

LAPLAND
Above Ordinary

LAPLAND – INTERNATIONAL SMART SPECIALISATION

**ARCTIC
Smartness**

ARCTIC SUSTAINABLE TOURISM

ARCTIC INDUSTRIAL CIRCULAR ECONOMY

ARCTIC INNOVATION INFRASTRUCTURES

ARCTIC INVESTMENT PLATFORM

Spring Cafe

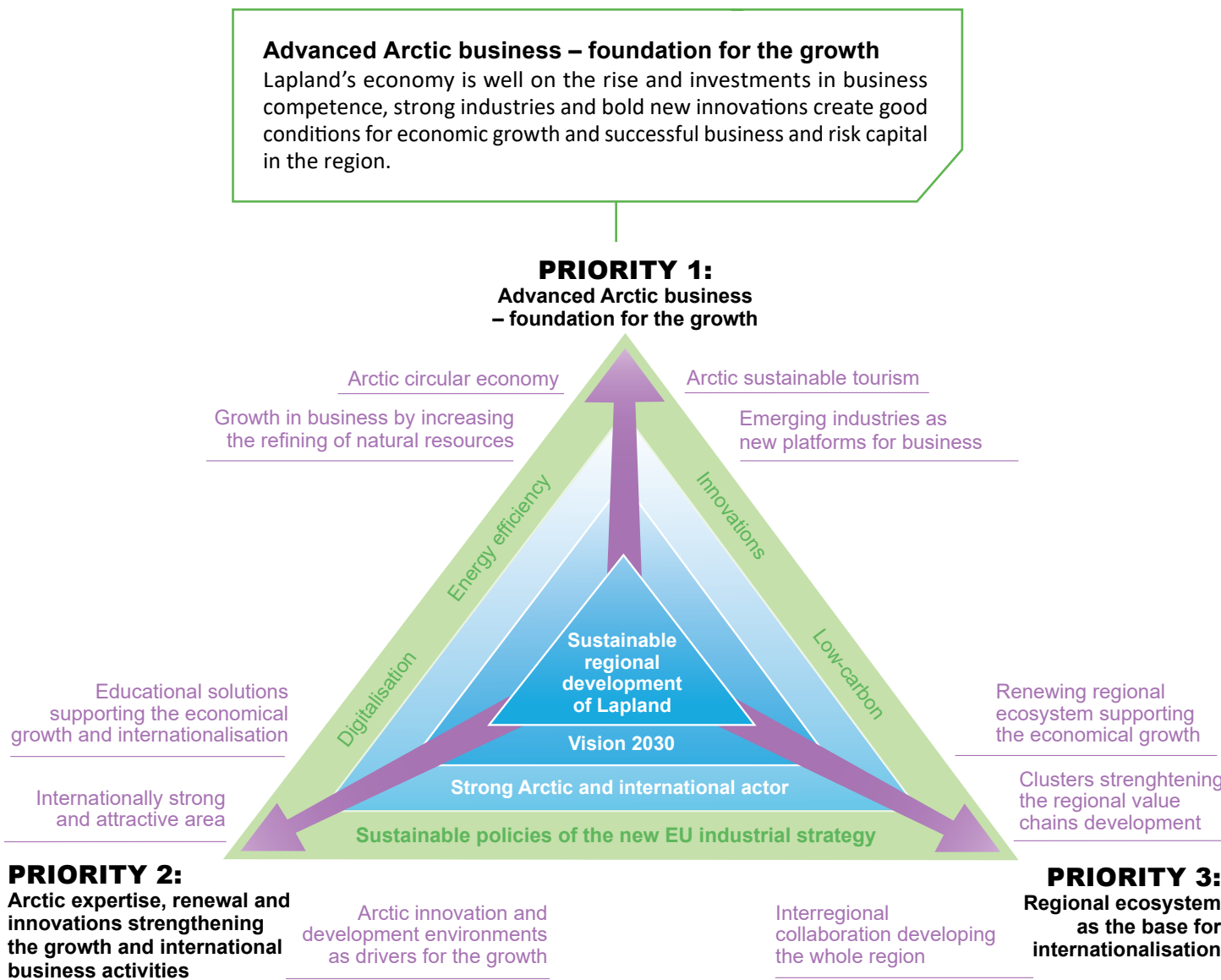
2019



Smart choices help to meet future challenges

Lapland is the northernmost part of Finland and of the entire European Union. At the same time, Lapland is geographically the most international region of Finland. The Arctic elements are an essential part of the internationally known Lapland brand that is being strengthened further.

Lapland wants to be the most innovative and entrepreneur friendly of all the sparsely populated and circumpolar regions. That requires strong expertise of the entire region, as well as innovation activities and strong regional ecosystem, which together create a foundation for sustainable growth and international business.



PRIORITY 2: Arctic expertise, renewal and innovations strengthening the growth and international business activities

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The implementation of the Lapland – an Arctic and international highflyer – strategy is based on good co-operation between regional stakeholders. The strategy reinforces the conditions for operating in an international field, in Lapland as well as beyond. Lapland utilises financial synergies and seeking after most useful EU

funding opportunities which will contribute to increasingly internationalising smart specialisation. Interregional collaboration and active participation in EU thematic partnerships will be even more important in the future.

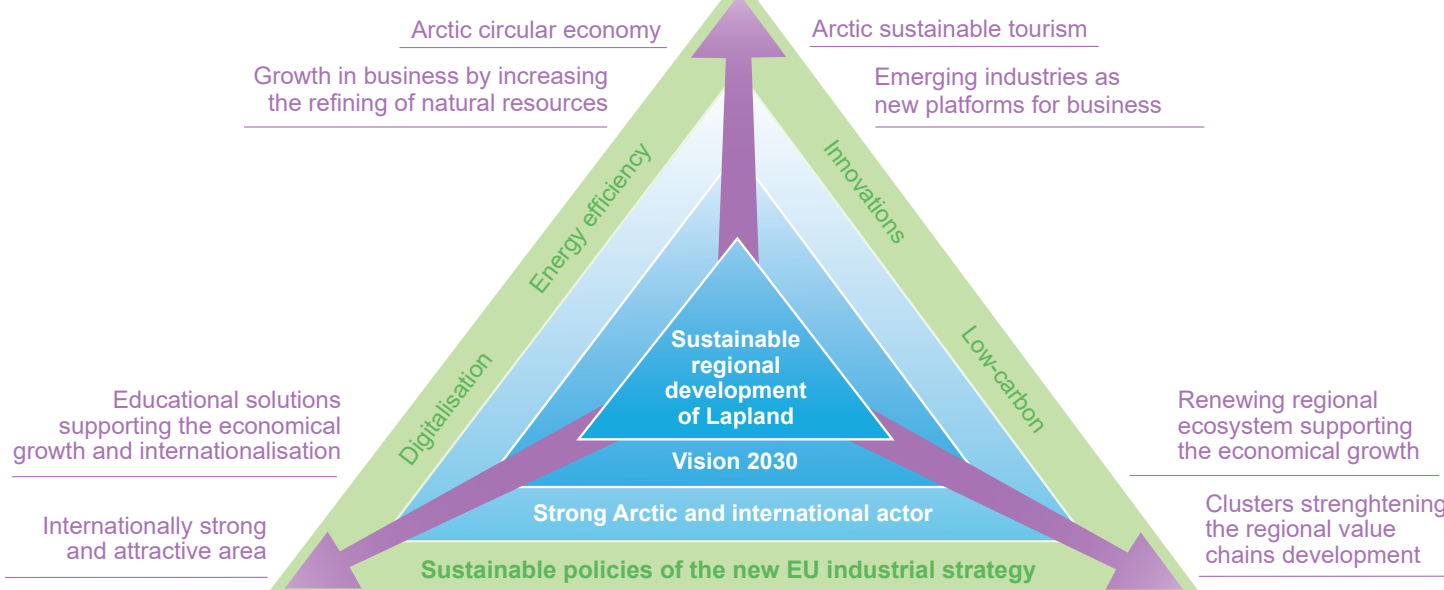
Lapland is looking towards the future of international smart specialisation with an open mind. By utilising the experiences and successes and drafting a clear finan-

