handled, such as other land use, climate change, predators, technology, economy, other arctic reindeer herders etc.
- the cooperation between the parties has a stronger foundation for the future
- different levels of learning material have been created
- cooperation with Sami associations and other organizations has been implemented through coordination of events
- The Sami language has served as an official language in the project
- interpreters were used in the education, so that the education was mainly made in Sápmi.
- The wealth of the Sami language in reindeer husbandry and wildlife words has emerged in the various stages of the project, which increases the appreciation of the Sami language
- Sami language use in the training modules has promoted the student's traditional knowledge about reindeer husbandry
- Education and meetings have benefited from modern technical applications and opportunities, eg in the implementation of training modules where cloud servers and other IT applications and equipment were combined with concrete actions such as slaughtering, moving in the terrain, identifying the ear tags of the reindeer, survival under natural conditions

The project contributed to 325 people being able to participate in cross-border competence initiatives within Sami industries.

**Beneficiaries:** Saamelaisalueen

koulutuskeskus, Samernas

utbildningscentrum, Bokenskolan,

Samisk vidaregående skole og

reindriftsskole

**Project Duration:** 2015-2018

**Project Budget:** 835 502 EUR

**Approved EU-fund:** 384 540 EUR

**Approved IR-fund:** 121 951 EUR

**Public co-financing:** 329 011 EUR



## NORPÅ

### Goal

The project wanted to develop better and simpler systems to facilitate the skilled labor mobility in the North Calotte.

### Result:

In this project, the Nordic authorities and industry organizations were merged, and relevant professional areas were examined, as well as existing competency systems between the three countries, Sweden, Finland and Norway. Planned investments were identified and the need for qualified workforce in the North region.

Through mapping of labor needs, figures have been obtained on the need, but also what requirements the companies set to be able to hire. The result shows that there are needs primarily in the construction, service and health and care sectors. The companies see no major obstacles to hiring from another country in the North Calotte.

Through mapping of regulations and competencies, an overall picture of the countries' legal requirements and industry requirements has been obtained when employing labor from another country. The result is that it is usually the industry's own requirements that constitute obstacles and not differences in the countries' regulations. Education and professional skills are often valued equally and approved between the countries, but it is often difficult to obtain information about what is required, or the information is inadequate. It can also be experienced complicated and time consuming with the documentation required for approval. The project thus showed that there is no need for harmonized vocational training, but industry collaboration and collective information on regulations and routines for approval are needed.

The project contributed with knowledge that could be utilized in the project Arctic Labor, which is also a project with support from Interreg Nord.

Through the project, 27 people participated in cross-border mobility initiatives.

<https://www.facebook.com/Nordpaaprojektet/>

**Beneficiaries:** Utbildning Nord,

Narvik VGS

**Project Duration:** 2015-2016

**Project Budget:** 356 375 EUR

**Approved EU-fund:** 112 353 EUR

**Approved IR-fund:** 82 317 EUR

**Public co-financing:** 161 705 EUR



## The Ramp

### Goal

The primary goal was to find ways of collaboration among relevant organizations in order to decrease the number of, so called “*Neets*” in the region.

### Result

Participating organizations have experienced during the project that cross-border cooperation has been concretized, re-evaluated and they have found forms of cooperation that did not previously exist. Through the exchange of experience, good examples have been obtained that have been applied in our own organization.

About 2,000 young people have participated in the project's activities such as fairs and courses.

Young people now have an easier time making contacts across the border. Some who have been part of the project have, for example, planned to apply to the Finnish vocational school. Other young people have discovered and created contacts with new companies and employers through the project.

Several young people have been able to leave unemployment through studies, active participation in associations, probationary and vocational education. Through the project, young people have gained new thoughts and ideas about the future and have taken the step from inaction to actively seeking work or education.

The project has provided the actors with effective tools, valuable insights and experiences to succeed in the work to promote reduced unemployment and increased mobility in the area.

<https://www.facebook.com/rampenramppi/>

**Beneficiaries:** Sverigefinska

folkhögskolan, Peräpohjolan

Kansanopiston kannatusyhdistys ry,

Haparanda kommun

**Project Duration:** 2016-2019

**Project Budget:** 240 940 EUR

**Approved EU-fund:** 156 611 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 70 577 EUR

**Private co-financing:** 13 752 EUR



## Arctic Labour

### Goal

The project's main goal was to increase awareness and interest to work in the North and to increase the actual number of people moving across the border or are considering doing so. The project also wanted to enable higher employability as a support for the Northern labor market.

### Result

The project developed a coaching model to support potential mobile employees to have the skills and courage to grasp the opportunity to work in another country in the north. The coaching model consists of cultural coaching, professional coaching, a study trip to target area, and face-to-face event to meet with potential employers to conduct interviews and introductions. Coaching was piloted two times in project with total of 62 participants. Project also organized visits to Kiruna mine in Sweden and meetings for target group and Norwegian and Finnish employers. All in all, project reached total of 291 persons participating in cross-border labour mobility initiative.

In total 24 Finnish, Norwegian and Swedish employers participated in project activities. There were 71 job interviews taking place that lead to 22 job offers, of which 9 materialized in employment. As a conclusion, there is interest towards cross-border labour mobility in the northern parts of Finland, Sweden and Norway, within potential employees as well as employers. It was clear that more collaboration will be needed, in terms of extensiveness as well as depth of it, to enable influential activities in labour mobility.

<https://www.arcticlabour.com/fi/>

<https://www.arcticlabour.com/sv/>

<https://www.arcticlabour.com/en/>



**Beneficiaries:** Oulun seudun

koulutuskuntayhtymä, Stiftelsen

Utbildning Nord, Bedriftskompetense

**Project Duration:** 2016-2019

**Project Budget:** 713 261 EUR

**Approved EU-fund:** 341 547 EUR

**Approved IR-fund:** 93 902 EUR

**Public co-financing:** 197 701 EUR

**Private co-financing:** 80 111 EUR

## Sámi Music Academy

### Goal

The goal is to strengthen the Sami music as industry.

### Expected result

A strong cross-border network has been created, consisting of both experts and actors.

