

TOTALLY 18 PROJECTS HAVE BEEN APPROVED TO BE FINANCED BY THE KOLARCTIC CBC (situation in August, 2018)

The following projects wer approved during the 1st Call for proposals (JMC meeting on 9th June, 2017)

KO1001 Arctic Coast Bioremediation

Lead Partner: FBI State Regional Centre for Standardization, metrology and Testing in the Murmansk Region (MCSM)

The project will produce a technology for comprehensive cleanup of coastal marine areas in the Arctic from oil contamination based on the use of mineral sorbents to collect water-oil emulsions, oil-oxidizing microbial inoculants and plants for revegetation on the treated areas.

KO1013 BRIDGE – Barents Region Initiative for Developing Growth and Employability Lead Partner: UiT – The Arctic University of Norway

Three-year BRIDGE is an innovation network project of some 60 small companies and approximately 200 exam candidates from five universities in the Barents Region supporting growth and bringing together students and local job opportunities. Around 200 students in 60 teams will work on behalf of some 60 companies in Finnmark, Murmansk, Karelia, St. Petersburg and Kemi-Tornio. Their innovation work will produce business solutions for problems addressed by companies: B2B and B2C interaction across borders, new products, services etc. The main intention is to establish a competence and innovation brokering system that will permanently be available for small businesses looking for support in developing their cross-border business.

KO1017 Salmonid Fish and Freshwater Pearl Mussel Lead Partner: Metsähallitus, Parks and Wildlife Finland

The overall objective of the project is to enhance cooperation and to streamline common practices for assessing the status of streams and rivers, and especially of *freshwater pearl mussel* and *salmonid fish* as indicators of ecosystem function and health. The project will improve the knowledge-base on riverine ecosystems in the Green Belt of Fennoscandia and provide us a common toolkit of best practices and methodology for assessment of riverine ecosystem health. Furthermore, the project aims to raise people's awareness of riverine ecosystems and their socio-economic influence, and thus to improve the status and attractivity of the cross-border watersheds.

KO1029 Barents Region Transport and Logistics Lead Partner: Council of Kainuu, Finland

A joint strategy document for the transport of the Barents Region (the Joint Barents Transport Plan, JBTP by BEATA) started in 2012. The objective of this project is to put in practice - in the regional level - the results of the state level multilateral process.

The project is facilitating the platform, where the authorities responsible for of co-ordinating of the regional development in the Barents Region, can agree upon implementation of the strategy.

KO1030 Supporting Environmental Economic and Social Impacts of Mining Activity Lead Partner: Northern Research Institute Narvik AS, Norway

The SEESIMA project aims to raise awareness of technological solutions to environmental impacts of mining activities, in order to reduce environmental impacts and return economic returns. Thereby it will also improve public perception of the mining industry. The change

contributed by the project will be to increase the awareness of existing and new knowledge on technological solutions for application in the mining industry, and to involve in this Russia, Sweden, Norway and Finland.

The project will provide documentation and dissemination of technological tools that can improve the current practice of mineral processing, both for production and for the waste handling.

KO1078 Ecological Restoration of Arctic Rivers

Lead Partner: County Administrative Board of Norrbotten, Sweden

During history, the flow of rivers on the Kolarctic region has been disturbed. Rivers have been channelized because of timber floating, forests and agricultural land has been drained which also impacts the river flows. Construction of a road or railway crossing a river may have meant a change in the water flow. This has in many cases led to migration barriers for many aquatic species, nutrients and heavy metals released from the ground to the river, and erosion. All this has a negative effect on river biodiversity.

Re Arc-project will restore river flows on numerous rivers on the Kolarctic region.

