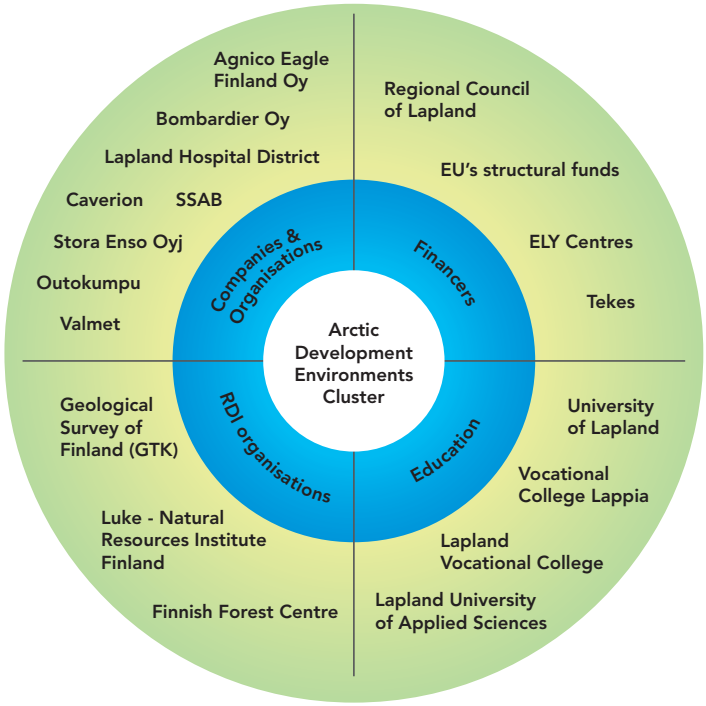
Arctic Development Environments - foundation of cooperation and innovations

Arctic development environments cluster is serving as a supporting network to all clusters with i.e. enabling technologies and to all industries and especially SMEs. The tool for measuring the performance and effectiveness of innovations is Technology readiness level (TRL). TRL is used as a meter to indicate the level of cluster's readiness to the produce development services to market.

Bringing out the innovation and research potential and competitiveness of region are cluster's goals. Including the knowledge of existing funding instruments, strong stakeholder relations and cooperation between different RDI environments will create added value for SMEs and regional development actors.

Cluster has developed a model to lift the RDI skills among several actors in the region. This skillset is targeted to regional SME needs in their everyday business challenges.

Main locations of development environments in Lapland.



Cluster is improving the substantial knowledge development and services provided in the region targeting to national and European level partnership. Development environments are physical and virtual platforms, learning and innovation environments, laboratories, research facilities, studios, workshops and simulation units where products and services can be created, tested and developed.

In total, the cluster has around 50 different development and innovation environments available for businesses and communities. The facilities are located in around vast Lapland and hosted by educational institutions, universities and sector specific research institutes.

ARCTIC DEVELOPMENT ENVIRONMENTS

CLUSTER

Regional RDI cooperation as a driver for growth

Development environments is an active and dynamic network which enables versatile services for local SMEs and RDI organisations. The mission of Arctic development environments cluster is to strengthen the regional cooperation of RDI actorsby implementing the Arctic specialisation programme (S3) through SME business development. The goal is to strengthen the network of existing RDI services based on sustainable and inclusive growth of local business.

3D printing environment

WHAT: Modern three-dimensional printing services from various materials. 3D modelling expedites research, development and innovation chains and,consequently, boosts product development.

FOR WHOM: Businesses, communities and inventors of all kinds for product development, component testing and to support innovation.

WHERE: Lapland Vocational College, Rovaniemi

CONTACT: tarmo.aittaniemi@lao.fi

Arctic Power

WHAT: A research and development unit that specialises in special Arctic conditions and smart ICT systems.

FOR WHOM: Businesses and communities that want to have more efficient technical systems or to test the performance of roducts in challenging conditions.