- Sámi musihkkaakademiiija's operating model has been worked out.
- It has been implemented and established a two-year adult education in Sami music. The education revitalizes Sami vocal music genres and improves music skills. The education also includes courses in entrepreneurship that reinforce the students' skills in cultural entrepreneurship, for them to have the opportunity to act as supervisors, musicians and self-employed in music after education.
- From the curriculum content, a training package in music has been compiled for students in pedagogy at Sámi allaskuvla.
- Educational materials have been produced to the education's own needs.
- It has been trained 12-16 new supervisors and professional musicians
- An international seminar on traditional Sámi vocal music genres and cultural entrepreneurship has been organized.
- There has been a digital meeting point for Sami musicians.
- The possibilities for permanent education have been investigated including the possibility of completing a double examination.
- It has been investigated how adult education in Sami music can be a high school diploma in Finland and Norway.
- Utsjoki Áilegas Center with its premises and equipment has become a central place for music education.
- It has been possible to start an orchestra with public funding in connection with Sámi musihkkaakademiiija.
- Sami music as industry has been strengthened and music education strengthens it further.

### Project description

During the project, Sámi Musihkkaakademiiija's activities form a basis for long-term operations. The project develops Sámi musihkkaakademiiija's activities. Its operations consist of a network where the players include Sámi oahpahuovddáš, Sámi allaskuvla and Utsjoki municipality. The overall content of the project consists of a two-year adult education in Sami music, the development of teaching in Sami music at preschools and schools, the promotion of cultural entrepreneurship in music, and the expansion and strengthening of the network.

<https://www.facebook.com/samimusihkkaakademiiija/>

**Beneficiaries:** Utsjoen kunta,

Saamelais-alueen koulutuskeskus, Sámi allavs-kuvla

**Project Duration:** 2018-2020

**Project Budget:** 839 390 EUR

**Approved EU-fund:** 399 750 EUR

**Approved IR-fund:** 112 195 EUR

**Public co-financing:** 327 445 EUR





## Bothnian Arc Youth

### Goal

The main objective of the project is to increase the mobility of young people during the study period, based on learning entrepreneurship, entrepreneurship and cross-border cooperation.

### Expected result

The project will lead to

- cooperation between Oulu (and vicinity) and Norrbotten has become part of the schools' work and entrepreneurship education
- cross-border activities in entrepreneurship education are seen in joint mobility measures for young people
- The students' motivation and attitudes to the neighboring language and culture are strengthened.

### Project description

The purpose of the project is to develop cross-border cooperation in entrepreneurial education in the Bothnian arch. The project includes the exchange of NY / UF trade shows between Sweden and Finland as well as the organization of cross-border NY / UF Innovation Challenge events.

In connection with these events, so-called teacher programs and seminars that spread knowledge about NY / UF business and entrepreneurial education to school staff and non-school entrepreneurs. Teacher activities offer experienced NY / UF teachers the opportunity for networking and other useful activities and information about the business community in the Bothnian Arc, such as visits to the region's companies.

The project supports further development of existing methods and organizes new types of activities and events. The priority target group and participants in the cross-border activities are upper secondary schools in the Bothnian Arc region. Another group involved in mobility initiatives is teachers and others involved in the implementation and development of entrepreneurial education. Target groups from the entire Bothnian Arc can participate in project events.

<https://ungforetagsamhet.se/om-oss/norrbotten/projekt/interreg-projekt>

**Beneficiaries:** Oulun kaupunki, Ung

Företagsamhet i Norrbotten

**Project Duration:** 2018-2021

**Project Budget:** 726 559 EUR

**Approved EU-fund:** 469 876 EUR

**Approved IR-fund:** 0 EUR

**Public co-financing:** 256 683 EUR



## Academic North

### Goal

The aim of the project was to further the placement of university graduates for the Nordic labor market and to support the remigration of academically educated people to the region.

### Result

The best achievements are increased, intensified and insightful collaboration among the Arctic Five universities. In aim to identify, understand and find solutions for joint cross-border academic labor-based mobility challenges there is need to gain an in-depth understanding of complexities relative to the situation. Universities in the region are such a valuable resource as they function as central RDI facilitators in the region in collaboration with various stakeholders both from public and private sectors and also create jobs that are core for the Nordic welfare society.

Read more about Arctic Five at [The Arctic Five – The Arctic Five \(arcticagenda.org\)](https://arcticagenda.org)

The Academic North project enabled the partners to become a bit closer to each other – despite of the covid-19 pandemic that kept them apart during the final year. They made collegial connections that will sustain for years to come. They also managed to create an Arctic Five university HR network and co-design an idea of a digital platform for continuing collaboration for improving the conditions for Academic work and cross-border mobility that is surprisingly low. Collaboration with HR services in each country resulted in a new project application on Virtual HR services – a work that needs to continue by advancing digitalization more in HR sector services development, not least for sustainable skills supply.

<https://www oulu.fi/wgs/node/54495>

**Beneficiaries:** Oulun Yliopisto, LTU,

UiT

**Project Duration:** 2018-2020

**Project Budget:** 534 440 EUR

**Approved EU-fund:** 283 314 EUR

**Approved IR-fund:** 49 286 EUR

**Public co-financing:** 189 840 EUR

**Private co-financing:** 12 000 EUR



## Filling the EU-Sápmi knowledge gaps

### Goal

The main goal of the project is to increase knowledge about the EU in Sápmi and create the conditions for a cross-border platform for joint, structured and targeted work on issues related to the EU concerning the Sami people.

### Expected result

The project will:

1. increase knowledge about the EU in Sami civil society and in Sami industries
2. create work training for young Sami in education by offering a Sami trainee program focused on the EU
3. Establish a Council, Jurdabeassi, made up of Sami experts to develop a strategy for promoting Sami issues in a more structured, common and targeted way in EU policy development
4. organize EU Sápmi Week in Brussels in 2022.

The Sami languages will be used actively in the project.

### Project description

The Sami Council's Sami Conference already stated in 1992 that the position of the Sami in the EU must be considered in the EU membership of the nation states. Sweden and Finland became EU members in 1995 while Norway voted no for membership. As part of Sweden's and Finland's accession agreement to the EU, the so-called Sami Protocols (Protocol 3 to the Accession Agreement) are included. The Sami Protocols are an exception for the Sami from the prohibition of discrimination under the four EU freedoms. During the almost 25 years that Sweden and Finland have been members of the EU, no systematic work has been carried out to see what opportunities and challenges that EU membership brings to the Sami people.