KO1087 Facility Management of Residential Buildings in Barents region Lead Partner: UiT – The Arctic University of Norway

Seen from an environmental perspective, buildings consume 40% of the energy and stand for nearly the same amount of CO2-emissions. Residential buildings thus constitute a major environmental impact. In the Nordic countries, maintenance and operation of buildings has been in focus for many years, resulting in high competence in the industry and service providers. An apparent problem on the Russian side of the border is the lack of follow-up systems for facility management. The focus of the project FaMaRB is in connecting renovation and the operational stage of buildings life cycle together. The essence of the project is to bring effective operation and management of buildings into focus by adapting various concepts of energy efficiency and energy saving through upgrading or renovation.

KO1089 Green Arctic Building

Lead Partner: UiT – The Arctic University of Norway

The project is aimed at solving the problem of providing a sustainable urban environment in the northern regions based on the use of "green building" practices and tools. This will be supported by developing and promoting sustainable strategies for green buildings in cold climate. The project will contribute to innovation in "green" building methods and tools. The project will increase the awareness of the importance of "modern green" thinking in planning and operating Arctic settlements. It will contribute to providing the authorities with a better base to execute green policies of the regions.

KO1110 Cross-border dialogue and Multi-Use Planning in the Pasvik and Grense Jakobselv catchments

Lead Partner: The Office of the Finnmark County Governor, Norway

The Pasvik (Paz/Paatsjoki) and Grense Jakobselv (Vorjema/Vuoremijoki) river basins are located in the border area of Russia, Norway and Finland. The catcment areas of the rivers are mostly in Finland and Russia. The Pasvik river is the border between Norway and Russia over a distance of 112 km. The last 35 km of the river Grense Jakobselv forms the northernmost border between Norway and Russia. Since industrialization, the environment in the area has been increasingly affected by industrial activities. The overall objective of this project, therefore, is to sustain and improve the state of the environment within Pasvik and Grense Jakobselv river basins.

After preparation and planning phases, the largest part of the project consists of work leading to a new Programme of Measures (PoM) for the years 2020-2030, and dissemination of project results.

KO1115 Geo-Bio Hazards in the Arctic Region Lead Partner: Geological Survey of Finland

The project will study geo-bio hazards in the Arctic and sub-Arctic areas of the Barents region. In its studies it will focus on

- Acid sulfate soils
- Mine environment issues: mine closure, mine waste management and reuse, mine water management, and best practices of closed mine facilities inventory
- Geomicrobiology: in this, the main objective is to find links between bacterial communities and geochemical factors in acid sulfate soils and to investigate the role of different bacterial groups in acid production and metal dissolution from acid sulfate soils.

KO1157 Agroforestry in Barents region Lead Partner: Lapland University of Applied Sciences, Finland

The objective of the project is to combine agricultural and forestry technologies aiming to create diverse, productive, profitable, healthy, ecologically sound and sustainable land-use systems for improved availability of Non-Timber Forest Products (NTFP) raw materials in Barents region. Such land-use system is called agroforestry.

Examples of the activities and outputs of the project:

- Piloting of the chosen agroforestry activities at each partner area. Evaluation of the piloting results and recommendations for future activities.
- Virtual tool for modelling and planning agroforestry activities
- Estimation of the commercial potential of chosen agroforestry products.

The following projects were approved during the 2nd Call for Proposals (JMC meeting on 8.12.2017)

KO 2011 Arctic Railway Infrastructure in Kolarctic II – ARINKA Lead partner: Northern Research Institute Narvik, Norway

On Kolarctic region, the railway plays an important role for freight transport of minerals & ore, fish, grocery, paper and timber. Travel with train in the Kolarctic region is also becoming increasingly popular among commuters and tourists. Generally, in Europe and the Kolarctic region, there is an expectation of a gradual increasing demand of transport capacity on the railway network.

The Kolarctic region provides extremely challenging conditions for railway operation and maintenance.

The ARINKA project main objective is to increase railway capacity in Kolarctic region and to contribute to making railway network, operations and maintenance smarter, more sustainable and climate-proof.

