

To Dig or Not to Dig?

*An Integrated Post-Structuralist Analysis of the EU
Critical Raw Materials Act and its Justice Implications for
Local Communities*

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Abstract:

In its proposed 2023 Critical Raw Materials Act, the European Commission considers access to critical raw materials within its territory as key to both the green transition and to reduce import dependencies. This onshoring of extractivist practices warrants a critical analysis that reflects on the justice implications this may have for local communities. Therefore, I apply an integrated post-structuralist analysis to identify the dominant policy narratives the EU portrays in its proposal and examine the environmental justice counter-discourses that are raised in its public consultation process. On this basis, I find that in the current proposal, narratives of 'mining-for-sustainability, 'mining-for-security and 'public-acceptance-for-mining' are fostered. In turn, with respect to local communities' rights, environmental justice counter-discourses raised that for the proposal to be fair, it should place greater emphasis on distributive mechanisms, recognize the needs of local communities and incorporate procedural mechanisms that allow for meaningful community participation in decision-making processes.

Keywords: critical materials, environmental justice, policy narrative, extractivism, resource governance, Europe

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List of Abbreviations

| | |
|------|-----------------------------------|
| CRM | Critical Raw Materials |
| CRMA | Critical Raw Materials Act |
| EC | European Commission |
| EIA | Environmental Impact Assessment |
| EJ | Environmental Justice |
| EU | European Union |
| FPIC | Free, Prior and Informed Consent |
| IEA | International Energy Agency |
| ILO | International Labour Organisation |
| NGO | Non-Governmental Organisation |
| REE | Rare Earth Elements |

1 Introduction

1.1 Sustainability and the Rise of Green Extractivism

In recent years, mainstream sustainability discourses have shifted towards portraying the mining of raw materials as an essential pillar of the green transition, necessary to mitigate the climate crisis (Dorn et al., 2022; Voskoboynik & Andreucci, 2022). Labelled as 'green extractivism', this shift reproduces technocratic notions of prosperity, long connected to extractive industries like oil and gas, yet now framed as compatible and necessary to 'sustainable development' (Voskoboynik & Andreucci, 2022). However, the destructive impacts extractivist practices can generate for both people and the environment are mostly neglected or only superficially touched on in mainstream policies on sustainability transformations (Bruna, 2022; Grossmann et al., 2022).

In Europe, scholars and local communities are witnessing a rise in extractivist projects (del Mármol & Vaccaro, 2020; Riofrancos, 2022). In its proposal for a 2023 EU Critical Raw Materials Act (CRMA), the European Commission (EC) has now put onshore mining within the territory of the European Union (EU) back on the agenda, to ensure "secure and sustainable supply chains for EU's green and digital future" (European Commission, 2023a). Through targets for EU domestic extraction, refining, and recycling, the Commission seeks to establish a regulation that diversifies supply chains and reduces dependencies, while simultaneously securing the raw materials required for a green and digital transition (European Commission, 2023a).

Although often mentioned, local communities' perception of sustainability transformation and participatory approaches are at risk of being inadequately considered. Social dimensions are often neglected or not focused on in environmental policy-making (Pye et al., 2008). Scholars, particularly in Latin America, have shown how little local communities are involved despite the high risk of environmental degradation and increased social inequalities that mining activities associated with the green transition pose for them (Camacho-Garza et al., 2022; Liu & Agusdinata, 2020; Owen et al., 2023). At present, few democratic tools for securing resource access exist and big corporations are often winners of an intensified resource rush (Alonso-Fradejas, 2021).

There is a gap in research on European raw material policy from an environmental justice perspective. In past decades, research on the expansion of green resource frontiers has been very focused on Latin America and China, and it is only in recent years that the focus on European context has started to increase (del Mármol & Vaccaro, 2020; Riofrancos, 2022) Further, there is a need to consider environmental justice dimensions of sustainability transformations, to assess local impacts of and perceptions

on political actions associated with large socio-technical transformations (Araújo et al., 2022). This thesis attempts to respond to these gaps in research and elucidate the environmental justice dimension for local communities in the EU within the 2023 EU Critical Raw Materials Act.

1.2 Research Aim, Purpose, and Research Questions

The purpose of this thesis is to elucidate environmental justice implications for local communities from the proposed expansion of extractive activities within the EU. It does so by examining policy processes connected to the European Commission's (EC) proposal for a 2023 EU Critical Raw Materials Act. Through contrasting dominant policy narratives with counter-discourses from an environmental justice perspective, my objective is to provide a deeper understanding of current EU critical raw material policy developments with regard to distribution, recognition, and participation. To this end, I apply two integrated post-structuralist analyses.

A Narrative policy analysis aimed at answering the RQ:

- What dominant policy narratives are employed within the European Commission's proposal for an EU Critical Raw Materials Act?

An Environmental justice counter-discourse analysis aimed at answering the RQ:

- What counter-discourses with respect to distributive, recognitional, and procedural justice for local communities are employed in the policy process that led to the Commission's proposal for an EU Critical Raw Materials Act?

From this, I discuss tensions exposed in the dominant policy narratives by observing it through the environmental justice counter-discourses raised and elaborate on implications that can inform more precise critiques of green extractivism within the case.

Data considered for the analysis include official EU policies and documents: the proposal for a 2023 EU Critical Raw Material Act, alongside its preceding public consultation process. Through this process, circulating proposals, statements, reports, and documents by a multitude of actors, e.g., non-governmental organisations (NGO), civil society and corporations, were derived.

1.3 Contributions to Sustainability Science and Action

My research contributes to sustainability science in two ways.

First, through a case study at the scale of EU policy processes that expands our understanding of the interplay between nature and society (Clark & Dickson, 2003), in my case natural resource extraction and its environmental justice implications for local communities in a European context. Through my

research, I expose tensions regarding the inclusion of local communities in the dominant policy narratives by observing it through the environmental justice counter-discourses raised. I thereby contribute to a critical analysis of simplified, technocratic dominant policy narratives in EU raw material policy-making and give a voice to the counter-discourses that inform a more precise critique of green extractivism within the case.

Second, it also contributes to the field's goals of linking knowledge to action (Miller, 2013) by using policy narrative theory to explain the phenomenon of rising extractivist activities outlined in the CRMA. By juxtaposing this with environmental justice theory and counter-discourses, my research enables the identification of factors argued to be essential for ensuring a just sustainability transformation in the context of the EU's critical raw material policy processes. More specifically, I point to argumentative tensions and patterns whose improvement could be beneficial for environmental justice and avoid increasing mining conflicts and marginalization in Europe. In doing so the outcomes of my research within the field of sustainability science can help those at the forefront of fighting for more just resource policies to open a space for a more democratic, citizen-informed and green transformation agenda rooted in environmental justice principles (Miller, 2013).

1.4 Thesis Outline

In what follows, I contextualise the topic of critical raw material resource governance in Europe and elaborate on current resource governance schemes. I then continue to present my theoretical framing in chapter 3, alongside my methods in chapter 4. In chapter 5, I present the findings of my thesis, and continue to discuss them in chapter 6. In chapter 7, I conclude by summarising my main findings and embark on ideas for further research.

2 The EU's 2023 Critical Raw Materials Act

2.1 Why Onshore Extractive Activities in the European Union?

To respond to the climate crisis, the EU puts electrification as means for decarbonization at the centre (European Commission, 2018; Tagliapietra & Veugelers, 2021). Current efforts to undergo a transformation are centred on innovation and the replacement of climate- and environmentally-damaging technologies with low-carbon alternatives; promoting technological-economic ideas of transformation (Kreienkamp et al., 2022; Olsson et al., 2021). To respond to calls for innovation and green transformation, a drastic surge in demand for raw materials is projected (Ayuk et al., 2020; LKAB, 2023; Rietveld et al., 2022). The latest EU Foresight Study highlights the "unprecedented increase in material demand", especially in the electric mobility sector (Carrara et al., 2023, p. 8). Further, current scenarios¹ by the International Energy Agency (IEA) assume that mineral demands for the production of battery storage and electric vehicle elements could increase between 10 to 30 times between 2020 and 2040 (IEA, 2022).