The Sami Council member organizations have over time expressed a need for more knowledge and exchange of experience in Sápmi on how EU directives, regulations, decisions, opinions and recommendations affect the everyday life of the Sami. The need has also been raised in the Sami Parliamentary Council (SPR) for a long time on how Sami can get a clearer voice within the EU and how a permanent contact point with the EU can be organized. The project is established both at political level in Sápmi and in civil society.

**Beneficiaries:** Nordiska Samerådet,  
Suoma Sámi Nuorat ry, Saami Council  
Headquarters

**Project Duration:** 2018-2020

**Project Budget:** 982 245 EUR

**Approved EU-fund:** 496 612 EUR

**Approved IR-fund:** 109 113 EUR

**Public co-financing:** 286 078 EUR

**Private co-financing:** 90 442 EUR



## Working together

### Goal

The aim of the project is to raise awareness of the labor market's potential for cross-border mobility, among the actors in the labor market.

### Expected result

- Positive impact on labor supply in northern Sweden and northern Finland.
- Contributes to solving the challenge of providing skills and creates a favorable attitude climate for the common labor market area in the north.
- The area's employers receive information on how factors that hinder mobility affect workers' willingness to move across borders.
- The project strengthens the operations of the existing networks

### Project description

The main goal of the project is to increase awareness of the opportunities for cross-border mobility in the labor market through collaboration between the project network and stakeholder groups and to reduce the factors that hinder labor mobility. The project involves municipalities, employment agencies, employers and business networks within the program area. Those actors can, with their activities and collaboration, promote cross-border mobility and thus respond to employers' need for labor. The project promotes cooperation between northern Sweden and northern Finland to build the common labor market area. This means improving jobseekers' skills in seeking employment and increasing employment in the program area and increasing employers' ability to hire jobseekers from the program area and influencing political decision-making to eliminate the causes of structural barriers to promoting mobility.

**Beneficiaries:** Oulun seudun

koulutuskuntayhtymä, Lappia, Lapin

liitto, LTU, Oulun amk, Utbildning Nord

**Project Duration:** 2020-2022

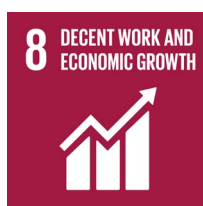
**Project Budget:** 1 497 128 EUR

**Approved EU-fund:** 976 133 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 508 951 EUR

**Private co-financing:** 15 044 EUR



## Live and stay in Torne River Valley

### Goal

The project will create a sustainable and long-term strategy to increase the number of municipal citizens in the participating municipalities

### Expected result

The project will create a new way of working with the goal of getting families to move in. The project will create a unified entrance for new residents of the municipality and create an attractive and viable part of the Torne river valley for those who already live in the region. The project will work to strengthen the region's brand, focus on communicating the benefits of the municipalities, in stories about the conditions and experiences that make Pajala and Kolari municipalities the best places to live and stay. The goal is to increase the occupancy with 10 families or 40 people.

### Project description

The biggest challenge for the Torne river valley is a declining population, which leads to a lack of skills and manpower. Because the municipalities jointly meet the challenges and in close cooperation with the business community, develop methods and working methods that can be packaged and marketed, you do not compete, but together strengthen the attractiveness of the region. Building networks across the border with a focus on development issues is an important part of the work. Marketing of study opportunities, work, housing, meeting places, experiences, leisure activities, culture and associations will be an important part of increasing the mobility and mobility across the border.

**Beneficiaries:** Pajala Kommun,  
Kolarin kunta

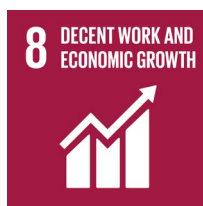
**Project Duration:** 2020-2022

**Project Budget:** 238 271 EUR

**Approved EU-fund:** 154 631 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 83 640 EUR



## Dialogue and encounters in the Arctic

### Goal

The goal is to improve the dialogue and the common understanding of indigenous people, especially between practitioners of Sami industries and knowledge-communities to strengthen the ability of indigenous peoples to influence issues regarding their own culture.

### Expected Result

The project's expected result is to create better dialogue and understanding between partners in the Arctic in the areas of research, education, livelihood and culture. In practice, this means innovation solutions that are both ecologically and economically sustainable for the Arctic indigenous peoples and which are also linked to traditions.

### Project description

A pilot for the project's network-based business model is conducted through workshops. The project will arrange various workshops with themes such as;

- local environmental perceptions;
- sustainable food cultures and food sovereignty
- Arctic innovations of indigenous objects, materials and tools, creative use and design, carefully crafted stories and narrative research.

**Beneficiaries:** Saamelaisalueen

koulutuskeskus, Lapin yliopisto, Umeå  
University

**Project Duration:** 2020-2021

**Project Budget:** 644 777 EUR

**Approved EU-fund:** 419 104 EUR

**Approved IR-fund:** - EUR

**Public co-financing:** 225 673 EUR



## Interreg Battery Region

### Goal

The main goal of the project is to establish a cross-border competence supply strategy for the battery industry's manufacturing stage.

### Expected Result

- Identified and defined development needs within the training and matching systems for the battery industry.
- Established network between labor market and education actors (relevant to the industry) for learning and exchanging knowledge and experiences.
- Developed proposals for training opportunities for battery manufacturing, based on performed analysis.
- Established collaboration between regional strategic managers for the competence supply issue, with a view to a common cross-border labor market region regarding the battery industry.

### Project description

The project creates the necessary networks and collaboration to be able to coordinate and utilize synergy effects between the countries' education systems and matching systems. The aim is to develop cross-border solutions for employment and mobility. A collaboration on this issue is not established today. For the project's two actors who have regional responsibility for skills supply issues, this will be a first step towards a coordinated cross-border labor market region for the battery industry.

**Beneficiaries:** x

**Project Duration:** 2020-2021

**Project Budget:** x EUR

**Approved EU-fund:** x EUR

**Approved IR-fund:** - EUR

**Public co-financing:** x EUR

**Private co-financing:** x EUR



## AB3C Supercluster

### Goal

The main goal of the project is to build the third dimension of the supercluster initiative; "Skills and knowledge" by exposing both professionals and employers to the cross-border labor market through training adapted for companies.

