



GEOLOGICAL
SURVEY OF
NORWAY
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FOCUS

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An old open pit at the Ertelia mine. Photo: T. Bjerkgård

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FOR MORE DATA

NICKEL IN NORWAY

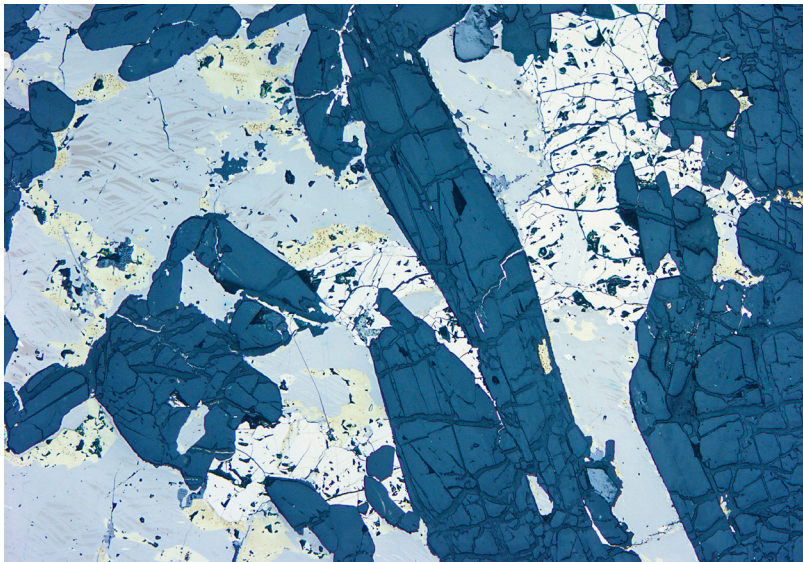
NGU FOCUS 26.02.2019 / WRITTEN BY TERJE.BJERKGARD@NGU.NO

Mining of nickel has a long tradition in Norway since it was discovered in 1837. Mining operations commenced at Espedalen and Ertelia in the 1840s and with increased production in the following years from several mines, Norway became the world's major producer of nickel in the 1870s. The discovery of nickel laterite ores in New Caledonia, which was much easier and cheaper to produce led to a rapid decline in the Norwegian nickel production in the 1880s. During World War II demand for nickel increased in Germany and old mines in Norway were reopened and some of deposits were mined out (Flåt and Hosanger). In 1989 the Finnish company Outokumpu opened the Bruvann (Råna) deposit close to Narvik for mining of nickel and olivine, an operation which lasted until 2002.

Based on the NGU database it is estimated that more than 12 Mt of nickel ore has been produced from the 20 larger deposits in Norway, of which more than 11 Mt came from Bruvann and Flåt mines.

In the recent years, there have been several exploration programs for nickel in Norway, including Bamble and Ertelia areas in Southern Norway, Espedalen area in Central Norway and Råna and Reinfjord in Northern

Norway. Including earlier campaigns, there are estimated resources of nearly 20 Mt nickel ore in Norway, of which 8.3 Mt are regarded as identified (NI 43-101). In addition to nickel, the deposits are copper-rich and some are enriched in cobalt and/or PGE.