The EU currently imports most of its critical raw minerals from countries outside Europe, e.g. 98% of the EU's rare earth elements (REE) are imported from China and 98% of borate is supplied by Turkey (European Commission, 2020). To counter these dependencies, recent political developments indicate a shift within Europe and the United States, where governments seek to make onshore mining and local green technology supply chains more attractive (Riofrancos, 2022; Zimmermann, 2022). This began in 2008, when EU policymakers started to emphasise the risk of external dependence and indispensability of raw materials for development (European Commission, 2008) and continues in 2022 with the "plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition" (European Commission, 2022b). Riofrancos (2022) critiques these developments as the 'security-sustainability nexus', where lithium mining within Europe is depicted as a pathway to greater supply chain security and sustainability while in reality creating alignment between corporate interests and environmental policies.

The rise of European onshore mining materialises into an increase in mining explorations and permit processes to expand resource frontiers, e.g. for lithium in northern Portugal (Dunlap & Riquito, 2023), for rare earth elements in Sweden or for nickel in Finland (Kivinen et al., 2020). As mining exploration

¹ This is the IEA's projection in its Sustainable Development Scenario (SDS), which is based on their assumptions of the pathway required to achieve the goals of the 2015 Paris Agreement. In the IEA's Stated Policies Scenario (STEPS) that is based on current policies and announcements, the mineral demand for battery storage and EV element would increase by 10 times until 2040 (IEA, 2022).

and permitting processes intensify in Europe, so do mining conflicts between governments/companies and opposing anti-extractivist local communities (Mononen et al., 2022; Zachrisson & Beland Lindahl, 2019). Figure 1 depicts an overview of EU critical raw mineral deposits and CRM mining conflicts registered in the Environmental Justice (EJ) Atlas as of 2023.

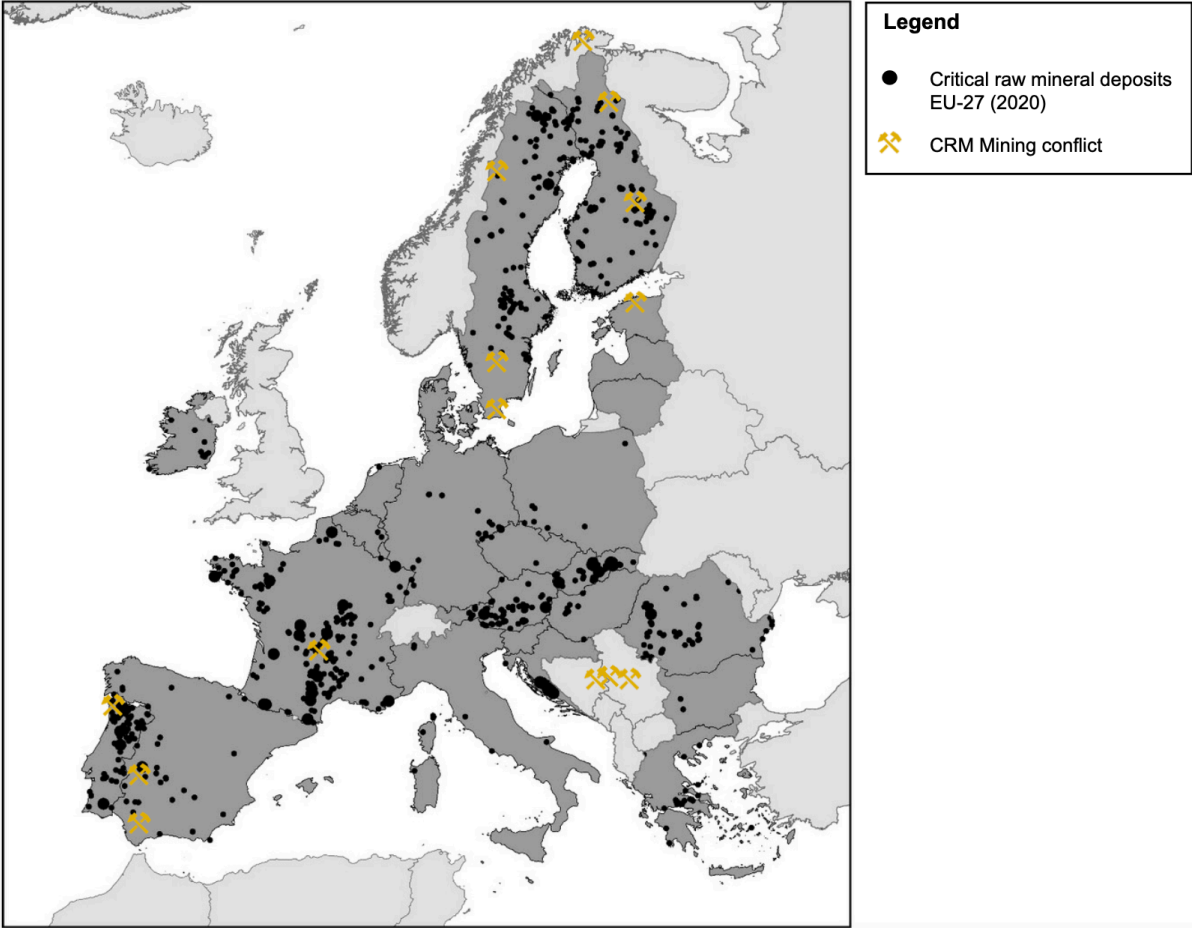


Figure 1. Map of EU critical raw mineral deposits EU-27, 2020 (Source: European Commission, 2020), own addition of CRM mining conflicts (Source: EJAtlas, 2023). These are conflicts that are registered in the EJAtlas and relate to materials the EC has included in its 5th assessment of CRM; also including materials like copper and nickel that are considered ‘strategic’ (European Commission, n.d.-a).

Opposition against mining and other extractive projects exist for different reasons. Local resistance and opposition often originates from fear of potential or the observation of actual destructive environmental impacts, as well as from poor participation and representation schemes for local communities, a lack of financial remuneration and distribution, and distrust towards mining corporations and the government (Conde, 2017; Conde & Le Billon, 2017; Kivinen et al., 2020). An inclusion of critical voices and diverse opinions in policy processes is beneficial as “mining resistance grows at the national level when the state offers little or no real access nor influence to mining-sceptical actors in either policy formulation or implementation” (Zachrisson & Beland Lindahl, 2019, p. 10).

2.2 Setting the Stage for the EU Critical Raw Materials Act

In her State of the Union in September 2022, European Commission (EC) President Ursula von der Leyen announced a new ‘European Critical Raw Materials Act’ would be established, pinpointing to the geopolitical importance of critical raw materials² (CRM), as they “will soon be more important than oil and gas” (European Commission, 2022c, p. 1). In March 2023, the Commission published the first proposal of the Act. It intends to cover different areas which include a focus on supply chain resilience, circularity, diversification of imports and the creation of a network of European agencies (European Commission, 2022c, 2023a).

To reduce import dependencies and projected high raw material demands, parts of the Act stipulate increasing attention toward European resource sovereignty. Targets proposed to enhance sovereignty include that at the minimum 10% of the EU’s consumption for extraction, 40% of the EU’s consumption for processing, and 15% of the EU’s consumption for recycling (per year) should stem from domestic capacities. Furthermore, the Act seeks to reduce permitting bureaucracies and durations for strategic projects. For these, a reduction of the permit time to 24 months, for extraction projects, and 12, for recycling and processing projects, is intended. In addition, Member States are expected to create their own national schemes to explore geological reserves and available resources (European Commission, 2023a, 2023b).