cial road map, Lapland can achieve the goals and priorities set for the internationalising smart specialisation. The key to the implementation of the approach is maximising the effectiveness of available financial instruments and programmes. At the same time, the leverage of the development efforts is directed at the growth and internationalisation of the regional economy.

Advanced Arctic business – foundation for the growth

Lapland's economy is well on the rise and investments in business competence, strong industries and bold new innovations create good conditions for economic growth and successful business and risk capital in the region.

PRIORITY 1: Advanced Arctic business – foundation for the growth



PRIORITY 3: Regional ecosystem as the base for internationalisation



County Governor's greetings

MIKA RIIPI
COUNTY GOVERNOR OF LAPLAND

“
To succeed, we need more and more courage, networking skills and co-operation – but these are weighed against almost unlimited possibilities.”

Lapland is the most international region in Finland – we are in the middle of the Barents Euro-Arctic Region, and we have always lived, done business and worked across the borders. The people of Lapland have always adopted an international attitude in their everyday lives. In the wake of digitalisation, globalisation and the resulting new economy, geography is losing

its significance in the development of growth and jobs. At the same time, it is challenging us constantly to perceive the entire world as an operating area and a potential market. To succeed, we need more and more courage, networking skills and co-operation – but these are weighed against almost unlimited possibilities.

Lapland's strong growth sectors form the basis, but we also

want to highlight Arctic expertise and new potential for growth. The key principle of the smart specialisation is to integrate inter-regional and EU level networking as natural part of all our development activities. For the economy to grow the regional business have to be part of the European industrial value chains. Therefore, the foundation for each ounce of success consists of strong

networking and co-operation between enterprises as well as developers. To support this, we have updated our smart specialisation strategy – Lapland an Arctic and international highflyer – to be International Smart Specialisation Strategy.

I want to thank all our partners who have been involved in the implementation of the Lapland Smart Specialisation in the practise. Lapland will surely continue to seeking after Arctic Truffles and to be the beacon of the entire Arctic!

Lapland in facts & figures

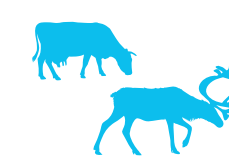


Employment
69,000 jobs
50% in private enterprises
9,100 private enterprises



Annual revenue
€ 13,300 M
70% from private enterprises

Fastest growing economy in Finland



Agricultural production & reindeer husbandry
€ 340 M
Annual revenue



4th largest export region in Finland
7% of Finnish export



Surface area
100,366 km²



Water
7,699 km²



Population
178,530

Population density
1.8 /km²



Mining & metal industry
€ 5,000 M
Annual revenue



Forest bioeconomy
€ 1,300 M
Annual revenue



Tourism overall demand
€ 1,000 M
Fastest growing industry in Lapland

Annual growth 9%
20% in 2017

- + World's northernmost bio, mining and metal industry hub
- + Only chromium mine and the largest gold mine in Europe
- + 9 national parks in the area
- + World's cleanest air and Europe's purest water
- + World's largest wild organic harvesting area
- + Strong educational structure: University of Lapland, Lapland University of Applied Sciences, Vocational College Lappia, Lapland Education Centre REDU and Sami Education Institute
- + Research institutes: Geological Survey of Finland (GTK), Natural Resources Institute Finland (LUKE), Sodankylä Geophysical Observatory (SGO) as the most notable
- + National circular and bio-economy centre in Kemi



Illustrations: Lasse Paldanius



Photo: Lapin Materiaalipankki | Antti Pehkonen

Lapland Tourism – Existing business cluster develops further through smart specialisation

International tourism in Lapland has long traditions. The industry has grown more systematically from the late nineties when co-operation increased between companies and destination organisations started to emerge.

Regional Council of Lapland gathered different tourism actors together to a build joint regional tourism strategy, with the bottom-up approach already from the start. Since then, Lapland tourism strategy has formed the common vision, set the goals and defined the actions for tourism development in Lapland.

As a result, tourism has succeeded and the growth in the international tourism has been record-high. Today tourism is one of the key industries in Lapland, producing 6% of the GDP and being one of the most important employers in the region. In the peripheral and sparsely populated area like Lapland, tourism has a big significance for the vitality of the whole region.

Tourism industry and other tourism related actors have worked together in a cluster like manner already before the term started to appear more in European union context. Lapland tourism strategy was the factor that brought together tourism companies, destination organisations, municipalities, development organisations, education and research institutes, public sector authorities etc. to actualize the common goals set in the strategy. This committed work been a key element for the success of Lapland tourism.

However, smart specialisation has brought new understanding and structure to tourism development. Lapland has recognized its role as a pioneer in the arctic nature and experience tourism in the very fragile and vulnerable arctic region. Through the strategy, tourism industry and other tourism actors have committed to develop sustainable and responsible tourism. The development priorities are year-round sustainable nature tourism, management of arctic conditions, experiences, well-being and safety.

Lapland's tourism can offer expertise and knowhow about how to operate and make the successful and sustain-

able business in the harsh arctic conditions. However, fast growth, climate change and changing tourism have brought new challenges for Lapland tourism. In order to solve them, more international co-operation, networking and mutually benefitting partnerships are needed.

Through smart specialisation Lapland has established useful partnerships with other European tourism regions. Especially co-operation with regions and NECSTouR network within the thematic area of "Tourism Safety and Digitalisation" has expanded the views and increased knowledge. Being a part of the smart specialisation structures has helped to develop the Lapland tourism business cluster by clarifying the roles of the different tourism actors. Lapland has high expectations also for the future co-operation.

