



Accelerating Mineral Extraction in Sápmi

An Environmental Justice Analysis of the EU's
Critical Raw Materials Act

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Accelerating Mineral Extraction in Sápmi. An Environmental Justice Analysis of the EU's Critical Raw Materials Act

Accelererad mineralutvinning i Sápmi. En miljörättviseanalys av EU:s förordning om kritiska råvaror

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Abstract

Europe's rising demand for critical minerals has intensified efforts to enhance domestic extraction as part of a sustainable green energy transition. In response, the European Union finalised the Critical Raw Materials Act (CRMA) in 2024, aiming to streamline permitting processes for projects that contribute to the Union's strategic goals. Sweden, with its substantial reserves of critical raw materials, has embraced the CRMA by taking measures to meet its targets and to maintain its position as Europe's leading mining nation. Amid this policy enforcement, the state-owned mining company LKAB announced the discovery of a rare earth element deposit in Kiruna called Per Geijer, which could be granted a speeded permit process under the CRMA. However, this project lies beneath the land of Gabna Sámi village, a reindeer herding collective (RHC) whose livelihoods and reindeer herding practices are deeply tied to their traditional grazing lands. Hence, this project poses serious threats to their reindeer herding activities that are integral parts of their cultural identity and continuity. This research engages with the theory of Indigenous environmental justice (IEJ) to critically examine how the CRMA and its implementation in the Per Geijer case affect the Gabna Sámi village across multiple justice dimensions. The findings reveal tensions between EU's industrial and green transition goals and the Sámi village's rights and reindeer herding practices. The findings also contribute to the broader discussion on the evolving discourse of justice, Indigeneity and the governance of natural resources in the context of the green transition.

Keywords: Critical Raw Materials Act, Strategic Projects, green transition, mining, Indigenous Peoples, Sámi, Indigenous Environmental Justice.

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Abbreviations

Abbreviation	Description
CRMA	Critical Raw Materials Act
EIA	Environmental Impact Assessment
EJ	Environmental Justice
EU	European Union
FPIC	Free, Prior and Informed Consent
IEJ	Indigenous Environmental Justice
ILO 169	The International Labour Organisation's Indigenous and Tribal Peoples Convention, 1989
LKAB	Luossavaara-Kiirunavaara Aktiebolag
REE	Rare earth elements
RHC	Reindeer herding collective
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples

1. Introduction

Currently, there is a high demand for minerals and metals in Europe and a reliance on imported critical raw materials from a concentrated group of non-European countries (Karlsson et al., 2023; SGU, 2024a). The urgency of the climate threat along with geopolitical tensions such as Russia's war on Ukraine, have pushed Europe even further to secure a greener, more resilient and autonomous supply chain of critical raw materials (Nobletz et al., 2024). Cobalt, phosphorus, rare earth elements (REE) and lithium are a few of these demanded materials required for battery production, magnet manufacturing and mineral fertilisers used for agriculture (SGU, 2024a). The EU defines "critical" in critical raw materials as having a high economic importance and a supply risk, while also considering sustainability (European Commission, n.d.). These raw materials are believed to be key ingredients for industrial and technological competitiveness, but also crucial for achieving a sustainable green transition of energy and technological advancements (European Commission, n.d.; SGU, 2024a). In response to the geopolitical and climate related concerns, the European Commission introduced the Critical Raw Materials Act (CRMA) which came into force in May 2024 (European Commission, n.d.). The Act encompasses comprehensive sets of goals and targets as a guiding instrument in policymaking on different governing levels, where one of these targets aims to speed up permitting processes for exploring minerals and opening mines. However, accelerated permits apply to projects that are classified as Strategic, under the CRMA (European Commission, n.d.). Strategic Projects can be defined as projects that will increase Europe's ability to extract critical raw materials (European Commission, n.d.). They will benefit from streamlined approval procedures, enhancing the efficiency of their application process. This can be particularly advantageous for mining companies facing challenges in securing permits. However, while critical raw materials are essential for supporting industries and their green transition, the drive for faster permitting procedures and increased mining could compromise a sustainable implementation which the CRMA regulation seeks to enable.

Sweden as a member within the EU has a pivotal role in relation to the CRMA, owing to its substantial reserves of critical raw materials and its capacity as a supplier of iron ore, graphite and REE (Thoms et al., 2024). The country has enacted the regulation by developing a new mineral strategy and proposing amendments to national laws to shorten permitting processes (Ministry of Climate and Enterprise, 2024; Swedish Government, 2024a). These legislative changes are not only reshaping the national policy framework for mining and resource extraction, but also have a profound impact on local contexts, particularly in the Sápmi region. As energy demand continues to rise, this area has been witnessing

an intensification of mining projects, along with wind power and commercial forestry. Sápmi is also the traditional territory of the Sámi, an Indigenous group that has long faced considerable pressures on their cultural heritage and traditional livelihoods because of irreversible land interventions (Karlsson et al., 2023). This region has thus become a contested area because of land rights disputes between different stakeholders and the Sámi as rights holders (Raitio et al., 2020; Raitio & Löf, 2023).

Several concerns have been raised towards the implementation of the CRMA into national policies, with critics arguing that the green transition cannot be considered as “green” (Olevik & Fröberg, 2023). Indigenous territories that serve as locations for reindeer herding may be overridden by future mining projects, which could result in significant encroachments on grazing lands and migration routes for the reindeers (Kejerhag, 2023). One example is the state-owned mining company LKAB’s discovery of the Per Geijer deposit in Kiruna, which could be granted a strategic status and a speeded permit process, under the CRMA (LKAB, 2023). This deposit lies beneath the land of Gabna Sámi village, a reindeer herding collective (RHC), raising concerns about its impact on traditional grazing areas (Isberg, 2023). The United Nations has been among those criticising Sweden for inadequate protection of Sámi rights and insufficient consultation on issues affecting Sámi communities (CERD, 2018). To better understand the potential implications of the CRMA on Indigenous rights, this study focuses on how the Act may impact the Sámi people, particularly through the lens of Indigenous environmental justice. The thesis specifically examines the EU’s CRMA regulation and conducts a case study analysis of the Per Geijer mining project.

1.1 Aim and research question

The main objective of this research is to examine how the CRMA, in its pursuit of accelerated permit processes for Strategic Projects may affect Indigenous communities. This study seeks to contextualise the CRMA’s provisions on Indigenous rights by analysing its application in a real-life case: the Per Geijer mining project in northern Sweden. Through this case, the research explores key dimensions of environmental justice. The overarching research question guiding this study is:

- How do the CRMA and its implementation in the Per Geijer case shape the different dimensions of environmental justice for the Gabna Sámi village?

To address this question, this study adopts an Indigenous perspective through the theoretical framework of Indigenous environmental justice (IEJ), which encompasses distributive justice, procedural justice, justice as recognition and capabilities theory. This lens enables a more holistic understanding of how Sámi rights, knowledge systems, cultural values and needs are either acknowledged or sidelined in environmental governance. The analysis centres on the implementation of the CRMA, finalised in May 2024, while also considering its legal entanglements with relevant Swedish legislation.

2. Theoretical framework

This study is grounded in Indigenous environmental justice (IEJ), providing a critical lens through which Indigenous rights can be understood and framed within the broader context of justice. Drawing on the work of scholars such as Svarstad and Benjaminsen (2020), alongside other prominent researchers who have explored environmental justice through an Indigenous perspective, this approach focuses on key principles like distributive justice, procedural justice, justice as recognition and capabilities theory. These principles are widely recognised as important elements in the historical development of environmental justice as a concept (Solorzano, 1993; Schlosberg, 2013; Svarstad & Benjaminsen, 2020). The theoretical framework will guide this research and determine how the implementation and the objectives of the CRMA align or challenges Sámi Indigenous rights in Sweden.

2.1 The evolving concepts of Environmental Justice

The concept of environmental justice (EJ) has been broadly applied in a range of different fields (Schlosberg, 2013). EJ originated as a movement in the United States during the 1980s, when marginalised communities began to advocate against discriminatory practices and the disproportionate exposure to environmental hazards. One of the core ideas has been to detect how injustice presents itself in environmental conditions, particularly through the inequitable distribution of environmental benefits and burdens. The movement started to address concerns about the disproportionate burden of pollution and environmental risks on low-income and minority communities, acknowledging their compounded disadvantages (Solorzano, 1993; Schlosberg, 2013; Schlosberg & Collins, 2014). The academic foundations of the EJ movement were initially shaped by the work of Robert Bullard in the 1990s (Solorzano, 1993). However, the discussion about unequal distribution of environmental goods and bads was perceived as insufficient, which over time expanded to include broader themes and disciplines. According to researcher David Schlosberg (2013), EJ is still to this day growing, encompassing a broad range of disciplines such as climate justice, indigenous rights, energy justice, food justice and conservation, all addressed across various contexts. This theory is not only incorporating an intersectional framework by examining how environmental harms intersect with broader social inequalities such as class, gender, race and ethnicity, it also focuses on non-human entities such as ecological systems (Schlosberg, 2013). As this theory continues to evolve as a multidimensional framework by adapting to the growing complexity of global environmental and social issues, it becomes increasingly applicable across a wide range of disciplines and contexts. A

growing body of research within this field also strengthens the theory, as scholars continue to engage with it and develop its ideas. In particular, the integration of Indigenous perspectives has further enriched EJ theory by expanding its scope to include cultural, spiritual and ecological dimensions of justice (McGregor et al., 2020), which will be further explored in the next section.

2.2 An Indigenous approach to Environmental Justice

As mentioned previously, the literature on EJ has grown considerably in recent decades and has expanded its scope to incorporate a broader perspective that bridges the human and nonhuman realms. David Schlosberg and Lisette B. Collins (2014) explains how the EJ movement began to challenge traditional definitions of “environment” and “justice” by incorporating justice with multiple dimensions and perspectives, while rejecting the conventional view of the environment being equated solely with wilderness and untouched nature, while incorporating multiple and interconnected dimensions of justice. The traditional idea of the environment was predominately upheld by wealthier, mostly white environmental organisations (Schlosberg and Collins, 2014). However, this idea was eventually criticised as it excluded a critical social aspect, primarily for communities whose lives are deeply intertwined with the environment. Gradually, the EJ movement started to emphasise a more inclusive understanding of the environment, defining it as spaces where people live and interact with. Although the movement incorporated a social dimension, it did not disregard the nonhuman world (Schlosberg & Collins, 2014). A key development in this expansion was the integration of Indigenous perspectives on the interconnectedness of humans and non-human nature (Wiley & Sons, 2014; Schlosberg & Collins, 2014). This influence is notably reflected in the principles outlined at the 1991 People of Colour Environmental Leadership Summit, particularly the principle which emphasises the sacredness of Mother Earth, the ecological unity, and the interdependence of all species, which asserts that ecological systems and species possess intrinsic value and rights similar to humans (Schlosberg & Collins, 2014). Another central aspect that emerged was the recognition of the disproportionate environmental burdens faced by marginalised groups, particularly Indigenous People (Schlosberg & Collins, 2014). Due to their close relationship with land and natural resources, Indigenous communities were recognised as being at the centre of environmental injustices, frequently threatened by large-scale industrial activities (Schlosberg & Collins 2014). This recognition highlights the importance of understanding Indigeneity within the context of EJ. Scholars like Jarno Valkonen et al. (2017) further explore the concept of Indigeneity, arguing that the categorisation of Indigenous Peoples as distinct collective groups plays a crucial role for their formal recognition within national and international legal and political frameworks. The significance of integrating Indigeneity as a concept

within EJ is to acknowledge their collective rights, needs and vulnerabilities (Schlosberg & Carruthers, 2010).

Building on these ideas, Deborah McGregor et al. (2020) advocate for an Indigenous environmental Justice framework that incorporates Indigenous worldviews, values and practices. They stress that justice for Indigenous people involves restoring balance and reciprocity with the environment, alongside safeguarding self-determination and cultural continuity (McGregor et al., 2020). These authors further examine how dominant sustainability discourse, rooted in Western perspectives, can marginalise Indigenous knowledge systems and fail to address the historical and ongoing injustices Indigenous communities face. This essentially aligns with the purpose of this study which is to incorporate a more inclusive and holistic understanding of justice in the theoretical discussion and the empirical analysis, to move beyond Western-centric frameworks. Therefore, it is crucial for the theoretical approach to be grounded in Indigenous perspective to adequately navigate and understand the systemic injustices and colonial legacies experienced by the Sámi in Sweden.

On account of moving from conventional EJ frameworks, researchers Hanne Svarstad and Tor A. Benjaminsen (2020) have expanded the concept of EJ by incorporating a radical political ecology perspective. The authors critique early EJ frameworks which focus on the distributive equity of environmental benefits and burdens with a limited perspective of structural power imbalances and a historical context. These scholars contribute to the EJ literature by providing a more comprehensive, justice-focused, and historically informed approach to understand and address global environmental issues. These perspectives offered by Svarstad and Benjaminsen (2020) provide an insight on how regulatory systems and legal frameworks can affect marginalised groups. Although Svarstad and Benjaminsen do not explicitly incorporate an Indigenous approach, their theoretical contributions can be significantly enriched by engaging with literature that examines the intersection of EJ and Indigeneity (Schlosberg & Collins, 2014; Valkonen et al., 2017; Schlosberg & Carruthers, 2020; McGregor et al., 2020). Moreover, Svarstad and Benjaminsen offer theoretical insights into the four main principles of EJ, namely: distributive justice, procedural justice, justice as recognition and capabilities theory (ibid). The following section will delve into these principles more concretely, tailoring each principle to reflect the literature of IEJ. The aim is to address intersectional injustices faced by an Indigenous People, by engaging with and prioritising Indigenous conceptions of justice.

