Balancing EU Interests in the Arctic: The Critical Raw Material Act and Northern Finland

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Executive Summary

- In the face of the green transition and current geopolitical tensions, the EU is seeking to become independent for the supply of Critical Raw Materials (CRMs). To achieve independence, the CRM act was introduced in 2024. Through this act, the EU has the ability to designate certain projects as strategic projects, loosening processes for environmental impact assessments.
- Arctic Scandinavia houses many of these CRMs and thus may play a crucial role for the EU in fulfilling its goal of resource independence. Yet, before considering the expansion of resource extraction in the High North, the Union should be wary of the local situation and the interactions of different interests at local, regional and global levels. Extractivism justified under the CRM act has the potential to create power imbalances at the local level. In addition, the CRM act has the potential to generate clashes between different core EU principles.
- Hence, a renewed effort should be made to tighten regulations of extraction industries under the CRM act. Governments are key actors and the current legislation leaves too much room for mining companies to marginalise voices. In addition, more emphasis should be put on researching the cumulative impacts of expanding industry and giving local communities the space to disagree. Finally, in some cases, it should be questioned whether a certain project should be continued at all.

1. Introduction: The Global Green Transition and the High North

The supply of Critical Raw Materials (CRMs) is a major question for the future of the European Union. As the green transition is gaining more traction, the demand for critical raw materials has been on the rise. As defined in 2023, the Union requires major amounts of CRMs to further sustainable development (European Commission, 2023). Yet, the European Union relies on importing these CRMs from other states, making it vulnerable to external shocks to CRM supply. As such, in 2024, in the face of rising geopolitical tensions and resource competition, the EU adopted the Critical Raw Materials Act in order to regulate the Union-wide supply of raw materials with the aim to become self-sufficient in the long term. As part of the CRM act, the Union is able to encourage CRM projects such as mining and refining industry from the EU level through designating them 'strategic projects.' Yet in the same act, a tension emerges as the EU cautions for potential negative impacts of stimulating extractive industries. As illustrated in this policy brief, even though the problems of extractive industries are noted, the current legislation is rather lacking in providing concrete steps to combat negative impacts.

Finnish Lapland possesses significant deposits for CRMs and thus may fulfill an important role in the supply of EU produced CRMs. The region already houses critical mining sites for the EU, as it possesses the sole EU Chromium mine (Outokumpu in Kemi) and the largest gold mine in Europe (Agnico in Kittilä). Moreover, there has

been a rising interest in establishing new mining projects, as illustrated in the following figure.