The adoption of the Commission’s proposal is accompanied by public consultation processes to include stakeholders from a broad range and different backgrounds. The public had possibilities to give feedback on the initiative during the first public consultation period from September to November 2022 (European Commission, 2022d). During that period, 308 stakeholders from different backgrounds responded to the planned proposal. These included actors from companies, business associations, non-governmental organisations (NGO), public authorities, research and academic institutes, and citizens. The majority of responses were submitted by business associations (25.32%) and companies (21.4%), followed by EU citizens (17.5%) and non-governmental organisations (15.9%) (European Commission, 2022a). The higher proportion of corporate and corporate-related stakeholders in the consultation, compared to civil society raises questions about who the Commission is reaching and to what extent. As a report by the European Court of Auditors (2019) shows, the “Commission’s framework for public consultations is of a high standard, but [...] outreach activities need improvement” (p. 4).

² Here the understanding of the European Commission is applied which defines critical raw materials as those raw materials that are “of high importance to the EU economy and of high risk associated with their supply.” (European Commission, n.d.-a)

After considering the first feedback round, the adoption of the Action Plan by the EU Commission was released on March 16, 2023. At the moment of submission, the second feedback round is held, which is open from 20 March to 16 June 2023 (European Commission, 2022d). After consideration of the second feedback round, the legislative proposal will be submitted to the European Parliament and the European Council, where it can be adopted, amended, or rejected (European Council, 2023). This means that there are still some possibilities to respond to the first proposal in the second round of consultations. Figure 2 presents an overview of the policy process.



Figure 2. Timeline of the Process around the EU Commissions' adoption of the 2023 EU Critical Raw Materials Act, own depiction (Source: European Commission, 2022d)

2.3 Opportunities to Influence Extractive Activities: the ‘local’ and the ‘EU’

Different means exist for communities and citizens to (1) have a say in extractive activities and to (2) advance ‘the local’ in EU legislation.

First, different EU legislation and international conventions stipulate possibilities for ‘the local’ in Europe to have a say in extractive activities. These are shortly introduced since some of the regulations and mechanisms mentioned are continuously referred to by the different stakeholders within the results section.

The possibilities for local communities to influence extractive projects differ from Member State to Member State. This is because, in Europe, Member States are fully responsible for mining legislation, resource management and permitting processes as “raw materials are generally considered to be national natural assets” (Mononen et al., 2022, p. 26). Permit systems within the Member States are in place to ensure that extractive activities do not harm people or the environment. Yet to ensure a homogeneous approach, these permit systems are subject to EU and international legislation (Mononen et al., 2022).

The foundational EU legislation that enhances EU local citizens' abilities' to have a say in extractive projects is the 2007 Treaty of Lisbon (Treaty on the Functioning of the EU – TFEU) that stipulates a general citizens' right to participation³(Alemanno, 2022). In practice, however, there is often little distinction between participation and consultation (Krämer, 2020). Based on the TFEU, local communities can have a say in extractive activities through the EU Environmental Impact Directive⁴, which mandates Member States to enable public participation (consultations) by conducting Environmental Impact Assessments (EIA). This can provide an instrument to make local communities' voices and concerns heard (Mononen et al., 2022). Yet, critics voice their concerns to what extent this mechanism is sufficiently far-reaching, since only consultations are required (Bolger et al., 2021).

Additional means to have a say in extractive activities, through ILO169, can be exercised by 'the local' when extractive projects are located on lands of indigenous peoples. To date, four EU Member States have ratified the 1989 ILO Convention 169 (IWGIA, 2021). This Convention makes the recognition of Indigenous people's rights to self-determination within National States legally binding. Regarding participation, the Convention mandates states to adhere to the principle of 'free, prior and informed consent' (FPIC) (ILO, 1989). Yet out of the four European countries where Indigenous Saami live, only Norway has ratified ILO 169 (Gaia Amazonas, 2019).

Next to these, bottom-up approaches can be exercised by 'the local' to advance policy processes and stipulate amendments of existing EU legislation.

There are different ways for local community associations, NGOs, and civil society actors to stipulate the advancement of ongoing policy processes. Through engagement in EU public participation processes, they can partake in shaping ongoing policy processes, to e.g., demand other mechanisms than those proposed. In addition, civil society actors can assert their interests vis-à-vis Members of the European Parliament (lobbying) who review and amend legislative proposals and play an important factor in decision-making processes. Opportunities for this include committee's public hearings or participation in group activities of Members of the European Parliament (European Parliament, n.d.).

In addition, the 'local' can formulate invitations to the EC to propose new European legislation through the 'right of initiative'. This right can either be exercised indirectly through the European Parliament

³ More specifically, this is described in Article 10 (3) as "Every citizen shall have the right to participate in the democratic life of the Union. Decisions shall be taken as openly and as closely as possible to the citizen" and Article 11 (1-3) (European Union, 2007).

⁴ The EU Environmental Impact Directive mandates Member States to ensure that extractive projects that can potentially impact people and the environment have received consent for development and a prior extensive assessment of all risks (Mononen et al., 2022).

or directly by citizens themselves (European Commission, n.d.-b). For the latter, citizens have to successfully gather 1 million signatures in an 'European Citizens' Initiative' which mandates the Commission' to consider proposing a legislation (European Union, n.d.).

3 Theoretical Framework

3.1 Post-structuralist Power Perspectives

In political ecology different perspectives on power and its execution prevail. Svarstad et al. (2018) propose three different theoretical power perspectives: 'actor-oriented', 'neo-marxist' and 'post-structuralist' power dimensions. This work focuses on the policy narratives that dominate current EU resource governance and the counter-discourses that challenge them from an environmental justice perspective. Therefore, the dimension of discursive power within post-structuralist power theory is considered in depth.

In post-structuralist traditions, a discourse is defined as a "socially shared perspective on a topic", and "discursive power" is exerted when different actors, e.g. governments, private corporations or non-governmental organisations create such discourses and evoke their reproduction" (Svarstad et al., 2018, p. 356). Discursive power is often examined through policy narrative and discourse analysis to highlight how the adoption of discourses and narratives serves to advance the interests of actors and thereby yield power (Svarstad et al., 2018). In post-structuralism knowledge within modernity is understood as "contextual, partial and fragmentary" (Fox, 2014, p. 1), thus also a non-neutral and formative force of power relations between groups and individuals (Fox, 2014).

An analysis of policy narratives and counter-discourses from a post-structuralist viewpoint is beneficial as it allows for critical scrutiny of policies. It does not follow the 'conventional view' and rational choice theory approach to policy analysis, where political decision-making is considered "a linear process in which rational decisions are taken by those with authority and responsibility for a particular policy area" (Leach et al., 2010, p. 127). Instead, it acknowledges the messiness and unstructuredness of policies to consider knowledge with respect to hidden structures, socio-political constraints and the contested nature of environmental problems (Daviter, 2019; Keeley & Scoones, 2003; Morgan et al., 1999). By questioning whether policies are inherently designed to solve an environmental problem, alternative policy analysis aims to understand its underlying implications, incorporate interpretative and fragmented knowledge that allows for greater reflexivity and grasping of the non-linear nature of policy-making; the changes a policy implies (Bacci, 2009; Daviter, 2019; Morgan et al., 1999). As such, a post-structuralist analysis offers the potential to question and de-construct, "modern technocratic

policy analysis” (Lester, 1996, p. 657). This makes it a useful tool to highlight marginalised voices within political processes (Lester, 1996).

