

Impacts of Arctic Mining on Northern Swedish Indigenous Traditions

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"There is no such thing as 'sustainable mining"

Indigenous Environmental Network (2012), Kari Oca 2 Declaration

1. Introduction

Due to its geographical features and abundant natural resources, the Arctic is an eligible and promising region to drive the green transition, with many actors turning their attention to it (Gritsenko, 2018; Strek & Ekblom, 2023). In early 2023, the Swedish Parliament declared the presence of the largest deposit of rare earth elements (REEs) in Europe near the Kiruna mine. The European Union (EU) sees mining this deposit as an opportunity to transition resource dependence away from countries like China and Russia, as those materials are essential for producing 'clean' technologies, such as wind turbine generators, mobile phones and hybrid cars. However, the Kiruna mine falls within the territory of Europe's only recognised Indigenous people, the Sámi. Through this spatial overlap, mining in this area could impact the reindeer herding, which constitutes the essence of the Sámi's culture. Kiruna's original mine and its development have already disrupted reindeer herding and led to the taking of land from the Sámi.

This paper aims to explore potential solutions to ensure that the green energy transition takes place justly by recognizing impacts on all parties involved.

2. The Green Transition

The increasing development of initiatives in the name of the green transition is causing substantial changes in land use, which pose threats to and disrupt the livelihoods of Indigenous communities (OECD, 2019). These include displacement and relocation, restricted access to cultural sites and natural resources such as hunting and fishing areas, contamination and aesthetic impacts, and the fragmentation of critical habitats. One of these environmental initiatives is the mining of rare earth elements. REEs are important metals for green technologies, but their extraction is costly and harmful to the environment, as the process of mining these minerals leads to water contamination, soil erosion,

deforestation, and habitat destruction (Oladipo et al., 2023).

In the Arctic, mines alter the landscape, disrupt reindeer grazing grounds and migration routes, and threaten fishing in rivers, lakes, and seas. Sensitive Arctic ecosystems require long recovery times after environmental degradation.

A textbook example of the side effects of mining is the Kiruna mine. This mine is situated in the North of Sweden and recognized as the site of the largest iron ore deposit in the world. Having been in operation for over a century under the management of LKAB, a Swedish mining corporation, it has significantly contributed to the country's economy. However, mining activities have led to ground subsidence, prompting LKAB in 2004 to present local officials with a choice: shut down the mine, the primary employer in Kiruna, or move the entire city.

Consequently, a massive relocation effort was undertaken, affecting four thousand households, major highways, the national railway, and most of the city's infrastructure, with minimal consultation with the residents of Kiruna (Owen et al., 2022). Similarly, the Indigenous Sámi community faced displacement without much say in the matter, especially concerning infrastructure developments like railways that disrupt reindeer grazing lands. Although LKAB proposed the construction of a bridge for reindeer crossing, the Sámi community was essentially left without an option to reject this plan (Khazaleh, 2015).

The tension between the Kiruna Mine and the Sámi People might be exacerbated by the green transition. In January 2023, LKAB unveiled that it had found the largest rare earth mineral deposit in Europe within the Kiruna region (Lindberg, 2023).

3. The Kiruna Mine's Impact on the Sámi

The major obstacle facing the affected Sámi will be induced by changes in reindeer dynamics. The Sámi are known for their reindeer herding, which began in the 17th century as nomadic reindeer husbandry. It became the basis of the Sámi way of life and is protected

by international law due to its cultural significance (Normann, 2021). Reindeer herding areas in Scandinavia are already in decline due to cumulative pressures from land-use change, primarily driven by energy transition projects (Kuokkanen, 2022). The Kiruna mine, along with the related relocation of the town of Kiruna, has left the Sámi in the area with only a narrow corridor for their reindeer herds to pass through. The newly discovered REE deposit is located below this remaining area, which could mark the end of the last centuries-old route used by the reindeer and their herders to migrate annually from the Norwegian mountains to the Swedish pasture forests (Strek & Ekblom, 2023). For future generations of Sámi communities, traditional reindeer herding would be severely restricted, limiting their options of choice (Ramos-Castillo et al., 2017).

