

SEMCRET.GEOPHYSICAL EXPLORATION OF MAGMATIC ORE DEPOSITS

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Summary

Critical raw materials (CRMs) are essential for EU industry and strategic sectors, especially about the transition to green energy. However, at present, the EU's domestic supply of primary CRMs is less than 3% for many important raw materials. To gain a better understanding of the EU's critical raw material potential, discover new deposits and thus increase the internal supply of CRMs and secure its raw material autonomy, the EU intends to boost exploration and production of CRMs.

Orthomagmatic mineral systems host important (critical) green transition raw materials such as Ni, Cu, Co, V, Ti, Cr and platinum group elements (PGE). There are currently only two operating mines producing these metals in the EU, although there is potential for other mines in several EU countries. This project is designed to develop exploration methodologies, including socially and environmentally sustainable applied geophysics.

Through the study of 4 areas located in Portugal, Czech Republic, Poland and Finland, of which we have a wide knowledge of the geology and can establish geological models with different characteristics within the type of mineralisation sought, exploration procedures have been defined in which geophysical methods have a very important weight, translating the geology into measurable physical parameters with different techniques that during the project will be studied in detail to improve the implementation of the same in relation to this type of mineralisation.

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References:

[1] SEMCRET. HORIZON CL4-2021-RESILENCE-01-06