2.2.1 Distributive justice

Distributive justice has been a central element of the EJ framework, addressing the equitable distribution of benefits and burdens (Svarstad & Benjaminsen, 2020). One of the key questions asked here is who gains and who loses from environmental interventions and policies. As previously mentioned, the focus of distributive equity has broadened to include historical and systematic inequities that have impacted Indigenous communities. Drawing on the work of Sofia Persson et al. (2017), an Indigenous perspective tries to incorporate the historical legacies of disproportionate loss of land and resource exploitation rooted in colonisation and the development of extractive industries. These legacies remain embedded in current policies and institutional frameworks, perpetuating the marginalisation and exploitation of Indigenous people. Consequently, the application of distributive justice alone is insufficient, primarily because it reduces justice to the equitable goods and harms without addressing and advocating frameworks that honour Indigenous peoples' unique relationship with their land, which encompass historical, cultural and spiritual ties to the nature (Persson et al., 2017; Bennett et al., 2019).

Hence, Indigenous perspectives on distributive justice moves beyond addressing material impacts of environmental harms, emphasising the importance of respecting and prioritising cultural, spiritual and environmental connections to the land in decision-making processes (Persson et al., 2017). By centering these Indigenous perspectives, the focus shifts towards a more equitable and inclusive outcome in land-use management that challenges historical and present-day reproduction of systemic inequalities.

2.2.2 Procedural justice

Procedural justice within environmental justice refers to the extent to which individuals or groups are included and able to influence decision-making processes. Svarstad and Benjaminsen (2020) provide an example by drawing insights from political ecology, highlighting that while local participation is often encouraged, it does not necessarily translate into meaningful influence in decision-making processes in practice. Procedural justice emphasises the inclusivity of governance mechanisms, focusing on the degree to which decision-making processes adhere to principles of transparency, accountability, legitimacy, and the involvement of local communities such as Indigenous groups (Bennett et al., 2019). According to Nathan J. Bennett et al. (2019), achieving inclusivity in decision-making processes requires several key considerations. Governance structures need to be contextually relevant, and they have to reflect the specific needs and lived experiences of local populations, in order to resonate with these groups and to gain their trust (Bennett et al., 2019). Indigenous communities such

as reindeer herding collectives, might vary in levels of capacity and resources in order to engage effectively in governance processes. These differences should be accounted for, making sure that there is capacity and resources to foster meaningful participation with local communities and Indigenous people. Additionally, power imbalances between stakeholders and rights holders need to be addressed to ensure more equitable participation (Bennett et al., 2019). Establishing clear and accessible information is also essential to promote transparency and accountability within decision-making processes.

According to Kaisa Raitio et al. (2020), an important practical instrument which ensures participatory rights within an Indigenous context is the FPIC, making sure that Indigenous groups are fully informed and consent freely to decisions affecting their lives and territories. The international legal framework ILO 169 also becomes relevant in matters related to safeguarding the rights and meaningful participation of Indigenous Peoples in decision-making processes (Raitio et al., 2020).

2.2.3 Justice as recognition

According to Svarstad and Benjaminsen (2020), justice as recognition refers to the acknowledgment of views, values and interest of different groups that needs to be respected and acknowledged. They argue that recognition as justice includes power relations that might need to be further decolonised, which is why they add additional aspects to specify recognition: senses of justice and critical knowledge production (Svarstad & Benjaminsen, 2020). Senses of justice refers to people's subjective experience of being affected by environmental interventions. For example, it is how different actors like the Sámi people subjectively perceive what is fair and how they narrate various situations. Meanwhile critical knowledge production emphasises the necessity of enabling affected communities to articulate their own understanding of justice (Svarstad & Benjaminsen, 2020). Moreover, critical knowledge production points to the imbalance in power relations between the state, governmental authorities, companies, and local actors such as Sámi indigenous communities. Information produced by the state and governmental officials can be produced in ways that favour these actors, while Sámi people might be dependent on information which does not align with their perception of what is just and fair.

Scholars such Nathan Bennett et al. (2019), highlight the value of Indigenous knowledge in creating a more holistic approach to sustainability initiatives. This knowledge encompasses generations of observations, practices and deep relationships with ecosystems, which offers valuable insights into ecological processes, land use, resource management and climate resilience (Bennett et al.,

2019). Hence, integrating Indigenous perspectives into sustainability efforts emphasises the interconnectedness between humans, animals, fostering strategies that are not only more inclusive but also ecologically attuned.

2.2.4 Capabilities theory

Capabilities theory refers to several critical questions, while the core question highlights the extent to which humans are able to live the lives they have chosen for themselves and which they perceive to be valuable (Svarstad & Benjaminsen, 2020). The capabilities approach to justice was initially developed by philosophers Amartya Sen and Martha Nussbaum, which has become a useful aspect within IEJ (Nussbaum & Sen, 1992 see Schlosberg & Carruthers, 2010). It considers broader factors to enable people to thrive, including their environmental, social, cultural well-being (Schlosberg & Carruthers, 2010). This approach requires determining what is essential for Indigenous people and their self-determination in terms of collective agency. Hence, it would be appropriate to investigate the capability of Indigenous people to determine their own well-being and their freedom and agency to achieve what they value as a collective entity (Schlosberg & Carruthers, 2010; Murphy, 2014). Within a Sámi context, it would be relevant to examine the extent to which reindeer herding collectives are able to practice reindeer herding, as it is considered to be an integral and valuable part of their livelihoods, tradition and cultural identity (Sámediggi, 2021).

The capabilities theory also incorporates the well-being of non-human nature, suggesting that animals and ecosystems are an integral part of the justice framework (Schlosberg, 2007). This idea aligns with previous discussion within IEJ regarding the intrinsic value of nature which must be respected (Schlosberg & Carruthers, 2010). From a Sámi Indigenous context, this perspective aligns with their commitment to preserve and sustain nature for future generations. Not only is this essential to continue the freedom of practicing reindeer herding, but also to ensure the preservation of environmental integrity (Samiskt informationscentrum, n.d.).

2.2.5 Summary of key elements in Indigenous Environmental Justice

Table 1 will provide a clearer overview of the justice principles outlined in the IEJ framework. Serving as a key analytical lens, the table will form the foundation for the analysis and present tailored questions, inspired by the IEJ, to guide the coding process of the collected material.

Table 1. A contextualised Indigenous environmental justice framework.

<i>Justice principle</i>	<i>Definition</i>	<i>Guiding analytical questions</i>
<i>Distributive justice</i>	<i>Fair allocation of environmental benefits and burdens.</i>	<i>Is there an equitable distribution of burdens and benefits? Who gains and who loses from environmental interventions?</i>
<i>Procedural justice</i>	<i>Inclusivity in decision-making processes.</i>	<i>Which actors are involved and are able to influence decision-making processes? How are participatory processes implemented in practice? Are FPIC and ILO 169 implemented to facilitate meaningful participation and dialogue?</i>
<i>Justice as recognition</i>	<i>Respect and acknowledgment of identities, cultures, and knowledge systems.</i>	<i>Are actors who are involved, particularly those who are directly impacted by environmental interventions, respected and acknowledged? Senses of justice: What is subjectively perceived as fair and just according to the different actors involved? How are various situations and consequences narrated? Critical knowledge production: How is knowledge produced? How and by whom is information distributed? Does it favour any particular group?</i>

<i>Capabilities theory</i>	<i>Sustaining capabilities to enable human and nonhuman life to function and to flourish.</i>	<p><i>To what extent are people able to live their lives they have chosen for themselves?</i></p> <p><i>Are their lives aligned with what they believe to be valuable?</i></p> <p><i>What is necessary for functioning and flourishing human and non-human nature?</i></p>
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3. Methodology

This chapter outlines the methodological framework underpinning this study. It presents the choices of empirical material, the analytical approach and the ethical considerations that guided the research process. Central to this section is the use of thematic analysis, conducted deductively through the lens of Indigenous environmental justice, which resulted in the development of four themes: framing sustainability: *benefits and burdens, participation and influence, recognition and representation, and conditions for well-being*.

3.1 Research design and material

This study uses a qualitative method for collecting data, starting from a comprehensive background of the topic, eventually narrowing it down to analyse the CRMA and a current case in Sweden. This study relied both on primary and secondary sources, including websites, news articles, literature and other relevant publications. Information on the CRMA itself was gathered from the European Commission's official website and database ensure access to the most up to date version of the finalised Act. Complementary information about the Act was collected through keyword searches such as "the Critical Raw Materials Act". Legal and policy documents related to the CRMA, the mining industry, and Indigenous rights in Sweden were sourced from the official websites of the Swedish Government, governmental agencies, the Sámi parliament (Sámediggi), and the Geological Survey of Sweden (SGU). These institutions were deemed particularly relevant for interpreting the permitting process and the rights of the Gabna Sámi village, alongside legislation such as the Minerals Act and the Environmental Code. This study also critically examines the institutional frameworks revolving mining and Indigenous rights by drawing on previous research, to support the analysis and substantiate claims. Relevant literature was identified using keyword combinations such as "mining activities" and "Sámi territories". This review offered valuable insights into the historical and cultural documentation of the Sámi people's colonial legacy and its lasting impact on policymaking. Key contributions in this area of research include works by Kaisa Raitio, Annette Löf, and Rasmus Kløcker Larsen (Raitio et al., 2020; Raitio & Löf, 2023; Raitio & Kløcker Larsen, 2023). The main databases that were used to locate relevant material for the background and previous research were Web of Science, Scopus and Google Scholar, which constitutes the Swedish University of Agricultural Sciences recommended search engines.

For the case study analysis, the data primarily consisted of secondary sources, including media reports and public statements regarding LKAB's discovery of the

Per Geijer deposit. The timeline spans from the initial exploration of the deposit in 2020 to LKAB's submitted application for Strategic Projects in 2024. Google News (news.google.com) was the main platform used to locate news articles and press releases, offering a wide search scope and helping to identify relevant keywords such as "LKAB", "Per Geijer-deposit" (Per Geijer fyndigheten), "Gabna Sámi village" (Gabna Sameby), and "Strategic Projects" (Strategiska Projekt). These terms were also combined to get more specific results. Since the project is situated in Sweden, the searches were conducted in Swedish, which provides a broader selection of sources. Although Google News includes mostly news articles, it also includes content from magazines and other media outlets. It was therefore crucial to carefully evaluate the source, checking the publisher's credibility, the article's tone and purpose, and the journalist's credentials. Ultimately, four articles from Dagens Nyheter (DN), seven articles from SVT Nyheter and five press releases from LKAB's official website were selected for the case study analysis (See Appendix 1). These news articles included interviews with Sámi representatives and their thoughts on the Per Geijer deposit, which was particularly relevant for addressing the research question. SVT Nyheter and DN were primarily selected for their journalistic reliability. SVT Nyheter state that they strive to offer a public service perspective ensuring a collective public voice, while DN consider themselves as an independent newspaper emphasising the values of quality and credibility (SVT Nyheter, 2017; DN, 2016). Still, the way these news outlets portrays the case of Per Geijer and the voices of the actors involved plays a significant role in shaping public perception. Their choices of headlines and focal points essentially contribute to the narrative constructed around the issue.

As a researcher, my aim is to examine the different dimensions of justice reflected in the empirical material, while remaining transparent and critical about how the material was gathered. Since the original sources were in Swedish, I conducted my own translations of the material, including media reports, public statements and interview excerpts from media outlets. In the translation process, I made an effort to remain neutral and to preserve the intended meaning of the original text, striving to avoid interpretive bias. Although not conducting interviews with primary sources may limit the range of justice perspectives included in this study, the decision was based on the availability of published statement that provided sufficient insight for the analysis. Moreover, this approach also considered ethical concerns, aiming to minimise potential burden on Sámi communities such as the Gabna Sámi village, by avoiding additional demands on their time and resources.

3.1.1 Thematic analysis

One common approach used for analysing qualitative data is thematic analysis, a method formalised within the social sciences by Victoria Clarke and Virginia Braun (Clarke & Braun, 2006, 2016). This method enables researchers to systematically identify, organise and interpret meaningful patterns within the dataset. Thematic analysis is particularly suitable for this study due to its flexibility and adaptability, especially when working with extensive policy documents such as the CRMA regulation, which spans approximately 70 pages. The analysis followed Clarke and Braun's six-step process: familiarising with the data (1), generating codes (2), searching for themes related to the codes (3), reviewing the themes (4), defining the themes (5), and then finally producing the report (6) (Clarke & Braun, 2006; Byrne, 2021).

The initial step involved immersing in the data by thoroughly reading and re-reading relevant material, including legal documents, press articles and public statements. This familiarisation with the material (step 1) was particularly useful for identifying sections of the CRMA regulation relevant to the research question: how the CRMA and its implementation in the Per Geijer case shape environmental justice outcomes for the Gabna Sámi village. After becoming familiar with the material, it was time to code the data (step 2) using a deductive strategy. A deductive approach is guided by a predefined theoretical framework to explore how justice is represented in the context of Indigenous rights (Clarke & Braun, 2006). In contrast to an inductive approach which is data-driven, deductive thematic analysis applies existing theoretical concepts to guide the interpretation of the data. This approach helped reduce large datasets, such as the CRMA regulation, into more manageable sections directly related to key theoretical concepts. A similar deductive process was applied to the Per Geijer case study, examining press articles and public statements to trace how the implementation of the CRMA impacts the affected Sámi community. Given that this dataset was more limited in size, extra care was taken to review multiple sources to account for potential nuances and more accuracy in the statements. Reflexivity was also maintained throughout the process, including critical reflection on which sources and quotes were included or excluded, and why.