Tourism safety in Lapland

The competitiveness and appeal of tourism in Lapland are based on its natural conditions and their sustainable use. The tourism safety network, which has been built together with businesses in the region and tourism areas over several years, is an operating model based on trust and cooperation.

Safety is a central part of the quality and competitiveness of tourism businesses. Cooperation, information exchange and joint development interests solidify the network operations and bring added value to all parties. The tourism safety cluster consists of tourism businesses and other businesses that serve the field. In addition, key actors in the cluster include support and development organisations, which support and serve business activities, as well as institutes of higher education and



- Tourist destinations
- ✈ Airports
- ⚓ Harbours
- 🚂 Train stations
- Main roads

research institutions. The tourism safety cluster is already strong both in Lapland as well as nationally, but it has also become widely networked on an international level. Lapland has joined the Network of European Regions for Competitive and Sustainable Tourism (NECSTouR). In the UArctic network, Lapland coordinates the sub-theme called Tourism Safety, under the thematic network for Safety and Security. In addition, the Digitalisation and Safety for Tourism theme network, which is also coordinated by Lapland, has been accepted into the European Smart Specialisation Platform. The cluster's activities and actors can be found on the cluster's website www.arcticsafety.fi

Success Stories of Tourism in Lapland



Photo: SeasideGlassVilla

During last years the tourism industry has achieved huge success and made new records. Long-term development activities and co-operation has made tourism industry grow especially in international tourism.

In 2017 Lapland had more international registered overnights than domestic. Total number of registered overnights was more than 3 million in 2018 and this growth can be also seen in companies turnover and economic impacts of tourism to the local economy.

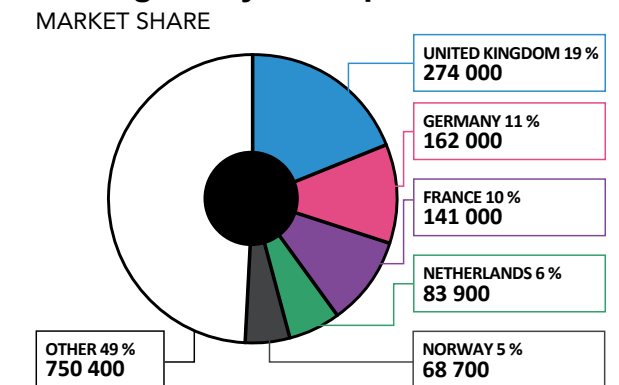
The turnover of companies in hotel, restaurant and activities grew from 2015- to 2017 by more than 20% in Lapland. The turnover of tourism sectors companies exceeded 770 million € in 2017 (+14,3% to 2016) when transportation sector is included. While growing, the tourism demand for Lapland has become more and more global. Most important markets are Great Britain, Germany, France and Netherlands, but growth has been fastest in Ireland (+59%), Belgium (+41%), USA (+30%) and India (+26%).

Not only has success been achieved in numbers, but also in international recognition of quality and experience in tourism companies. Arctic Treehouse Hotel has received several rewards during last years. In 2018 they received the European Continent Winner for Best Luxury Forest Resort in World Luxury Hotel Awards and The Destination and Travel Company of the Year from The Finnish Guild of Travel Journalists and in 2017

Best Innovation in Hotel Concept by The Worldwide Hospitality Awards. Mr Ilkka Länkinen, CEO of the Arctic TreeHouse Hotel, has stated "Instead of creating accommodation, we wanted to give an experience of the Arctic Circle that our guests can enjoy with all the senses. Embracing our surroundings and heritage, our wonderful team is dedicated to bring the best of Lappish hospitality and warm welcoming atmosphere". Other winners of rewards include

Seaside Glass Villas in Kemi is a World Luxury Hotel Awards 2018 Global Winner, Lapland Hotels SnowVillage, which is created for the second time in cooperation with HBO Nordic is based on scenes and characters of the popular Game of Thrones® television series and received The Tourism Experience of 2018 award by Finnish Lapland Tourist Board

International travellers' registered overnight stays in Lapland 2017

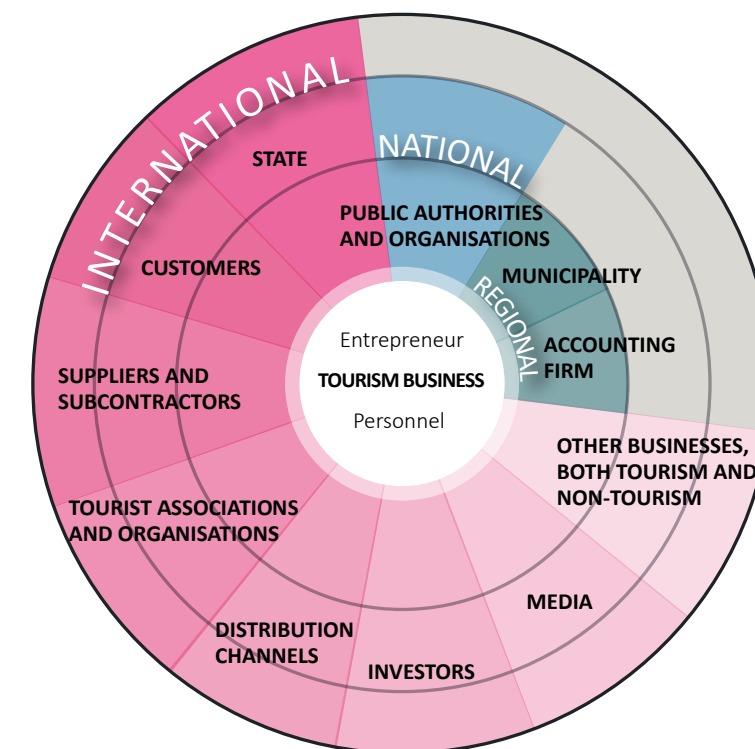


Lapland's Arctic Tourism Cluster – Smart Growth by common strategy, cooperation and smart specialisation

ERDF funded project of Lapland's Arctic Tourism Ecosystem aims to create a unique innovation cluster for tourism in Lapland, based on the smart specialization program in Lapland. The project will make visible the Arctic Tourism Cluster in Lapland, develop network co-operation and the division of tasks between the actors, and raise awareness of the Arctic tourism know-how of Lapland.

Profiling as an Arctic tourism cluster in Lapland is a catalyst for cooperation between the tourism industry and research, education and development organizations. In addition, the project will increase the awareness of

Lapland tourism at national and international level, actively influence decision-making in line with the goals of the tourism strategy and help to international partnerships in development. The practical measures of the project will engage tourism actors more closely into the Arctic tourism cluster in Lapland and develop a new tourism strategy for Lapland for the years 2019-2022. The strategy will be based on tourism scenario work assessing threats and opportunities that may affect tourism development.



