

A Prosperous Lapland – With Sustainable innovations

Lapland's Sustainable Smart Specialisation Strategy
2023–2027

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ARCTIC
Smartness



REGIONAL COUNCIL
OF LAPLAND

Leverage from
the EU
2014–2020



Smart Specialisation

Smart specialisation is part of European innovation policy, where regions are expected to identify their own strengths and areas of expertise to which future resources and investments should be directed.

Through smart specialisation, the aim is to improve the competitiveness of business, make use of expertise and top-level research, and transform them into new commercial products and services.

The key perspectives are internationalisation, partnerships, and networks, as well as turning these into regional economic growth, business activity, and new jobs.

The strategy seeks both a vision for the future and concrete steps for the long-term development of the region's innovation activities.

Vocational schools, universities and research organisations in Lapland

UNIVERSITIES' RESEARCH STATIONS

Lapland Research Centre Kevo
(University of Turku)

Kilpisjärvi
Biological
Station (University of Helsinki)

Värriö Research Station
(University of Helsinki)

Sodankylä Geophysics
Observatory (University of Oulu)

LAPLAND UNIVERSITY CONSORTIUM

University of Lapland

Lapland University
of Applied Sciences

VOCATIONAL SCHOOLS

Sámi Education
Institute

Rovaniemi
Educational Consortium
REDU

Lappia Vocational School

STATE RESEARCH INSTITUTES

Finnish Meteorological Institute

National Land Survey of Finland

Geological Survey in Finland

Natural Resources
Institute Finland (Luke)

S3 Development in Lapland

2013–2017 (1st Strategy)

Focus on *Arctic expertise*

Sustainable use of natural resources and conditions

2018–2022 (2nd Strategy)

Built on initial strategy

Priorities in *international growth*

2023–2027 (New Strategy: S4)

More focused specialisation areas

Stronger business orientation

More inclusive approach

Sustainability at the core (S4)

