

ARCTIC INDUSTRY AND CIRCULAR ECONOMY -CLUSTER

Sustainable utilisation of
arctic natural resources

DIGIPOLIS



THE VISION

The vision of the Lapland's smart specialisation strategy (S3) is to develop our leading position in exploiting and commercialising Arctic natural resources and conditions while maintaining balance in sustainable development. S3 finds that balanced mix of industrial expertise and commitment to sustainable development are at the core of refining natural resources in the Lapland region.

We are reaching our vision promoting regional clusters and ecosystems of emerging industries that focus on refining natural resources throughout the value chains. In addition to our strong traditional sectoral development, S3 focuses on cross-cutting interventions. S3 was a milestone that helped to recognise emerging industries arising from the region's potential, and laid down the foundation for the region's Arctic Smartness branding and development of the Arctic clusters.



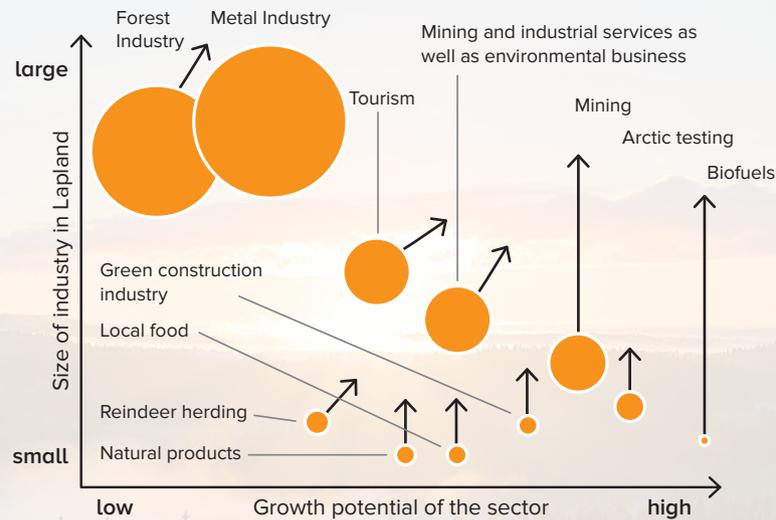
LAPLAND, FINLAND

The Lapland region in North Finland aims to become the leading Arctic region in the sustainable utilisation of natural resources. A Model demonstrator region approach is implemented in order to contribute to the modernisation of the Arctic industry in Lapland with eco-innovative, bio-based and resource efficient solutions.

- Lapland is the northernmost region in Finland and the whole of EU
- The land area of Lapland is 92 665 square kilometres, which is 25.7% of Finland's land area. Lapland has 182 810 inhabitants, which is 3.4% of Finland's population
- The largest residential centres are Rovaniemi (60 944 inhabitants) and Kemi-Tornio region (59 909 inhabitants)
- Industries in Lapland produce 10% of export in Finland



KEY BUSINESSES



Lapland's Arctic Specialisation Program 2013

The figure above illustrates the growth potential of the industries in Lapland. It also demonstrates that the economic development of the region is highly dependent on industries refining the natural resources.

- Activity in Industrial symbiosis and circular economy is experiencing strong growth in the region
- Plans to build two large biorefineries in Lapland are concrete examples of industrial symbiosis cases that are based on circular and cross-sectoral value chains

THE SPECIFIC CHALLENGE

Lapland possesses vast deposits of natural resources and pristine nature. Due to its forest and mineral potential, Lapland has become one of the most prominent regions for the bioeconomy and extractive industry at the global level. Large and constantly growing amount of forest biomass and wood enable increasing utilization of bio raw materials.

- Lapland has vast, growing forest resources - the annual growth of the stock was 13,3 m³ from 2009 to 2013, with increasing forest quality. About half of the amount was annually utilized. (National Forest Inventory nr. 11, VMI11).
- The driving force is the sustainable use of natural resources and to support the European Union to become self-sufficient on raw materials
- The use of the potential of the Arctic know-how, expertise and emerging industries
- The development of the seamless collaboration between multidisciplinary cluster-actors and cross-cluster cooperation





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LAPLAND
 Above Ordinary

Leverage from
 the EU
 2014–2020



REGIONAL COUNCIL
 OF LAPLAND