### Expected Result

The project is expected to result in:

- two roadmaps for the "Northern Construction Supercluster Collaboration Framework", one short-term for the period 2022-2027 and one long-term for the period 2022-2039.
- a survey of the industry's needs as a basis for educational development.
- a roadmap for the development of cross-border training for companies

### Project description

The work within the project stems from the long-term creation of a supercluster in the construction industry in the northern Nordic region. At the regional level, local clusters are the most important instrument in the work, while cross-border collaboration is done with the help of clusters to coordinate collaboration within the framework called supercluster.

The work of formulating and building superclusters can be described in three dimensions:

- research and innovation
- industrial cooperation and new business opportunities for SMEs
- competence and knowledge

The "AB3C Supercluster" project will work within the third dimension with the intention of using the supercluster initiative to broaden people's skills and deepen their skills. In order to move towards cross-border mobility for the workforce in the construction industry, the project focuses on mobility of skills where people share their skills across borders.

**Beneficiaries:** x

**Project Duration:** 2020-2021

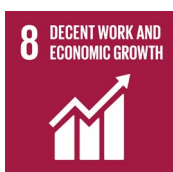
**Project Budget:** x EUR

**Approved EU-fund:** x EUR

**Approved IR-fund:** - EUR

**Public co-financing:** x EUR

**Private co-financing:** x EUR





Priority area	Pre-study	Lead Partner	Other partners	Nord / Sápmi	Budget (EUR)	EU-funding (EUR)	IR-funding (EUR)
1	INSPIRE	Västerbottens läns landsting	Oulun yliopisto, UiT	Nord	33 725	9 880	9 262
1	Offshore Hightech	Turun yliopisto	Forskningsparken i Narvik AS	Nord	32 930	9 836	8 899
1	PreNUVE	Oulun ammattikorkeakoulu	LTU	Nord	30 744	19 984	0
1	NAI	LTU	Luleå kommun, Region Norrbotten, Oulun amk	Nord	28 538	18 546	0
2	Arcti© Lean	Kemin Digipolis Oy	IUC Norrbotten AB, Sintef Nord AS	Nord	60 000	10 000	10 000
2	Digitalization as a driving force in Arctic Europe	Norrbottens Handelskammare	Bedriftskompetanse AS	Nord	37 523	9 915	10 000
2	Forprosjekt Arctic Intergenerational Exergaming	Norut	-	Nord	7 318	0	3 659
2	Export Cooperation Sweden - Finland	Norrbottens handelskammare	Oulun kaupunki	Nord	39 010	19 356	0
2	Samisk digital multimedia bedriftsnettverk	Norut Tromsø	-	Sápmi	19 512	0	9 756
2	Samisk reiseliv i Tanadalen	Samis næringsforbund	-	Sápmi	19 512	0	9 756
2	Vårt gemensamma matkulturarv i Sápmi	Slow Food Sápmi	Sijti Jarngje – det samiske kultur- og utviklingsentre i Hattfjelldal	Sápmi	20 000	6 500	4 999
3	Halti transboundary landscape area	Reisa nasjonalparkstyre	-	Nord	17 968	0	8 984
3	Arctic Cultural Heritage	Nouseva Rannikkoseutu ry	Leader Polaris 2020	Nord	29 313	19 053	0
3	Grenseoverskridende kulturminner og kulturmiljø	Árran julevsáme guovdásj	-	Sápmi	20 207	0	10 000
3	Händelser kring gränsen	Stiftelsen Gaaltije	Ajtte, Västerbottens museum, Stiftelsen Saemijen Sijte	Sápmi	41 711	9 950	4 683
3	Struven ketju Pohjoisen	Lapin amk	Verdensarvsenter for bergkunst Alta Museum IKS	Nord	25 016	9 919	4 878
4	Akateeminen työttömyys/työllisyys Arktisessa Pohjoisessa.	Oulun Yliopisto	LTU	Nord	16 049	10 000	0
4	Felles Arbeidsmarked	Vinn	-	Nord	8 476	0	4 238
4	Jobbcentrum	Föreningen Norden	Lapin liitto	Nord	16 800	10 000	0
4	Trainee High North	Bedrifts-kompetanse AS	-	Nord	19 512	0	9 756

Priority area	Pre-study	Lead Partner	Other partners	Nord / Sápmi	Budget (EUR)	EU-funding (EUR)	IR-funding (EUR)
4	Integration Nordkalotten	Föreningen Norden	Pohjola-Norden	Nord	30 425	15 925	0
4	Local bus	Tornion kaupunki	Haparanda stad	Nord	28 500	18 500	0

Financier	EU - Public fin EUR	EU - Private fin EUR	Norway - Public fin EUR	Norway - Private fin EUR	No of projects financed
3D Step		5 000			1
ABF Mitt i Lappland, Vilhelmina	27 500				1
Abisko, STF AB		6 480			1
Agency9		67 667			1
AGIO		1 000			1
Agnico Eagle Finland Oy		5 000			1
Ahlmanin koulun säätiö		23 759			1
Aikolon		5 000			1
Ajtte, svenskt fjäll- och samemuseum	266 310				5
AkkuSer Oy		1 000			1
Akvaplan-Niva				12 000	1
Alavojakkalan jakokunnan yhteisen		900			1
Alfamat Oy		15 550			2
Alkkulan kalastuskunta		1 500			1
Alta Kommune			22 945		2
Alta museum			37 576		2
ALUTEC Oy		1 000			1
Apex Automation Oy		3 000			1
Arctic Bath AB		2 310			1
Arctic Connection Travel Group		6 480			1
Arctic Inbound AB		2 310			1
Arctic Light Hotel Oy		5 000			1
Arctic Link AB		10 800			1
Arctic Property Oy		1 200			1
Arctic Safaris		6 480			1
Arjeplog hotel Silverhatten AB		18 360			2
Arjeplogs kommun	5 291				1
Arkivverket (Samisk arkiv)			104 917		1
Arktikum-palvelu Oy		7 250			2
Armassaaren kalastuskunta		900			1
Ärran - lulesamisk senter			80 122		1
Art Hotel Tornedalen		2 310			1
Arvidsjaur's flygplats AB	10 800				1
Aurora DC Finland Oy		1 070			1
Aurora Lapland Travel Oy		2 250			1
Bardu kommune			6 097		1
Bedriftskompetanse AS				91 786	3
Bedriftsnettverk/Arena				73 171	1
Beivvas Sami Teahter			29 268		1
Bioforsk Holt				60 976	1
Bioforsk Jord og Miljø			20 000		1
Black Lion Pictures Oy		3 000			1
BnearIT AB		2 000			2
Boden Utveckling AB	1 000				1
Bodens kommun	29 353				2
Bodö kommune			6 097		1
Boliden Electro		1 050			1