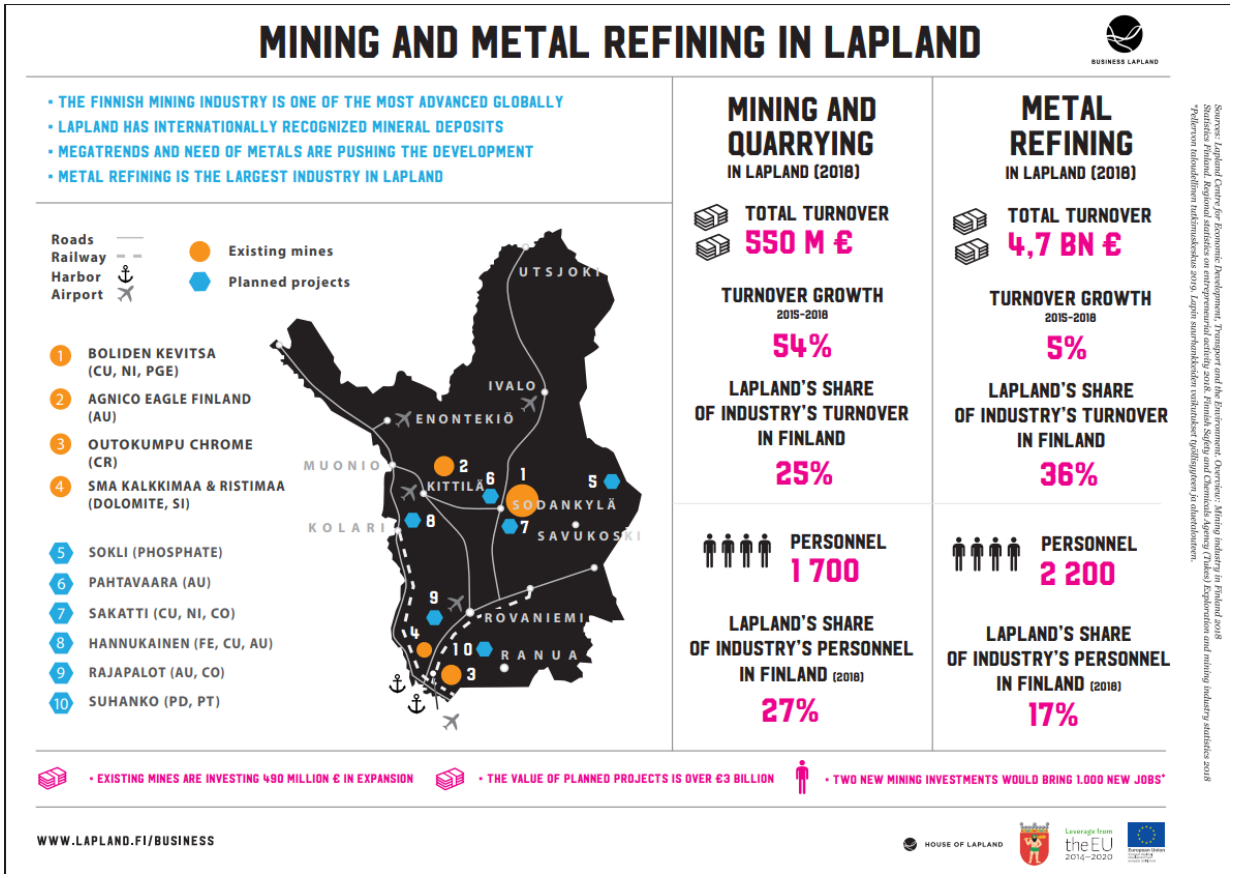

Figure 1: Mining and Metal in Refining in Finland. Taken from https://www.lapland.fi/business/infographic-mining-and-metal-refining-in-lapland/ (retrieved 20-4-2025)

As evident from the figure, a large number of mining projects are planned in Northern Finland, several of which concern minerals necessary for the green transition. Yet, in recent times, the effects of the green transition have brought about issues for the region. Numerous land use disputes have arisen as local indigenous peoples' ways of life are affected by windmills, mining and other infrastructure development, even giving rise to accusations such as 'green colonialism' (Bidgood & Hall, 2024). The tensions between green transition and extractive industries have seen extensive scrutiny in the Scandinavian context. Regional-specific problems pertain to the status of nature reserves and local reindeer herders. In addition, extractive industries bring about major cumulative and long-lasting impacts, which are usually underestimated in planning phases; effects of traffic and light pollution, among others, tend to be unaccounted for in impact assessments. These effects are also long-lasting, as pollution lasts for decades and proper nature restoration initiatives have been lacking so far (Kløcker-Larsen et al., 2022). In addition, the mining industry enjoys a notoriously bad reputation with respect to social and environmental impacts (Lassila, 2024). Consequently, Sweden and Finland have

seen a significant rise in disputes between local communities and mining companies. As the EU is aiming to become self-sufficient in CRMs, it is important to emphasise that the transition should not come at the cost of local environmental and social destruction, creating 'green sacrifice zones' (Lassila, 2025). Communities in Lapland are already vulnerable due to the effects of climate change. The Arctic region is among the most affected regions by global warming, giving rise to an issue where in order to combat climate change, the most vulnerable regions are sacrificed.

The introduction of the CRM act adds a new layer to these struggles between green transition and extractive industries. Under the EU treaties, mining legislation is a competence delegated to EU member states. Yet, the ability to designate certain projects as 'strategic projects' under the CRM act has made the EU directly involved in local mining affairs. A form of competence creep emerges, as the EU is directly influencing mining projects on the member state level. Consequently, the involvement of international organisations such as the EU creates power asymmetries and pressures local communities to accept destruction on a local scale in the name of public interest (Lassila, 2025; Amnesty International, 2025). Yet, as defined in the CRM act under article 31(5)(a), the union ought to provide better tools to regulate the green transition and ensure the resilience of local communities. These tools have not seen the light of day yet, meaning that the adoption of the CRM act in its current form will only exacerbate the current problems and tensions that are already present in Northern Lapland.

2. Reconstructing the Issues Involved in the Sakatti Mining Project

To illustrate the problems and the concrete balancing act the Union is facing in the high North, the ongoing Sakatti mining project will serve as an illustration. The Sakatti mining project was designated as a strategic project under the Commission Decision C(2025) 1904 of the 25th of March 2025 and thus serves as a clear example of the effects of the CRM act.

Initiated in 2011, the project is located near the village of Sodankylä in Finnish Lapland. Run by Sakatti mining oy, a subsidiary of the British/South African company Anglo American, it is argued that Sakatti could play a major part in providing the materials for the green transition globally and within the EU (Sakatti Mining oy, n.d.). The targeted ore deposit contains major amounts of copper, nickel and platinum-group metals, necessary for the green transition and recognised as CRMs by the EU commission in 2023 (European Commission, 2023).