The coding structure was directly informed by the IEJ theory, drawing on four key principles: distributive justice, procedural justice, justice as recognition and capabilities theory. The goal was to ensure that the structure of the analysis mirrored the theory itself. To achieve this, specific codes were created to correspond with each principle. For example, the code "benefits and burdens" captured aspects related to distributive justice; "meaningful participation" was used to identify instances relevant to procedural justice; "recognition" was applied

when Indigenous knowledge and values were either acknowledged or marginalised, in line with justice as recognition; and “capabilities to flourish” captured discussions around ecological and social conditions necessary for long-term well-being, as informed by capabilities theory (see Table 2).

Table 2. A deductive thematic coding of the empirical material.

<i>Codes</i>	<i>Code definition</i>	<i>Related theory</i>
<i>Benefits and burdens</i>	<i>The distribution of environmental and social impacts, highlighting who bears the burdens and who benefits.</i>	<i>Distributive justice</i>
<i>Meaningful participation</i>	<i>Participation in decision-making processes by looking at which actors are involved and able to influence processes in a meaningful way.</i>	<i>Procedural justice</i>
<i>Recognition</i>	<i>Recognition of Indigenous Peoples’s rights, culture and knowledge. It also focuses on how different groups perceive fairness and how knowledge is produced. It highlights whether certain perspectives are marginalised or excluded.</i>	<i>Justice as recognition</i>
<i>Capabilities to flourish (human and nonhuman)</i>	<i>Captures the core idea of sustaining the necessary conditions for people and ecosystems to live in ways they value and thrive.</i>	<i>Capabilities theory</i>

Once these codes were formalised, it was time to develop the themes (step 3). For example, material coded under “benefits and burdens” were repeatedly related to how sustainability is framed and how environmental, social, and economic impacts were distributed between state and corporate actors on one hand, and the Gabna Sámi village on the other. These patterns gave rise to the theme “framing sustainability: benefits and burdens”. Meanwhile, provisions in the CRMA regulation and excerpts from press articles and public statements regarding Indigenous engagement and influence in governance processes, suggested the

theme “participation and influence”. The theme “recognition and representation” emerged from consistent coding of material that either included or disregarded Indigenous knowledge, values and perspectives. Lastly, any data relating to the capacity of communities and ecosystems to sustain themselves in the long-term, such as concerns about land use, cultural continuity or ecological degradation, were integrated under the theme “conditions for well-being.

Step (4) and (5) involved reviewing the themes through Clarke and Braun’s (2006) iterative thematic analysis process, with an emphasis on developing well-defined candidate themes (See Table 3). The themes were defined more precisely and linked back to the justice principles structuring this study. These themes are analytically distinct yet interconnected, offering an interpretation of how justice from an Indigenous perspective can be framed, represented or overlooked within the EU’s approach to the green transition. Finally, the themes were integrated into the written analysis and discussion (step 6), producing a report that links the empirical findings to the broader theoretical framework and research question.

Table 3. Development of analytical themes.

Theme	Theme definition	Related code (and theory)
<i>Framing sustainability: benefits and burdens</i>	<i>Explores how sustainability is framed and how environmental, social and economic impacts are distributed. Focuses on who benefits and who bears the burdens from mining projects.</i>	<i>Benefits and burdens (distributive justice)</i>
<i>Participation and influence</i>	<i>Focuses on the extent to which affected communities, particularly Indigenous groups, are meaningfully involved in decision-making processes and able to influence outcomes.</i>	<i>Meaningful participation (procedural justice)</i>
<i>Recognition and representation</i>	<i>Examines whether and how Indigenous knowledge systems, cultural values and perspectives are recognised or excluded in planning and governance processes.</i>	<i>Recognition (justice as recognition)</i>

<i>Conditions for well-being</i>	<i>Explores whether social, cultural and ecological conditions necessary for Indigenous well-being are addressed or overlooked in project contexts.</i>	<i>Capabilities to flourish (capabilities theory)</i>
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To ensure the legitimacy and trustworthiness of this method, few strategies were employed to enhance the credibility of the findings (Clarke & Braun, 2016). For example, when studying the CRMA regulation, it was necessary to consult multiple data sources from the EU's official website to clarify key terms. One such term, "critical" in "critical raw materials", required further exploration, as its meaning is tied to both economic importance and sustainability goals (European Commission, n.d.). Cross-checking the data in this way increased the reliability in the coding process and helped minimise individual bias when interpreting a specific text (Clarke & Braun, 2016). It was also essential to critically reflect on how personal assumptions, positionality and prior knowledge might influence the coding and theme development. As the coding process was guided by a pre-established research question and theoretical framework, this deductive approach informed both the focus of the coding and the interpretation of meaning within the data. By doing so, the analysis remained grounded in the justice principles central to this study, while still allowing space to question and reflect on how those principles were expressed or absent in the empirical material.

3.1.2 The relevance of context-dependent knowledge

The specific dynamics of the Per Geijer deposit in terms of the mining process and the Sámi village is contextually based, which makes it difficult to isolate the possible effects of the implementation of the CRMA regulation itself. The impact of a new legislation also unfolds over time, hence, studying the CRMA at a specific point of time may not capture the long-term consequences. On the other hand, an in-depth analysis allows a more detailed exploration of how the CRMA would impact Indigenous communities like the Gabna Sámi village. Case study research is essential in this case, providing insights of the practical application of EU and national policies, as well as their potential implications for the environment and local communities (Flyvbjerg, 2006). Every research has its own characteristics and objectives and requires appropriate methods to address the specific inquiry (Darke & Shanks, 2002). Consequently, research methods should correspond to the nature of the phenomenon being studied and the depth of understanding required (Darke & Shanks, 2002). The goal of this study is to combine a case study method with thematic analysis to provide a more nuanced

understanding of the research topic, by assessing patterns of justice and injustice according to the IEJ theory.

3.2 A critical reflection on the role and responsibility of a non-Indigenous researcher

Before initiating this research, I engaged in some fundamental questions: why do I want to write this thesis, what purpose will this work serve, and what new insights and perspectives will it offer? These guiding questions, alongside my research question, have been central in shaping my approach and establishing my position as a non-Indigenous researcher. This study inevitably delves into a field where Indigenous People have experienced historical exploitation, mistrust, misrepresentation and cultural harm, as documented by extensive research. Reflexivity in this qualitative research is therefore crucial, as it allows the researcher to critically examine their role in recognising these sensitivities, and how to promote a framework grounded in respect, mutual benefit and ethical engagement. In my view, meaningful learning often arises from the intersection of diverse ideas, perspectives and values, creating a space for multiple interpretations of a given subject. This opportunity for intellectual engagement and reflection has been a key motivation for undertaking this research.

Indigenous research methodologies are considered as an important ethical framework when engaging with topics related to historical and structural inequalities endured by Indigenous communities. Kristin Sehlin MacNeil (2014) highlights that Indigenous research methodologies differ significantly from traditional Western academic approaches. Not only do these methodologies critique western epistemologies, but they also seek to challenge frameworks that have historically marginalised and excluded Indigenous knowledge systems. The use of the term “methodologies” rather than “methodology” explains the multiplicity and diversity of Indigenous approaches to research. By acknowledging the range of Indigenous worldviews, cultures, and languages, Indigenous methodologies can reduce the risk of generalisation and oversimplification of Indigenous experiences and knowledge. The purpose is to tailor approaches to embrace the plurality of worldviews that exists within Indigenous communities (MacNeil 2014). This perspective has essentially guided the development of this thesis by using a respectful and culturally sensitive approach. It is especially relevant for questioning normative knowledge structures in political and policymaking contexts, which might fail to recognise or legitimise Indigenous cultural and ecological relationships with their land. By incorporating more holistic approaches into these arenas, a more democratic and inclusive valuation of these relationships can emerge, thereby broadening the understanding of what a sustainable green transition entails and who has the authority to define

its parameters. Hence, having an Indigenous perspective in policy making and research can be essential, as it fosters a more critical engagement with empirical material and environmental justice.

As a non-Indigenous person, I will inevitably apply a western academic background which will influence the outcome of this research. Nevertheless, being open minded and engaging with critical reflexivity encourages a discussion of my subjective positionality and biases, which could offer valuable insights into the research process. The focus of this study will be to engage with Indigeneity using the IEJ framework, to explore how justice is perceived and constructed within the analysis. While this approach may not fully capture the complexity of Indigenous experiences, it provides a perspective on how justice can be analysed through an IEJ lens.

4. Introduction to the regulation and the case

This chapter establishes the essential background to contextualise the research problem “how the implementation of the CRMA compromises Sámi Indigenous rights”. It begins with a comprehensive overview of the Critical Raw Materials Act (CRMA), and how it came to be as an emerging criticality agenda (4.1). The focus will then shift from an EU-level to focus on Sweden and how the nation is implementing the CRMA targets (section 4.2). At the heart of this chapter is an exploration of the historical and contemporary struggles of the Sámi people in Sweden, particularly regarding Sámi rights and land use, which are marked by a colonial legacy. This foundational context is crucial for understanding the broader implications of Sweden’s mining permit processes and the existing gaps in legal protections for Indigenous rights. Hence, this chapter is not only a prelude, but also the lens through which the analysis will gain more depth and meaning.

4.1 Introducing the Critical Raw Materials Act

The CRMA was published by the European Commission in March 2023, and came into force in May 2024, establishing a framework to fast-track access to critical materials in Europe which are integral to Energy and digital transitions (European Commission, n.d). The finalisation of the Act within a year indicates the dedication of EU’s member states to secure a European supply of critical raw materials. Currently, China provides the EU with 90 percent of its supply of REE, which creates a dependency and vulnerability in European supply chains (Nobletz, et al., 2024). By promoting domestic extraction, the EU seeks to enhance resilience and reduce susceptibility to external supply disruptions (European Commission, n.d.). The main objective is to shape a European policy response that coordinates and inspires all member states to act upon the series of targets and tasks introduced by the Act (European Commission, n.d.).

Before introducing the CRMA, the EU launched their first Raw Materials Initiative in 2008, establishing a framework that facilitates a sustainable supply of raw materials. Later in 2020, the EU commission introduced an Action Plan aligned with their EU Green Deal, with a stronger emphasis on strengthening a domestic sourcing of raw materials within European borders and a more resilient EU economy (Tröster et al., 2024). The series of prior steps have helped to mature and build the thought process around the CRMA. The finalised Act differs from the Action plan as in not only being a critical raw materials’ strategy but also introducing a policy framework that enables a series of targets that relate to:

Strategic Projects, diversification of supply chains within EU, sustainable and circular economy, and finally, a strategic governance and implementation process (European Commission, n.d.).

The CRMA contains general provisions that outline its objectives and implementation. It emphasises its purpose of ensuring a secure, sustainable, and resilient supply of critical raw materials, which are vital for the EU's strategic sectors such as renewable energy, digital technologies, defence, and aerospace. The Articles within the CRMA provide the legal backbone, establishing binding provisions, requirements, and governance frameworks organised around its central objectives. Additionally, the legislation includes Annexes that complement the Articles by offering detailed technical and procedural information, such as guidelines, standards, and lists of critical and strategic raw materials.

4.1.1 The objectives and priorities of the CRMA

The Act presents a list of 34 critical raw materials and a subset of 17 strategic raw materials. These targeted strategic raw materials are given priority in permitting processes and considered to be critical for advancing the green transition, given their substantial economic significance (SGU, 2024a). Examples of these are: lithium, cobalt, copper, nickel and graphite for battery production, and REE for magnet manufacturing (CRMA, Regulation (EU) 2024/1252). Another important aspect related to the CRMA is the series of non-binding targets the EU has set for 2030. The EU would like at least 10 percent of annual consumption of strategic raw materials to be extracted in the EU; at least 40 percent of annual consumption to be processed in the EU; at least 25 percent of annual consumption to be recycled in the EU; lastly, no more than 65 percent of annual consumption of strategic raw materials at any stage of processing, should come from a single third country (European Commission, n.d.).

The CRMA also presents so-called Strategic Projects, designed to strengthen the EU's security in the supply of strategic raw materials (CRMA, Regulation (EU) 2024/1252). The criteria for qualifying as a Strategic Project under the CRMA are defined as follows (European Commission, n.d.):

1. Projects must contribute and strengthen the EU's supply security
2. Projects should be technically feasible within a reasonable timeframe, meeting the expected production volume necessary to increase the EU's capacity of strategic raw materials.
3. Projects need to have a cross-border benefit beyond the concerned member state. For projects based in third countries or within the EU, there

must be mutual benefits, ensuring adherence to equivalent environmental and social sustainability standards.

4. Finally, there is the criteria of sustainability in Strategic Projects which addresses prevention of environmental and social impacts, particularly with regards to human and indigenous rights by following international guiding principles.

The Act represents an ambitious initiative that establishes clear targets, reflecting the EU's and European industries' priorities. Its emphasis on accelerating permitting processes underscores the urgency placed on ensuring resource security within the EU. However, significant concerns remain regarding the extent to which the Act incorporates parameters beyond the criticality narrative of strategic raw materials, such as the protection of Indigenous rights and adhering to a just process (Raitio & Kløcker Larsen, 2023). This will be examined in greater detail in coming chapters.