The Advisory Committee of the Framework Convention for the Protection of National Minorities (2023) expressed deep concerns about the Kiruna case. The recent discovery of a huge deposit of rare earth metals in the Gabna reindeer herding community close to Kiruna could have severe repercussions on the Sámi's rights and the environment. If LKAB opens a new mine on this site, it will split a traditional area for Sámi reindeer herding in Kiruna into two disconnected areas and ignore the Sámi people's right to exercise its culture and traditions.

A study on the impact of two other Swedish mines on the Sámi describes various economic, territorial, social and cultural challenges (Kløcker et al., 2022). These impacts presumably also apply to Kiruna and include: changes in the behaviour of the reindeer, leading to increased workload and considerable financial losses, along with effects on human health and well-being. Effects on human health and well-being include psycho-social stress, anxiety, frustration and fatigue. Factors such as increased discrimination and harassment, ongoing conflicts with neighbouring districts, lawsuits, negotiations or the loss of traditional knowledge and ways of living contribute to this.

Nevertheless, it should not go unmentioned that the mine can also have positive socio-economic effects for the Sámi. The relocation of the town contributes to the development of infrastructure in the region such as improved roads, health services and other public facilities, which could also benefit the Sámi (LKAB, 2021). Some Sámi may also

benefit directly or indirectly from the creation of jobs by the mine. However, these jobs are often not traditional Sámi occupations, which could affect their cultural practices. The extent to which these potential socio-economic benefits apply to the indigenous people can only be speculated. While LKAB emphasises its commitment to diversity and inclusion, it does not provide specific figures on Sámi employment (LKAB, n.d.).

The impact of the Kiruna mine on the Sámi is ambivalent. While potential benefits are undeniable, for many Sámi the negative impacts on their environment, culture and traditional way of life outweigh the benefits. For them, the green transformation is a form of land grabbing and a threat to their way of life, often described by them as 'green colonialism' (GfbV, 2021; Petter, 2021; Saami Council, 2023; Sonk, 2023).

"The green shift is nothing more than a continued extraction of resources in Sámi areas...The difference is that resource utilization has been given a nice color, green; we call it 'green colonization'."

Gunn-Britt Retter, Head of Arctic and Environmental Unit, Saami Council - Arctic Today

4. Solutions

The aim of this paper is to explore potential solutions to minimise negative impacts of mining REEs in the Kiruna mine. One of the major issues with environmental mining is the lack of recognition of the Sámi voice on this issue. In other regions of the world, such as Australia and Africa, other Indigenous and local voices are often silenced on environmental issues such as mining. For example, in many African countries, such as Madagascar and Democratic Republic of Congo, mining and extraction of REEs is a prevalent issue (Oladipo et al., 2023). In Madagascar, in the Toliara Mine, exploration of potential mine sites of REEs conflicts with the local and Indigenous Mikea people's traditional ways of living (Andriamanantenasoa & Craad-Oi, 2023). Through several forms of protest, the Toliara mine project has been halted, but more action from the government is needed (Andriamanantenasoa & Craad-Oi, 2023). In addition, in Australia, potential solutions have

been explored to mitigate conflict between the Argyle Mine and Aboriginal heritage sites (Harvey & Nish, 2005). Potential policy solutions from other areas of the world could be used in the case of the Arctic, and potential solutions explored for the Arctic could also help mining conflicts in other areas.

Several potential solutions could be explored before moving forward with REE extraction, which include: **(a)** implementing social impact assessments, **(b)** increasing REE circularity, **(c)** formalising and recognising Indigenous rights, **(d)** increasing transparency between Sámi and state interests, and **(e)** strengthening site protection management plans.

