

INDUSTRIAL MINERALS OF NE BALTIC SHIELD, RUSSIA

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Murmansk region produces about 100% of Russia's apatite and nepheline concentrate, 100 % baddeleyite, 80-90% phlogopite and vermiculite, considerable quantity of ceramic raw material, facing and semi-precious stones, muscovite and construction materials. The largest industrial minerals (IM) reserves are hosted by the Khibiny alkaline massif. This Paleozoic intrusion contains apatite, nepheline, titanite, titanomagnetite, potassium feldspar, eudialyte, aegirine, soda, semi-precious stones (khibinite, pegmatoid ijolite-urtite, tinguaitite), construction materials. Another massif containing a wide range of IM is the Kovdor intrusion, where apatite, rare-metal ores with baddeleyite (ZrO_2), phlogopite and vermiculite are mined. Kyanite deposits in the Keivy region is unique in terms of resources and the quality of raw material. They are accompanied by deposits and occurrences of sillimanite, abrasive garnet, veined quartz, muscovite, amazonite, zircon. The Murmansk region is rich in considerably large deposits of facing stone, and many of the stones are "granites", i.e. hard rocks with a high strength, best suited in terms of the world strategy of facing stone production. In 1998 the reserves of the first on Kola chromite deposit, Sopcheozerskoye, were approved. Exploration work for ilmenite ore has been carried out at the Gremyakh-Vyrmes deposit. Active exploration for diamonds is carried out both on the continent and on the White Sea shelf. Murmansk region possess extensive potential reserves of small-size muscovite, barite, graphite, talc, quartz for melting, asbestos, kaolin, schungisite. A favorable prerequisite for the exploitation of these deposits is the complexity of raw material, well-developed infrastructure of the region, the availability of energy resources and important geopolitical position in the northwest of Russia.