

Critical raw material potential in Finland

L.S. LAURI^{1*} AND O. SARAPÄÄ¹

¹*Geological Survey of Finland, P.O. Box 77, 96101 Rovaniemi, FINLAND*

*(*correspondence: laura.lauri@gtk.fi)*

Critical raw materials as defined by the European Commission (Sb, Be, borates, Cr, Co, coking coal, fluorite, Ga, Ge, graphite, In, magnesite, Mg, Nb, phosphate rock, PGM, REE, Si metal, Ta and W) are commodities, which are needed by the EU industry, but produced elsewhere, creating a possible supply risk (EC 2014). The discovery potential of these raw materials in the bedrock of Finland has been estimated by GTK (Kihlman et al. 2014, Sarapää et al. 2015a,b). Some of the commodities are currently produced from mines (Cr, Co, PGM, phosphate rock and silica sand) and Finland also has minor refinery production of Ge from imported material. The discovery potential of borates, coking coal, fluorspar, Ga and Ge in the bedrock of Finland is estimated as low to nonexistent based on the lack of known occurrences. In and Mg are currently considered to have low potential, although the rapakivi granites may have some In potential and magnesite deposits are known in Finland. All other commodities are estimated to have moderate to good discovery potential based on the number of known occurrences and deposits and historical or current mine production. The recent investigations of GTK have revealed several new targets for REE and phosphate rock exploration in central and northern Finland. The most interesting targets comprise carbonatites (e.g., Sokli, Kortejärvi) and alkaline intrusions (Iivaara).

References:

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