The planning of the mine has been particularly controversial due to its potential environmental impacts. Most importantly, the ore deposit is located below the Viiankiaavaa nature reserve, an aapa bog or string bog; a unique type of mire with a large diversity of flora and fauna. The nature reserve is doubly protected under EU legislation by the Natura 2000 act and the Birds directive. A major concern of the Sakatti mining project is the groundwater level. As the mine would be an

underground mine, there is significant risk that the mining shafts may cause a drop in groundwater level, thereby draining the bog and creating irreversible damage. To circumvent the issue, Sakatti oy attempted to exclude the peat bog area from the EIA, claiming that the mine would go underneath the aapa bog and thus not affect the mire directly. Moreover, the company argued for the use of a watertight pipe for any mining activity underneath the mire. Yet, the Pajala mining project in Sweden faced similar issues and also used watertight pipes underneath the local peat bog. Although guarantees were made that the water level would not drop, the waterlevel in the peatbog dropped by 16 meters (Granqvist, 2016). If a similar disaster were to occur in Viiankiaavaa, the entire nature reserve and its plant and animal species would be destroyed, affecting both nature and society in the region.

In addition to issues with nature protection, questions of local reindeer herders have become pertinent as well. In the current plans, some of the facilities are built on winter pastures for local reindeer herds, thereby affecting the livelihood of local vulnerable communities. Moreover, noise and dust from the mine may affect the reindeer, as also evident from the nearby Kevitsa mine (Lassila, 2025). In addition, cumulative impacts have only been discussed minimally, as the current plans would also require a new riverbridge and road network to the mining site. The increase in traffic as a cumulative effect was raised by the municipality, though is still minimally considered by Sakatti mining oy (Lapin elinkeino-, liikenne- ja ympäristökeskus, 2018). Finally, mining industry inherently causes irreparable damage to landscapes. Even though attempts have been made to make mining 'greener' through nature restoration projects, these restoration projects have not yielded any successful results. Instead Sakatti oy has been relying on ecological compensation. The company argued that it has compensated for any inadvertent ecological damage by buying 2900 hectares of forest in Northern Lapland. Yet, ecological compensation may not be as watertight as it seems. Local herders would have rather seen that the company bought lands in the municipality itself, also to compensate for the loss of pastures (Lassila, 2025).

Questions have been posed regarding the actual contents of the mine, as the potential size of the mineral pockets is marginal compared to global and even compared to other mines in the region (Leisti, 2024). Mining is not a new activity in the region around Sodankylä; the Kevitsa mine has been operating for a decade already around 20 kilometres away from Sodankylä. Prior experiences with the Kevitsa mine illustrate some positive impacts on the municipality, yet these positive impacts tend to be short-term. One of the main drivers for approving the Kevitsa pertained to the idea that it could reduce the emigration numbers and provide a boost to local employment. However, the promised 'millions of Kevitsa' were never realised.

3. The Sakatti project: what does it reveal?

As seen, the Sakatti case illustrates some of the major tensions between extractive industries and the green transition in the EU. In addition, a paradoxical relation surfaces as different EU goals are challenged by each other; sustainability, nature protection and community resilience are juxtaposed. The Natura 2000 and Birds directive provide effective double protection for the Viiankiaavaa mining site, yet they are at risk of being waived due to 'strategic interests.'

While the identified problems are not unique to Sakatti, the project is particularly relevant in eliciting the influence of the CRM act. As alluded to in the beginning, the EU is extending its competences into mining, even though it is a member state competency, giving rise to a power asymmetry. The EU is directly putting pressure on local communities to simply accept extractive industries. In 2016, the Sakatti project was already referred to the EU commission which argued that only 'public interest' can be weighed against nature conservation (Talvitie, 2016). In 2017, the argument of public interest surfaced again. In order for the mining project to continue, employment rates and the regional economy in Sodankylä were argued to be in public interest (Leisti, 2017). In the CRM act, this concept of public interest is concretised as strategic projects may override EU legislation if it is in the public interest under article 10(2). However, the competence creep noted earlier means that the EU is directly pushing the concept of 'public interest' onto local communities. As also illustrated by a visit of the Finnish environmental minister in June 2024. Again, it was argued that a Natura 2000 exemption was necessary for the project, due to overriding public interest. Referring to the frame of the EU green transition, he argued that the Mire protection decree could be amended to suit the operations.

What emerges then is a clash of EU values of public interest versus nature protection and the protection of local livelihoods, giving rise to the question of what 'public interest' actually is and how to balance different EU core values and their attached legislation.

4. Balancing EU Interests: Concrete Policy Proposals

As seen then, the CRM act has the potential to generate clashes between concrete EU values. Consequently, concrete policy proposals to tackle these issues should be introduced from the EU level. In the following some potential solutions are listed, yet the balancing of EU interests remains highly complicated.