WHERE: Lapland University of Applied Sciences, Rovaniemi

CONTACT: ari.karjalainen@lapinamk.fi

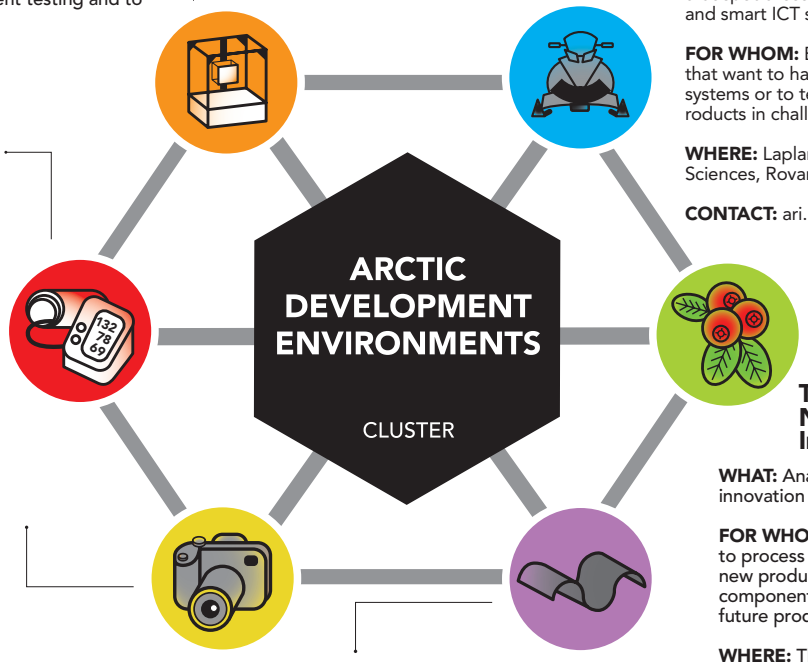
SOTE simulation environment Social welfare and health care simulation environment

WHAT: Open and multidisciplinary training and learning environment to simulate practical situations that would otherwise be challenging to train for.

FOR WHOM: Professionals of the field for training, education and product development as well as for use as a trial, exhibition or test environment.

WHERE: Lapland University of Applied Sciences, Kemi

CONTACT: hannele.kauppila@lapinamk.fi



The laboratory of the Natural Resources Institute Finland

WHAT: Analysis of raw materials and innovation of new products.

FOR WHOM: A business that wants to process natural raw materials, test new products or search for new components from plant material for future products.

WHERE: The laboratory of the Natural Resources Institute Finland, Rovaniemi

CONTACT: antti.hannukkala@luke.fi, susan.kunnas@luke.fi

Video and sound studio

WHAT: Renting out equipment or the studio along with expert services for various development, research and production projects. Audio-visual production services as student and business co-operation.

FOR WHOM: Local businesses, organisations, associations or film companies.

WHERE: University of Lapland, Rovaniemi

CONTACT: timo.haanpaa@ulapland.fi

Arctic Steel and Mining

WHAT: Materials Usability research to support the product development for further recessing.

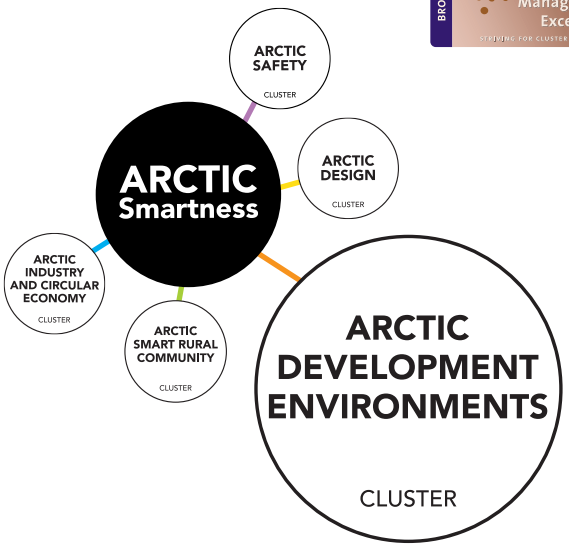
FOR WHOM: Businesses, research institutes as well as SMEs to support whole value chain from materials testing to prototype specification level.

WHERE: Lapland University of Applied Sciences, Kemi

CONTACT: rauno.toppila@lapinamk.fi

EXAMPLES OF DEVELOPMENT ENVIRONMENTS

- Arctic research, development and innovation services in Lapland
- 50 modern development environments
- More than 100 experts and specialists
- Multidiciplinary 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
- Artic 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 Development Environments is one of the Arctic Smartness clusters in Lapland. With the five clusters Arctic Smartness is looking beyond the boundaries, cross-fertilisation, the best use of the regional expertise and strategic networking over the borders.

Contact

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