4.2 The development of a new mineral strategy in Sweden

Sweden has been considered as one of Europe's leading nations for mining with industrial activities dating back to the 13th century (SGU, n.d.). Sweden's mineral resources are primarily located within three mining areas: Norrbotten, Bergslagen and the Skelleftefältet (SGU, n.d.). In 2020, Sweden's production of iron ore accounted for 93 percent of EU's total iron ore production (SGU, 2020). However, the trend of Sweden's ore production started to decrease in 2023 with 4 percent compared to the year before, due to a more weakened global economy and geopolitical uncertainties (SGU, 2024b). These concerns have driven conversations about the EU's concentrated source of supply of critical raw materials, which causes a vulnerability towards trade disruptions (European Commission, n.d.). To build a more resilient supply chain, the EU aims at diversifying the sourcing of critical raw materials by enhancing domestic production and reconsidering its member states as key players in mineral sourcing.

According to the Minister of Energy, Business and Industry Ebba Busch, the CRMA will serve as a framework for Sweden's strategic work to meet the targets of the Act, but also in achieving national goals of zero net emission of greenhouse gases by 2045 (Ministry of Climate and Enterprise, 2024). However, Sweden currently lacks an updated mineral strategy, as the most recent version was published in 2013 (Ministry of Climate and Enterprise, 2013). In accordance with EU's requirements, Sweden is now required to develop a revised mineral strategy,

aligned with the Union's ambitions. In early 2024, Minister Busch invited a cluster of mining companies, SGU and representatives from several Universities, to gather inputs for the development of Sweden's new mineral strategy, which is expected to be presented later this year (Ministry of Climate and Enterprise, 2024). During the discussions, a number of stakeholders pushed for the need of incentives, risk mitigation and removal of unnecessary legislative obstacles along the value chain, but also a need for a broad mineral strategy that considers the entire value chain (Ministry of Climate and Enterprise, 2024). However, the participation of local actors, including communities directly affected by mining operations, was not highlighted in the meeting, raising questions about the inclusion of their perspectives in shaping the strategy.

Besides working on a new mineral strategy, the Swedish Government introduced their proposal of streamlining and enhancing the efficiency in permit processes by presenting amendments to the Minerals Act, which later was approved by the parliament and enforced 1st of July 2024. This modification states that a Natura 2000 permit will no longer be a prerequisite for granting an application for exploring a mine within a Natura 2000 area (Swedish Government, 2024a). The decision has moved the assessment of Natura 2000 areas to the final stage of the permitting process, instead of assessing potential impacts on Natura 2000 areas in the early stage of the permitting process (Müller, 2024). This delay in the assessment of Natura 2000 undermines the ability to safeguard these areas from test drilling and other land interventions, until the final stages of the permit process. As a result, companies would be investing money in exploration and permit applications, only to face a potential rejection at the final stage if the environmental impact on a protected area is deemed too severe for mining (Müller, 2024). Additionally, local communities and Sámi villages would be left to bear the burden of these adverse impacts.

According to Minister Busch, Sweden needs more mines to meet the targets set by the EU (Ministry of Climate and Enterprise, 2024). In line with this objective, the government has proposed a legislative referral presenting measures to simplify and shorten permit processes, with an implementation date set for January 2025 (Swedish Government, 2024b). Specifically, the government proposes alteration of the Environmental Code, which is designed to mitigate the negative environmental and human impacts related to mining activities (Raitio et al., 2020). Changing the Environmental Code is one way of constructing efficient permit processes to accelerate the industry's green transition and to meet the national goal of zero net emissions by 2045 (Swedish Government 2024a). Sweden's Minister of Finance Elisabeth Svantesson asserts that bureaucracy should not hinder or delay companies that want to invest in the green transition

(Swedish Government 2024b). She further emphasises that the proposed changes to the Environmental Code will foster improved conditions for climate transformation and contribute to Sweden's economic growth and prosperity (Swedish Government, 2024b).

The rhetoric used by Minister Busch and Minister Svantesson, which emphasises efficiency and expedited processes, aligns with the EU's strategic economic and green transition goals. However, this focus may unintentionally affect the social and environmental sustainability targets outlined in the CRMA, which will be further examined. Similarly, while the proposed amendments to Sweden's national legislations aim to facilitate the mining sector's growth and support the green transition, it is crucial to examine how such policy changes intersect with local realities, particularly in the Sápmi region. The following section will explore the historical and contemporary context of the Sápmi territory, focusing on the Sámi people as Sweden's officially recognised Indigenous group, their relationship with their traditional lands, and the ongoing challenges they face in the context of Sweden's colonial legacy. This historical context is essential to understanding how Sámi rights have been legislatively framed and how these rights are affected by both current and future mining projects in the region. The historical context will hopefully build an understanding on the structural disadvantages the Sámi face in land-use decision-making, which is central to the study's exploration of justice under the CRMA.

4.3 Sápmi and the Sámi people

The Sámi, alternatively spelled as Saami or Same, are recognised as Europe's only Indigenous People, with an estimated global population of 80,000 to 100,000. They inhabit a region known as Sápmi, which extends across northern regions of Norway, Sweden, Finland and the Kola Peninsula in Russia (Sámediggi, 2024a). This region encompasses a wide range of natural landscapes, including forests, tundra, mountains, and coastlines, and holds deep cultural and historical significance as the Sámi's ancestral land. There are records of early settlements in Sápmi dating back approximately 10,000 years back, before any modern state borders were imposed. These early settlers were nomads who based their livelihoods on hunting, fishing and later reindeer herding, and are believed to be the ancestors of the Sámi people (Sámediggi, 2018a).

Before 1700s and 1800s, the Sámi people in Sweden were landowners of so-called "lappskatteland" which they used for reindeer herding, fishing and hunting (Sámediggi, 2024a). These lands could be inherited and sold and were officially recognised by the court and county districts. However, in the late 1800s and beginning of the 1900s, the Sámi gradually lost ownership over these territories to

farmers, as agricultural and forestry expansion was prioritised (SOU 2006:14). The Swedish crown's decision to abolish the Sámi tax lands had a profound impact on the Sámi's livelihoods, as they lost vast territories, they had previously managed. This shift was further exacerbated by systematic colonisation policies and the discovery of valuable resources like iron ore, hydropower and timber in the region (Sámediggi, 2018a). The continued exploitation of natural resources in Sápmi eventually led to an industrial expansion which is still an ongoing development today (Sámediggi, 2018a). After losing their tax lands, the Sámi still had the rights to use the land, particularly for reindeer herding (Sámediggi, 2024a). Due to a long historical and generational usage of land, it eventually gained a legal status through the concept of "immemorial usage", which grants land rights based on continuous historical practice, even without formal property ownership (SOU 2006:14; Sámediggi, 2022). However, the Sámi face challenges in substantiating their land claims. Traditional practices such as hunting, fishing, and reindeer herding leave minimal physical traces, unlike agricultural lands or other areas modified by permanent changes. This lack of visible evidence makes it difficult for the Sámi to prove their historical land use, complicating their efforts to assert legal rights over these territories (Sámediggi, 2022). Moreover, legal frameworks such as the CRMA may build upon pre-existing legal structures in Sweden that already weaken Sámi claims to land. These challenges raise broader questions about their rights to self-determination, which involves not just the right to land, but the right to maintain their cultural integrity, governance system and way of life, which will be explored in the next section.

4.3.1 Sámi rights and self-determination

The Sámi people hold distinct rights designed to preserve their cultural practices, traditional livelihoods, and relationship to their ancestral lands. These rights were formally acknowledged by the Swedish Constitution in 2011, recognising the Sámi as an Indigenous group (Ministry of Culture, 2023). Another milestone in the recognition of Sámi rights was the establishment of the Sámi Parliament in Sweden, known as Sámediggi or Sametinget, in 1993. Sámediggi was created to serve as a representative body for the Sámi people and to institutionalise their self-determination, ensuring their active participation in political processes related to Sámi rights, livelihoods and culture (Sámediggi, 2024b). However, the Sámi Parliament's effectiveness as a legislative authority has been criticised, comparing it to a government agency rather than an autonomous parliamentary body, as it operates under the Swedish government's authority (Raitio et al., 2020). The parliament's ability to autonomously shape policies related to Sámi interest is restricted.

Nevertheless, since the establishment of the Sámi parliament, the legal position of Indigenous Peoples has strengthened in international law (Sámediggi, 2024b). As Indigenous People, the Sámi hold the right to self-determination, as recognised by several international legal frameworks, including the Indigenous and tribal Peoples Convention No.169 (ILO 169) and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (Raitio et al., 2020). These frameworks affirm the Sámi people's right to determine their own political status and to pursue their economic, social and cultural development in accordance with their needs and aspirations (Sámediggi, 2017). Central to these frameworks is the principle of Free, Prior and Informed Consent (FPIC), which ensures that Indigenous communities must be consulted and consent to projects or policies affecting their lands, resources and cultural heritage. The FPIC is enshrined in both UNDRIP and ILO convention 169 and is conserved as an extension of Indigenous advocacy in policymaking (Sámediggi, 2018a).

However, the FPIC remains legally complex and sometimes inconsistently implemented in practice (Raitio et al., 2020). At a national level, Sweden has not yet ratified the ILO Convention 169, but has committed to the FPIC, through a partial alignment with international frameworks such as the UNDRIP, leaving gaps in legal protection for Sámi rights (Sámediggi, 2018a). The Swedish legal framework acknowledges the principle of FPIC but has not fully enshrined it, leading to situations where consultations are often reduced to formalities rather than genuine opportunities for consent or refusal, especially concerning mining projects in Sámi territories (Raitio et al., 2020). Though the Sámi have the right to withhold consent through the FPIC, their objections may be overridden if a project is deemed to serve the public interest, which often leaves the concept of FPIC vulnerable to different interpretation and inconsistent application (Raitio et al., 2020).

A step-forward in ensuring Sámi participation in decision-making was the enactment of the Sámi consultation Law in 2022 (SFS 2022:66), mandating consultation with the Sámi Parliament, Sámi representatives and Sámi organisations on matters significantly affecting the Sámi people. The law requires Swedish governmental bodies, municipalities and agencies to conduct consultation, with section §9 (SFS 2022:66) stipulating that the consulting party determines how the consultations are conducted while accommodating the preferences of the Sami representatives regarding the format of the procedure. Sami representatives are entitled to receive a written account of the issues in advance before a consultation, and reasonable time to gather the necessary information to prepare for the consultation. However, the law does not require

agreement to be reached, nor does it grant Sámi representatives veto power over decisions (Sámediggi, 2024c; IEA, 2023).

The discussion of Sámi rights and self-determination is crucial to understanding the implications of the CRMA in relation to Indigenous rights. Given the already fragile legal framework surrounding Sámi rights and self-determination, it raises concern about whether the provisions set out in the CRMA will ensure meaningful opportunities to exercise their rights. Next part will introduce Sweden's mining permitting process, which outlines how current mining regulations already limit Sámi influence, particularly in the early phases of permit approvals.

4.4 Sweden's permit process

In the midst of the growing pressures in Sweden to expand mining operations in Sápmi, it is essential for affected RHCs to have a meaningful opportunity to influence permitting processes where key decisions are being made. The Swedish mining permitting process is primarily governed by the Minerals Act and the Environmental Code which regulates the extraction of minerals in Sweden (SGU, 2023). As outlined by researcher Kaisa Raitio et al. (2020), the Swedish permit system for mining consists of five phases, with the first three being especially critical for the Sámi. These phases will be the focal point for understanding the broader challenges RHCs face, particularly in the Per Geijer case.

The first phase consists of the exploration permit, allowing mining companies to investigate mineral deposits (Minerals Act, 1991:45). Companies will have to apply for an exploration permit from the Mining inspectorate and present a work plan which informs how the exploration will be carried out and its potential effects. Sámi RHCs and other land users are then informed and may appeal against the exploration. However, their input is often rejected due to the technical focus of the exploration rather than its broader environmental and social impacts (Raitio et al., 2020). This phase often fails to fully address the long-term effects of multiple activities on a particular area, also referred to as cumulative impacts (Raitio et al., 2020). These combined impacts or stressors could become more noticeable and significant over time.

The second phase determines whether a mining concession is granted, which is crucial for obtaining further permits (Raitio et al., 2020; SGU, 2023). While the mining concession itself does not authorise companies to start mining operations, it is pivotal in advancing or halting the project. However, as Raitio et al. (2020) highlight, the Minerals Act exhibits an inherent bias of favouring the approval of

mining concessions by treating reindeer herding primarily as a public or economic interest, rather than recognising it as a specific property right held by RHCs. In the third phase, the Environmental Impact Assessment (EIA) is conducted to assess the project's environmental effects, including impacts on land use and biodiversity (Raitio et al., 2020). The Land and Environmental Court grants the permit based on the EIA. However, the separation of the mining concession and environmental permit processes limits the ability to evaluate cumulative impacts holistically (Raitio et al., 2020). This division is especially relevant for the Per Geijer, where the fragmented assessment may fail to capture the full impact on Sámi land and practices. This section explains how existing system for mining permits already creates challenges for the Sámi, even before the CRMA was introduced.

Understanding the limitations of the current Swedish permitting system is crucial for analysing how the CRMA may potentially exacerbate these challenges. Next chapter will explore this further by examining the CRMA regulation and the case of Per Geijer mining project.