A common critique of Foucauldian understanding of discourse is its neglect of human agency, where people are portrayed as being subject to discourses, and not as acting subjects that are in charge of their own knowledge production and agents of change (Svarstad, 2002). To respond to this critique, I consider how actors actively challenge the dominant policy narratives rooted in discourse – recognizing their human agency – by looking for counter-discourses from an environmental justice perspective, while being cognizant of the hidden structures that shape these counter-discourses (see 5.2 and 6.2).

In what follows, I specifically consider the theory relevant to perform an analysis of 1) the dominant policy narratives and 2) its environmental justice counter-discourses.

3.2 Analysis 1: Narratives and Policy Narrative Analysis

To answer my first research question, the theory of discursive power exercised through the adoption of dominant policy narratives will be in focus.

Policy narratives are characterised by having a clear start, middle and end; to depict particular developments or events, convey a certain meaning of the world and thereby influence political decision-making (Leach et al., 2010). Narratives often follow a stringent problem-cause-solution logic, in which a problem is presented, its causes are explained, and clear solutions are derived (see e.g., Hajdu & Fischer, 2016, on degradation narratives). One common feature of policy stories or narratives is its frequent simplification of complex situations and political processes (Roe, 1994; Roe, 1991). In light of contradicting evidence, they often continue to “underwrite and stabilize the assumptions for decision-making in the face of high uncertainty, complexity and polarization” (Roe, 1994, p. 2). As such, they are appealing to policy-makers as they allow for quick and easy fixes rooted in established discourses through which popularity and widespread support can be gained (Leach et al., 2010).

In narrative analysis, Emery Roe (1994; 1991) has been a source of inspiration for many on how to use narratives to examine environmental issues and tensions (see e.g. Hajdu & Fischer, 2016; Leach et al., 2010). According to Roe’s policy narrative analysis the dominant narrative or story forms the underlying basis and stabilisation for political decision-making, and is marked by a clear string of explanation of the problem and cause for which a solution (policy intervention) is required (Lester, 1996; Roe, 1994). If there is a dominant narrative, counter-narratives, stories or scenarios emerge that position themselves contrary to the dominating storyline, to evoke resistance (Gasper & Apthorpe, 1996; Hampton, 2009; Roe, 1994). In Roe’s understanding, counter-scenarios seek to contrast the dominating storyline by illuminating reasons for policy failures to establish “the precondition for successful

new programs” (Roe, 1995, p. 1067). However, recognizing the overlap between the conceptualisations of narratives and discourses (Fischer, 2003), I do not seek to examine the specific contrasting narratives that actors put forward as explanation for program failures and preconditions for new programs. Instead, I seek to examine the broader environmental justice counter-discourses that emerge in the policy process to discuss tensions regarding environmental justice exposed in the dominant policy narratives. In doing so, I inform a discussion beyond the problem-cause-solution chain of the dominant policy narratives.

3.3 Analysis 2: Counter-Discourses of Environmental Justice

To answer my second research question, the theory of environmental justice is used to analyse the counter-discourses.

Here, the concept of counter-discourses are understood more as offering patterns to examine the emergence of alternative perspectives, worldviews and knowledge with respect to change-making (Maillot & Bruen, 2018; Wang, 2016). As such they intend to “represent the world differently” (Terdiman, 1985, p. 149) that goes beyond a contradiction of the dominant (Wang, 2016). This enables moving past how counter-narratives position themselves against the dominating storyline and allows for a consideration of the broader body of knowledge that is rooted in and emerges from the dominant policy narratives. Here, my analysis combines environmental justice theory with the concept of counter-discourses. This enables a focused consideration of how the environmental justice perspective of local communities is established within the policy process of the CRMA.

The term environmental justice (EJ) emerged in the 1980s when African American communities resisted and protested against a toxic waste dump in the US; linking environmental pollution to racial discrimination (Walker, 2011). Since then, research in the discipline has evolved, to encompass a diverse range of disciplines, theories, and methodologies (Holifield et al., 2018). The term has also grown to include a wide range of substantive problems and struggles, and takes on descriptive, normative or political stances (Walker, 2011). My thesis specifically relates to Schlosberg’s theory of environmental justice (2003, 2004) and its elaboration of three interrelated, overlapping dimensions of environmental justice: 'distributive justice', 'recognitional justice' and 'procedural justice', which I apply in my analysis of counter-discourses.

Distributive justice refers to how environmental risks are distributed (Schlosberg, 2003, 2004). It is, amongst others, but mainly, based on John Rawl’s notion of justice, in which justice is perceived as “appropriate division of social advantages” (Rawls, 1971, p. 10). The assessment of distributive justice focuses on socio-economic factors, and often calls for redistribution or equity to achieve greater

distributive justice (Schlosberg, 2003). For Schlosberg (2004) evidence of environmental injustice was found in unequally distributed levels of environmental pollution for indigenous, marginalised or communities of colour.

Recognitional justice calls to recognize different identities, cultures and ways of thinking within institutional but also cultural and social spheres (Schlosberg, 2004). By striving for the “recognition of the diversity of the participants and experiences in affected communities” (Schlosberg, 2004, p. 517), the underlying structures that have evoked unjust distribution in the first place are attempted to be considered and resurrected. Critical thinkers like Iris Young point to the underlying structural, cultural and social conditions of inequitable distribution (Schlosberg, 2004) and find that justice requires an acknowledgment and recognition of group differences (Young, 1990). Here, Young notes that “part of the reason for unjust distribution is a lack of recognition of group difference” (Schlosberg, 2004, p. 519). Like Young, Nancy Fraser points to justice necessitating both recognition and distribution; a need to discover the ‘why’ of injustice (Schlosberg, 2004). However, Fraser calls for a more differentiated view of group difference to ensure that only “those versions of the politics of difference that coherently synergize with the politics of redistribution” are identified and defended (Fraser, 1995, p. 180). Schlosberg (2004) acknowledges these different approaches and argues to recognize cultural identity within a threefold justice conception.

Procedural justice refers to calls for participation and involvement of people in decision-making processes (Schlosberg, 2004). This dimension conceptualises justice as a ‘process’ and is often seen vital to “achieve both distributional equity and political recognition” (Schlosberg, 2003, p. 84). A direct link between procedural and recognition justice is found in the lack of recognition which often translates into a reduction of a person's participation. Therefore, conceptualisations of justice should also consider the types and conditions of political processes so that both unequal distribution and the underlying conditions that lead to a lack of recognition can be challenged and addressed (Schlosberg, 2004). Examples of procedural justice can be found in calls for greater community participation, institutionalisation of diverse, public participation and recognition of community knowledge (Schlosberg, 2004).

4 Methods

The selected research design aims to help answer the RQs. Through a post-structuralist narrative policy analysis, dominant policy narratives employed in the EU 2023 Critical Raw Material Act are identified. Through a counter-discourse analysis, with specific respect to the environmental justice dimensions, the counter-discourses employed by other actors in the policy process connected to the EU 2023 Critical Raw Materials Act are identified. This facilitates an in-depth understanding of the specific context of environmental justice within EU (critical) raw materials legislation and thereby aids to explore the under-researched context of increasing EU extractive activities.

4.1 Data Selection and Collection

I selected two different data sets for my two analyses:

First, to analyse the dominant policy narrative, the EU 2023 Critical Raw Materials Act serves as main document source. Published on 16 March 2023, the proposed regulation is the EC's most recent publication on critical raw materials (European Commission, 2023b). It was chosen as it is relevant to indicate the reasoning and dominant policy narratives employed to justify raw material decision-making and policies. The Annexes of the proposed regulation are not considered.