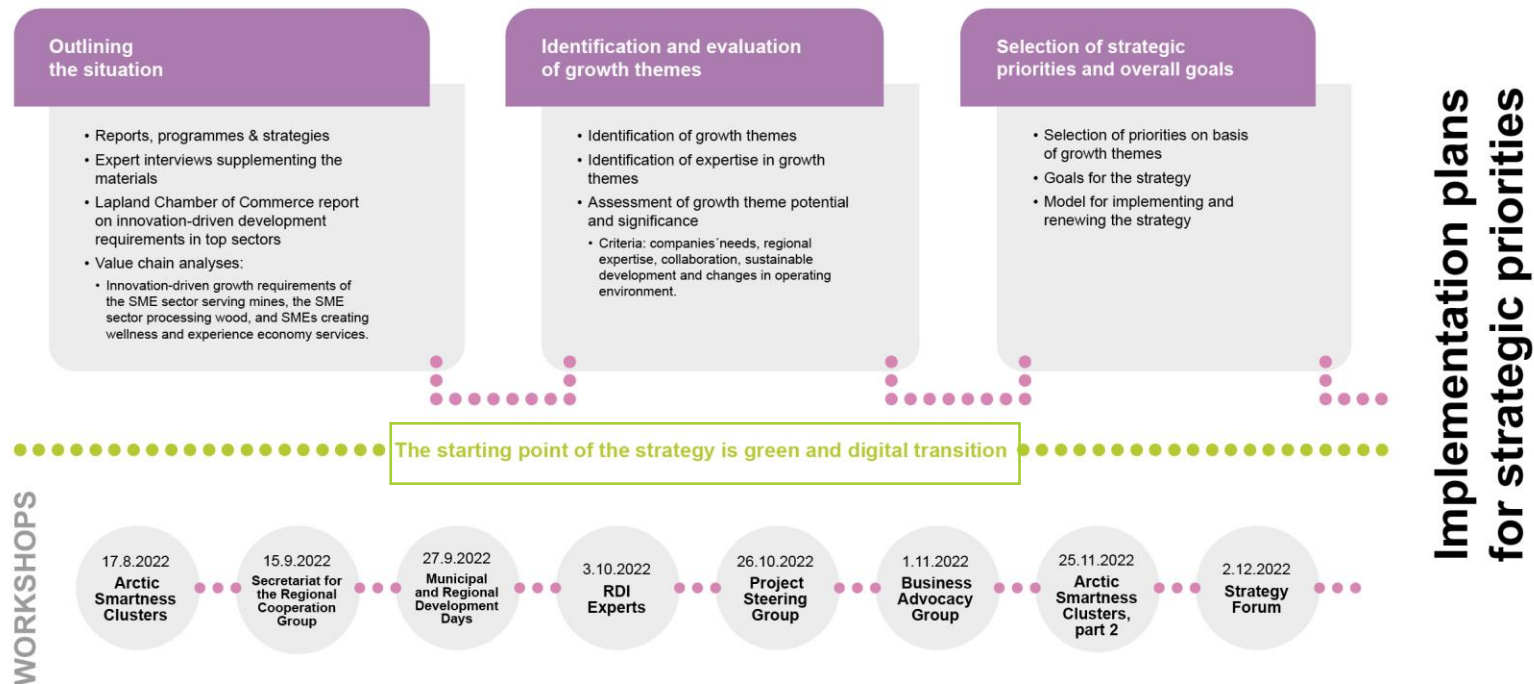
Clear monitoring & evaluation criteria



The goals of the strategy

- 1 To boost research and education organisation's ability to support the innovation operations amongst Lapland's micro-, small- and medium-sized enterprises
- 2 To renew expertise and joint action models in the research and education sector
- 3 To promote the willingness of companies to invest in the advancement of expertise, production, services and processes, as well as foster the attractiveness of Lapland as an investment target
- 4 To strengthen co-operation among businesses, research and educational institutions, municipalities, the public sector, development organisations and civil society around strategic priorities

Process of strategy renewal



Priorities and their goals

Target: To strengthen Lapland's role as a pioneer in the circular economy and support the transition of companies towards a resource-wiser economy

Circular economy as the basis of sustainable growth

Target: To utilise nature sustainably as a source of well-being and experience economy services as well as accelerate the responsible growth of enterprises

Wellness and experience economy services based on nature

Target: Raising of companies' competitiveness by accelerating the deployment of advanced technologies