5. Data and findings

5.1 A review of the Critical Raw Materials Act

This section will provide key provisions in the CRMA regulation, with a particular focus on Strategic Projects, which are referred to as initiatives deemed critical for ensuring the EU's security of supply for strategic raw materials (European Commission, n.d.). These provisions outlined in this chapter will examine the requirements for qualifying as a Strategic Project, including the need to adhere to social and environmental standards, among other criteria.

Furthermore, key provisions will be explored in relation to a structured thematic analysis with four distinct themes: framing sustainability: *benefits and burdens*, *participation and influence*, *recognition and representation* and *conditions for well-being*.

5.1.1 Framing sustainability: benefits and burdens

This section analyses how the CRMA frames sustainability and how it structures the distribution of outcomes. CRMA primarily frames sustainability as a balancing act between industrial development and environmental and social responsibility, yet this framing raises questions about who benefits and who bears the burdens. Sustainability, as outlined in Article 6, is primarily defined through a lens of minimising negative environmental and social impacts while securing the EU's supply of critical raw materials. This definition embeds sustainability within an economic imperative. Specifically, Article 6 (1) (a) emphasises that Strategic Projects have to make “a meaningful contribution to the security of the Union's supply of strategic raw materials” (CRMA, Regulation (EU) 2024/1252), reflecting the EU's industrial goal of securing resources and reducing dependence on external suppliers. This industrial benefit is central to the regulation's framing. Simultaneously, Article 6 (1) (c) requires that Strategic Projects adhere to what the EU believes to be a sustainable implementation, specifying these criteria:

the project would be implemented sustainably, in particular as regards the monitoring, prevention and minimisation of environmental impacts, the prevention and minimisation of socially adverse impacts through the use of socially responsible practices including respect for human rights, indigenous peoples and labour rights, in particular in the case of involuntary resettlement, potential for quality job creation and meaningful engagement with local communities and relevant social partner, and the use of transparent business practices with adequate compliance policies to prevent and minimise risks of adverse impacts on the proper functioning of public administration, including corruption and bribery; (CRMA, Regulation (EU) 2024/1252).

This segment outlines the EU's commitment to responsible resource extraction, requiring that projects align with environmental stewardship, equitable development and respect for human and Indigenous rights. The regulation's use of terms like "monitoring", "prevention" and "minimising" signals an intention to hold projects accountable for their environmental and social impacts, which can be related to distributive justice. However, the practical implementation of these requirements, particularly in relation to Sámi land rights and reindeer herding areas, remains a key area of analysis. The meaning of words becomes relevant in the regulation and in practice, especially when it comes to statements such as "respect for human rights, indigenous peoples and labour rights". These terms are not clearly defined and not accompanied by enforcement mechanisms, making it uncertain how compliance will be assessed or upheld. Moreover, the regulation suggests that the extraction of critical raw materials do not come at the expense of the environment as stated in Article 6 (1) (c). However, the CRMA once again lacks clarity, in this case on how risks are measured or whether cumulative impacts on the environment and affected communities will be considered. This raises concerns about the comprehensiveness of sustainability assessments on socio-environmental burdens.

Meanwhile, the regulation incorporates provisions to accelerate Strategic Projects, found in Article 10, which grants these initiatives priority status within national permitting systems. Article 10 (4) states:

Strategic Projects in the Union shall be granted the status of the highest national significance possible, where such a status exists in national law, and be treated accordingly in the permit-granting processes (CRMA, Regulation (EU) 2024/1252).

This prioritisation reflects the EU's industrial goal of ensuring a secure and steady supply of raw materials by facilitating quicker approval processes. The provision is framed as a response to geopolitical and supply chain vulnerabilities, supporting the EU's broader industrial policy goals of autonomy and resource security. National authorities are required to allocate resources efficiently and expedite decision-making to prevent delays. Additionally, under Article 10 (2), Strategic Projects can be designated as serving an "overriding public interest", enabling them to proceed even if they may cause environmental impacts:

With regard to the environmental impacts or obligations addressed in Article 6(4) and Article 16 (1), point (c), of Directive 92/43/EEC, Article 4 (7) of Directive 2000/60/EC and Article 9(1), point (a), of Directive 2009/147/EC or in Union legislative provisions regarding the restoration of terrestrial, coastal and freshwater ecosystems, Strategic Projects in the Union shall be considered to be of public interest or serving public health and safety, and may be considered to have an overriding public interest provided that all the conditions set out in those Union legislative acts are fulfilled (CRMA, Regulation (EU) 2024/1252).

This provision allows Strategic Projects to proceed, provided that no alternative sites exist and that public interest cannot be met through other means. However, the CRMA's definition of "public interest" is somewhat ambiguous, which could be applied in ways that favour industrial development over environmental or social protections. In such cases, tensions may emerge between industrial development goals and environmental or Indigenous rights protections. If not carefully regulated, this provision could weaken environmental safeguards, particularly in cases where Environmental Impact Assessments fail to fully capture long-term consequences. For example, in the Per Geijer case, if the assessments are insufficient, the project could be approved under the "overriding public interest" clause, sidelining the rights and livelihoods of the Gabna Sámi village.

Overall, the CRMA positions sustainability as a balance between economic efficiency, environmental protection, and social responsibility. While it emphasises minimising harm and promoting fair distribution of resources, its focus on accelerated project implementation and vague definitions, such as "public interest", suggest that industrial priorities may take precedence over long-term environmental and social sustainability. Ensuring that environmental burdens and benefits are distributed fairly will depend on how rigorously sustainability assessments are conducted and enforced.

5.1.2 Participation and influence

The theme of participation and influence is important when analysing the procedural justice of the CRMA regulation, especially regarding the involvement of affected communities, such as Indigenous groups. Central to this theme is the question of who has the power to participate meaningfully in decision-making processes, and to what extent these communities can influence the outcomes of projects that affect their rights, land and livelihood. In the context of the CRMA, the provisions reflect a centralised approach to decision-making at the EU level, aiming to balance regulatory oversight over Strategic Projects with input from member states. Article 7 (9) grants the European Commission the authority to make final decisions on granting Strategic Project status, stating that "the Commission shall adopt a reasoned decision on the recognition of the project as a Strategic Project within 90 days from the date of the acknowledgement of completeness of the application" (CRMA, Regulation (EU) 2024/1252). The Commission will ensure that projects align with the EU's broader objectives of securing a resilient and sustainable supply of critical raw materials (CRMA, Regulation (EU) 2024/1252).

To support procedural fairness and transparency, Article 7 (6) introduces the role of the European Critical Raw Materials Board in the evaluation process. It states: “the board shall meet at regular intervals...to discuss and issue an opinion on, on the basis of a fair and transparent process, whether the proposed projects fulfil the criteria laid down in Article 6 (1)” (CRMA, Regulation (EU) 2024/1252). While this indicated an attempt to integrate a different viewpoint in the project assessment phase, the Board’s influence is ultimately consultative. This is further clarified in Article 36, which defines the composition and role of the Board, stating: “The Board shall be composed of representatives from all Member states and the Commission and shall be chaired by a representative of the Commission” (CRMA, Regulation (EU) 2024/1252). The Board’s role is primarily advisory, as it evaluates projects based on their strategic relevance and provides recommendations, but the final decision-making authority remains centralised within EU institutions (European Commission, n.d.; CRMA, Regulation (EU) 2024/1252).

Together these articles underscore the EU’s commitment to coordinated, top-down regulatory framework, that seeks to align national contributions with overarching European priorities. Centralising decision-making at the EU level may enhance consistency in how Strategic Projects are assessed and approved, reducing fragmentation across member states and making it a more efficient process. However, this structure also consolidates power within EU institutions, raising concerns about the extent to which local and national voices, particularly Indigenous and marginalised communities, can effectively influence outcomes.

Notably, the CRMA incorporates requirements for consultation, particularly where Indigenous peoples may be affected. Article 7 (1) (j) mandates that applications include a consultation plan detailing how Indigenous communities will be meaningfully engaged, how impacts on their rights will be minimised and what fair compensation mechanisms will be adopted:

for projects with the potential to affect indigenous peoples, a plan containing measures dedicated to a meaningful consultation of the affected indigenous peoples about the prevention and minimisation of the adverse impacts on Indigenous rights and, where appropriate, fair compensation for those peoples, as well as measures to address the outcomes of the consultation (CRMA, Regulation (EU) 2024/1252).

This provision creates a formal requirement for consultation with Indigenous communities during the assessment phase coordinated by the Board. While it appears to promote participation, offering a platform for these communities to voice their views, it does not shift decision-making power. The final authority remains with EU officials, who operate within an authoritative and advantageous position compared to the affected communities. This imbalance could undermine

the fairness and equity in the process. It raises concerns about the inclusivity and representativeness of EU decision-making, while also highlighting the risk of internal biases driven by overarching EU objectives, which may overshadow the needs and interests of local communities.

5.1.3 Recognition and representation

The theme of recognition and representation, central to justice as recognition, examines whether indigenous Peoples' unique identities, cultural values, and knowledge systems are acknowledged and meaningfully included in governance structures. In the context of the CRMA, this principle is partially addressed through various participatory provisions, yet some limitations remain in how Indigenous perspectives are formally recognised and structurally embedded. While the CRMA acknowledges the importance of gaining community support and fostering local engagement in the development of Strategic Projects. One way the regulation has tried to promote this is through enhancing the trust and community engagement. Article 7 (1) (d) requires that project developers create a comprehensive plan to foster public acceptance by ensuring transparent communication, active involvement, and awareness-raising initiatives. The article specifically states:

a plan containing measures to facilitate public acceptance including, where appropriate, measures to facilitate the meaningful involvement and active participation of affected communities, the establishment of recurrent communication channels with local communities, organisations, including social partners, and relevant authorities, and the implementation of awareness-raising and information campaigns and potential mitigation and compensation mechanisms; (CRMA, Regulation (EU) 2024/1252).

This provision demonstrates the CRMA recognition of the need for a social license to operate, acknowledging that public support is critical for the long-term viability of Strategic Projects. By fostering transparent and collaborative relationships with local communities, the provision seeks to pre-empt potential conflicts and promote sustainable practices. However, the terms used in Article 7 (1) (d) refers broadly to "affected communities," "local communities," and "social partners" (CRMA, Regulation (EU) 2024/1252). It does not explicitly recognise indigenous Peoples as a distinct group, which might risk subsuming them into a broader category of stakeholders. This omission can be problematic for several reasons. Failing to recognise Indigenous rights and by grouping them with broader categories of local communities, risks diminishing their ability to assert specific legal protections tied to their unique legal, historical and cultural status. The absence of explicit recognition in Article 7 (1) (d) could lead to weaker consultation and participation mechanisms for Indigenous communities.

More direct recognition is found in Article 7 (1) (j), as mentioned in the previous section (CRMA, Regulation (EU) 2024/1252). This provision more explicitly recognises Indigenous rights, but only under specific conditions, namely when there is a risk of adverse impacts. While this is an important step, it reflects a reactive rather than a proactive approach to recognition, potentially overlooking situations where Indigenous knowledge and perspectives could contribute constructively to project design and sustainability, even in the absence of direct risk.

While the CRMA includes provisions that gesture towards inclusive governance, its recognition of Indigenous peoples remains partial. The failure to consistently and formally identify Indigenous Peoples as a distinct group throughout the regulation, risks disempowering them not only on a semantic level but also legally. Addressing this gap would require stronger legal commitments, ensuring that Indigenous recognition and representation goes beyond consultation by affirming and incorporating indigenous knowledge, values and rights as integral to project development.

5.1.4 Conditions for well-being

The CRMA regulation raises important considerations in relation to the conditions necessary for the well-being of communities and ecosystems affected by Strategic Projects. This becomes particularly important for Indigenous communities whose social, cultural and ecological relationships are intricately tied to the land. From a capabilities perspective, which focuses on the actual freedoms individuals and communities have to pursue lives they value, it becomes relevant to examine how the CRMA's regulatory framework may support or constrain these conditions.

Rooted in the EU's ambition to secure access to critical raw materials for green and digital transitions, the CRMA outlines a regulatory framework for Strategic projects that aims to accelerate permitting processes and enhance procedural efficiency. A central component of this framework is the reform of the permit-granting process, which seeks to shorten approval times for designated Strategic Projects. According to Article 11 (2), extraction projects must be approved within 24 months, and processing or recycling projects within 12 months (CRMA, Regulation (EU) 2024/1252). These shortened timelines become relevant in order to reduce regulatory delays. While the regulation accelerates permitting, it preserves the requirement for Environmental Impact Assessments (EIA), which are formally excluded from the time limits set in Article 11. As stated in Article 11 (3):

Where an environmental impact assessment is required pursuant to Directive 2011/92/EU, the step of the assessment referred to in Article 1(2), point (g)(i), of that

Directive shall not be included in the duration for permit-granting process referred to in paragraphs 1 and 2 of this Article (CRMA, Regulation (EU) 2024/1252).

This provision ensures that the EIA remains a prerequisite, operating outside the accelerated permit-granting timeline. While each assessment is carried out separately, it operates under a unified framework to streamline the process, as stated in Article 12 (2) (CRMA, Regulation (EU) 2024/1252). However, despite this separation, a fundamental tension emerges between the CRMA's objective of speeding up project approvals and the need for rigorous, comprehensive impact assessments. This approach appears to assume a uniform timeline for impact assessments, disregarding that such assessments may vary significantly depending on the project. For example, communities facing cumulative impacts, such as the combined long-term socio-environmental impacts of a project, may require additional time to thoroughly evaluate the risks and mitigation strategies. A rigid timeframe may limit the scope of assessments, leading to incomplete analyses that fail to capture the full extent of environmental degradation, biodiversity loss or socio-economic disruptions.