Second, the data for analysis of the counter-discourses was selected from the public consultation process the EU Commission held between September and November 2022 as part of the preparations of the EU Raw Materials Act. Since there were more than 300 potential documents to be analysed from this consultation process, selection criteria were developed to help identify the relevant documents. As there is an uneven ratio between the different types of respondents⁵ and not all documents are of relevance to my analysis, I decided against a sample of x documents per actor group. This prevents amplification of an uneven distribution of the voices heard and enables a more targeted analysis. Therefore, three criteria had to be fulfilled to be included in the selection process. These are:

- (1) Word count: minimum word count of 500 to avoid documents that lack depth and only touch the topic superficially.
- (2) Relevance for analysis: to ensure that the respective document is relevant for an analysis of the counter-discourse, one or more of the following keywords must appear in the text: community/communities, civil society, justice, participation, social licence, consent, indigenous, inclusion.

⁵ approx. 50 % of feedback stems from businesses or business associations, while NGOs and civil society make up only 30 % (see 2.2) (European Commission, 2022a).

- (3) Reference to European context: some reference to European context or the CRMA to avoid an inclusion of out-of-context documents. One example for such an out-of-context document would be feedback regarding extractive activities in Canada.

In a first step, I excluded 2 out of the 310 feedback documents that were submitted during the first public consultation round since they did not fulfil the feedback rules of the EC. I then proceeded to scan the documents according to criteria (1) and (2). This resulted in a total of 89 relevant documents. In a third step, I removed all the 'double' documents, where different actors submitted the same response multiple times. This resulted in a total of 66 documents. In a fourth step, I removed all documents that were not relevant to the European context or where the selection criterion (2) was only touched on so briefly that no further analysis could be carried out. This resulted in a total of 45 documents that were selected to analyse the counter-discourses. See Appendix 1 for an overview of the selected documents and the corresponding type of actor.

The data selected from this process was collected by downloading the respective documents from the EU Commissions official publication website and the Commissions' feedback forum 'Have your Say'. No document was excluded because of language requirements. Four non-English documents were translated using the online translation 'DeepL' and a copy of the translation is provided next to the original document. Note that through this process, some translation errors might have occurred.

The selected documents represent a broad actor stage that range from public authorities and governments to businesses/companies and business associations to non-governmental organisations and EU citizens. This is the categorization that is applied in the EU's public consultation forum 'Have your Say'.

Supplementary information was retrieved to build knowledge on the legislative process, identify relevant documents and understand the implications between the EU policy level and local extractive conflicts. These include interviews and the attendance of events to learn about interlinkages and relevant data sets (see Appendix 2). However, this information was not included directly in the analysis.

4.2 Data Analysis and Coding

The first dataset was analysed through a policy narrative analysis. Here, the EC proposal for a 2023 EU Critical Raw Materials Act was scanned for recurring themes and patterns according to the problem-cause-solution chain.

The second dataset was analysed through an environmental justice counter-discourse analysis. Here, the selected 45 feedback documents of the Commissions' public consultation were scanned for

recurring themes and patterns according to the three justice dimensions (distribution, recognition, procedural) to situate the counter-discourses with regards to local communities.

Using the qualitative data analysis tool 'NVivo', both datasets were scanned to code statements in accordance with the aforementioned categories, so that specific themes that repeatedly occurred within the data sets could be identified. From these codes, relevant themes, i.e., policy narratives and discursive patterns, were identified. To ensure depth and insight, the data sets were worked through multiple times, until a data saturation point was reached (Bowen, 2008).

After a first coding round, a coding table was derived and used to develop corresponding themes in the second coding round (see Table 1 and 2). The codes are connected to the theoretical framework. Within these, reoccurring patterns were identified, and specific themes derived. A comprehensive overview of the coding schemes and themes can be found in Appendix 4 and 5.

Table 1. Coding Table for Analysis of Dominant Policy Narratives, for an overview of all codes see Appendix 4.

| Code | Theme | Quote |
|--|--|---|
| The code corresponds to the theoretical framework, e.g. 'cause' of the dominant policy narratives' 'problem-cause-solution chain'. | The theme describes a reoccurring topic within the respective code, e.g. 'rising demand for critical raw materials' in the code 'cause'. | The quote describes the corresponding part of the text that was derived to represent the respective code and theme. |

Table 2. Coding Table for Analysis of the Counter-Discourses, for an overview of all codes see Appendix 5.

| Code | Theme | Quote |
|--|---|---|
| The code corresponds to the theoretical framework discussed in section 3.2, e.g. 'distributive justice'. | The theme describes a reoccurring topic within the respective code, e.g. 'grant distributive benefits'. | The quote describes the corresponding part of the text that was derived to represent the respective code and theme. |

5 Analysis and Results

In this chapter the main results are presented, and the research questions answered. In total, 46 documents were reviewed for the analysis of the dominant policy narratives and counter-discourses.

5.1 Analysis 1: Dominant Policy Narratives

RQ1: What dominant policy narratives are employed within the European Commissions’ proposal for an EU Critical Raw Materials Act?

The **Critical Raw Material Act** (released March 16, 2023) serves as a starting point for the analysis and is used to identify the dominant policy narratives (European Commission, 2023b). The policy narrative analysis conducted reveals multiple dominant policy narratives that are applied in the Act and that move along a ‘problem-cause-solution’ chain.

First, the reoccurring problem-cause-solution argumentations posed in the regulation with respect to onshoring extractive activities are compiled to identify the “dominant discursive construction of the problem, its causes and solutions” (Hajdu & Fischer, 2016, p. 542). A summary of these can be found in Figure 3.

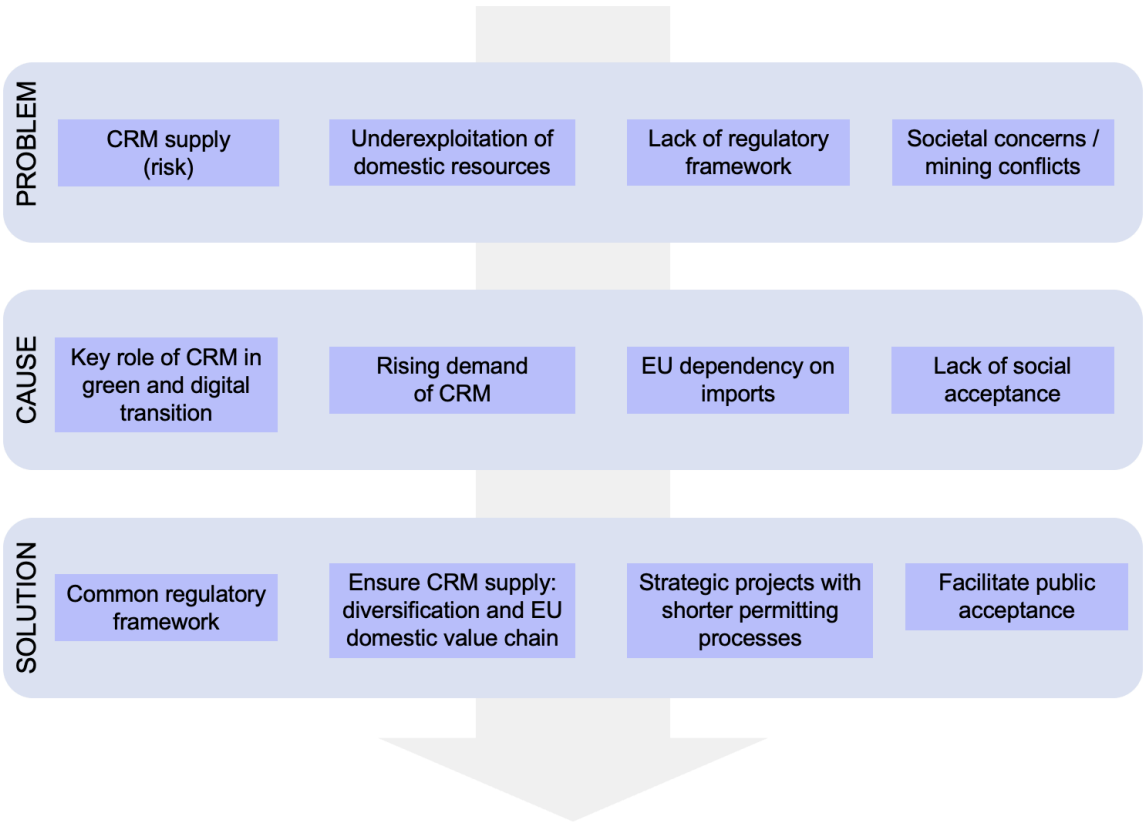


Figure 3. Summary of the Identified Problem-Cause-Solution Chain within the Critical Raw Materials Act (own depiction)

5.1.1 Problems

Regarding the **problems** the CRMA intends to solve, four reoccurring topics become apparent: (1) the supply risk of CRM, (2) the under exploitation of domestic resource extraction, processing, and recycling in the EU, (3) a lack in common regulatory and legislative incentives and (4) mining conflicts.