(a) Social Impact Assessments (SIAs) or Human Rights Impact Assessments (HRIAs) could be included in addition to Environmental Impact Assessments (EIAs) to highlight potential social or cultural conflicts should mining projects proceed on the traditional lands of the Sámi. Currently, EIAs for the Kiruna mine are conducted by LKAB itself, though it is audited by KPMG, and are solely focused on the following areas: biodiversity, sustainable water and waste management, energy supply and efficiency, and circularity and resource efficiency (LKAB, 2021; LKAB, 2024). According to the Swedish Sami National Association (Svenska Samernas Riksförbund, SSR) and the Sámi Parliament, the implications of mining on cultural traditions and livelihoods should also be considered when conducting impact assessments, and even prior to granting exploration permits so that the Sámi communities can take an appropriate stance on the issue (Sámediggi, 2016). Implementing SIAs in addition to EIAs could complement and improve the understanding of the landscape, traditional knowledge, cultural heritage, health, and human interactions with the environment (Sámediggi, 2016; Pinto-Guillaume, 2017). HRIAs could also improve protections for the Sámi should extractions continue by highlighting the values of the Sámi in decision-making, and allowing the Sámi enough information to give or deny consent to such projects (Hossain & Petértei, 2017; Sámediggi, 2016). Free Prior Informed Consent, meaning that consent or non-consent to conduct a project is given without outside influence within a timeframe that allows Indigenous peoples to form an opinion, should be implemented in the case of the Kiruna mine (Szpak, 2019). Free Prior Informed Consent is already implemented in other parts of the Arctic, for example under Finnish law, which

states that any mining projects that could affect the Sámi must allow for the permitting process to be conducted with Sámi representatives and these representatives can give an opinion on whether or not the permit can be granted (Pirinen et al., 2024). Should they find that a mining activity would interfere and disrupt traditions, a permit is not to be granted unless there are other steps taken by the proponents of a project to avoid this interference (Pirinen et al., 2024). Implementing this notion of Free Prior and Informed Consent in Sweden could give the Sámi in Kiruna more authority over their cultural traditions and livelihoods, refute projects that could damage these traditions, and ensure that LKAB must legally find a way to minimise or not interfere with these traditions. In addition, perhaps assessments and reports should be carried out by a third party appointed by governing bodies and not assigned by LKAB itself in order to maintain objectivity and appropriately consider community voices.

(b) Circularity of products that use REEs could also be explored further instead of extracting more metals to create new products. With the increasing demand for technological products that require REEs, more focus should be on how to reuse materials from existing end-products before extracting more materials. Although LKAB states that circularity is part of the EIA agenda (LKAB, n.d.), circularity of REEs should be considered even before assessing mining operations and should be implemented in company supply-chains. Within the EGD, the EU has already proposed efforts to improve circularity through projects like the Secure European Critical Rare Earth Elements (SecREEts), however these projects still focus on the 'sustainable' extraction of REEs (Pawar & Ewing, 2022). As of 2018, only 1% of REEs are recycled from end-products, with the rest being discarded (Jowitt et al., 2018). Should the EU invest more in the research and development of REE recycling, issues with increasing demand and limited supply could be mitigated in a more socially and environmentally friendly way (Jowitt et al., 2018). The extraction of REEs will never be completely environmentally or culturally sustainable, and improving regulations surrounding the production quality and reusability of material from existing products could help mitigate impacts on the Sámi.

- **(c)** Swedish legislation makes no distinction between Sámi land and non-Sámi land, but interests such as reindeer herding have to be taken into account (Koivurova et al., 2015; Tarras-Wahlberg & Southalan, 2021). The further formalisation of the recognition of Indigenous rights, such as land rights, could lead to a stronger presence of the Sámi in legal proceedings. Keskitalo and Götze (2023) present an approach to realise this: Indigenous peoples as rightholders. This concept entails the employment of a socio-cultural and value-driven dimension to a policy and permit process, therefore acknowledging the cultural and social consequences of mining. It is the opposite of the *common* stakeholder, which only has a focus on the economic side. Adding the notion of rightholder to a permitting system, could streamline Indigenous peoples rights into the policy and could ensure that no Indigenous peoples are left behind in the policy process and implementation. As a result of which indigenous rights are formalised and recognised.
- **(d)** Enhancing transparency between the Sámi people and state authorities is crucial for promoting a just green transition in the Kiruna mine area. A lack of transparency in Sweden's wind energy projects has already led to significant adverse effects on reindeer herding (Cambou, 2020; Szpak, 2019).