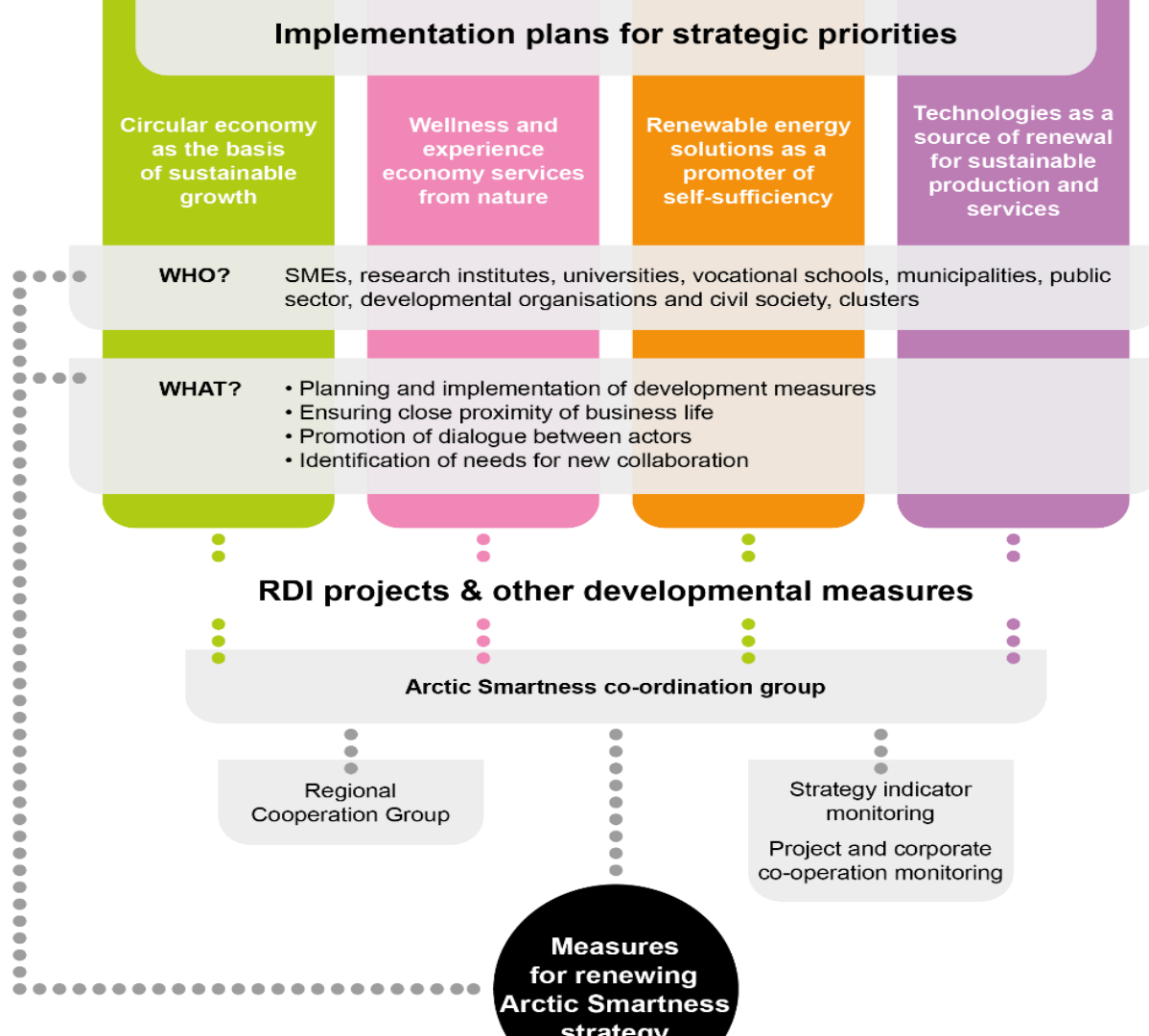
Technologies as a source of renewal for sustainable production and services

Renewable energy solutions as promoters of self-sufficiency

Target: To strengthen Lapland's role as a top region for the application of renewable energy and energy technologies

Priorities with the strongest potential for sustainable growth:

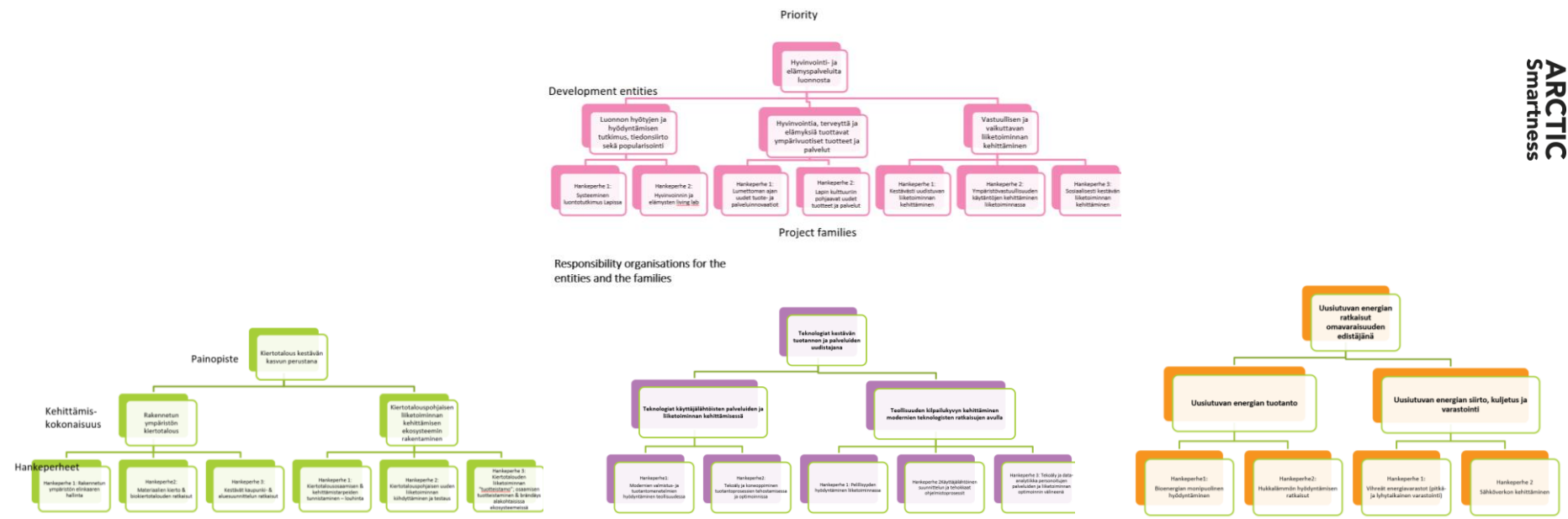
- ✓ Companies' needs
- ✓ Regional expertise
- ✓ Need for collaboration
- ✓ Sustainability aspects
- ✓ Changes in the operating environment