The problem of (1) *supply risk of CRM* forms the basis for establishing the regulation and is argued to be an issue in multiple ways. As “critical raw materials are often indispensable inputs for a wide set of strategic sectors” (European Commission, 2023b, p. 1) their supply is considered essential for purposes of security, sustainability, digitalisation and the functioning of the EU economy. The regulation conveys that without a supply of CRM, problems for the digital and green transition could arise as less critical raw materials are available to produce the relevant goods. Another issue of supply risk is argued in the realm of security. Here, the EC points to supply risks from rising geopolitical tensions and competitions. Statements like “the risk of supply disruptions is increasing against the background of rising geopolitical tensions and resource competition” (p. 1) and “ensuring the security of supply of strategic raw materials is of crucial importance for [...] the resilience of the defence and space sectors” (p. 5), corroborate this finding.

Further, intertwined with the problem of supply risk, the proposal frames the current (2) *underexploitation of domestic resources (for extraction, recycling, and processing)* as problematic. It points that “the EU's potential to increase its extraction, processing or recycling capacities remains underexploited” (European Commission, 2023b, p. 2). This issue is presented to be connected to a lack in knowledge of mineral deposits for CRM, alongside social and regulatory barriers; intertwined with problem (3) and (4).

Related to the under exploitation of domestic extractive resources, the EC highlights the problem of (3) *mining conflicts and societal concerns* regarding extractive projects in Europe. This is reflected in statements like “land use conflicts can create barriers to the deployment of critical raw material projects” (European Commission, 2023a, p. 8) or “nongovernmental organisations (NGOs) and citizens expressed concerns about the environmental and social impacts of extraction and processing projects that lack appropriate environmental and social safeguards” (European Commission, 2023a, p. 9).

Another problem is ascribed to (4) *the lack in legislative or regulatory incentives* that unify EU Member States approaches’ and facilitate a secure supply of critical raw materials. The Commission asserts that “at present, there is no regulatory framework aimed at structurally reducing supply risks across the range of critical raw materials” (European Commission, 2023a, p. 2) which again is depicted to cause issues for CRM supply and the onshoring of extractive activities.

5.1.2 Causes

Multiple underlying **causes** are depicted to establish the problems portrayed in the Act. These include (1) the EUs' rising demand for critical raw materials, (2) the key role of critical raw materials in the green and digital transition (3) the EUs' dependency on imports for critical raw materials and (4) the lack of social acceptance for onshoring extractive activities.

Regarding (1) *the rising demand for critical raw materials*, the EC points to the essentiality of raw minerals like lithium or cobalt to produce batteries, manufacture electric vehicles and renewable energy parts. It states that "global demand for the lithium used to manufacture batteries for mobility and energy storage is expected to increase of up to 89-fold by 2050" (European Commission, 2023b, p. 1) and that "presently, current and planned capacities risk not meeting more than 50 % of the projected demand for cobalt and future demand increase for rare earths is expected to outpace growth in capacities" (p. 1). This rising (worldwide) demand is perceived as cause for fuelling competition for CRM and contributing to an increased supply risks (see 5.1.1).

Moreover, intertwined with the cause of rising demand, is (2) *the central role ascribed to CRM for the green and digital transition*. Here the EC puts CRM in the centre of the EU markets' functioning and points to their necessity in decarbonization and digitalisation but also defence and space application. This becomes apparent in statements like "access to raw materials is essential for the Union economy and the functioning of the internal market" or "given the key role of many such critical raw materials in realising the green and digital transitions, and in light of their use for defence and space applications" (European Commission, 2023b, p. 1).

Further, the Commission highlights (3) *the EU's current high dependency on imports for CRM* and the high concentration of singular supplying countries for certain CRM. It states that "the EU currently relies almost exclusively on imports for many of these raw materials; more importantly, within these imports, suppliers are highly concentrated, and the main suppliers are in many cases exposed to significant environmental, social and governance risks" (European Commission, 2023a, p. 63). One example for this dependency is China, where "the supply share [...] is above 90%, [...] for light rare earths" (European Commission, 2023a, p. 63). This dependency is what is perceived as contributing to the issue of supply risks, and to a current externalisation of mining resulting in an underexploitation of domestic resources (see 5.1.1).

As cause for mining conflicts and societal concerns, the Commission points to (4) *a lack in public acceptance*, which is deemed "crucial for [...] effective implementation" of extractive activities (European Commission, 2023a, p. 5). This is further reflected by statements like "the lack of public acceptance as

well as potential environmental concerns are major impediments to the development of critical raw materials projects.” (p. 2) and is also linked to an underexploitation of domestic resources (see 5.1.1)

5.1.3 Solutions

To tackle these problems and underlying causes, the EU Commission proposes different **solutions** in its Act that are intended to (1) create a common regulatory framework, (2) ensure CRM supply through diversification and domestic EU value chains, (3) enhance the selection of strategic projects and (4) facilitate public acceptance.

To tackle the problem of a lacking legislative and regulatory incentive, the Commission proposes the EU Critical Raw Materials Act as (1) *common regulatory framework* that intends to safeguard the EU’s internal market, develop EU domestic CRM value chains, improve capacities for monitoring, and adopt certification schemes to assess the sustainability of CRM. The Commission aims for the framework to “ensure the Union’s access to a secure and sustainable supply of critical raw materials” (European Commission, 2023a, p. 17) and to introduce “a new policy framework with regard to attracting investment and developing a critical raw materials value chain in the Union” (p. 66).

To counter the dependency on imports and prevent potential supply disruptions, measures, and specific targets to (2) *ensure supply through diversification and stronger domestic capacities along the CRM value chain* are proposed within the regulatory framework. To diversify the EU’s imports, the Commission proposes a target of reducing the supply dependency on one single country to 65% or less by 2030. To strengthen the domestic CRM value chain by 2030, the following targets are proposed to be achieved: a domestic extraction capacity of at least 10%, a processing capacity of at least 40% and a recycling capacity of at least 15% of the EU’s annual consumption of CRM (European Commission, 2023b).

To foster the implementation of solution (2), proposed measures in solution (3) intend to support the process of diversification through *the selection of strategic projects* that have significantly shorter and streamlined permitting processes. As such they are proposed to be considered with priority status and as being in the public interest. The Commission asserts a reduced timeline for permit processes of strategic projects of “(a) 24 months for Strategic Projects involving extraction; (b) 12 months for Strategic Projects only involving processing or recycling” (European Commission, 2023a, p. 28).