The ILO Convention 169 on Indigenous and Tribal Peoples, adopted in 1989, plays a vital role in supporting transparency. As a legally binding international treaty, it protects the rights of indigenous and tribal peoples by recognizing their right to self-determination, control over their development, and the preservation of their cultures, languages, and traditions (Szpak, 2019). The Convention mandates that governments consult with Indigenous peoples on legislative or administrative measures that may affect them, ensuring their participation in decision-making processes. It also affirms their rights to the land and resources they traditionally own or use, aiming to safeguard their livelihoods and prevent displacement. Sweden has not ratified ILO 169 until now, doing so could significantly enhance transparency and support the implementation of Free Prior and Informed Consent, laying a stronger foundation for protecting Sámi rights within the framework of international law (Szpak, 2019).

Madagascar can also serve as an example for Sweden in enhancing transparency and balancing interests in the mining sector, particularly for the Kiruna mine. The Extractive Industries Transparency Initiative (EITI) in Madagascar ensures community participation in decision-making (Smith et al., 2012). The adoption of a new mining code influenced by the World Bank integrates social and environmental safeguards into mining operations (Sarrasin, 2006). Local governance reforms, such as the GELOSE act, transfer rights from the central government to local communities, promoting their involvement in resource management (Antona et al., 2004). However, there are downsides. The manipulation of community representation by the state has led to disempowerment and distrust among local populations (Smith et al., 2012). Additionally, while new mining regulations aim to improve environmental and social outcomes, the implementation has often fallen short, with inadequate enforcement leading to persistent environmental degradation and social conflicts (Sarrasin, 2006). Szpak (2019) highlights a similar issue when discussing ILO 169, noting that laws on paper do not always translate into effective action.

By incorporating similar transparency measures and community engagement strategies while addressing these shortcomings, Sweden can enhance its mining governance, ensuring that the voices of local communities are heard and respected in the decision-making process, and that environmental and social safeguards are effectively enforced.

(e) Strengthening relationships between mining companies and Indigenous peoples is important for recognising the rights and needs of all parties.

The Argyle Participation Agreement (APA) in the Argyle Diamond Mine in Australia, provides a useful model for how mining companies can work collaboratively with Indigenous communities to protect culturally significant sites and traditional practices—such as reindeer herding (Argyle Diamond Mine Participation Agreement, 2004). As part of the APA, an Indigenous Land Use Agreement (ILUA) and a Management Plan Agreement (MPA) were signed by Owners of the diamond mine as well as Traditional Owners and Aboriginal People in 2005 (Paramenter et al., 2023).

The APA gave Traditional Owners veto power over any new development that could damage significant Aboriginal sites, providing secure protection for sacred areas (Harvey & Nish, 2005). The MPA covered safeguarding sites used for traditional practices, employment and training initiatives for indigenous peoples, cross-cultural training for mine staff and contractors, and involving Traditional Owners in mine closure and rehabilitation (Argyle Diamond Mine Participation Agreement, 2004). These agreements aimed to enhance Indigenous participation, well-being, and sustainability within the mining industry, reflecting a commitment to promoting economic empowerment and cultural preservation among Aboriginal people (Harvey & Nish, 2005).

According to a recent study by Parmenter et al. (2023), the agreements at the Argyle Diamond Mine resulted in positive outcomes for Aboriginal communities, including increased employment opportunities, financial benefits through established trusts, cultural preservation measures such as protection of sacred sites and cross-cultural training, community engagement through a relationship committee. The comprehensive, legally binding plans demonstrated a commitment to cultural preservation, economic opportunities, and mutual understanding between the mine and indigenous communities. As highlighted by Novoselov et al. (2021), there is a need to develop mechanisms for collaboration and interaction between different groups involved in traditional Arctic lands. This Australian model could potentially be adapted to protect areas used by the Sámi people for reindeer herding and other traditional practices near the Kiruna mine in Sweden. Similar collaborative, legally binding management plans could help safeguard Sámi rights, facilitate inclusive decision-making, avoid disturbance of culturally significant sites, integrate traditional knowledge, and ensure the Sámi equitably benefit from mining activities on their lands.