Fostering Competitiveness through Open Collaboration and Validated Implementation Plans

Impact through larger, well-coordinated entities

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1. Circular economy in the built environment
2. Building an ecosystem for the development of circular economy-based businesses



1. Research on the benefits of nature and their utilisation, data transfer, and popularisation
2. Year-round products and services that contribute to well-being, health, and experiences
3. Development of responsible and impactful business



1. Renewable energy production
2. Renewable energy transmission, transportation, and storage



1. Technologies for developing user-centric services and business
2. Enhancing industrial competitiveness through modern technological solutions

Key elements for Implementation

Renew the domains in which we excel, and identify and acknowledge the areas where we need expertise from elsewhere

Expertise, research and development

- Increasing competence in smart specialisation priorities
- Utilising the competence of creative industries as well as social sciences and legal research within the development of companies' business operations
- Evolving collaborative models as well as investments towards the renewal of know-how and ensuring expertise-based exchange and accessibility to skilled labour
- Increasing the knowledge and application of research facilities located within the region in order to promote the competitive edge of enterprises
- Building and developing goal-oriented, innovation system-reforming operations between companies, research and educational institutions, municipalities, the public sector and civil society

Renewal of industries

- Promoting the development of structures and culture connected with SMEs' innovation operations
- Investing in end user-based planning in RDI activities
- Developing the recognition and accessibility of RDI environments
- The utilisation of more effective development environments in the creation of innovations is being enabled
- Supporting industries in green and digital transition

International collaboration

- Reinforcing the role of actors and operational readiness in international networks
- Taking advantage of international networks and partnerships in the implementation of influential development packages
- Utilising Lapland's geographical position as a neighbouring region of Sweden and Norway and traditional crossborder co-operation in reinforcing livelihoods and in export

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Kemi
Tornio
Keminmaa
Simo
Tervola



VAHVUUDET



- Kattava energiantuotanto ja -jakelu
- Osaamista suurhankkeista ja niiden edellytyksistä
- Energian tuotanto, jalostus ja käyttöpotentiaali paikallista
- Liikenneverkko monipuolinen



- Vesistöjen Lappi – meri, joet ja järvet
- Kansainväliset matkailutuotteet Sampo ja Lumilinna, kesäajan risteilymatkailu
- Ostos-, kulttuuri- ja teollisuusmatkailun ympärivuotisuus ylläpitää palveluita
- Rajaton raja



- Isojen teollisuusyksiköiden ekosysteemit
- Kansainvälisyys ja rajayhteistyö
- Vihreän siirtymän pioneerirytykset
- Kiertotalouskeskus ja Arktinen teollisuus ja kiertotalous- klusteritoiminta
- Oma toimivaltainen seutuliikenneviranomainen



- Toimialoiltaan laaja pk-sektori
- Laajat yrityspalvelut ja tiivis seutukaupunkirakenne
- Pk-yritysten kansainvälinen osaaminen
- Nopeat ja kattavat tietoliikenneyhteydet

