





ARCTIC INDUSTRY AND CIRCULAR ECONOMY CLUSTER



Arctic Frontier – side event
Smart Specialisation in the Arctic – experiences and next step

Case Lapland, Finland
The Story - Power of the Regional Innovation Ecosystem,
Arctic Smartness — Focus on Smart Choices











LAPLAND in facts & figures







Population **178,530**

Population density





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



Mining & metal industry € 5,000 M

Annual revenue



Forest bioeconomy

€ 1,300 M Annual revenue



Fastest growing industry in Lapland

Annual growth 9% 20% in 2017



Agricultural production & reindeer husbandry

€ 340 M

Annual revenue



largest export region in finland

of Finnish export

- 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

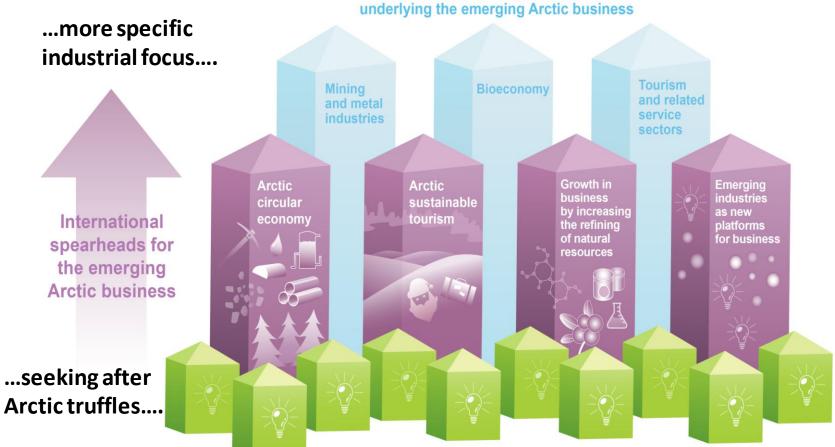
- World's largest wild organic harvesting area
- Strong educational structure:
 University of Lapland, Lapland University of Applied Sciences,
 Vocational College Lappia, Lapland Education Centre REDU
 and Sami Education Institute
- Research institutes: Geological Survey of Finland (GTK), Natural Resources Institute Finland (LUKE), Sodankylä Geophysical Observatory (SGO) as the most notable
- National circular and bio-economy centre in Kemi



Arctic industries at the centre

Three economic backbones of Lapland





The new industries will emerge with the support of four strategic business spearheads

...sustainable Lapland – foundation for the future...

Based on Arctic natural resources and conditions
Regional economic benefits
Balanced growth
Sustainable value chains

*SDGs 17 Sustainable
Development Goals
**Green Deal Investment Plar





Overview of Lapland S3 – International Smart Specialisation

PRIORITY 2:

business activities

Arctic expertise, renewal and

the growth and international

innovations strengthening

ARCTIC Smartness

PRIORITY 3:

as the base for

Regional ecosystem

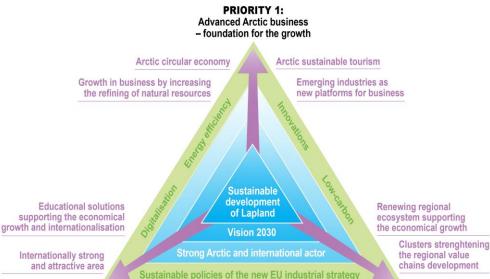
internationalisation

Governance

- S3 planning and design process is led by the regional Council of Lapland – overall responsibility to lead regional development
- S3 Implementation in two levels:
 - Arctic Smartness concept supporting the spearheads activities
 - Recognising of emerging sectors and potential – systematic development
- How is the governance set-up of your RIS3?
 - Regional ecosystem led jointly Regional Council of Lapland and Lapland ELY Centre*
 - Governance involves stakeholders and have both Top-Down to Bottom-Up continues dialog
 - Regional planning/programming provide the

breeding ground for smart specialisation

- Regional ESIF used in synergy policy mix
 Lapland Smart Specialisation Priorities
- Agreed together with regional stakeholders
- Shared responsibilities



Interregional

the whole region

collaboration developing

Arctic innovation and

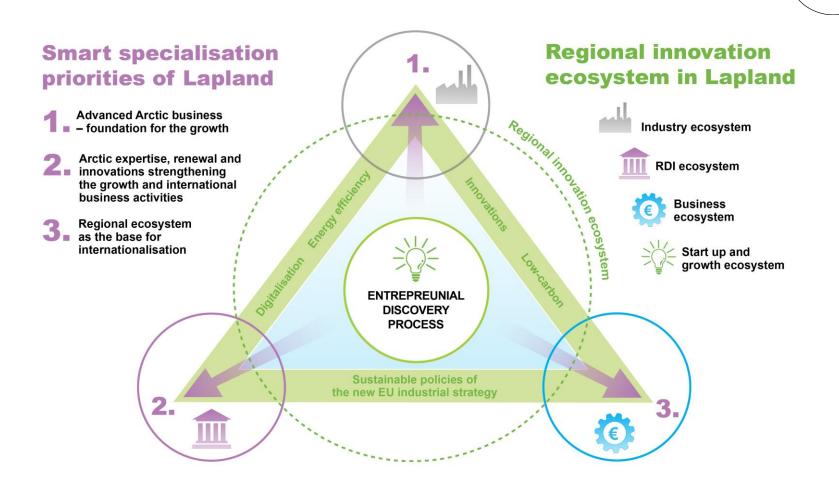
development environments

as drivers for the growth

^{*}Centre for Economic Development, Transport and the Environment (ELY Centres) is responsible for the regional implementation and development tasks of the central government.



Good governance forms the strong regional ecosystem Orchestrating the Regional Ecosystem ARCTIC Smartness



...modern clusters are the engines of the regional ecosystem...









€ € €

Cash flow



Added value for business

2 3 *****

Development organisations



National and global partners

Business sector

support services

Research and education organisations

Cities and municipalities

Companies

Private and

public financers

4

The cluster can help companies and other local actors with e.g. branding, marketing and promoting their interests.

Companies can find new collaboration models, international contacts and markets through the cluster.

The cluster supports companies in utilising business support services, promoting research and acquiring financing.

The cluster can provide assistance in applying for joint EU project funding or responding to large calls for tender.



Case –Arctic Industry and circular economy cluster



Good governance forms the strong regional ecosystem Systematic development approach