Strategic coordinates are:

- Arctic year round tourism
- Accessibility from markets and within Lapland
- Digitalization and knowledge-based management
- Sustainability, quality and safety

OUR STRENGTHS

- Experience in international and local tourism development projects and networks
- MTI brings together the know-how at the University of Lapland, Lapland University of Applied Sciences, the Lapland Education Centre REDU and Kemi-Tornionlaakso Municipal Educational and Training Consortium Lappia.
- Working co-operation and network with private and public sector
- Innovative tourism companies and destinations
- Tourism industry growing rapidly
- Key figures
- Tourism expenditure over 1 billion €
- International tourism 52%
- Tourism employment over 7400 persons
- Over 100 000 beds in accommodation capacity
- Six International Airports



Photo: Lapin Materiaalipankki | Joonas Linkola



Photo: Digipolis

Industrial circular economy

World urgently needs pioneering solutions where growth of the economy and well-being are no longer based on the wasteful use of natural resources. By developing the best solutions for the carbon-neutral circular economy, Finland and Lapland can be among the first to create sustainable well-being and success in a new way during the coming years.

In the circular economy, the use of materials is carefully planned throughout their life cycle and material loss and waste generation are minimised. In the industrial circular economy, the volume of materials is enormous. More than 95 % of the waste generated in Finland is produced in industry, so it is important to promote the utilisation of these streams in particular.

The industrial circular economy is accompanied not only by the promotion

of environmental issues but also by huge business opportunities. The promotion of the industrial circular economy improves industrial competitiveness and offers business opportunities for new operators.

The key is the principle of someone's waste or side stream being someone else's unprocessed raw material for production. Industrial circular-economy products are utilised, among other things, in geotechnical construction, as nutrients, in concrete products, in chemicals production and

as energy. New methods of utilisation are constantly being developed among industry and industrial service companies.

In the cluster, the development work is done by SMEs, mid-cap and large enterprises. Pilots, which companies, municipalities, educational establishments and research institutes conduct as part of their operations, are an integral part of industrial side stream utilisation.

Kemi-Tornio industry and the cluster

Kemi-Tornio is the world's northernmost concentration of bio, metal, mining and energy industries. The innovation area of Kemi-Tornio is unique in its size, since all the companies operating in the area are located within a radius of 25 km. Within this area, there are three major industrial aggregates and around 100 SMEs. Small and medium-sized enterprises are often operators serving big businesses. The Kemi-Tornio economic region represents approximately 80 % of Lapland's industrial production and 8 % of Finland's exports. Exports of companies in the region exceed EUR 5 billion annually. The region has a long tradition of utilising the circular economy.

Arctic Industry and Circular Economy Cluster connects process- and mining industry companies, SMEs serving industry, universities, research institutions, funding and regional authorities to a same co-operation network. Common goal for Lapland is to be a front runner in sustainable utilisation of natural resources and sustainable

industry and circular economy activities. The work in progress for sustainable industrial refining has been notified on national, Nordic and EU levels. Systematic cluster development started in 2014, when Lapland was chosen as one of the model regions of European cluster initiative with six other regions. Lapland has been able to innovatively benefit from natural strengths of the region for cluster development.

"After joining the cluster, we have been able to connect better with decision makers and make an influence in the operational environment", says Mika Alasuutari, Managing Director of the mining service SME Palsatech. According to Alasuutari, an entrepreneur's perspective on the development is usually very practical. Through that perspective, they can bring new views to the cluster work. "We



Picture: Digipolis

After joining the cluster, we have been able to connect better with decision makers and make an influence in the operational environment"

— Mika Alasuutari, Managing Director, Palsatech

think that this kind of networking activities are very important part of business and development of operational environment", says Alasuutari.

Cooperation with Sitra

Sitra (Finnish Innovation Fund) published the national circular economy road map (2016) for years 2016-2025, which collates the best national pilots, ideas and practices in the field of circular economy. Finland was the first country in the world to draw up such a roadmap for the circular economy actions. In the roadmap, the goal is to create a common vision for the society to promote circular economy and to define the most effective means for achieving the vision. One of the key initiatives of the road map was to establish a circular economy innovation platform in Kemi-Tornio. Platform was designed to create tools for companies

through open, cross-sectoral and network-based cooperation for boosting the utilisation of side streams. Sitra named the industrial circular economy innovation platform led by Kemi Digipolis as one of the roadmap's key projects. This led to establishing of the Circular Economy Centre in Kemi-Tornio in 2018. Centre is natural cause for ambitious and determined work in the region. Circular Economy Centre gathers together the experts, who response to business initiated circular economy challenges based on network model built during past years.

- The Centre aims to develop a more competitive business environment for companies involved in the circular economy.
- Centre helps companies to develop circular economy business and products by providing expert assistance, applying for funding, linking operators, creating networks, promoting pilots and supporting in scaling-up.

Education responding to challenges of circular economy

Circular economy needs professionals with understanding of principles and methods of the implementation of circular economy. Professionals are required to apply their own skills to new approaches while developing new innovations. Taking the knowledge of the circular economy to the field with new professionals is one of the efficient routes to change the operational environment.

For this reason, education and development are an integral part of the operation of the cluster.

Bachelor and master level courses

The aim for these courses is to work in an authentic customer client project-environment concerning industrial side streams. Student get acquainted with production technology RDI case study given by a customer company.

Research problems of clients are solved by the project groups of students using the development environments of Lapland University of Applied Sciences. A major part of learning process is to operate with the standard specifications of RDI unit in the area of project management and communication with the customer company. The study modules are and will be carried out in real life situations.

Cluster's partnerships in the Horizon 2020

Horizon 2020 is a European Union's biggest Research and Innovation programme which targets to ensure EU's world-class science, remove barriers of innovation and make it easier for the public and private sectors to work together. Arctic Industry and Circular Economy Cluster partners, Geological Survey of Finland (GTK) and Natural Resources Institute Finland (Luke) have formed successful partnerships under the Horizon 2020.



Photo: Lapin materiaalipankki | Marko Junttila

The Geological Survey of Finland (GTK) is an active partner in the Arctic Industry and Circular Economy Cluster especially in terms of the mining industry value chain. In 2017, the cluster cooperation resulted in two new projects that will be implemented in 2017-2020. The "Mining and Metallurgy Regions of EU" (MIREU) project is producing a European

network of regions with economic interest in mineral raw material production. In addition to GTK as the MIREU coordinator, the Regional Council of Lapland and the University of Lapland are included in the consortium as core project partners. GTK also participates in the other Horizon 2020 projects Minland, which concentrates on land-use issues associated with mining industry

and NEXT, which develops new tools for sensitive exploration technologies.