In addition to impact assessments, Article 15 (2) (b) stipulates that project promoters must ensure community participation:

The Member State whose territory is concerned by a Strategic Project shall take measures to facilitate its timely and effective implementation. Those measures may include assistance to:

- (a) ensure compliance with applicable administrative and reporting obligations.
- (b) further increase the ability of project promoters to ensure the meaningful involvement and active participation of the communities affected by the Strategic project (CRMA, Regulation (EU) 2024/1252).

Yet, as with environmental assessments, the time needed to conduct meaningful consultation may vary depending on the complexity and scale of the project and the rights holders involved. If the overarching focus on efficiency limits the depth and quality of consultation processes, there is a risk that affected communities, especially Indigenous groups, may be insufficiently engaged in decisions that impact their well-being. While the CRMA establishes a framework that seeks to facilitate Strategic Projects efficiently, its emphasis on accelerated timelines requires careful attention. The regulation's ability to uphold the conditions for well-being, especially for Sámi communities and their relationship with their traditional territories, will depend on whether its provisions allow sufficient time and resources for these communities to sustain and enhance their capabilities to flourish. Ultimately, the effectiveness of the CRMA in this regard will be shaped

not only by the legal provisions alone, but by how it is interpreted and implemented in practice.

5.2 A case study analysis of the Per Geijer deposit

Building on the regulatory analysis of the CRMA in the previous section, this part explores how the regulation's key provisions and objectives unfold in practice. The four overarching themes: framing sustainability: benefits and burdens; participation and influence; recognition and representation; and conditions for well-being, becomes relevant to further examine how the implementation of the CRMA may shape justice dimensions in a specific local context. To ground this analysis, this section turns to the case of Per Geijer deposit, located in Kiruna within the traditional lands of Gabna Sámi village. The case offers a relevant context to investigate the interplay between LKAB's mining activities in Kiruna, national and EU-level priorities, and the reported experiences of the Gabna Sámi village.

5.2.1 The exploration of the Per Geijer deposit

In spring 2020, LKAB initiated geological and resource exploration in Kiruna named Per Geijer. The purpose was to investigate the geology and mineral deposits located in the area and identify around 1 billion tons of mineable ore to secure the company's long-term sustainability (LKAB, 2020). LKAB continued to share updates on their plans to continue drilling and investigating the Per Geijer area, to learn more about the water and natural environment (LKAB, 2021; LKAB, 2022). The exploration permits for the Per Geijer deposit allowed the company to study its mineral properties in more detail and assess whether the deposit is economically viable or not.

Ongoing efforts to explore the Per Geijer deposit eventually led to the discovery of significant phosphorus and REE (LKAB, 2022). On January 12th, 2023, LKAB's CEO Jan Moström and Minister of Energy, Business and Industry Ebba Busch, officially announced the discovery of Europe's largest known deposit of REE during a press conference (Olevik & Fröberg, 2023). The event was held approximately 500 meters underground in LKAB's Kiruna mine, coinciding with an EU summit that marked the beginning of Sweden's presidency of the Council of the European Union (Olevik & Fröberg, 2023). The discovery of the deposit was highlighted as a significant step towards reducing Europe's dependence on imported raw materials and supporting the green transition by securing critical raw materials for technologies such as electric vehicles and batteries. As minister Busch noted in an interview with SVT Nyheter in 2023: "This will play a key role in the green transition in Europe. There is a great potential for Europe to lead the green transition. We can reduce emissions and strengthen competition at the same

time” (Haupt, 2023). Despite the enthusiasm surrounding the discovery, some concerns were raised about the timeline for turning the discovery into actual production. In a press statement, Moström highlighted the urgent need to reform Sweden’s permitting processes in order to align with the accelerating demand for critical raw materials:

We are experiencing an increased awareness of the need for metals and minerals for electrification and the green transition. At the same time, Europe’s heavy dependence on imports is a concern both within industry and politics. In Europe, there is now talk of a two-year permitting process for strategically important minerals like rare earth elements, but our experience is that it can take between 10 and 15 years to navigate the complex Swedish permitting system. The mining concession is only one part of this. So this will be an important test to see whether the permitting system can meet the expectations of the outside world (LKAB, 2023).

He reiterated this concern in an interview with Dagens Nyheter, stressing: “The big problem is the time with lengthy permitting processes. It can take up to fifteen years before we can benefit from this. We need to shorten the process” (Olevik & Fröberg, 2023).

In June 2023, LKAB submitted their application for a mining concession for the Per Geijer deposit (LKAB, 2023). While it is still in the early stages of the permit process, an approved mining concession would allow LKAB to continue developing the deposit and prepare for an environmental permit application (LKAB, 2023). The concession permit itself does not allow the company to start mining immediately, however, the mining concession represents a critical permit in the process for the affected Sámi people. The outcome of the permit could either halt the mining interventions or it could determine a further exploration of the deposit, which could have an immense impact on Gabna Sámi Village (Raitio et al., 2020). Almost a year later, in August 2024, LKAB submitted three applications for fast-track approval of projects related to critical raw materials (Sternlund, 2024; LKAB, 2024). This fast-track initiative is part of the EU’s CRMA which aims to streamline the permit granting process for Strategic Projects, setting a maximum timeframe of two years and three months for a more efficient process (Sternlund, 2024; CRMA, Regulation (EU) 2024/1252). The Swedish authorities are still working on how to meet national permitting procedures with these accelerated deadlines promoted by the EU regulation (Sternlund, 2024). The projects include the Per Geijer deposit in Kiruna, which could be given a strategic importance if the application is approved by the EU (Sternlund, 2024). In a press article with SVT Nyheter, lawyer Tobias Kluge argues that: “High demands will be placed on permitting authorities and county administrative boards, but not least on the operators themselves. However, it is possible; 27 months is not impossible” (Sternlund, 2024). Kluge, who is a lawyer

at Svemin (the Swedish industry association for mines, minerals and metal producers), remains optimistic about opening new mines, believing it is achievable (Sternlund, 2024). He further states in another article with SVT that improving the prospects for new mining projects will not mean compromising environmental standards: “Getting the classification as strategic should improve the opportunity to open new mines. However, it does not mean any lowering of environmental requirements” (Everljung, 2024). This statement by Kluge aligns with the CRMA’s objectives of balancing the need for critical raw materials with sustainable practices. However, the progress of the exploration efforts is repeatedly referred to as complicated due to the environmental and social challenges associated with the Per Geijer deposit, especially considering its location.

5.2.2 Framing sustainability: benefits and burdens

The case of Per Geijer deposit highlights how sustainability is framed and operationalised within the EU’s green transition goals, and in doing so, it reveals who benefits from this transition and who bears its burdens. The deposit lies beneath sensitive land used by the Gabna Sámi village, a mountain-based Sámi reindeer herding collective (RHC), which is part of a system of geographically defined areas designated for reindeer husbandry. These areas, known as “sameby” in Swedish, are vital to the Sámi people’s rights and livelihoods (Raitio et al., 2020). The Gabna Sámi village has already lost significant herding areas to Kiruna city’s expansion and LKAB’s existing mining operations (Sternlund, 2021). The Sámi village manages eleven registered reindeer herding businesses and maintains a maximum winter herd of 6,500 reindeers, with grazing grounds extending across the municipalities of Kiruna and Pajala (Sámediggi, 2018b). This land is considered crucial for the RHC’s herding activities, with a key migration route running directly above the deposit (Sternlund, 2021; Kejerhag, 2023).

LKAB initially aimed to minimise surface impact to coexist with the reindeer herding industry. The company planned to use backfill mining for the Per Geijer deposit to create an “invisible mine”, which involves extracting ore underground and filling the resulting voids with natural sand or mining by-products (Sternlund, 2023a). This method was intended to avoid surface disruptions and maintain the integrity of the land above. This approach was also seen as the only viable solution to ensure that mining operations do not negatively impact reindeer herding and the environment. While backfill mining had been used for smaller ore bodies, its feasibility for the large-scale operations required at Per Geijer remained uncertain. Later in September 2023, SVT reported that LKAB wants to abandon the initial plans and adopt traditional sublevel caving instead, a method

where ore is extracted and the overlying rock is allowed to collapse (Sternlund, 2023b). The reasoning behind this is because traditional sublevel caving is considered to be more appropriate for large-scale mining operations, allowing continuous extraction without the need for backfilling with additional materials (Sternlund, 2023a). SVT also reports that LKAB believes that this method is the only efficient and cost-effective alternative (Sternlund, 2023b).). However, traditional sublevel caving will affect the ground above the mine to the point where neither humans nor animals will be able to cross the land (Sternlund, 2023c). Nevertheless, LKAB's press officer Anders Lindberg still believes that coexistence with mining activities and reindeer herding practices is still possible. He states in an article with Dagens Nyheter:

We see that perhaps the biggest obstacle is the impact on reindeer herding because the mine would be located where Gabna has an important migration route. We believe solutions can be found, but exactly what those are, we want to discuss with the Sámi village (Isberg, 2023).

Traditional sublevel caving fundamentally alters the landscape above the mine, making it unsafe and inaccessible for both humans and animals (Sternlund, 2023c). This transformation directly disrupts the Gabna RHC's essential migration routes for reindeer herding. While Lindbergs statement acknowledges the challenge, it minimises the profound and likely irreversible nature of this impact by framing it as a solvable problem without presenting viable alternatives. The statement risks being perceived as vague or dismissive. The lack of concrete proposals or examples suggests that the mining company may not yet have measures to mitigate the impact, leaving the burden of proposing solutions to the affected Sámi village.

5.2.3 Recognition and representation

This framing of sustainability in the case of Per Geijer raises important questions concerning recognition and representation, particularly with respect to Sámi communities. Framed through the lens of justice as recognition, this analysis focuses on whether, and how Indigenous knowledge systems, cultural values, and perspectives are included or excluded in decision-making processes. At the core of justice as recognition is the idea that groups must not only be consulted but also recognised as legitimate actors in planning and governance. The framing of sustainability advanced by LKAB, Swedish authorities and the EU, positions industrial mining as the central and unquestioned pathway to achieving climate goals, as repeatedly foregrounded in public statements by LKAB and Swedish government representatives (LKAB, 2023; Haupt, 2023). These narratives highlight the strategic and geopolitical importance of the deposit but make little reference to Sámi environmental knowledge or cultural values as part of the

sustainability discussion. By contrast, representatives of Gabna Sámi village have articulated a different understanding of sustainability in media coverages. There has also been an expressed shock and concern over LKAB's proposed mining operations in the Per Geijer deposit. In an interview with Dagens Nyheter, Karin Kvarfordt Niia, a member of the Gabna Sámi village, called the proposed mining "catastrophic" (Kejerhag, 2023). She explained further that several areas crucial for reindeer herding are now part of the city of Kiruna or LKAB's mine, and the mining project threatens the last remaining migrating route and grazing grounds vital to their reindeer herding practices. She says: "If that is also mined, the reindeer will have nowhere to go. Since reindeer herding is an important part of Sámi culture and language, this will have serious consequences" (Kejerhag, 2023). Kvarfordt Niia is one of the members of Gabna RHC who have voiced a strong stance on the implications of green transition initiatives, highlighting the disproportionate sacrifices already made by the Sámi community for Sweden's and the EU's industrial development. In a separate interview with Dagens Nyheter, she says: "Claiming now that we should give up the rest to supply the EU with rare earth elements is not only unfair but oversimplifies the 'solution' to climate change" (Olevik & Fröberg, 2023). She further explains that: "More batteries simply do not solve anything. First we should, for example, discuss the recycling of residual materials from mines, where there are high concentrations of rare earth elements" (Olevik & Fröberg, 2023). Finally, Kvarfordt Niia illustrates the Sámi way of life through the concept of "birget":

In reindeer herding, there is the concept of "birget", which is in Norther Sámi and means not taking more than necessary to get by. From a Sámi perspective, I must ensure that my children and grandchildren also have a good life; that is what we consider to be sustainable and green (Olevik & Fröberg, 2023).

This particular Sámi term embodies the principle of taking only what is necessary to survive. Rooted in simplicity and minimal consumption, this philosophy prioritises intergenerational well-being, offering an alternative sustainability ethics that remains unrecognised in policy narratives and decision-making frameworks (Olevik & Fröberg, 2023).

5.2.4 Participation and influence

The theme of participation and influence addresses the extent to which Indigenous communities are meaningfully included in decision-making processes that affect their rights, lands and livelihoods. It focuses on procedural justice, ensuring that affected groups have real opportunities to engage, be heard and shape outcomes, rather being consulted only in a symbolic manner. In a press article by Dagens Nyheter, reindeer herder Lars-Marcus Kuhmunen from the Gabna Sámi village

highlights the importance of dialogue and communication when dealing with challenges that impact reindeer herding, stating:

It feels important to emphasise that most of it is about conversations with other people, explaining and compromising. Last year, we put up signs around the mountain where the reindeer were grazing and asked people not to drive snowmobiles there unnecessarily. It worked really well. But mines cannot be reasoned with, they are irreversible (Olevik & Fröberg, 2023).