To (4) *facilitate public acceptance* the EC proposals depicts solutions that range from engagement and consultations to information and awareness campaigns, alongside mitigating and compensating mechanisms. This is reflected in statements such as “ensure engagement in good faith as well as comprehensive and meaningful consultations with local communities, including with indigenous peoples”

(European Commission, 2023b, p. 4) or “measures to facilitate public acceptance including, where appropriate, the establishment of recurrent communication channels with the local communities and organisations, including social partners, the implementation of awareness-raising and information campaigns and the establishment of mitigation and compensation mechanisms” (p. 5).

5.1.4 Dominant Policy Narratives

Based on these identified problems, causes and solutions, three intertwined dominant policy narratives can be derived: (1) a mining-for-sustainability narrative, (2) a mining-for-security narrative and (3) a public-acceptance-for-mining narrative. This enables an understanding of the central discursive reasoning within the CRMA with respect to the onshoring of extractive activities.

The (1) mining-for-sustainability dominant narrative identified refers to the EC emphasis regarding a lack in domestic extractive activities to tackle supply risks for CRM and their reference to CRM’s key role in the sustainability transition within the Act. The dominant policy narrative argues that extractive activities are required for a green transition and places emphasis on expanding the EU’s potential for domestic extractive activities (mining, but also processing, refining, and recycling) to ensure such a transition.

The (2) mining-for-security dominant narrative is reflected in the EC’s focus on ensuring greater domestic extractive capacities to respond to disruptions in supply chains, the EU dependency on imports and the rising global demand (and competition) for CRM. The dominant policy narrative argues that domestic extractive activities are required to enable security, stability and functioning of the EU market.

The (3) public-acceptance-for-mining narrative is reflected in the EC’s emphasis on public acceptance required to pursue domestic extractive activities. It argues that there is a need to foster such acceptance to avoid conflicts and respond to societal concerns through community engagement, public consultations, and campaigns to foster information and awareness and enable the onshoring of extractive activities.

A description of the three dominant policy narratives and the connected problem-cause-solution chain is outlined in Table 3.

Table 3. Overview of the identified dominant policy narratives within the EU Critical Raw Materials Act and the corresponding problem-cause-solution chain

| Dominant Policy Narrative | Description | Connected Problem-Cause-Solution Chain |
|----------------------------------|--|---|
| Mining-for-sustainability | The mining-for-sustainability narrative is reflected in the Commissions' emphasis on domestic mining (but also processing and recycling) to ensure materials for the green transition are available. | <p><i>Problem:</i> Supply risks, Underexploitation of domestic resources, Mining conflicts & societal concerns, Lack of regulatory framework</p> <p><i>Cause:</i> Key role of CRM in green and digital transition, rising demand of CRM, EU dependency on imports, Lack of social acceptance</p> <p><i>Solution:</i> Common regulatory framework, ensure CRM supply, strategic projects, Facilitate public acceptance</p> |
| Mining-for-security | The mining-for-security narrative is reflected in the Commissions' emphasis on domestic mining (but also processing and recycling) to secure CRM and prevent supply risks. | <p><i>Problem:</i> Supply risks, Underexploitation of domestic resources, Mining conflicts & societal concerns, Lack of regulatory framework</p> <p><i>Cause:</i> Key role of CRM in green transition, rising demand of CRM, EU dependency on imports, Lack of social acceptance</p> <p><i>Solution:</i> Common regulatory framework, ensure CRM supply, strategic projects, facilitate public acceptance</p> |
| Public-Acceptance-for-Mining | The public-acceptance-for-mining narrative is reflected in the Commissions' emphasis on fostering public acceptance of local communities to avoid mining conflicts and reduce societal concerns. Public consultations and information campaigns are proposed as mechanisms to ensure local compliance. | <p><i>Problem:</i> Mining conflicts & societal concerns</p> <p><i>Cause:</i> Lack of social acceptance</p> <p><i>Solution:</i> Facilitate public acceptance</p> |

5.2 Analysis 2: Counter-Discourses

RQ 2: What counter-discourses with respect to distributive, recognitional, and procedural justice for local communities are employed in the policy process that led to the Commission's proposal for an EU Critical Raw Materials Act?

In my analysis of the environmental justice counter-discourses I apply my theoretical conceptualisation of counter-discourses as discursive patterns that enable an alternative view on how actors actively challenge and perceive transformation. This is combined with environmental justice theory.

The **Public Consultation** between 30 September and 25 November 2022, conducted in preparation for the Commissions' first proposal of the Critical Raw Materials Act serves as source for this analysis and is used to identify the counter-discourses. The counter-discourse analysis conducted reveals multiple nuances that are adopted by the actors regarding justice implications. It is important to highlight that some discursive patterns identified reveal some level of alignment with the identified dominant policy narratives in 5.1. Implications of this are outlined in section 6.1. Despite the categorization I conducted, the trifold dimensions of justice are still interrelated and act in interplay with each other.

As elaborated on in section 2.2. and 4.1 the stakeholders that gave feedback on the initiative are from different backgrounds. In my analysis, I will not go into detail on what **kind of actor** advocates for what kind of engagement mechanisms. However, in what follows a tendency becomes apparent in which actors that advocate for stronger community participation, recognition and consent are often NGOs, research institutes and citizens. When referring to community engagement and development in the broader sense, the actor stage is more diverse and includes business associations, businesses and public authorities.

5.2.1 Distributive justice

Regarding the dimension of **distributive justice**, counter-discourses are identified that call for (1) greater distribution of benefits for local communities, (2) strengthening development, alongside (3) an avoidance of distributing the negative impacts. Table 4 provides an overview of the environmental justice counter-discourses identified, with respect to dimensions of distributive justice.

Table 4. Overview of the Identified Themes and Counter-Discourses Identified within the Code 'Distributive Justice'.

| Code | Theme | Argumentative Patterns of Counter-Discourses |
|----------------------|--|--|
| Distributive Justice | Distributive Benefits | Distribution of benefits for the public and local communities are proposed. Propositions include: <ul style="list-style-type: none"> • Benefits for local communities • Compensation for loss of territorial capital • Scheme to return value creation from extractives activities to local communities. • Production of beneficial by-products, e. g. renewable energy |
| | Development | Development (for local communities) in the broader sense is argued to be strengthened. Propositions include: <ul style="list-style-type: none"> • Community-ownership schemes • Economic and social development through procurement spendings for services and goods by mining companies |
| | Avoid distribution of negative impacts | Actors argue to avoid the distribution of negative impacts. Propositions include: <ul style="list-style-type: none"> • No-go-zones for extractive activities, e.g., in conservation and protected areas or indigenous territories • Avoid distribution issues, e.g., moving communities without compensation • Prevent environmental liabilities, unpaid wages, and public debt because of (speculative) extractive activities. |

The actors emphasise the need to (1) *provide distributive benefits* to the public and local communities when approving mining projects. Here, the different stakeholders advocate for mechanisms that would return part of the value added from extractive activities back to local communities, for compensation for loss of territorial capital or by producing and sharing beneficial by-products from (e.g., heat) with local communities. Some actors connect the provision of distributive benefits with the need to enable “a better understanding of the extractive industry” (Consejería de Política Industrial y Energía Junta de Andalucía, 2022, p. 5) and “social acceptance” (Geological Survey of Italy Portal, 2022, p. 2).

Another consideration regarding the distributive dimension is the idea of promoting (2) social, regional, cultural, and economic *development* through distribution. As extractive projects are often located in rural regions and/or indigenous territories, some actors assume that a great need for ‘development’ exists in these areas. Examples of proposed distributive dimensions for development proposed include “community-ownership programs” (Business and Human Rights Resource Centre, 2022, p. 5) or “business activities that are based on mineral resources in traditional Sami areas should benefit

and directly strengthen and develop Sami culture and local communities” (North Norway European Office, 2022, p. 2).