With the support and contacts provided by the Arctic Smartness clusters, another active arctic industry partner Natural Resources Institute Finland (Luke) achieved partnership in a Horizon 2020 project ROSEWOOD (European Network of Regions on Sustainable Wood

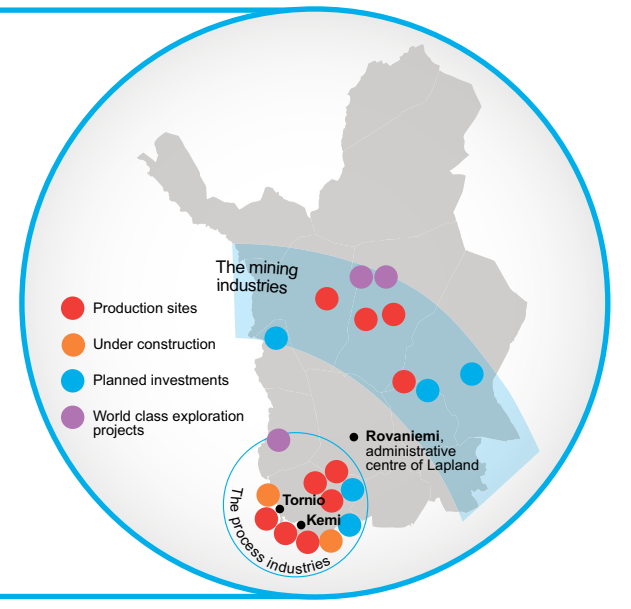
Mobilization) in 2017 – the first one for the institute in Finnish Lapland. This has led to several other project partnerships and proposals for Luke. Also, Lapland University of Applied Sciences holds a key role in ROSEWOOD consortium.

"The experience with the Arctic Smartness society has thoroughly changed my work and also my attitude towards regional

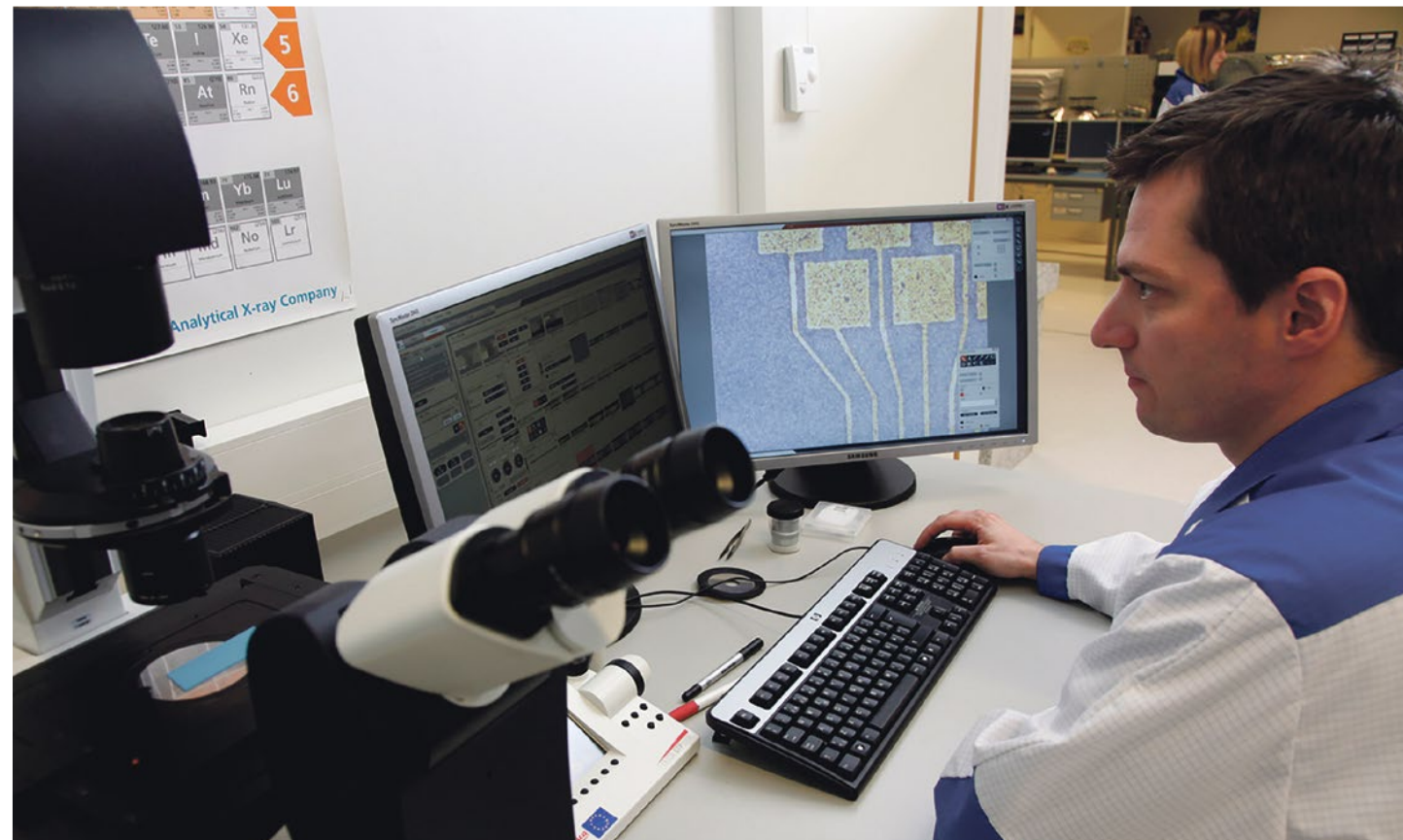
cooperation and internationalisation", says Dr. Kari Mäkitalo, Senior Scientist from Natural Resources Institute Finland. All these European partnership projects will benefit from the strong and ongoing Arctic Smartness cooperation in Lapland

STRENGTHS OF THE ARCTIC INDUSTRY

- Ecosystem of the Arctic Industry is an operational environment and unique innovation platform.
- The process industry, which is largely concentrated in the Kemi-Tornio region, actively searches for new, eco-innovative ways to modernise its processes.
- Management of by-product processes of industries and process optimisation in the Kemi-Tornio region is a prioritised issue.
- The annual volume of by-products and residues of Kemi-Tornio large scale industries amounts to 1,7 million tonnes.
- Rovaniemi is the administrative centre of Lapland and an important regional centre of public governance for mining in Finland.
- Mining industry is active throughout Lapland.
- With the long traditions in Lapland the coexistence between industries using natural resources has been amicable.



Arctic development environments produce services for the region's businesses



Laboratory professional is inspecting a ceramic electronics substrate with Inverted research microscope.

The significance of development environments and experts working there to the area's RDI activities has been traditionally valued in Lapland, which is why much investment have been made in them. The development environments are physical and virtual environments meant for use in learning and innovation, such as laboratories, studios, workshops or simulation environments where products, services and expertise can be further developed.