<b>Financier</b>	<b>EU - Public fin EUR</b>	<b>EU - Private fin EUR</b>	<b>Norway - Public fin EUR</b>	<b>Norway - Private fin EUR</b>	<b>No of projects financed</b>
Brokk		4 000			1
Brändö konferens & fritidsby		9 780			2
Brødrene Karlsen AS				600	1
Business Oulu Export Cluster		28 000			1
Camp Ripan AB		13 080			2
Cape East		1 200			1
CAPE Lapland Oy		4 000			2
Carrum Oy		4 650			1
Casselgren Innovation AB		14 527			1
Castolin Scandinavia AB		5 500			1
Centria-ammattikorkeakoulu Oy	421 227				11
CGI		1 000			1
City Hotel Oy		5 000			1
Clarion Hotel Sense		18 360			2
Collaprim Oy		22 500			3
Compositbalkonger i Fällfors AB		10 000			1
Conex		4 000			1
DDig AB		1 050			1
Deltagande företag Norge				884 488	9
Destia Oy		4 500			1
Destination Inlandsbanan AB		8 790			2
Dimense Oy		600			1
Domisi Oy		1 000			1
Dundret Sweden AB		2 529			1
Duroc AB		5 500			1
Duroc Laser Coating		5 500			1
Eija Nivala Design Oy		1 500			1
Elite Hotel Luleå		11 430			2
Elpex Sweden AB		1 000			1
ELY	293 740				6
EräHotelli Nellim Oy		4 750			1
Eskelisen Lapin Linjat Oy		2 500			1
Etelä-Savon Maakuntaliitto	2 750				1
Europcar		1 750			1
Explore the North AB		3 300			1
FilmCamp AS				186 244	1
Fineweld Oy		1 000			1
Finn Spring Oy		2 000			1
Finnish Lapland Tourist Board / LME		14 608			2
Finnmarks fylkeskommune			623 038		12
Finnvera	1 000				1
Finsk-Svenska Gränsälvscommissionen	3 000				1
Fjällguiden AB		2 310			1
Flowpuls Oy		9 300			1
Foreca Oy		52 937			1
Forest Hotel		1 208			1
Forskningsparken i Narvik				29 566	2

<b>Financier</b>	<b>EU - Public fin EUR</b>	<b>EU - Private fin EUR</b>	<b>Norway - Public fin EUR</b>	<b>Norway - Private fin EUR</b>	<b>No of projects financed</b>
Fortum Power and Heat Oy		12 000			1
Frebelt AB		1 000			1
Future Eco		20 628			1
Fylkesman i nordland			85 366		1
Fylkesmannen i Finnmark			121 951		2
Föreningen Norden Norrbotten	3 800				3
Gaaltije-sydsamiskt kulturcentrum	0				1
Gbuilder		2 000			1
Geologiska forskningscentralen	150 949				3
Gestamp Hardtech AB		11 000			2
Gildeskål kommune			60 975		1
Giron Sámi Teáhter	31 600				1
Global Boiler Works Oy		1 600			2
Grant 4com Oy		1 000			1
Group Builder Oy		2 500			2
Guolbba Oy / Lomakylä Valle		1 750			1
Gällivare kommun	24 438				3
Hagblom Oy		1 000			1
Hammerfest kommune			16 848		1
Hammerfest Turist				59 450	1
Haparanda kommun	133 494				6
Haparanda Stadshotell AB		4 500			2
Happy Booking		1 050			1
Harrinivan Lomakeskus Oy		14 500			1
Hartela-Forum Oy		1 000			1
Havs- och vattenmyndigheten	124 509				1
Heart of Lapland		3 790			1
Helgeland museum			37 287		1
Herman Andersson Oy		1 000			1
Hiihtokeskus Iso-Ylläs Oy		9 500			1
Himmerkinlahti Oy		4 000			2
Honkamajat Oy		1 000			1
Hopeaseppä Jorma Smeds		500			1
Hotell Storforsen AB		6 480			1
Hotelli Inarin Kultahovi Oy		2 500			1
Hotelli Ivalo Oy		5 000			1
Hotelli Korpikartano		2 500			1
Hovilompolo		300			1
Hulkoffgården AB		750			1
Hullu Poro Oy		34 250			2
Hushållningssällskapet		9 500			2
Hydro66		15 000			1
Högskolan i Narvik			70 860		1
ICEHOTEL		19 800			1
Icehotel AB		6 480			1
Icross Flyfishing		1 050			1
Ihana! AS				25 244	1

<b>Financier</b>	<b>EU - Public fin EUR</b>	<b>EU - Private fin EUR</b>	<b>Norway - Public fin EUR</b>	<b>Norway - Private fin EUR</b>	<b>No of projects financed</b>
Iin kunta	3 000				2
Iin Micropolis Oy	15 588				1
Ilmatieteen laitos	52 079				2
IMSS Oy		2 000			1
Inarin Lapin Vesi Oy	35 998				1
Inari-Saariselkä Matkailu Oy		4 750			2
Industrigruppen Bottnia		5 362			1
Infranord AB		5 500			1
Innovasjon Norge			804 050		7
International Sámi Film Institute	15 800				1
Interrent Oy/ Europcar		2 250			1
IUC Norr		46 110			2
J.M. Eskelisen Lapin Linjat Oy		9 500			1
Jake Rakennus Bygg Oy		500			1
JKS Products Ltd		1 000			1
Jokkmokks Allmänning		14 480			1
Jord Ekonomisk förening		9 727			1
Kainuun ammattiopisto	61 608				1
Kainuun liitto	27 750				2
Kainuun Voima Oy		4 000			1
Kainuunkylän osakaskunta		1 500			1
Kaivosyhtiö Arctic Ametisti Oy		4 750			2
Kajaanin Ammattikorkeakoulu Oy	43 695				1
Kalaliike Haavi		600			1
Kalix kommun	11 709				2
Kansallisarkisto/Saamelaisarkisto	96 239				3
Kansanmusiikki-instituutti		4 029			1
Karasjok kommune			96 341		2
Karungi fiskeförening		600			1
Karungi hembygdsförening		150			1
Karungi Skifteslag		1 500			1
Karungin osakaskunta		7 500			1
Kaulirannan osakaskunta		700			1
Kautokeino kommune			19 817		1
Kemijoki Oy		75 000			1
Kemin Digipolis Oy	53 500				3
Kemin Matkailu Oy		18 500			2
Kemi-Tornionlaakson koulutuskuntayht.	37 119				1
Keskipiste-Leader ry	577				1
Keski-Pohjanmaan koulutusyhtymä	40 521				1
Kieringin Lomakylä Oy		1 750			1
Kiruna Lappland ek för		19 300			2
Kiruna Wagon		4 000			1
Kittilän kunta	9 000				1
Kjeller Vindteknikk AS				600	1
Kjeøy Research and Education Center				145 526	1
Klar Svan AB		1 000			1

