Paper Number: 3038

The Circum-Arctic Mineral Resource Project

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This presentation is based on the results from a cooperative project in which the partners are:

- The geological surveys of Canada (GSC), Denmark and Greenland (GEUS), Finland (GTK), Norway (NGU) (project coordinator), Sweden (SGU) and the USA (USGS)
- The A.P. Karpinsky Russian Geological Research Institute (VSEGEI)
- The National Energy Authority of Iceland, Iceland GeoSurvey

Numerous scientists from these organisations have made important contributions to the project which has focussed primarily on the major metal and diamond deposits on land within the area north of 60° N. The existing Nordic-Russian Fennoscandian Ore Deposit Database (http://en.gtk.fi/informationservices/databases/fodd/) has been of vital importance as a template for the project, in particular in relation to size categorization of deposits.

The above-mentioned organisations have earlier cooperated on compilations of the bedrock geology, tectonics and aeromagnetic and gravimetric fields in the Arctic region. Maps showing these topics as well as the products from the current project will be exhibited at stand GG8 in the Exhibition hall.

Products from the project include:

- A database of the major deposits (including information on the tonnage of their resources and the grade of valuable components).
- Printed maps (1: 5,000,000 and 1: 10,000,000) showing the distribution of the deposits.
- Two overview publications, one (in English) for the geoscientific public and a briefer description for general interested groups (published in English, French, Inuit, Russian and Sami).
- A dedicated web site hosted at NGU (<u>www.ngu.no/camet</u>) which provides on-line access to the above products as well as general information on the project.

The project was completed in July 2016 and reflects the level of information available in the last quarter of 2015.

Major ore deposits of many kinds are found in the Arctic and production of certain commodities from the operating mines is of critical importance to global needs. The mining industry in the Fennoscandian region has particular importance as a dominant supplier to the European market. New deposits, some of "world class" are still being discovered in the Arctic region, even in areas which have been investigated for many decades: further potential is being recognized in new areas. The resource potential of the Arctic region and the prospect of increased access to the High Arctic due to reduction in ice cover in the Arctic Ocean are among the reasons for the greatly heightened focus on the Arctic from decision makers, exploration companies and many other interested groups. This presentation will provide an overview of the most important metal mining operations in the Arctic with additional focus on projects in development and on new discoveries.

The financial support of the Ministry of Foreign Affairs of Norway for coordination of the project and the positive approach of all the partners are gratefully acknowledged.