Approximately ten RDI organisations operate in Lapland and they manage approximately fifty different development environments. Now, the Lapland-based RDI organisations operate as separate actors according to their own organisations' objectives and strategic goals. The Arctic Development Environments Cluster started its operations in autumn 2015 by mapping the RDI field of Lapland and the development environments situated there. The objective of the Arctic Development Environments Cluster is to bring together the RDI environments and expert services operating separately in Lapland to form a uniform body to serve the region's business life and to enable the development of business life and business investments in product development and internationalisation.

Freshly starting and small businesses, for example, often do not have contacts to the research world and they often have business-related development needs but lack the required resources. The task of the cluster is to bring together the RDI services of Lapland by establishing Lapland's regional research, development and innovation activity expertise entity where research activities are allocated across organisational limits with a business life need orientation. A joint research strategy will be formed for the expertise centre to strengthen the region's Arctic

research and research strategy and to enable the mandates and roles of separate research institutes to join forces. The new operating model will be used to develop an innovation ecosystem based on the research activities of Lapland with a focus on RDI-based innovation cycle management and the identification of technology readiness levels (TRL).

The ideas and concepts created with the help of a shared service model based on the identification of the technology readiness levels (TRL) will be tested with the help of pilots, and concrete results will be served to businesses and for utilisation in the business operations and production processes of the interest groups. Further resources for the region's development can be acquired through international cooperation. Networking with the other European expertise centres enables cooperation and planning of new project initiatives and consortia, in particular, in the spearhead areas of research. The final goal is to support in this manner the business life of Lapland to develop new products and to launch them with the help of high-quality research.

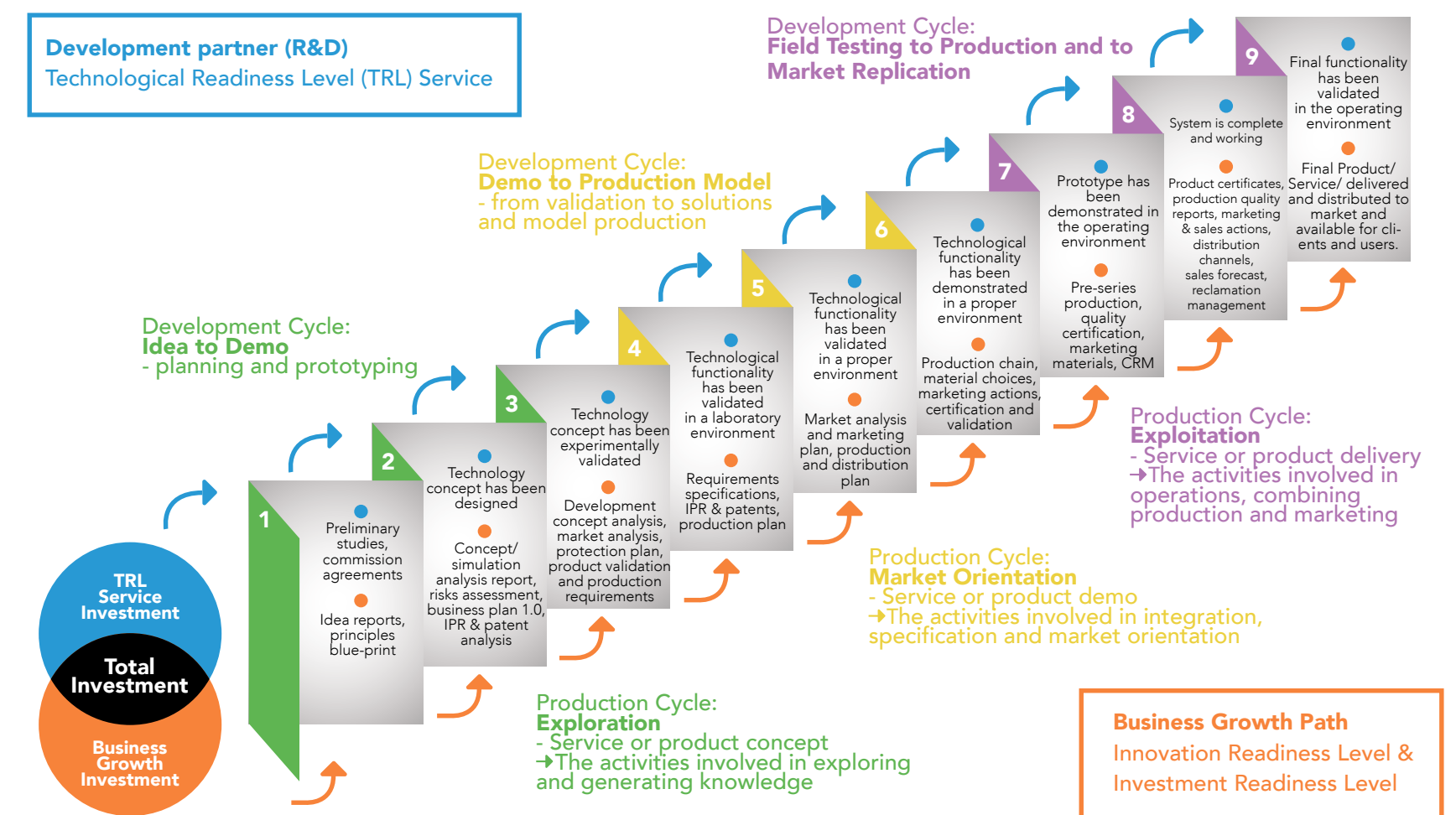
FURTHER INFORMATION

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Objectives of the Arctic Development Environments Cluster

- Producing added value to the business life of Lapland, improving the businesses' competitiveness and creating new businesses
- Generating added value to the other organisations operating in the network
- Strengthening the RDI activities of Lapland
- Identifying core competence and managing focus areas of competence
 - Developing shared service models
- Strengthening the cooperation between the Arctic Clusters
- Increasing international funding and competence

Technological, Innovation & Investment Readiness Levels Supporting Business Growth (in development)



Picture: Ella-Noora Polvi

Arctic Smartness Sister projects ASG and ASR

Arctic Smart Growth (ASG)

The goal of the Arctic Smart Growth (ASG) project is to boost SMEs to grow and go international by supporting companies to utilize EU funding, international networks and Arctic Smartness Clusters more effectively.

International projects have been implemented mainly by universities or research institutes and involving big companies. The purpose of this project is to reverse emphasis on SMEs and increase SMEs research, development and innovation activities. The project is mapping the most relevant sources of funding and networks, including international investment funding sources for supporting the growth and internationalization of the SMEs. The project is closely linked to the regional business services and other business networks. In order to strengthen the enterprise interface the regional business service, The Enterprise Finland Network is closely connected to the project.