<b>Financier</b>	<b>EU - Public fin EUR</b>	<b>EU - Private fin EUR</b>	<b>Norway - Public fin EUR</b>	<b>Norway - Private fin EUR</b>	<b>No of projects financed</b>
Koillis Mittaus Oy		600			1
Koillismaan Leader ry	577				1
Koillis-Suomen kehittämissyhtiö	95 350				1
Koivukylä-Päkkilä-Vitsaniemi		300			1
Kokkola LCC Oy		20 200			2
Kokkolan kaupunki	10 000				1
Kokkolanseudun Kehitys Oy (KOSEK)	145 202				3
Kolari kommun	11 829				1
Korpikylä hembygdsförening		300			1
Korpikylän osakaskunta		6 000			1
Koy Koutalaki / Hotel Levi Panorama		12 000			2
KS-säätiö		30 000			1
Kuivakankaan osakaskunta		750			1
Kukkola kalastuskunta/fiskeförening		3 990			1
Kukkola samfällighetsförening		6 000			1
Kukkolaforsen Fastighet		3 000			1
Kukkolaforsen Turist & Konferens AB		16 980			4
Kukkolan kyläyhdistys		300			1
Kukkolan osakaskunta		11 010			1
Kukkolankosken Myllynpirtti		1 000			1
Kukkolankosken siikkalastusyhtymä		2 400			1
Kukkolankoski Catering		300			1
Kuljetusliike Kinnunen Oy		500			1
Kummeet Oy		1 000			1
KUST Hotell & Spa i Piteå		9 780			2
Kvensk Institutt			32 927		1
Kylmämaan Ohjelmat Oy		4 000			2
Kåfjord kommune			51 594		1
Lapin ammattikorkeakoulu Oy	801 738				21
Lapin Kauppakamari		1 000			1
Lapin liitto	10 046 499				93
Lapin yliopisto	238 210				6
Lapland Hotels Oy		39 250			2
Lapland Ice & Light AB		2 310			1
Lapland Resorts AB		26 280			2
Lapland Safaris Group Oy		39 250			2
Lapland Welcome Oy		2 250			1
Lappesuando Turistservice AB		6 480			1
Lappia	9 000				1
Lapplands kommunalförbund	16 416				2
Lasercom AB		1 072			1
Lestijärven kunta	16 273				2
Levin matkailu Oy		28 250			2
Levin Matkailukeskus Oy		34 250			2
Licab		1 000			1
LKAB		6 000			1
Loiste Oy		1 000			1

<b>Financier</b>	<b>EU - Public fin EUR</b>	<b>EU - Private fin EUR</b>	<b>Norway - Public fin EUR</b>	<b>Norway - Private fin EUR</b>	<b>No of projects financed</b>
LTU Business AB		17 521			1
LUKE Luonnonvarakeskus	307 779				9
Luleå energi AB	3 000				1
Luleå kommun	169 048				9
Luleå tekniska universitet	2 191 903				47
Lumise Oy		1 000			1
Lunds universitet	240 588				2
Längmanska företagarfonden		18 180			1
Länsstyrelsen i Jämtlands län	89 554				1
Länsstyrelsen i Norrbottens län	1 406 674				15
Länsstyrelsen i Västerbottens län	16 796				1
Länsstyrelsen i Västernorrlands län	50 142				1
Maailmasta Oy		26 000			1
Maanmittauslaitos	29 976				1
MAF Arkitektkontor AB		1 000			1
Masonite Beams		10 000			1
Matkakoski fiskeförening		3 000			1
Matkalle Sallaan ry		4 000			2
Meri-Lapin matkailu Oy		4 000			2
Metasphere Technology AB		10 900			1
Metsähallitus	248 174				6
Meän kukkolankoski ry		500			1
Midnight Composites AB		1 921			1
Miilux		20 000			1
Mirror Partner Utveckling AB		1 000			1
Moose & Goose AB		2 310			1
Movenium AB		1 000			1
Museene for Kystkultur og gjenreisn.			16 848		1
Myvon Oy		1 750			1
Narvik Composite				600	1
Narvik kommune 959469059			60 976		1
Nasjonalparkstyret for Reisa			51 592		1
Nedre Vojakkala Skifteslags		1 000			1
Nellim Wilderness Hotels & Safaris		9 000			1
Niekhu Adventure AB		2 310			1
Nihak Oy	18 758				2
Nivalan Teollisuuskylä Oy	11 250				1
Nord Troms Museum			3 000		1
Nordic Cai Project Consulting AB		100			1
Nordic Tank Oy		1 000			1
Nordiska ministerrådet			426 365		2
Nordiskt genresurscenter	50 524				1
Nordkalotträdet (NKR)	66 000		11 940		9
Nordland fylkeskommune			951 399		19
NordNorsk Reiseliv as				377 917	1
Nordnorsk vitensenter			80 738		1
Nordnorske entreprenørers				13 701	1