4.1 Social Licence to Operate

A first avenue for EU solutions may be found in stimulating the involvement and the provision of realistic information to local communities. Also identified earlier, mining has a notoriously bad reputation with regard to providing information to local communities. As such, the Social Licence to Operate (SLO) framework has been adopted by other states to combat the problems of extractive industries. In short, the process of acquiring a SLO involves gaining approval from all the local stakeholders

(Lesser et al., 2021). So far, the SLO framework has seen use in Finland, yet experiences in the Finnish mining industry have been mixed. Although initialised as a dialogue between different stakeholders, mining companies may use the discussions as a system of self-preservation, instead resulting in mining companies providing information without any meaningful dialogue (Lesser et al., 2017). Additionally, an overall lack of trust towards mining industries makes some societal groups resist any dialogue. As revealed in older research, local Sámi communities would be more open for conversations about the mining industry if transparency would increase and local voices would be more integrated (Koivurova et al., 2015).

4.2 Adjustment to Impact Assessments

The current regulatory tools also fall short in providing the trust necessary for conversations such as argued above. In Sakatti, one of the issue points pertained to the timeframe of the Environmental Impact Assessment (EIA). As argued by the local community, the timeframe to react to the EIA was rather short. While the provided EIA was an extensive piece of research, the complexity and length of the document made it difficult for local communities to understand the document in the short timeframe given for comments (Lassila, 2024). Providing guidelines from the EU level for the EIA accessibility and timeframe could already provide a basic solution to the trust issues and transparency. In addition to EIAs, Social Impact Assessments (SIAs) may also be conducted. Yet, prior research has illustrated the issues with social impact assessments (SIAs), as they function in practice as a means to justify industry without involving actual impacts, similar to the SLO's argued above. In addition, SIA's often involve problematic narratives of destroying nature for the greater good or 'public interest', complicating dialogues with avid opponents. SIAs ought to be more instrumental and targeted towards finding results. New EU legislation under the CRM act could intensify and provide a far greater role for these SIAs and make them more crucial for the eventual process.

Sticking to Impact Assessment legislation, more attention should be paid to cumulative impacts during planning phases. In general, mining projects in the High North have revealed experiences of unforeseen cumulative impacts. For instance, the construction of infrastructure for the mine may also bring about increases in traffic due to improved connectivity. In addition, the High North is witnessing many other projects necessary for the green transition. Currently, a large number of windmills parks are being planned, which also infringe on the livelihood of reindeer and thus the local populations. Even though national legislation is interpreted more tightly, cumulative impacts were still not considered as illustrated in the aforementioned 2023 Kevitsa case study. Planned windmill parks in combination with the local mining industry generate massive cumulative impacts not considered in all assessments (Lassila, 2024).

4.3 Natura 2000 and Ecological compensation

Other issues with mining in the high North pertain to the overall lack of successful nature restoration projects. Mining industry causes unavoidable long-lasting damage to the environment. As such, some attempts have been made to restore nature, leading to vague promises by mining companies to restore the ecosystem to its old state. In Sweden, there is only a list of failed attempts, while Finland has not seen any attempts at all. As such, the EU should encourage more research or provide guidelines to avoid vague promises of restoration. Ecological compensation has been posited as a way of solving the permanent damage of mines. However, in the Sakatti case, Sakatti oy acquired forestlands 400 kilometres away to compensate for a string bog, a vastly different biotope. As such, it can be questioned whether ecological compensation makes sense as a forest does not replace the ecological value of a string bog.

Finally, returning to the balancing of Natura 2000 and the EU CRM act, a critical assessment should be made whether mining projects in Natura 2000 areas are desirable at all. Mires like Sakatti are fragile ecosystems due to the unique composition of groundwater level and mineral contents. Any changes to groundwater level, which are very likely to happen, will disrupt the entire ecosystem. As also illustrated in the Pajala mine in Swedish Lapland, the stability of the groundwater level is by no means guaranteed even if innovative solutions may be sought. It can be questioned if the legitimacy of the Natura 2000 directive can be maintained as exemptions to the directive are made, especially mobilising arguments of 'strategy' or 'public interest.' As also evident in surveys among the residents in Sodankylä, deviating from Natura 2000 legislation could affect the meaning and power of other Natura 2000 sites (Kuisma and Suopajärvi, 2017). The Union should consider what 'public interest' is and, most importantly, what the limits to public interest are. As evident in the Sakatti project, there are numerous problems on different levels ranging from reindeer herders to foundational EU norms. Consequently, the EU should make critical assessments and even reconsider which projects as strategic projects, especially in highly problematic projects such as the Sakatti mine. If Natura 2000 legislation can be set aside at the cost of 'public interest,' the legitimacy and the use of the Natura 2000 may be further questioned, generating major potential loopholes in EU legislation.

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