

Future, ongoing and abandoned projects in the European Union – challenges of nickel extraction for battery production

## **(EU Nickel)**

This project aims to investigate future, ongoing, and abandoned nickel projects in Europe, addressing environmental transitions. Nickel has been listed as critical by the European Union because first, the global demand in nickel is high and there is an important supply risk, and second because the mineral is necessary for key technologies such as Li-ion batteries for electric vehicles. The three case studies in Finland (Kolmisoppi), France (GalliCam) and Spain (Aguablanca) are part of the 47 strategic under the 2023 EU Critical Raw Materials Act (CRMA), but are also supposed to lead to soil, surface and groundwater contamination.

EU Nickel is structured around three areas of research: a) A spatial analysis which aims to identify and map nickel mining projects. b) A biogeochemical analysis of pollution. c) An analysis of power relations between stakeholders highlighting challenges, opportunities, and conflicts surrounding the nickel projects examined. The project asks whether the three cases should be considered as “sacrifice zones”, and to what extent they respond to the claims of the EU CRMA? Moreover, the participation of local communities and governments will be questioned, referring to the concept of Free, Prior and Informed Consent.

Based on an interdisciplinary approach combining human geography, biogeochemistry, and geology, the project refers to political ecology approaches, the notions of mining governance and “green extractivism”, and life cycle assessments. Methods include semi-structured interviews with community, company and political representatives, environmental impact assessments, and participatory mapping involving local communities and researchers (with GIS). Outputs will include a monograph, scientific articles, podcasts, and a possible comic in collaboration with an artist.