KO 2020 Barents on Time Lead partner: Finnmark County Authority, Norway

Hundreds of travellers cross the boundaries between Russia, Finland and Norway daily. Travelling by bus is not always convenient and efficient. The project "Barents On Time" (BoT) has an objective to provide cross-border travellers with up-to-date tools and services for using public transport. The target group is authorities, bus terminals and bus operating companies. The project will result in new tools and services: website with timetable and route search, mobile ticket application and information screens on bus stops. The project will facilitate bus priority at cross-border checkpoints, produce emergency plan to increase safety, and contribute to efficient timetables.

KO 2071 Development of common approaches to involvement youth into science and technical sphere – Be Tech

Lead partner: Municipality of Alta, Norway

School development experts and education policy makers have expressed their concern that young people do not apply for studies in mathematics and science, or in other subjects where these are applied. This is the situation in the countries of Kolarctic region, as well as in many other industrialized countries. It leads to an undesired structure of competence among the citizens: a lack of experts in natural sciences. This project will contribute to raising motivation of schoolchildren to learn science, via work with teachers and teaching methods. It will also contribute to raising interest towards business and industrial sector, via e.g. study visits.

KO 2072 Kolarctic Food Refining CBC Project - KFR Lead partner: NordConsult Oy, Finland

The project will contribute to using and refining – more, and better than earlier - the nature products from Finnish Lapland, Murmansk region and Nenets Autonomous District.

This project has chosen to develop, by means of cross-border-cooperation, the handling and refining of reindeer meat and wild, forest berries. Participants of the project, besides of the Lead partner, the Finnish company NordConsult Oy, are

- 3 other Finnish companies in reindeer meat and forest berry business,
- 4 Russian companies in reindeer meat and forest berry business and
- 3 other Russian expert organizations.

KO 2093 Phenomena of Arctic Nature – PAN Lead partner: Metsähallitus, Parks & Wildlife Finland

The project will increase the attraction of the project area and Arctic nature, by creating better business environment, recreational infrastructure and growing attraction of destinations. The project develops international cooperation in the field of tourism, environmental protection, environmental education and the formation of good neighbourly relations in the Arctic.

The main tasks of the project include

- Connecting tourism with nature and capacity building, by workshops for entrepreneurs and new observation sites made either by building new infrastructure or by restoring existing buildings.
- Raising the awareness and attraction of nature-based tourism, by making educational materials and new exhibitions to nature centres and information points, as well as making marketing materials.
- Creation of an operational network as part of Green Belt of Fennoscandia initiative, by networking between the nature and visitor centres, and complementing the network with tourism businesses and other operators.

KO 2100 Ice Operations

Lead partner: Northern Research Institute Narvik, Norway

The project works towards improved maritime accessibility, better knowledge of ice conditions, and accurate models to ensure safe and environmentally sustainable field developments.

The work packages of the project will:

- perform field expeditions, measurements and test, data collection,
- increase current knowledge base of the Barents Sea area and ice conditions,

- extend existing knowledge, experience and expertise on ice mechanics and perform numerical simulation of ice forces on structures,
- establish best practice models/understanding for ice and structure interaction relevant for the Barents Sea, and
- make recommendations for oil and gas field development concepts (contribute to build new knowledge on how to design offshore structures operating in ice-infested waters)

KO 2124 Reindeer Meat – Quality High Lead partner: Lapin Nahka Oy, Finland

Export of Russian reindeer meat overseas is still relatively small. In Finland on the other hand, the exporting of reindeer meat overseas is restricted by the sufficiency of reindeer meat, but for instance, there is expertise in exporting reindeer products.

The objective of the Reindeer Meat – Quality High project is to combine the strengths and expertise of the Russian and Finnish companies in the reindeer meat production chain.

The project creates guidelines for Russian reindeer slaughterhouses. Also, seminars and company visits to Finland will be arranged for employees and management-level persons employed in Russian slaughterhouses. The objective of this is to demonstrate reindeer meat production processes in Finland. The aim is for the Russian slaughterhouses to apply for and become incorporated in the European TRACES system (TRAde Control and Expert System), in order for them to be able to export their products to the EU region.