5. Conclusion/Policy Recommendations

Other Arctic countries face impacts from mineral extractions with climate change and an increasing demand of REEs for energy transitions. The Indigenous and local communities living in the Arctic are increasingly confronted with the intention of Arctic states and

companies to extract these resources. The Kiruna mine is just one example of the growing tensions between cultural tradition and exploitive extraction. The Swedish Council for Climate Policy (SCCP) recognizes the conflicts of interest that arise between proponents of the green transition and local communities (Hermansson et al., 2023). The SCCP also recognizes the importance of respecting the rights of the Sámi, although the views and consent of the Sámi have not been regarded so far (Hermansson et al., 2023). Five potential solutions—(a) implementing social impact assessments, (b) improving REE circularity, (c) formalising and recognising indigenous rights, (d) increasing transparency between Sámi and state interests, and (e) strengthening site protection management plans—were explored through this paper as potential recommendations for the EU to consider.

The EU currently does not ensure that the green transition will respect and regard Indigenous rights when extracting REEs (SDG Watch Europe, 2023). In order to move forward towards a just transition, the EU must begin to implement policy solutions and frameworks that not only progress the EU forwards towards an environmentally conscious future, but also protect and respect the interests of the Sámi and other Indigenous groups. It is imperative that the rights of Indigenous peoples are incorporated into current and future plans to secure resources, and that their rights are acknowledged, respected, and upheld.

References

- Advisory Committee on the Framework Convention on the Protection of National Minorities. (2023). *Fifth opinion on Sweden*. https://rm.coe.int/5th-op-sweden-en/1680ae851a
- Andriamanantenasoa, V. & Craad-Oi (2023) EJ Atlas.
 - https://ejatlas.org/conflict/fighting-for-toliaras-local-communities-and-mikea-indig enous-groups-fuNdamental-rights-by-stopping-the-base-toliara-mineral-sands-and-rare-earths-mining-project-in-the-southwestern-region-of-madagascar
- Antona, M., Biénabe, E., Salles, J., Péchard, G., Aubert, S., & Ratsimbarison, R. (2004). Rights transfers in Madagascar biodiversity policies: achievements and significance. Environment and Development Economics, 9(6), 825-847.
- Argyle Diamond Mine Participation Agreement: Indigenous Land Use Agreement. January 1st, 2004.
 - https://113dstor001.s3-eu-west-1.amazonaws.com/Community+Development+in+
 Mining/Australia/Australia_Argyle_Diamond_Mine_Participation_Agreement_Indige
 nous_Land_Use_Agreement_2004_English.pdf
- Cambou, D. (2020). Uncovering Injustices in the Green Transition: Sámi Rights in the Development of Wind Energy in Sweden. *Arctic Review on Law and Politics*, 11, 310–333. https://www.jstor.org/stable/48710635
- Eugene, R., Yang, S., & Ming, Y. (2014). Process Management Project Ambatovy Madagascar. *Research on humanities and social sciences*, 4(5), 57-61.
- GfbV. (2021). «Wir erleben einen grünen Kolonialismus» Aili Keskitalo im Interview.

 Gesellschaft für bedrohte Völker.

 https://www.gfbv.ch/de/publikationen/menschen-und-geschichten/story-aili-keskitalo/
- Gritsenko, D. (2018). Energy development in the Arctic: Resource colonialism revisited. In A. Goldthau, M. F. Keating, & C. Kuzemko (Eds.), *Handbook of the International Political Economy of Energy and Natural Resources*. Edward Elgar Publishing. https://doi.org/10.4337/9781783475636.00020

- Harvey, B., & Nish, S. (2005). Rio Tinto and Indigenous community agreement making in Australia. *Journal of Energy & Natural Resources Law*, 23(4), 499–510. https://doi.org/10.1080/02646811.2005.11433417
- Hossain, K., & Petrétei, A. (2017). Resource Development and Sámi Rights in the Sápmi Region: Integrating Human Rights Impact Assessment in Licensing Processes. Nordic Journal of International Law, 86(3), 302-340.
- Jowitt, S. M., Werner, T. T., Weng, Z., & Mudd, G. M. (2018). Recycling of the rare earth elements.