Kuhmunen's account, as captured by Dagens Nyheter, highlights how mutual understanding and compromise can lead to positive outcomes, such as the reduction of snowmobile disturbances by putting up signs. However, Kuhmunen contrast this with mining, which presents more fundamental and irreversible disruptions, limiting opportunities for dialogue and influence (Olevik & Fröberg, 2023). This concern is also echoed by Karin Kvarfordt Niia who states that despite mutual interest in dialogue between the Gabna Sámi village and mining company LKAB, such discussions were notably absent leading up to the press conference announcing the discovery. In an interview with Dagens Nyheter she says: "It is now clear that LKAB does not value dialogue, our livelihood and our culture." (Kejerhag, 2023). This statement underlines the sense of exclusion felt by the Sámi community. In response, LKAB's press officer Anders Lindberg disagrees and defends the company's approach by saying:

We've explained to them why we didn't discuss the numbers earlier. It's because we were ready just in time for the EU meeting, and of course, we thought it was good timing. Additionally, we follow international regulations that require us to announce the findings and the quantity of the deposit to everyone at the same time (Kejerhag, 2023).

This exchange underscores a disconnect between LKAB's communication procedures and the expectations of the Sámi community regarding meaningful consultation. In a separate interview with SVT Nyheter, press officer Lindberg acknowledges that the Sámi village's concerns are valid by explaining:

"We understand that it causes concern for the Sámi village, who realise that we have a very strong argument, but the Sámi village is also protected by law, which requires consideration, impact assessment, and compensation." (Stenberg Partapuoli & Sjöstedt, 2023).

Still, a major concern raised by Rasmus Kløcker Larsen, senior researcher at Stockholm Environment Institute, is the limited capacity for effective dialogue between LKAB and the Gabna Sámi village, due to gaps in Swedish legislation regarding Sámi rights (Kejerhag, 2024). In an interview with Dagens Nyheter, Kløcker Larsen notes that the mining company LKAB's application for a mining concession did not include an assessment of the consequences for Sámi rights. He

states: “No analysis of the consequences for rights was included in the company’s application for an exploitation concession. LKAB did not propose any measures to prevent or mitigate potential negative effects on the Sámi village.” (Kejerhag, 2024). He further comments on the limitations of the legal frameworks: “It is clear that neither the Minerals Act nor the Environmental Code are sufficient to hold companies accountable for their impact on Sámi rights” (Kejerhag, 2024). As reported in the same article, Swedish mining law, particularly the Minerals Act and the Environmental Code, does not require Sámi consent or an investigation into potential impacts on Sámi Indigenous rights when granting mining permits (Kejerhag, 2024). This legal context is relevant to the participation of the Gabna Sámi village in decisions that directly affect their land and traditional livelihoods. Discussions around Indigenous participation and influence also emerged during the legislative process for the CRMA regulation (Olevik & Fröberg, 2023). Earlier drafts of the CRMA included a reference to the principle of FPIC, which emphasises Indigenous consent while ensuring their meaningful participation in decision-making processes concerning their land and rights. However, after discussions between the European Parliament and the Council of Ministers, it was removed in the finalised version (Olevik & Fröberg, 2023). Sophie Rauszer, an advisor to the Left Group in the European Parliament who took part in the legislative process, commented in an interview with Dagens Nyheter:

The mention of the FPIC in the law has been a red line for the Council of Ministers. And it is a well-known fact that the issue was pushed by the Swedish government, which has the EU’s only Indigenous people- the Sámi. Sweden said no to FPIC (Olevik & Fröberg, 2023).

The FPIC formulation was instead replaced with formulations that emphasises Indigenous Peoples’ right to consultation, referencing the UNDRIP (Olevik & Fröberg, 2023; CRMA, Regulation (EU) 2024/1252). This shift highlights the current legal emphasis on consultation rather than consent in shaping the participation and influence of Indigenous communities.

5.2.5 Conditions for well-being

This theme examines how the conditions necessary for Indigenous well-being, for both humans and nonhumans, are addressed or overlooked in the context of the Per Geijer exploration. While preceding themes have already highlighted several dimensions of well-being, this section brings them together under the lens of capabilities theory, which emphasises individuals’ and communities’ real freedoms to live the lives they value. For the Gabna Sámi village, well-being is intimately tied to the land and the conditions that enable sustainable reindeer herding. As reindeer herder Lars-Marcus Kuhmunen plainly puts it in an interview with Dagens Nyheter: “If there is a mine here, it is the end of our Sámi

village” (Olevik & Fröberg, 2023). This quote not only reflects a fear of displacement but speaks to an existential threat to an entire way of life. Hence, the Sámi village’s well-being is dependent on continued access to migration routes, undisturbed grazing grounds, and an intact natural landscape. Additionally, the shift from the proposed “invisible mine” using backfill methods to traditional sublevel caving, a technique which causes the land above to collapse. As reported by SVT Nyheter, this method will impact the ground to such an extent that neither humans nor animals will be able to cross the land (Sternlund, 2023c). From this perspective, this change may directly affect social, cultural and ecological conditions for the Sámi village’s well-being.

Karin Kvarfordt Niia, as previously presented, challenges the narrative of the green transition by critiquing the framing of mineral extraction as a necessity. She highlights alternative approaches and introduces the Sámi concept of “birget”, meaning taking only what is necessary to get by (Olevik & Fröberg, 2023). This principle embodies an Indigenous sustainability ethic centred on maintaining balance and ensuring the well-being of future generations. It also highlights a culturally rooted understanding of well-being that conflicts with industrial goals of mining as previously stated by minister Busch: “This will play a key role in the green transition in Europe. There is a great potential for Europe to lead the green transition. We can reduce emissions and strengthen competition at the same time” (Haupt, 2023). From this perspective, an expansion of the proposed mining project could affect the Sámi community’s freedoms and capabilities to live the lives they value. Additionally, the removal of FPIC could further undermine the agency of Indigenous communities to meaningfully influence decisions affecting their lands, cultures, and well-being.

6. Discussion and conclusion

This thesis has examined how the CRMA and its implementation in the Per Geijer case shape environmental justice dimensions for the Gabna Sámi village. Drawing from the theoretical framework of Indigenous environmental justice, the discussion focuses on key findings related to distributive justice, procedural justice, justice as recognition and capabilities theory (Persson et al., 2017; Schlosberg, 2007; Schlosberg & Collins, 2014; Bennett et al., 2019; Svarstad & Benjaminsen, 2020). These dimensions help explore framings of sustainability, participation and influence, recognition and representation, and conditions for well-being, within the context of the CRMA review and the Per Geijer case study. This chapter will also include further reflections on the insights and an acknowledgment of the study's limitations.

6.1 Diverging notions of sustainability and disproportionate benefits and burdens

One of the central findings in the CRMA and the Per Geijer case is the different approaches to sustainability. The EU, Swedish authorities and the state-owned mining company LKAB tend to define sustainability within the framework of the green transition and the need to secure a supply of critical raw materials. This framing positions mining as a necessary step toward achieving climate goals and maintaining Europe's competitiveness. As minister Ebba Busch said in an interview with SVT Nyheter: "This will play a key role in the green transition in Europe. There is a great potential for Europe to lead the green transition. We can reduce emissions and strengthen competition at the same time" (Haupt, 2023). This perspective is embedded in Article 6 of the CRMA, which states that Strategic Projects must "make a meaningful contribution to the security of the Union's supply of strategic raw materials", a goal intended to support the EU's development of renewable energy and technological advancements (CRMA, Regulation (EU) 2024/1252). Although the CRMA claims to balance the extraction of critical raw materials while incorporating environmental and social considerations, the Per Geijer case reveals how economic imperatives override these commitments. Economic feasibility has driven the choice of exploration and extraction methods at Per Geijer, including the use of sublevel caving method, which compromises both ecological integrity and Sámi livelihoods (Sternlund, 2023c). From this point of view, the socio-environmental impacts of mining interventions seem to become a necessary trade-off to support what can be seen as broader European and green industrial goals. Securing critical raw materials are not only framed as being urgent and important for Europe's future but also aligns

with a utilitarian logic where the mining of Per Geijer is framed as contributing to the greater good of Europe and the collective welfare.

In contrast, the Gabna Sámi village's understanding of sustainability within the context of reindeer herding practices, is portrayed as deeply connected to intergenerational land use, cultural survival and ecological preservation. Gabna Sámi representative Karin Kvarfordt Niia believes that the extraction of REE is not an equitable trade-off considering that the Sámi village has already sacrificed significant land to previous mining activities (Kejerhag, 2023; Olevik & Fröberg, 2023). As she stated in an interview with Dagens Nyheter: "Claiming now that we should give up the rest to supply the EU with rare earth elements is not only unfair but oversimplifies the 'solution' to climate change" (Olevik & Fröberg, 2023). From an Indigenous environmental justice perspective, this reflects a distributive justice challenge. The environmental burdens of mining, such as the destruction of grazing land and the disruption of reindeer migration routes, fall disproportionately on the Sámi community. Additionally, the economic benefits are largely reaped by European industries pursuing these strategic goals. The CRMA's prioritisation of industrial and economic interests ultimately leads to a distributive injustice where Indigenous communities bear the brunt of mining interventions while companies such as LKAB benefit from the resource extraction. The Sámi's capability to flourish in ways that respects their traditional livelihoods and cultural practices is thus undermined by the emphasis on industrial growth and the secure supply of critical raw materials as an overriding public interest (Article 10 (2), CRMA, Regulation (EU) 2024/1252), which makes the socio-environmental sustainability goals of the CRMA secondary to economic profit. According to the capabilities theory, justice requires supporting people's real freedom to live the lives they value. In this case, the Sámi's ability to sustain reindeer herding and cultural traditions is a central capability that is being constrained by the CRMA regulation and its implementation in the case of Per Geijer (Schlosberg & Carruthers, 2010).

Moreover, as Persson et al. (2017) argue, distributive justice alone is insufficient for addressing Indigenous concerns. Traditional justice frameworks focus on the equitable distribution of benefits and harms but fail to account for the deeper historical legacies of colonialism and resource exploitation that continue to marginalise Indigenous peoples. The Sámi village's resistance to mining is not just about the immediate environmental damage, but also about the ongoing erosion of their rights, culture and connection to their traditional land that can be dated back to late 1800s where the Sámi started to gradually lose ownership over territories due to prioritisation of agricultural and forestry expansion (SOU 2006:14). The risk of current policies, including the CRMA regulation, is that it

may be embedded in institutional frameworks that perpetuate these colonial legacies of prioritising state interest and industrial growth over Indigenous sovereignty. A justice framework that truly honours Indigenous perspectives would go beyond mere distributive justice and acknowledge the Sámi's historical land losses, recognising their rights to self-determination, and integrating their perspectives on sustainability into policy frameworks. A justice framework rooted in Indigenous environmental justice could promote a more holistic understanding of sustainability, resonating with the Sámi worldview by recognising humans, animals, and ecosystems as interconnected, emphasising intrinsic value of nature rather than viewing it as a mere resource to be exploited (Schlosberg, 2007; Schlosberg & Carruthers, 2010). This could essentially produce environmental justice outcomes that respect and protect Indigenous rights.

6.2 Participation without influence?

This section addresses whether Indigenous communities, specifically the Gabna Sámi village, have been meaningfully included in decision-making process and to what extent the CRMA regulation supports or hinders such inclusion. A key concern found in Articles 7 and 36 of the CRMA is its top-down governance structure, where decisions regarding the assessment of Strategic Projects are made by the European Commission and the Critical Raw Materials Board (CRMA, Regulation (EU) 2024/1252). Although the decision-making process is intended to be fair and inclusive by including the participation of Indigenous Peoples, the Board's assessment phase remains heavily influenced by representatives from EU member states and the European Commission (European Commission, n.d.; CRMA, Regulation (EU) 2024/1252). This essentially limits the influence of Indigenous representatives and communities over projects that would affect their lands, rights and livelihoods.

Moreover, the Per Geijer case illustrates how the Gabna Sámi village was excluded from early consultations, a process that was carried out without their involvement or consent (Kejerhag, 2023). This exclusion occurred despite Article 7 (1) (j) of the CRMA, which emphasises the importance of engaging local communities in consultation processes (CRMA, Regulation (EU) 2024/1252). As presented in the case study, Sámi representative Karin Kvarfordt Niia told Dagens Nyheter that the Sámi village felt sidelined, raising concerns about whether their participation is genuinely valued or merely symbolic. This exclusion violates the principle of procedural justice which emphasises that affected communities must be meaningfully involved in decision-making processes that impact their rights and well-being (Svarstad & Benjaminsen, 2020). As noted by Bennett et al. (2019), genuine inclusion necessitates real influence over decisions, ensuring that power imbalances are addressed. One concrete mechanism that could strengthen

Indigenous participation is the FPIC, a widely recognised standard within Indigenous rights frameworks, emphasised by a number of researchers such as Raitio et al. (2020). However, the FPIC was removed from the final version of the CRMA regulation, as reported by Dagens Nyheter (Olevik & Fröberg 2023). Instead, the CRMA refers to the right to consultation in line with the UNDRIP, which does not grant Indigenous communities the power to withhold any consent (Olevik & Fröberg 2023). This change significantly weakens Indigenous rights, as Sámi objections to Strategic Projects can be overridden if the project is deemed to serve the public interest, as stated in Article 10 (CRMA, Regulation (EU) 2024/1252). As Raitio et al. (2020) argue, consultations will instead be reduced to formalities rather than genuine opportunities for Indigenous communities to consent or reject projects that impact their lives. Furthermore, the findings suggest an internal bias within the CRMA regulation, the Swedish government and the state-owned mining company LKAB, as they operate within a framework which aligns with the green transition goals of securing critical raw materials, leaving consultation with Indigenous communities vulnerable to these political interests.