<b>Financier</b>	<b>EU - Public fin EUR</b>	<b>EU - Private fin EUR</b>	<b>Norway - Public fin EUR</b>	<b>Norway - Private fin EUR</b>	<b>No of projects financed</b>
Nord-Trøndelag fylkeskommune			4 683		1
Nord universitet			37 287		1
Norges forskningsråd			91 421		2
Norges Vassdrags- Og Energidirektorat			26 829		1
Norra karelens landskapsförbund	2 750				1
Norra-Österbottens förbund	117 654				4
Norrbottens Handelskammare		24 262			4
Norrlandsjord och Miljö AB		1 050			1
Norsk institutt for bioekonomi			60 000		1
Norsk institutt for naturforskning			140 184		1
Norsk kulturråd			128 576		3
Northern Norway Tourist Board				272 029	1
Norut				83 845	1
Norut Tromsø			313 110		3
Nouseva Rannikkoseutu ry	684				1
Nuorgamin Lomakeskus Ky		1 750			1
Nuotiorannan kalastuskunta		1 200			1
Nutti Sámi Siida		6 480			1
NxtVN Finland Oy		15 000			1
Nämnden för hemslöjdsfrågor	18 555				1
Närkkin Tengeliö Portimojärvi		600			1
OnlineMarina		1 000			1
Optomed		5 000			1
Ottomarino Oy		1 000			1
Oulu Business Networks Oy		500			1
Oulun ammattikorkeakoulu	391 656				11
Oulun DataCenter Oy		1 322			1
Oulun Energia Oy		4 000			1
Oulun kauppakamari		1 000			1
Oulun kaupunki	788 747				13
Oulun Kojeistotarvike Oy		500			1
Oulun Konttivuokraus Oy		1 300			1
Oulun Matkailu Oy		30 000			1
Oulun seudun koulutuskuntayhtymä	118 772				3
Oulun Yliopisto	1 300 062				29
Outokumpu		15 000			1
Oy Häggblom Ab		10 900			1
Oy Kinos Safaris ltd		2 500			1
Oy Sea Lapland Hotels & Restaurants		2 500			1
Pajala kommun	100 572				3
Park Hotel Tornio Oy		1 200			1
Peab		8 530			1
Pellon Kehitys Oy		7 950			1
Peräpohjolan Kansanopiston		4 536			1
PeteMark Raudoitus Oy		1 000			1
Pirkkiön osakaskunta/ vesialue		639			1
Piteå Energi AB		2 573			1

<b>Financier</b>	<b>EU - Public fin EUR</b>	<b>EU - Private fin EUR</b>	<b>Norway - Public fin EUR</b>	<b>Norway - Private fin EUR</b>	<b>No of projects financed</b>
Piteå Havsbad AB		19 800			1
Piteå kommun	1 000				1
Playsign		2 000			1
Pohjois- Suomen Tekniikkapalvelut Oy		1 000			1
Pohjois-Savon Liitto-Maakuntayhtymä	2 750				1
Pohjois-Suomen audiovisuaaliset		20 412			1
Pohjolan Safarit		3 150			2
Pohjola-Norden		500			1
Pohjola-Norden Lapin piiri Ry	4 457				1
Polar Star Travel / Aurora Incoming Levi		2 500			1
Polardörren AB		1 050			1
Polarfönster		1 050			1
Posion Matkailuyhdistys		1 750			1
Premec Oy		1 000			1
Pro-Agria Oulu ry		0			1
Projant/ Katsastus Team Oy		1 300			1
Prosiika ry		2 400			1
Pure Lapland AB		2 310			1
Pyhä-Luosto Matkailuyhdistys ry		2 250			1
Pyhä-Luosto Resort Association		1 750			1
R- Automatic		1 050			1
Raahen setukunta	7 000				1
Rajakiiri Oy		18 000			1
Rajalla kauppakeskus		1 200			1
Rana kommun			6 097		1
Randax		5 000			1
Rec Alkaline Oy		1 000			1
Recion		8 113			1
Region Jämtland Härjedalen	102 192				1
Region Norrbotten	5 146 000				64
Region Västerbotten	188 990				4
Regionförbundet Västerbottens län	121 717				2
Reklamcentra produktion i Sverige AB		1 050			1
Relitor Engineering AB		1 072			1
RiddoDuottarMuseat			19 817		1
Rieska-Leader ry	577				1
RISE Research Institutes of Sweden	46 642				2
RISE SICS North AB	9 433				1
Roadscanners Oy		2 900			1
Robit Plc		9 300			1
Robot Center Norr AB		1 072			1
Rolls-Royce Oy Ab		10 900			1
Rovaniemen kaupunki	19 000				2
Rovaniemen Kehitys oy	30 000				1
Rovaniemen Matkailu ja Markkinointi		2 250			1
Rovaniemi Hirsitalot Oy		1 000			1

Financier	EU - Public fin EUR	EU - Private fin EUR	Norway - Public fin EUR	Norway - Private fin EUR	No of projects financed
Ruka-Kuusamo Matkailu ry		34 500			1
RYK			51 220		1
Saamelaisalueen koulutuskeskus	84 365				3
Saamelaiskäräjät	270 821				1
Saami Council		54 500		35 942	1
Saferescue Sweden AB		1 000			1
Salla Ski Resort / Kaunisharju Oy		2 250			1
Salten regionråd			37 287		1
Saltoluokta, STF AB		6 480			1
Samediggi/Sametinget			1 239 723		10
Samelands resor AB/Fjällguiden AB		1 072			1
Samernas utbildningscentrum	20 124				1
Samerådet, norska sektionen			9 146		1
Sameskolstyrelsen	12 060				1
Samesløjdsstiftelsen	15 800				1
Sametinget	460 266				3
Sámi Museum Siida	85 352				2
Sámi University College			144 390		2
Samisk høøgskole			3 049		1
Samisk nærings- og utredningscenter			43 466		1
Samisk vidaregående skole			121 951		1
SantaPark Oy		1 000			1
Sápmi Innovation AB		10 152			1
Sápmi næringshage as			16 848		1
Sápmi Nature AB		8 790			2
SARB Consulting Norge AS				6 098	1
Scandic		7 500			1
SCC Oulu companies		13 000			1
Science city Skellefteå AB		1 440			1
Senja AS				600	1
SFTec Oy		1 319			1
Sicomp swedish inst of composites	28 529				1
Siida-Saamelaismuseum ja luontokeskus	2 250				1
Sijti Jarngje			178 275		2
SINTEF				53 580	1
SINTEF NARVIK AS			172 006		3
Sintef Nord AS			8 500		1
SJ Norrlandståg AB	10 800				1
Skellefteå City Airport AB	20 700				2
Skellefteå kommun	258 401				5
Slow Food Sápmi		0			1
Smart Construction Cluster Alta				6 097	1
Smart construction Cluster Tromsø				6 097	1
Smilee/Kommeet Oy		1 200			1
Somotec Oy		4 650			1
Sparbanken Nord		39 480			2
Sport Resort Ylläs		5 000			1