 Current Opinion in Green and Sustainable Chemistry, 13, 1-7.
- Kankaanpää, P., Jadodzinski, K., Stepień, A., Koivurova, T., & Pynnöniemi, K. (2014). *Strategic Assessment of Development of the Arctic: Assessment Conducted for the European Union*. Arctic Centre, University of Lapland. https://library.arcticportal.org/1905/
- Keskitalo, A.M., Götze, J. (2023). How to streamline Sámi rights into Policy-Making in the European Union? *The Arctic Institute Center for Circumpolar Security Studies*.

 https://www.thearcticinstitute.org/how-streamline-sami-rights-into-policy-making-european-union/
- Khazaleh, L. (n.d.). Forced displacement in Sweden: When a mine company demolishes and rebuilds an entire city—Department of Social Anthropology. University of Oslo.

 Retrieved 20 March 2024, from

 https://www.sv.uio.no/sai/english/research/projects/overheating/news/2016/lopez.html
- Kløcker Larsen, R., Boström, M., District, M. R. H., District, V. S. R. H., District, V. R. H., & Wik-Karlsson, J. (2022). The impacts of mining on Sámi lands: A knowledge synthesis from three reindeer herding districts. *The Extractive Industries and Society*, 9, 101051. https://doi.org/10.1016/j.exis.2022.101051
- Koch, P., & Miggelbrink, J. (2011). Being in the frontline of a Sámi culture and a private business: Cross-Border reindeer herding in northern Norway and Sweden. Nomadic Peoples, 15(1), 114–143. https://doi.org/10.3167/np.2011.150106
- Koivurova, T., Masloboev, V., Hossain, K., Nygaard, V., Petrétei, A., & Vinogradova, S. (2015). Legal Protection of Sami Traditional Livelihoods from the Adverse Impacts of Mining. Arctic Review on Law and Politics, 6(1), 11-51.

- Kuokkanen, R. (2022). Is Reindeer the new Buffalo? Climate change, the green Shift and Manifest destiny in Sápmi. *Social Science Research Network*, *22* (1), 11-33.
- Larsen, R. K., Boström, M., District, M. R. H., District, V. S. R. H., District, V. R. H., & Wik-Karlsson, J. (2022). The impacts of mining on Sámi lands: A knowledge synthesis from three reindeer herding districts. The Extractive Industries and Society, 9, 101051. https://doi.org/10.1016/j.exis.2022.101051
- Lindberg, A. (2023). Europe's largest deposit of rare earth metals located in Kiruna. LKAB.

 Retrieved 20 March 2024, from

 https://lkab.com/en/press/europes-largest-deposit-of-rare-earth-metals-is-located-in-the-kiruna-area/
- LKAB. (2021). Annual and Sustainability Report 2021. LKAB. Retrieved August 8, 2024, from https://lkab.mediaflowportal.com/documents/folder/240526/
- LKAB. (n.d.). *What we believe in.* Retrieved July 24, 2024, from https://lkab.com/en/who-we-are/what-we-believe-in/
- LKAB (n.d.). *What We Do: Our Environmental Efforts*. Retrieved June 14, 2024, from https://lkab.com/en/what-we-do/our-environmental-efforts/
- Normann, S. (2021). Green colonialism in the Nordic context: Exploring Southern Saami representations of wind energy development. *Journal of Community Psychology*, 49(1), 77–94. https://doi.org/10.1002/jcop.22422
- Novoselov, A., Potravny, I., Novoselova, I., & Gassiy, V. (2021). Compensation fund as a tool for sustainable development of the Arctic indigenous communities. Polar Science, 28, 100609. https://doi.org/10.1016/j.polar.2020.100609
- OECD. (2019). *Linking the Indigenous Sami People with Regional Development in Sweden*. OECD. https://doi.org/10.1787/9789264310544-en
- Oladipo, H. J., Tajudeen, Y. A., Taiwo, E. O., Muili, A. O., Yusuf, R. O., Jimoh, S. A., ... & El-Sherbini, M. S. (2023). Global environmental health impacts of rare earth metals: Insights for research and policy making in Africa. *Challenges*, *14*(2), 20.
- Owen, A., Karlsson, M. T., & Rivin, D. (2022). *EJ Atlas*. https://ejatlas.org/conflict/relocation-of-kiruna-due-to-iron-ore-mine