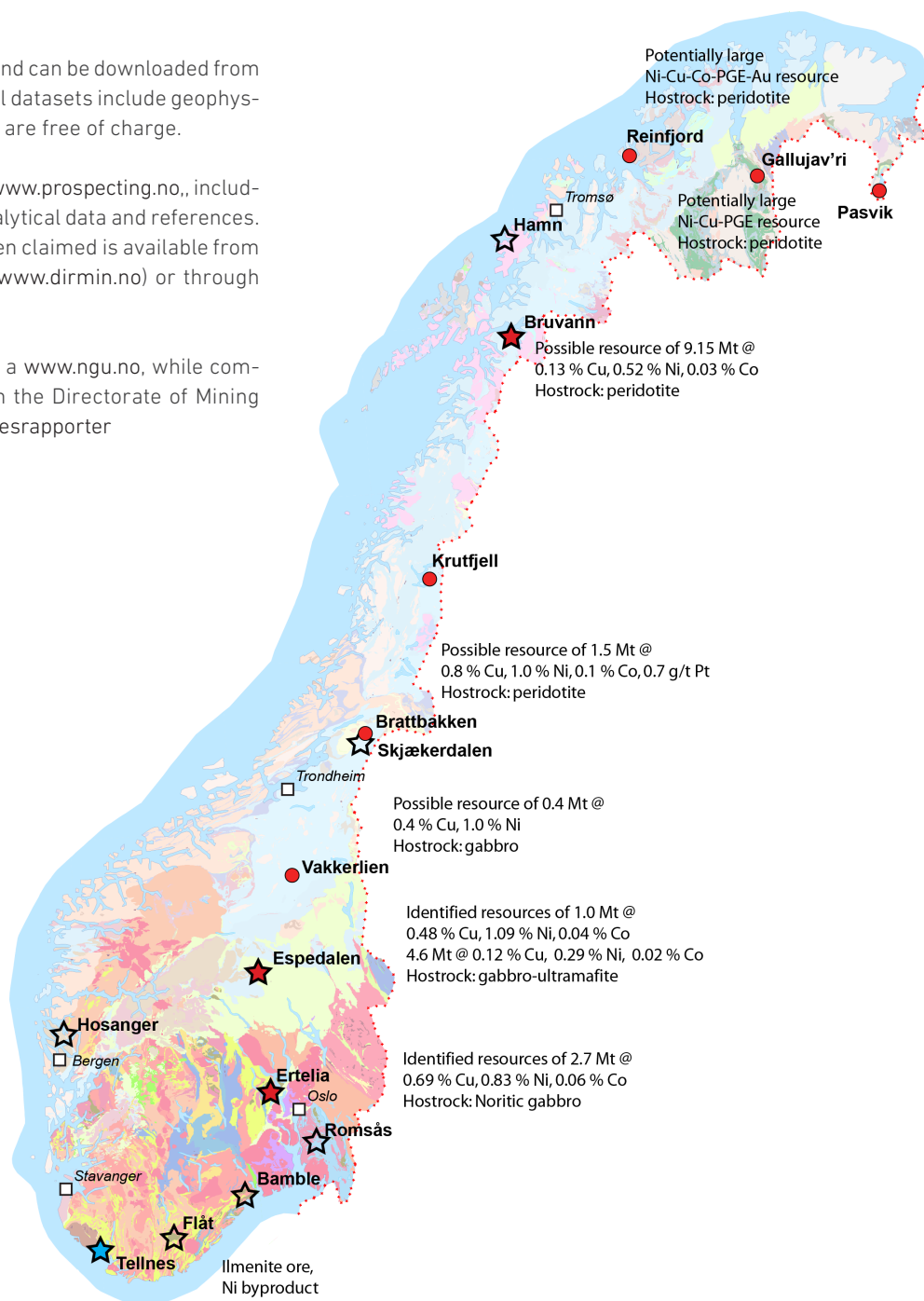
Typical Ni-Cu ore from the Gatlujavri deposit (photo: L.P.Nilsson)

DATA AND MORE INFORMATION

Maps and geological data are available and can be downloaded from the NGU website (www.ngu.no). Regional datasets include geophysics, geochemistry and geology. All data are free of charge.

Data on deposits are available through www.prospecting.no, including location, geology, mining history, analytical data and references. Information about areas which have been claimed is available from the Norwegian Directorate of Mining (www.dirmin.no) or through www.prospecting.no.

NGU Reports on deposits are available a www.ngu.no, while company reports can be downloaded from the Directorate of Mining website: <https://dirmin.no/undersokelsesrapporter>



- ☆ Old mine, mined out
- ★ Old mine + Ni resource
- ★ Existing mine, Ni byproduct
- Ni resource, not mined

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