# ENVIMINE – developing environmental and geodynamical safety related to mine closure in the Barents region

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## Lead Partner of the project:

Geological Survey of Finland – Northern Finland Office

### Partners:

Mining Institute – Russian Academy of Sciences – Kola Science Centre Luleå University of Technology – Division of Geosciences

### **Associates:**

The Kemi Mine – Finland
The Umbozero Mine – Russia
Boliden Mineral AB – Sweden

Implementation of the project: April 2012 – December 2014 (33 months)

### Objectives

- Developing methodology by cross border cooperation, for environmentally safe mine closure under specific conditions in the Barents area
- Producing information for the target groups of the environmental impacts of the mining activities
- Developing harmonization between mineral industry and environmental management during mine closure
- Creating a new, updated database of selected mine areas in Finland (an active mine), Sweden and Russia (closed mines)
- Developing multilateral relations between Finnish, Russian and Swedish organizations, responsible for environmental control in the Barents region

# Activities

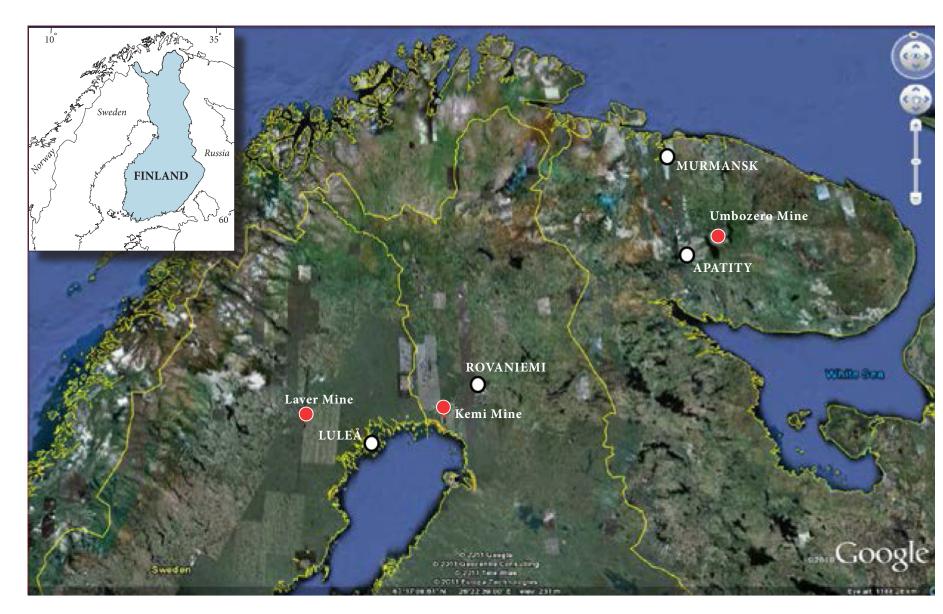
- Collecting data of the history and background of the case mines
- Field studies by GPR, XRF measurements, sampling of waters and soil, analyses
- Meetings and workshops
- Reports and recommendations for monitoring groundwater and surface water quality, and for after care plan
- Publications, presentations at workshops, seminars and conferences

# Outputs

- Promoting cross border networking and establishing permanent platform for cooperation
- Permanent structures for cooperation will be created and multilateral cooperation will be expanded
- Updated database of the environmental state of the case mine sites
- New research data
- Reports with recommendations



Project meeting in the Mining Institute, Apatity.



The study areas of the project.



The Kemi Mine, Finland.



View over the landscaped Laver Mine, Sweden.



Field studies by GPR in the tailings of the Umbozero Mine, Russia.

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