Financier	EU - Public fin EUR	EU - Private fin EUR	Norway - Public fin EUR	Norway - Private fin EUR	No of projects financed
SSA Digi Oy		1 000			1
SSAB		80 000			2
Statens energimyndighet	63 870				1
Statens kartverk			16 848		1
Statens kulturråd	53 915				1
Statnett SF			18 000		1
Steel Kamet Oy		1 000			1
Stella Polaris AS				600	1
STF Abisko		11 880			1
Stiftelsen Gaaltje		650			1
Stiftelsen Saemien sijte			158 929		4
Stiftelsen Teknikens Hus	37 500				1
Stiftelsen Tornedalens folkhögskola	20 065				1
Stiftelsen Utbildning Nordkalotten	61 095				1
Stockholms universitet	378 454				2
Stoorstålka AB		1 072			1
Stora Sjöfallet Fjäll AB		6 480			1
Storfjord kommune			70 002		1
Storumans kommun	125 523				1
Strukturum i jokkmokk AB	0				1
Studio E-city		20 795			1
Suoma Sámi Nuorat ry		0			1
Suomalais-Ruotsalainen kulttuurirah.		2 000			1
Suomen keskusvaraamo Oy		1 000			1
Suomen ympäristökeskus	56 679				2
Sustainalube AB		500			1
Svanstein Resort AB		2 310			1
Sweco		8 530			1
Swedavia AB	31 500				2
Swedish Lapland Visitors Board	18 156				2
Svenska Tågkompaniet AB		10 800			1
Swerea Mefos AB	85 079				2
SverigeFinska Folkhögskolan	36 579				2
Sveriges geologiska undersökning	215 184				2
Sveriges lantbruksuniversitet	4 566				1
Swerim		27 480			1
Sähkövaltti Oy		1 000			1
Säiö Ykköset Oy		1 000			1
Särkijärven Majat Oy		1 750			1
Sörbyn Turism och Konferens		6 480			1
Sör-Trøndelag fylkeskommune			4 683		1
Tana Kommune			132 255		3
Tanavassdragets fiskeforvaltning				16 098	1
Team Botnia Oy	114 574				1
Teatiamo Industries Oy		1 000			1
Teca Oy		500			1
Termater Oy		500			1

<b>Financier</b>	<b>EU - Public fin EUR</b>	<b>EU - Private fin EUR</b>	<b>Norway - Public fin EUR</b>	<b>Norway - Private fin EUR</b>	<b>No of projects financed</b>
The Northern company AS				4 878	1
Thermotic AB		1 072			1
Tikomet Oy		4 650			1
Tillväxtverket	95 000				1
TL Solution		9 000			1
Toranda Events		1 200			1
Tornedalens Renprodukter		1 050			1
Tornedalsrådet	27 606				5
Torneå kommun	8 000				3
Tornio City Hotel o Restaurang Oy		1 200			1
Tornio-Muoniojokiseura		300			1
Tornionjoen kalastusalue		900			1
Tosibox Oy		1 000			1
TravelCo in Swedish Lapland AB		2 310			1
Treeform		4 716			1
Treehotel AB		9 780			2
Tromb		1 000			1
Troms fylkeskommune			2 576 688		32
Troms og Finnmark fylkeskommune			393 941		5
Tromsö kommune			59 699		2
Trä och teknikcollege i Skellefteå AB		10 789			1
Träbyggarna i Kalix		1 072			1
Trøndelag fylkeskommune			141 059		3
Turnhill AB		4 000			1
Turun yliopisto	13 139				2
Tyréns AB		9 602			2
UiT Norges arktiske universitet			1 002 265		15
UKI		3 000			1
Uki Arkkitehdit Oy		2 500			1
Umeå universitet	195 244				5
University of Southern Denmark	24 190				1
UPM Energy		4 000			1
Utbildning Nord		48 204			2
Utsjoki kommun	192 288				3
Vasa universitet	35 909				1
Vattenfall Vattenkraft AB		229 257			2
Vida Nord DMC		6 480			1
Wild Nordic Finland		5 000			1
Villi Pohjola Oy		2 250			1
Wind control JV Oy		600			1
Visamix Oy		2 250			1
Visit Abisko		2 310			1
Visit Alta				19 817	1
Visit Inari Oy		4 750			2
Visit Luleå AB		19 300			2
Visit Rovaniemi		2 500			1
Visit Sweden	321 000				1

<b>Financier</b>	<b>EU - Public fin EUR</b>	<b>EU - Private fin EUR</b>	<b>Norway - Public fin EUR</b>	<b>Norway - Private fin EUR</b>	<b>No of projects financed</b>
Visit Ylläs		1 750			1
Vison Oy		1 000			1
Vitsaniemi Skifteslag		200			1
Volter Oy		1 500			1
Vuokatin Katinkulma Oy		3 000			1
Wyilda af Norden		500			1
Wärtsilä Finland Oy		20 200			2
Västerbottens museum	64 070				2
Xarepo AB		17 150			1
YIT Oy		4 500			1
Ylitornion kunta	4 500				2
Ylitornion museo- ja kotiseutuyhdistys		300			1
Ylivieskan Seutukuntayhdistys Ry	12 500				1
Ylläksen Markkinointi Oy		2 250			1
Yrityspalvelu Hollström Oy		1 000			1
Åarjelhsamien Teatere			92 684		1
Älvsbyns kommun	23 156				3
Övertorneå kommun	62 150				3

## The Nord programme's contribution to the Global Goals for Sustainable Development

In 2015, the UN's Member States adopted Agenda 2030, which stated that all countries shall be included in work for a sustainable world. The Agenda contains the 17 global goals for economically, socially and environmentally sustainable development. In 2016, the European Commission presented its strategy to implement Agenda 2030 and achieve the global sustainable development goals.

In 2019, the Council of the European Union called on member states to raise their level of ambition and to actively integrate Agenda 2030 into planning instruments, policies, strategies and budgetary frameworks.

Against this background, the managing authority for Interreg Nord has taken the initiative further and started a work to show how the programme is contributing to Agenda 2030 and the global goals for sustainable development. This work started in 2020 and will continue in various forms for the remainder of the programming period.

As a first step, the projects in this project portfolio have been classified based on results and contributions to the sustainable development goals. The funded projects have then been given goal symbols that indicate to which goal they are contributing the most.

*“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”*

### THE GLOBAL GOALS For Sustainable Development