- Parmenter, J., Holcombe, S., Dowell, K., & Alexander, R. (2023). Aboriginal employment outcomes at Argyle Diamond Mine: What constitutes success, and for whom? *Resources Policy*, 87, 104327.
- Pawar, G., & Ewing, R. C. (2022). Recent advances in the global rare-earth supply chain. MRS Bulletin, 47(3), 244-249.
- Petter, J. (2021, September 5). Bergbauprojekt in Norwegen: »Das ist grüner Kolonialismus«. *Der Spiegel*.

 https://www.spiegel.de/ausland/klimawandel-warum-die-samen-in-der-arktis-geg
 en-ein-co2-neutrales-bergbau-projekt-kaempfen-a-2b7d6175-2ea9-42f3-8339-a3b
 053cafb86
- Pinto-Guillaume, E. (2017). The Sami people's cultural heritage in Swedish EIAs. Impact Assessment and Project Appraisal, 35(3), 227–239. https://doi.org/10.1080/14615517.2017.13228051-250.
- Pirinen, T., Linninen, F., Lius, T., & Koski, M. (2024, January 25). *Mining 2024: Finland*. Chambers and Partners. Retrieved August 8, 2024, from https://practiceguides.chambers.com/practice-guides/mining-2024/finland
- Ramos-Castillo, A., Castellanos, E. J., & Galloway McLean, K. (2017). Indigenous peoples, local communities and climate change mitigation. *Climatic Change*, *140*(1), 1–4. https://doi.org/10.1007/s10584-016-1873-0
- Saami Council. (2023, February 27). *The Saami Council on Instagram.* https://www.instagram.com/p/CpKZPPCIBss/
- Sarrasin, B. (2006). The mining industry and the regulatory framework in Madagascar: Some developmental and environmental issues. *Journal of Cleaner Production*, 14(3-4), 388-396.
- Sámediggi (2016). Minerals and Mines in Sápmi. Sámediggi. https://www.sametinget.se/78211
- SDG Watch Europe (2023). To Achieve the SDGs and Succeed with the Green Transition, the EU Critical Raw Materials Act must Ensure Respect for Indigenous Peoples.

 https://sdgwatcheurope.org/to-achieve-the-sdgs-leave-no-one-behind-and-succeed
 -with-the-green-transition-the-eu-critical-raw-minerals-act-needs-to-ensure-respec
 t-for-indigenous-peoples/

- Smith, S. M., Shepherd, D., & Dorward, P. (2012). Perspectives on community representation within the Extractive Industries Transparency Initiative: experiences from south-east Madagascar. Resources Policy, 37(2), 24
- Sonk, R. (2023, February 6). *Grüner Kolonialismus? Die Entdeckung riesiger**Rohstoffvorkommen in Nordskandinavien trifft die indigenen Sámi der Arktis.

 Gesellschaft für bedrohte Völker | BLOG.

 https://gfbvblog.com/2023/02/06/gruener-kolonialismus-die-entdeckung-riesiger
 -rohstoffvorkommen-in-nordskandinavien-trifft-die-indigenen-sami-der-arktis/
- Strek, K., & Ekblom, J. (2023). *Europe's Green Revolution Threatens Indigenous Culture*.

 https://www.bloomberg.com/features/2023-sweden-indigenous-sami-green-energy/?embedded-checkout=true
- Szpak, A. (2019). Relocation of Kiruna and construction of the Markbygden wind farm and the Saami rights. *Polar Science*, *22*, 100479. https://doi.org/10.1016/j.polar.2019.09.001
- Tarras-Wahlberg, H., & Southalan, J. (2022). Mining and indigenous rights in Sweden: what is at stake and the role for legislation. Mineral Economics, 35(2), 239-252.

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