The result of the Arctic Smart Growth project will be a cooperation model, which connects enterprises, universities, regional actors, international networks and funding sources. The collaboration enables the creation of service and finance chains which ensure the availability of appropriate service and funding for SMEs' needs. The enterprises will easily find the suitable support services and solutions for their needs. The project is closely linked to the Arctic Smartness RDI-Excellence (ASR) and Lapland – Arctic and International highflier projects, which expands the network and activities to support SMEs. Project is funded by ERDF.

Arctic Smartness RDI-Excellence (ASR)

Arctic Smartness RDI-Excellence (ASR) -project introduces a concrete roadmap that defines operators, cooperation models, roles of research in RDI-activities and a common use of research and development infrastructure. The ASR project develops

the Lappish innovation ecosystem based on research and development activities and support. The core actors and beneficiaries of the project are Arctic Smartness Clusters, regional RDI-actors, regional developers and authorities.

Project output is a model of innovation ecosystem of Lapland, where the Research and Development (R&D) activities and Innovation management is amalgamated together with the enterprises. This empowers Regional RDI actions across and over traditional organisational boundaries and better supports and meets the needs of industry and commerce. This in turn is a starting point for more active and tangible cooperation between research organisations executing this project and enterprises. Regional Centre of RDI-Excellence that combines the Lappish Smart Specialisation cluster actors, the research, the innovation and growth seeking enterprises, the regional development and the innovation development activities. Its main features are a RDI-based innovation cycle

management and an identification of readiness levels of technologies (TRL) including services and Social Entrepreneurship. Systematically advancing the maturation of the development of ideas, products, services and technologies towards the market and supporting the market uptake is the way for RDI-based innovations and innovation management. The research is in connection with the enterprises' product development and the multi-level interactivity of innovation ecosystem. The work is supported by means of networking with other European centres of expertise/excellence and thematic innovation development networks.

FURTHER INFORMATION

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ARCTIC INNOVATION INFRASTRUCTURES

- Arctic research, development and innovation services in Lapland
- 50 modern development environments
- More than 750 experts and specialists
- Multidisciplinary research communities from University of Lapland, Lapland University of Applied Sciences, Natural Resources Institute Finland, Geological Survey of Finland, Vocational College Lappia and Lapland Vocational College
- Arctic Power – Cold climate testing
- Arctic Steel and Mining – Ultra strong steel and bulk steel research and testing
- ENVI – Welfare business virtual centre
- Natural Resource Institute Finland – laboratory, environment, food and primary research
- SINCO – Service design facilities
- SKY – social and healthcare simulation environment
- Audiovisual production research and testing studio



Arctic Investment Platform

Tackling the NSPA investment barriers together

The Northern Sparsely Populated Areas (NSPA) of Finland, Sweden and Norway face common challenges and share similar opportunities, providing a solid foundation for fruitful cross-border cooperation. These 14 regions have a history of working together to raise awareness for an area with a common population density of 4.9 inhabitants per km², which is lower than anywhere else in the European Union.

In the year 2018, the cooperation started a new chapter, with the Regional Council of Lapland carrying out a pre-feasibility study for launching a structured long-term funding cooperation.

The challenge?

The Northern Sparsely Populated Areas (NSPA) of Finland, Sweden and Norway suffer from permanent investment barriers: long distance to markets, sparse population, harsh climate, cross-border issues etc. We also know that SME access to finance is too reliant on traditional banks. Information asymmetries between companies and potential investors, longer than national average exit strategies and the sub-optimal critical mass visible for investors, all lead to a lack of investors and risk capital in the region.

What can we do about it?

Several EU initiatives (Regional Policy, S3 Thematic Platforms, European Investment Bank services, Interreg...) are available for the regions to tackle the mentioned challenges. The NSPA has been invited by the OECD and the EU to design ourselves the right instruments.

Fragmented efforts in this direction have been made by a number of NSPA regions individually through preparatory projects and reports, which have been produced. However, a structured overview on market failure and demand for new instruments in the region was lacking.

We need to open our eyes to a possibility of designing completely new solutions to:

- Harnessing all available funding streams in a systematic way to foster investment, incl. EFSI
- Creating a one-stop shop for SMEs to access finance and technical assistance
- Pooling the financial expertise of the NSPA and creating channels to EU-level expertise
 - Attracting financial intermediaries and investors and increasing the firepower of existing ones
- Addressing the most pressing investment gaps, validated through feasibility studies

The process towards an Arctic Investment Platform

The Arctic Investment Platform pre-feasibility study ran through the second half of 2018. It explored the demand for and potential benefits of a structured funding cooperation in the NSPA regions, inspired by the Investment Platform model. The pre-feasibility study was carried out by the Regional Council of Lapland and finished in December 2018. The NSPA regions were consulted throughout the pre-feasibility study.

The promising start to the process, was followed by a successful application for a follow-up project, funded by the Interreg Nord programme. During this project, a fully-fledged ex-ante analysis will be carried out, with the Regional Council of Lapland as lead partner. The cross-regional and cross-border aspect will be taken even stronger into consideration in this project, with project partners and local contact people hired in all three countries. The new project started on 1 January 2019 with the aim of launching an Arctic Investment Platform in the latter part of 2020.



Pre-feasibility study

Investment gaps and barriers are major challenges for the NSPA economy. To address these challenges more effectively, a better coordinated funding cooperation among the NSPA regions is needed, as acknowledged by the European Commission and OECD. The precise format, characteristics and expected Return on Investment of such a 'funding cooperation mechanism' remain to be defined.

Thus, a feasibility study for creating such a mechanism, an Arctic Investment Platform (AIP), was commissioned. The goal was to develop a suggested structure for a support system, specific to the NSPA. Circular economy, sustainable energy and tourism were chosen as the thematic areas to start the assessment of investment gaps on. The study concluded, however, that the AIP will not be developed in a sector specific manner.