- Jakeluinfrastrukturi
- Innovatiiviset uudet tavat energian tuottamiseen- ja varastointiin sekä siirtoon
- Vetytalous ja power-to-x ratkaisut
- SMR-laitoksiin liittyvän koulutuksen kehittäminen
- Saaköihytvän liikenteen pilotoinnit ja testaus (maa, ilma ja vesiliikenteessä), maas-ratkaisut

- Vesistömatkailu
- Viipymän pidentäminen alueella
- Oheispalveluiden: hyvinvointi, luonto, elämäystuotteiden kehittäminen
- Ekosysteemin rakentaminen palveluiden vastuullisuuden, laadun ja saatavuuden kehittämiseksi
- Yrittäjien tiedolla johtaminen

- Teolliset symbioosit, tuotannon sivuvirrat
- Yritysten ja kiertotaloustoimijoiden yhteistyö,
- Koulutus puhtaan siirtymän teollisuuteen
- Pk-yritysten osaaminen ja uudistuminen: materiaali- ja energiatehokkuus, uudet materiaalit
- Kestävät liikkumisen palvelut

- Pk-yritysten digitaaliset valmiudet, tiedolla johtaminen j
- Pk-yritysten osaaminen ja uudistuminen:
teknologiaratkaisut, tuotantotekniikat, prosessit,
liiketoiminta- ja yhteistyömallit sekä yhteishankkeet
- Kikpailukykyä alustataloudesta

YHTEISTYÖN TARVE

Metsähallitus, Sitra
Elyt ja AVIt
Tekniset tiedekunnat,
Lapin AMK
Business Finland
Fingrid, VTT

Visit Finland,
House of Lapland
MTI –korkeakoulut,
alueorganisaatiot,
matkanjärjestäjät,
yritykset

Sitra, yliopistot ja
ammattikorkeakoulut
ELYt ja AVIt,
Business Finland.

Tekniset tiedekunnat
Kehittämis-
organisaatiot
Yritykset

**Leveraging synergies
from national and
interregional networks**

Thematic Smart Specialisation partnerships and Vanguard Initiative pilots in Lapland

- 5 S3 Partnerships and 3 VI pilots
- Some of the cases the coordination is mandated by Regional Council to Lapland University of Applied Sciences and Kemin Digipolis Ltd, also vocational college REDU
- Close connections with coordinators
- Direct funding, complementing expertise, connecting SMEs to international value chains
- Synergic approach to funding connecting to implementation plans
- To achieve the impact we're looking for, we emphasize and guide towards measures that embrace the end user (SMEs, citizens)

TSSPs and VI pilots

Industrial modernisation

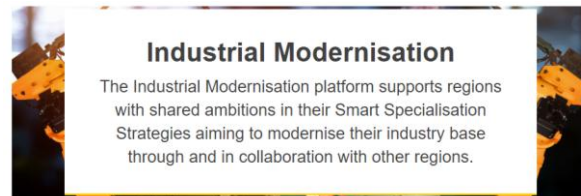
- Mining regions (co-lead)
- Advanced materials for batteries
- Sports and Vitality / ClusSport (co-lead)
- BERRY+
- Social economy
- (Health Resilience)

VI Pilots

- Bio-economy
- Hydrogen
- Smart Health

S3 Thematic Platforms and Thematic Smart Specialisation Partnerships

Starting in 2015, the European Commission has launched four dedicated S3 Thematic Platforms.



Other national and interregional initiatives

- Smart Specialisation collaboration between the 7 regions of East and North Finland (NUTS 2)
- As part of the S3 collaboration of East and North Finland S3 collaboration (NUTS 2):
 - Regional innovation valleys label
 - Participatory Action – Experimentation Journey – Achieving Circularity (JRC)
- Signatory partner in Horizon Europe Mission Adaptation to Climate Change
- Covenant of Mayors for Climate & Energy
- The Network of European Regions for Innovation in Agriculture, Food and Forestry (ERIAFF)
- European Regions for Competitive and Sustainable Tourism (NECStourR)
- Interregional Innovation Investments (I3) projects - **InShape** - INnovation ecoSystem for Healthy Active People in Europe, **RISE** - Resilient Innovation Ecosystem for EU Value Chains
- Interreg Europe projects (4/6 project's policy instrument is S3)

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<https://arcticsmartness.fi/en>



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