

The Barents project

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The Geological Survey of Sweden (SGU) was granted extra funds from the Ministry of Enterprise and Innovation to gather new geological, geophysical and till geochemical data and enhance the geological knowledge in Norrbotten County. The county located in northern Sweden is among the most economically important metallogenetic regions in Europe. The area has a high potential for new Cu, Fe, Au, Ni and PGE deposits. The Barents project started 2012 and is still ongoing.

The main goals of the project have been:

- Gaining a better understanding about the regional geological framework and development, hydrothermal alterations, mineralizations, structures and stratigraphy
- Mapping the physical properties of the bedrocks using different geophysical methods
- Mapping of till geochemistry including major, and trace elements analyses

New data acquisition such as lithochemical and petrophysical sampling, geological observations on outcrops including structural measurements and age determinations were conducted in Norrbotten. Airborne gravity gradient (AGG) and airborne transient electromagnetic (VTEM), reflection seismic and magnetotelluric (MT) profiles were collected within the frame of the project as well as till geochemistry sampling.

In this presentation some of the new findings from integrated multidisciplinary studies carried out in the Barents projects are summarized. There are 33 reports published and can be publicly accessed and downloaded at <http://www.sgu.se/en/mineral-resources/barents-project/>.