This raises a critical concern regarding the legitimacy of established laws and governing bodies from the position of Indigenous communities such as Gabna Sámi village, especially when these institutions fail to address existing power imbalances and potential biases. According to scholars Bennett et al. (2019), governance structures have to be contextually relevant and should reflect the specific needs and lived experiences of local populations to build trust and meaningful participation among these groups. Indigenous communities, such as Gabna Sámi village may lack the same capacity and resources as state actors or corporations, which affects their ability to meaningfully engage in decision-making processes. Yet, the case study reveals that state and corporate actors have failed to account for these disparities, leaving Indigenous communities at a disadvantage.

6.3 Sámi values and knowledge at the periphery

The CRMA regulation also presents key insights related to justice as recognition, particularly in terms of how Indigenous perspectives on environmental risks are overlooked within decision-making processes. The accelerated timelines in the permitting process under the CRMA raises further concerns about the adequacy of environmental and cumulative impact assessments. In its aim to speed up industrial activities such as the extraction of critical raw materials, the CRMA risks undermining proper and sufficient environmental safeguards and mitigation of social impacts. The Per Geijer case serves as a concrete example of how LKAB's decision to switch to a more invasive mining method, despite the associated environmental risks, was driven by the need of more efficient and cost-

effective alternative. This situation raises critical questions around justice as recognition and the failure to adequately addressing the views, values and interests of the Sámi community. Svarstad and Benjaminsen (2020) identify two key aspects that are necessary for true recognition: senses of justice and critical knowledge production. Senses of justice refer to the subjective experiences of individuals or communities, in relation to environmental interventions. For the Sámi, their perception of what is fair in the context of industrial development turns out to be shaped by their long-standing relationship with the land and their intergenerational responsibility to protect their environment and traditional reindeer herding practices. This is reflected in the concept of “birget”, as explained by Karin Kvarfordt Niia in Dagens Nyheter (Olevik & Fröberg, 2023). However, the Sámi community’s intergenerational responsibility to care for their land and culture may be compromised by accelerated timelines that fail to adequately assess the long-term risks on their livelihoods and cultural practices.

Equally important is the perspective of critical knowledge production, which calls for the validation of Indigenous knowledge systems within governance and decision-making. The case study reveals that the Sámi have their own understanding of ecological processes in relation to reindeer herding practices, that has been passed down through generations. Yet, the value of Indigenous knowledge in the CRMA regulation and its implementation, particularly in risk management, seems to be largely overlooked. As Bennett et al. (2019) discusses, incorporating Indigenous knowledge into sustainability efforts is essential for achieving ecologically balanced and socially just solutions. Hence, Sámi knowledge could offer valuable insights into sustainable land management. A more just approach to risk management according to the IEJ theory would not only acknowledge environmental and social risks associated with mining projects but also integrate Indigenous knowledge and values into decision-making processes. This would ensure that the long-term impacts on Indigenous communities, their culture and their livelihoods are properly addressed and mitigated. By doing so, the CRMA regulation and its implementation could foster a more inclusive and holistic model of sustainability, one that respects Indigenous rights, knowledge and values. This would also support the ability of individuals and communities to live in accordance with the lives they value, while ensuring the conditions necessary for their self-determination and well-being (Svarstad & Benjaminsen, 2020; Schlosberg & Carruthers, 2010). This perspective is closely linked to the capabilities dimension of the IEJ theory, which assesses whether RHCs, such as the Gabna Sámi village, can sustain their traditional reindeer herding practices and their agency to achieve what they value.

6.4 Further reflections and potential limitations

These findings can be extended beyond the specific case of the Per Geijer deposit, raising broader questions about how landscapes within Indigenous territories may be framed as sites for extractive industries in the pursuit of a green transition. Based on the results of the analysis and the research as a whole, it becomes increasingly clear that justice can be interpreted in various ways. This study has specifically adopted an IEJ approach to broaden the perspective of justice and explore more inclusive ways of understanding the interconnected relationship between humans and the environment (Schlosberg & Collins, 2014). This idea is particularly evident in how media sources have portrayed the voices of Gabna Sámi representatives, highlighting their relationship with their ancestral land and their needs of sustaining their traditional practices. This study has also revealed the multiple ways in which territories, particularly Sámi territories, can be framed. From an historical perspective, since the Swedish crown abolished the tax lands, the Sápmi region has gradually become a site to serve national goals and interests. Today, the Per Geijer deposit has been framed as serving the public interest and supporting EU's strategic goals of securing the supply of critical raw materials, to promote a green transition in industries and technologies. These insights contribute to the evolving discourse on environmental justice by challenging western-centric interpretations of sustainability and exposing the colonial legacies that continue to marginalise Indigenous voices (Schlosberg & Collins, 2014; McGregor et al., 2020). Having an IEJ lens challenges the idea of land primarily as an area for resource extraction, instead recognising it as a space of cultural and ecological value. This calls for further research on how Indigenous territories and landscapes are conceptualised and valued. This could be particularly useful in policy development in terms of acknowledging the cultural, ecological and historical context of these spaces (Persson, et al., 2017).

Furthermore, scholars like Valkonen et al. (2017) have explored the concept of Indigeneity by examining how Indigenous Peoples are formally recognised as distinct collective groups through legal frameworks. Similarly, the findings have revealed how media portrayals of representatives from the Gabna Sámi village are depicted as a unified and collective voice for their community. While it is crucial to acknowledge collective rights, needs and vulnerabilities, it is important to address the potential of overlooking internal diversities within these groups. A key challenge lies in accurately representing the varied perspectives, priorities and lived experiences of Indigenous communities without overlooking internal differences. From an IEJ perspective, achieving this balance can be critical to fostering Indigenous empowerment while respecting individual and collective identities. Hence, this research tries to foster a nuanced and genuine

understanding of Indigenous identities while addressing the potential limitations of the theoretical approach.

Lastly, the IEJ theory is defined as an evolving concept in response to changing realities (Schlosberg, 2013). This means that the way justice is understood and applied is not static, but shifts over time as new perspectives, lived experiences and critiques emerge. This theoretical insight is something that could perhaps be incorporated into policymaking, ensuring that legal frameworks such as the CRMA regulation remain flexible and context-sensitive that responds to contemporary challenges.

6.5 Conclusion

This thesis examines how the CRMA and its implementation in the Per Geijer case shape environmental justice dimensions for the Gabna Sámi village. Through the lens of Indigenous environmental justice, the findings reveal a tension between the CRMA's green transition goals and the protection of Sámi Indigenous rights, livelihoods, and well-being. The findings indicate that while the CRMA aims to accelerate the EU's green transition, it places the Sámi village in a difficult position, where economic imperatives overshadow the environmental and social safeguards that are essential for protecting their rights and reindeer herding practices. Consequently, the findings show that Gabna Sámi village risks facing a disproportionate share of burdens associated with the mining project, while the economic benefits will primarily benefit external actors.

In terms of participation and influence, the study finds that existing consultation mechanisms may fall short of providing a meaningful process with affected communities, such as the Gabna Sámi village. Although formal mechanisms for consultation exist, Sámi participation risks being symbolic rather than having a real influence over decisions that impact their traditional territories. The removal of the FPIC may further weaken Indigenous agency, leaving them at a disadvantage when their rights and livelihoods are at stake due to mining projects.

This study also highlights how Sámi values and knowledge systems can be sidelined in environmental risk assessments and decision-making processes. Accelerated permitting timelines risk compromising the long-term sustainability of Sámi livelihoods by failing to adequately consider Indigenous ecological expertise and worldviews. These findings underscore the need for a more inclusive, context-sensitive approach to governance that acknowledges and respects Indigenous rights and perspectives.

In answering the research question, this thesis shows how the CRMA and its implementation in the Per Geijer case shape environmental justice for the Sámi community across several dimensions: distributive, procedural, recognition and capabilities justice. Advancing justice in these areas would require governance practices that meaningfully integrate Indigenous perspectives on sustainability, ensure genuine participation and consent, and recognise the intrinsic value of Indigenous knowledge systems. More broadly, this research highlights the need to rethink how sustainability is conceptualised. In this case, the EU's focus on industrial and economic growth happens to come at the expense of Indigenous rights and environmental integrity. The findings of this research advocate for a model of sustainability that centres Indigenous perspectives, recognises historical patterns of colonialism, while ensuring the integrity of ecosystems for future generations. By embracing a holistic, justice-oriented approach, the EU could pursue its green transition goals in a way that upholds both environmental and social responsibility.

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Appendix 1

List of empirical material used in the case study analysis

This appendix lists the primary empirical sources analysed in the case study, including news articles and press releases relevant to the Per Geijer mining project and the Sámi community.

Selected articles from Dagens Nyheter:

Isberg, E. (2023). Unga samer protesterar mot LKAB:s nya gruvplaner. *Dagens Nyheter*, 26 August. <https://www.dn.se/sverige/unga-samer-protesterar-mot-lkabs-nya-gruvplaner/> [2024-09-26]

Kejerhag, J. (2023). LKAB:s gruvfynd kom som en chock för samebyn. *Dagens Nyheter*, 13 January. <https://www.dn.se/sverige/lkabs-gruvfynd-kom-som-en-chock-for-samebyn/> [2024-09-04]

Kejerhag, J. (2024). LKAB kan tvingas att ta större ansvar för skador på renskötseln. *Dagens Nyheter*, 7 November. <https://www.dn.se/sverige/lkab-kan-tvingas-att-ta-storre-ansvar-for-skador-pa-renskotseln/> [2024-12-30]

Olevik, J. & Fröberg, J. (2023). Här ställs kampen om samebyns framtid på sin spets. *Dagens Nyheter*, 10 December. <https://www.dn.se/sverige/har-stalls-kampen-om-samebyns-framtid-pa-sin-spets/> [2024-09-11]

Selected articles from SVT Nyheter:

Everljung, J. (2024). Sex svenska gruvprojekt har ansökt om EU:s snabbspår - Rönnbäcken med på listan. *SVT Nyheter*, 9 September. <https://www.svt.se/nyheter/lokalt/vasterbotten/sex-svenska-gruvprojekt-har-ansokt-om-eus-snabbspar-ronnbacken-med-pa-listan> [2024-12-30]

Stenberg Partapuoli, A.C. & Sjöstedt, M. (2023). Samebyn om LKAB:s planer: "Vi offras för att lösa EU:s beroende av Kina och Ryssland". *SVT Nyheter*, 23 January. <https://www.svt.se/nyheter/sapmi/samebyn-om-lkab-s-planer-vi-offras-for-att-losa-eu-s-beroende-av-kina-och-ryssland> [2024-10-4]

Sternlund, H. (2021). LKAB ska skapa en osynlig underjordsgruva nära Kiruna - utan att markytan påverkas. *SVT Nyheter*, 5 November. <https://www.svt.se/nyheter/lokalt/norrboten/lkab-ska-skapa-den-osynliga-underjordsgruvan-utan-paverkan-pa-ytan> [2024-09-06]

Sternlund, H. (2023a). Så kan de eftertraktade metallerna tas fram - utan att lämna spår. *SVT Nyheter*, 21 March. <https://www.svt.se/nyheter/lokalt/norrboten/sa-vill-lkab-ta-ut-de-eftertraktade-metallerna-utan-att-lamna-ett-spar> [2024-12-30]

Sternlund, H. (2023b). Därför vill LKAB överge plan på ny osynlig gruva i Kiruna. *SVT Nyheter*, 22 September. <https://www.svt.se/nyheter/lokalt/norrboten/lkab/-vill-overge-plan-pa-ny-osynlig-gruva-i-kiruna-blir-for-dyr--gglx76> [2024-10-12]

Sternlund, H. (2023c). Gabna sameby avfärdar LKAB:s tro på samexistens om gruvplaner ändras. *SVT Nyheter*, 22 September. <https://www.svt.se/nyheter/lokalt/norrboten/gabna-sameby-renskotseln-inte-mojlig-att-bedriva-med-rasbrytning--tspxa4> [2024-10-30]

Sternlund, H. (2024). LKAB vill ha snabbspår för tre projekt enligt nya EU-lagen. *SVT Nyheter*, 9 September. <https://www.svt.se/nyheter/lokalt/norrboten/lkab-vill-ha-snabbspar-for-tre-projekt-enligt-nya-eu-lagen> [2024-09-14]

LKAB's press releases:

LKAB (2020). *Gruvnära undersökningar för framtiden*. <https://lkab.com/nyheter/gruvnara-undersokningar-for-framtiden/> [2024-12-03]

LKAB (2021). *Vi undersöker Per Geijerområdet i Kiruna*. <https://lkab.com/nyheter/vi-undersoker-per-geijerområdet-i-kiruna/> [2024-12-03]

LKAB (2022). *LKAB driver undersökningsortar in i framtiden*. <https://lkab.com/nyheter/lkab-driver-undersokningsortar-in-i-framtiden/> [2024-12-03]

LKAB (2023). *Europas största fyndighet av sällsynta jordartsmetaller 25 procent större – nu tas första steget i kritisk prövning*. <https://lkab.com/press/europas-storsta-fyndighet-av-sallsynta-jordartsmetaller-nu-25-procent-storre-idag-tas-forsta-steget-i-kritisk-provning/> [2024-09-26]

LKAB (2024). *LKAB ansöker om tre strategiska projekt i EU för brytning och förädling av sällsynta jordartsmetaller*. <https://lkab.com/press/lkab-ansoker-om-tre-strategiska-projekt-i-eu-for-brytning-och-foradling-av-sallsynta-jordartsmetaller/> [2024-11-04]

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