Mineral Raw Materials: Insights into Finland

Saku Vuori

TYÖ- JA ELINKEINOMINISTERIÖ
ARBETS- OCH NÄRINGSMINISTERIET
MINISTRY OF EMPLOYMENT AND THE ECONOMY

GTK

Presentation Contents

- **Minerals policy in the Finland**
- **Workshop associated research activities in the Geological Survey of Finland**

Minerals policy in Finland

"Top ranking in the Fraser Institute Mining Destination Survey, 2013"

Vision 2030: Finland is a leader in sustainable extractive industry

Making Finland a leader in the sustainable extractive industry – action plan, 2012

Minerals sector is recognized in Goverment Programme, 2011

- Steering committee consisting of representatives from ministries and other parties appointed for implementation and updating the action plan
- Round table meetings annually

Natural resource report from Gov. to Parliament, 2010

Revision of Natural resource report from Gov. to Parliament, 2014?

Finland´s Minerals strategy, 2010

R&D&I funding: Launch of new national programmes and increasing commitment to European networking

EU´s Raw Material Initiative, 2008

Workshop associated research activities in the Geological Survey of Finland (GTK)

GTK´s core activities

- Survey and research of Earth's resources and their sustainable use
- Management and delivery of national geoscience data
- Provision of geoscience information for society and the business sector
- Promotion of regional development
- Specialist services for community and commercial customers
- Active collaboration in international projects

GTK's role in the mineral sector: Exploration, Development of 'Green Mining', Promotion and Expert Services

Workshop associated research activities in the Geological Survey of Finland

- **GTKMinTek** is leading mineral processing facility in Europe

  - Ore evaluation testwork for feasibility studies, process development, solutions for recycling and soil remediation

- **GTK´s Map Database**

- Work aims to organize and harmonize data for GIS interoperability, transparent access, open interface and database integrity (using e.g. GeoSciML; EarthResourceML)
- Harmonization is on a steady path and current services include e.g. digital bedrock map and commodity databases of Finland
- Second phase is web-based Mineral Deposit and Exploration portal (late 2013) and should be followed by two regional data services: the Fennoscandian Ore Deposit Service and Minerals Intelligence Network for Europe (Minerals4EU)
- Circum-Arctic Data Service is also in progress with e.g. Russia, Canada and US (Alaska). (Launch in 2016)

Workshop associated research activities in the Geological Survey of Finland

- **R&D programmes**

Mineral Potential programme

Assess reserves and discovery potential of mineral resources, and develop exploration innovations for their delineation; Study ores and ore-potential formations and structures, and create improved tectonic and metallogenic models; Evaluate sufficiency, life cycle and total environment impact of mineral raw materials use.

Eco-efficient mining programme

Develop eco-efficient ore concentration methods; Find ways to recycle and manage by-products and waste from mining and refining operations; Promote sustainable use of geological resources through development of geoenvironmental research

- **Associated projects:** ProMine, Minerals4EU, EURARE, …

Thank You!

Links:

Finland´s Minerals strategy

http://www.mineraalistrategia.fi/materiaalit/fi_FI/materiaalit/_files/84608410538672182/default/FinlandsMineralsStrategy.pdf

Government Report to Parliament

http://www.tem.fi/files/29319/TEM_5_2011_netti.pdf

Making Finland a leader in sustainable extractive industry – **Action plan**
http://www.tem.fi/files/37130/TEMjul_22_2013_web_04072013.pdf

Geological Survey of Finland / more on research:
http://en.gtk.fi/research/