NSPA economies consist largely of SMEs and in that group many micro-companies. They suffer from a sub-optimal capacity and a low access to finance and expertise to support their ambi-

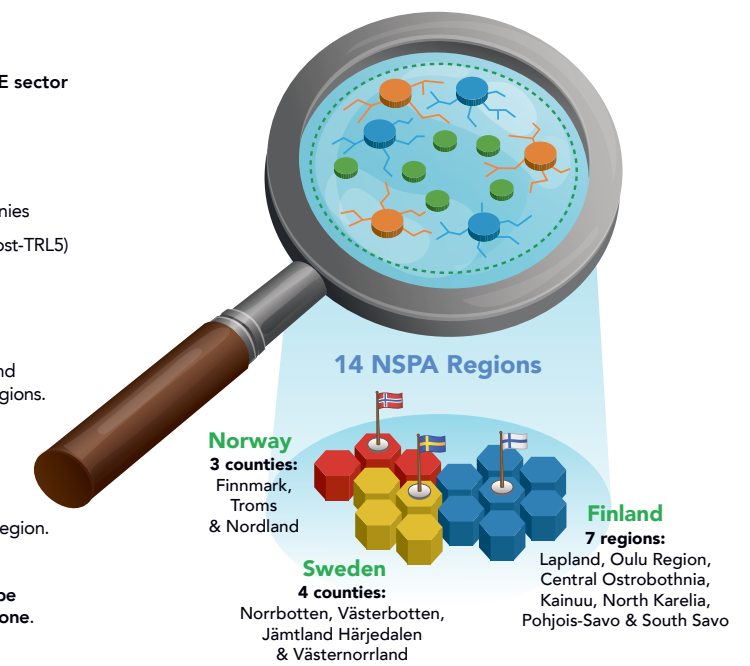
tion to scale up and grow internationally. Early focus finding workshops, to narrow down the scope of the feasibility study, set scale-up companies as the focus for the AIP.

The study was conducted during the second half of 2018. It builds upon desk research, semi-structured interviews and case studies ("showcases") developed to illustrate investment gaps faced by "scale-up" companies across the NSPA. All NSPA regions contributed through e.g. participation in common workshops as well as providing showcases.

Despite the lack of exhaustive view on the funding and financing instruments available across the 14 regions, the interviews demonstrated that asymmetries can be observed from a region to another – some having a strong policy mix already in place while others only rely on limited structural funds for instance.

No alignment can therefore be foreseen "off the shelf" and a common entity (whether in the form of agreement, special purpose vehicle, or legal entity) will most likely be required to

- 1 STUDY TARGET GROUP:** Scale-ups of all sizes within the SME sector – final beneficiaries
- 2 STUDY TARGETS:**
 - Investment gaps
 - Policy coverage
- 3 STUDY OBJECTIVE:**
 - Further explore, identify and understand the investment gaps across the 14 Regions.
 - Analyse the potential of launching an Arctic Investment Platform.
 - Develop a suggested structure for a support system specific to the NSPA region.
 - The project is founded on the vision that specific common challenges can be tackled better in cooperation than alone.



Picture illustrates the target group, targets, objective and regions studied in the pre-feasibility study.

organize the combination of funding streams and ensure the best possible level of simplicity, efficiency and reliability. There could be multiple ways to organize the Arctic Investment Platform. Some key features however appear to be necessary, such as the networking function.

4 main types of investment gaps were identified:

1. Expansion financing (lack of equity and debt finance for scale-up companies)
2. From Piloting to Demonstration Support (Piloting 100k€-300k€ and demonstration 1m€-5m€)
3. Large-Scale Demonstration (7-10m€)
4. Cross-Regional Tourism Platform (3m€-7m€ for setting up the platform, with individual projects of 30k€-50k€)

Fully-fledged feasibility study and roadmap

A more structured investment co-operation can take many different forms depending on the market gap or need it aims to fix. These gaps and the demand for new or more structured support systems between the NSPA regions need to be explored in depth. For this exploration, the Arctic Investment Platform (AIP) feasibility study and roadmap project will make use of top level European experts and join the forces of the NSPA of Finland, Sweden and Norway.

The results will form the basis for construction of a new or enhanced investment support. It may range from pooled expertise in building bankable projects to a joint cross-border funding structure. An Arctic Investment Platform could be such a cross-border funding/support structure.

The immediate upcoming steps for this project will be a workshop in Rovaniemi on 21 March 2019. During this workshop, the main aim is to agree among the participating regions on the process how to reach the final results of the feasibility study. All available data for the feasibility study is expected to be collected by the end of the summer, followed by an analysis of the results and the work on a tangible roadmap.

The latest public information about the project will be uploaded on arcticsmartness.eu/arctic-investment-platform/. In case of any questions or feedback regarding the Arctic Investment Platform, project manager Johannes Lith (johannes.lith@lapinliitto.fi) will be happy to receive your e-mail.

Fully-fledged feasibility study and roadmap project objectives:

- Analyse the demand and feasibility of a structured funding co-operation of the NSPA regions to boost the investment capacity of the regions SMEs
- Propose a framework for such a support system
- Provide a tangible roadmap for the set-up of such a support system
- Ensure credible resources to engage in a dialogue with the institutions relevant to the set-up of such a system (incl. regional stakeholders, national funding agencies, financial institutions, the European Investment Bank (EIB), the European Commission and national ministries in each of the three countries)

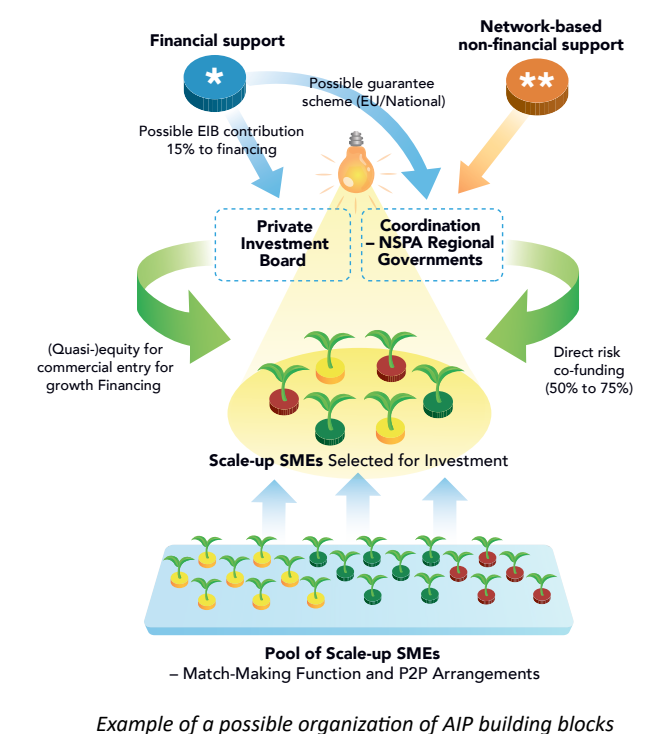
Learn more about the Arctic Investment Platform: arcticsmartness.eu/arctic-investment-platform



WHY AN ARCTIC INVESTMENT PLATFORM?

- Knowledge and information sharing for the common good of the NSPA
- Fill existing investment gaps
- Provide financial & network-based non-financial support
- Increase awareness of investment opportunities in the NSPA

With the Arctic Investment Platform, we wish to enhance the strengths and complementary profiles of our regions by tackling together our common challenges. We want to achieve funding synergies, using the investment platform paradigm as a starting point, while keeping in mind our regional specificities and needs of industrial modernisation.



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ARCTIC SMARTNESS SPRING CAFE NEWSPAPER

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Leverage from
the EU
2014–2020