Stakeholders not only call for distribution of benefits, but also point to the need to (3) *avoid a distribution of negative impacts*. In doing so, they highlight the problems that can arise from unequal distribution of impacts/benefits, as well as the environmental and social impacts of mining and the consequences for affected communities. As the IRMA (2022) highlights, “considering the impacts of extraction, it is critical to understand that environmental impacts often have impacts on society, including impacting human rights. As such, it is important to evaluate environmental impacts holistically (e.g., beyond emissions alone) and to consider best practices that respond to the objectives and rights of impacted local communities, workers, and other stakeholders, and rights holders” (pp. 1-2). Stakeholders argue to avoid environmental liability and public debt, and advocate for the establishment of no-mining zones in nature reserves, indigenous territories, protected areas and community conservation areas, the Arctic, and the deep sea. In doing so, they raise a counter-discourse that advocates for greater distributive justice in how environmental risks are distributed.

5.2.2 Recognitional justice

Regarding the dimension of **recognitional justice**, the counter-discourses raised by different actors emphasize to (1) recognize local communities and to (2) also recognize negative effects of extractive activities for local communities. Table 5 provides an overview of the environmental justice counter-discourses identified, with respect to dimensions of recognitional justice.

Table 5. Overview of the Identified Themes and Counter-Discourses Identified within the Code 'Recognitional Justice'.

| Code | Theme | Argumentative Patterns of Counter-Discourses |
|-----------------------|-----------------------------|---|
| Recognitional Justice | Recognize local communities | Actors call to recognize local communities (civil society) with respect to extractive activities. Propositions include a recognition of: <ul style="list-style-type: none"> • A strong human rights framework, alongside high social and environmental standards • Human rights risk • Stakeholder in the wider society • The treatment local communities receive • Communities’ human rights and traditional/custodial land rights • The will of communities • Reasonable concerns of communities |

| | | |
|--|--|---|
| | Recognize negative effects for local communities | <p>Actors argue to recognize the negative effects of extractive activities for local communities. Propositions of such include:</p> <ul style="list-style-type: none"> • Non-compliance with and disregard of environmental standards and public participation rights • Non-binding agreements (e.g., SLO) that do not enhance local community engagement • Non-recognition of local communities and civil society actors in (raw material) policy processes • Human rights abuse and violation |
|--|--|---|

Actors demand to (1) *recognize local communities*. One stakeholder calls for recognition to go beyond voluntary arrangements between companies and society (such as the Social License to Operate) and to implement more binding schemes to recognise and involve local communities, e.g., through the Right-to-Say-No or the concept of Free, Prior and Informed Consent (FPIC). Overall, “operations should take responsibility for their activities, including: climate impact, local environment, social, ethical awareness and treatment of local communities” (NTNU Raw Material Forum, 2022, p. 1). The motives for this are rooted in a consideration of “a global justice dimension” (Fair Trade Advocacy Office, 2022, p. 2; Worldwide Fund for Nature, 2022, p. 1). This includes respect for the rights of local stakeholders and the inclusion of a strong human rights framework. Furthermore, mining companies should adhere to the highest social and environmental (legal) standards, take responsibility, recognise the treatment of local communities, and ensure the involvement of wider society. While some actors assert that the recognition of local communities should entail that no projects are developed against their will, others demand to “address all the reasonable concerns of member state and local communities.” (S.C. Verde Magnesium, 2022, p. 11).

Furthermore, actors point to (2) *recognize the negative effects of extractive activities for local communities*, rooted in issues of non-compliance and disregard of environmental standards and public participation rights, the non-consideration of local communities’ perspectives and voices in EU raw material policy- and decision-making, alongside human rights violations. With respect to the proposed streamlining of permit processes for strategic projects, an EU citizen points out that these are “extremely problematic, especially in jurisdictions (*i.e., Portugal*) that have a track record of non-compliance with public participation rights and corruption by-passing environmental standards or safeguard” (Silva, 2022, p. 1). Here, the counter-discourses highlight the complexity of fostering recognition for different groups and the negative consequences they face from non- or misrecognition in raw material policy-making and extractive activities.

5.2.3 Procedural justice

Regarding the dimension of **procedural justice**, the environmental justice counter-discourses emphasize the need to (1) include local communities, (2) other stakeholders and (3) workers and trade unions through engagement processes. In addition, argumentative patterns raise the need for (4) community participation, (5) participation in policy processes and (6) community consent. Table 6 provides an overview of the environmental justice counter-discourses identified, with respect to dimensions of procedural justice.

Table 6. Overview of the Identified Themes and Counter-Discourses Identified within the Code 'Procedural Justice'.

| Code | Theme | Argumentative Patterns of Counter-Discourses |
|--------------------|---|---|
| Procedural Justice | Engagement: with local communities | The type of engagement is not further specified and includes a broad range: <ul style="list-style-type: none"> • Dialogue and consultation • Conflict management • Involvement of local communities (in all or different stages of approval and management) • Transparency and engagement through digital permitting processes |
| | Engagement: with wider civil society, politicians, and public authorities | Actors argue for engagement with stakeholders beyond local communities to engage wider civil society, politicians, and public authorities. Propositions include: <ul style="list-style-type: none"> • Education, information, and engagement to convey risks and benefits • Stakeholder engagement throughout lifecycle of extractive projects • Engage local authorities/governments, municipalities, regional actors • Democratic input by all stakeholders |
| | Engagement: with workers and trade unions | Actors call for an engagement of workers and trade unions to enable e.g.: <ul style="list-style-type: none"> • Complaints to enhance cooperation • Remediation • Mutually beneficial partnerships |
| | Community Participation | Here actors specifically call for participation of local communities beyond consultation. Propositions include: <ul style="list-style-type: none"> • Ensure existing public participation rights are enforced |

| | | |
|--|---------------------------------|--|
| | | <ul style="list-style-type: none"> • New legislative instruments regarding public participation rights • Strengthen participatory processes in authorization of extractive projects |
| | Participation in policy process | Here it is argued to specifically enable participation in policy processes. |
| | Community Consent | Actors specifically call for community consent. Propositions include: <ul style="list-style-type: none"> • Full community consent for extractive projects • 'Right to Say No' • Ratification of ILO169: Principle of Free, Prior and Informed Consent |

First, the counter-discourses assert a general need of (1) *engagement with local communities*. While some actors advocate for engagement but do not further specify what that entails, other actors perceive engagement as a dialogue or consultation process. The Geological Survey of Italy Portal (2022) notes that “local communities must be involved in all stages of approval and management of the mining project” (p. 2). In addition, one actor advocates for more digitalisation to “ensure transparency and full engagement from project developers to local communities” (Platform for electromobility, 2022, p. 1). In this section, actors often couple public engagement with the need to avoid conflicts around mining projects and foster acceptance.

Second, actors request to (2) *not only engage citizens but also a wider range of stakeholders from civil society, politics, and public authorities*. This is reflected in statements like “we need to involve all stakeholders i.e. the local authorities, public and communities that will need to allow development of new critical metal resources especially in Europe” (European Green Metals, 2022, p. 2) or “the supply of raw materials is too important as a political issue to be left to industry and authorities behind closed doors. Democratic decision-making involving trade unions, human rights and environmental organisations, academia and elected representatives is needed to bring procurement and distribution issues of the raw materials of national legitimacy” (Fair Trade Advocacy Office, 2022, p. 7).

Third, two actors specifically request the (3) *engagement with workers and trade unions*. An example for such is to develop “ongoing and meaningful engagement with affected workers [...] associated with the proposed project to enable complaints, remediation and mutually beneficial implementation of the partnership for its duration” (NomoGaia, 2022, p. 4).

Beyond general engagement, many actors request for local and indigenous communities to be specifically involved through (4) *community participation*. It is highlighted that “sufficient participation and opportunities for participation of those affected should be ensured within the framework of

democratic decision-making processes” (Citizen Feedback, 2022, p. 1). These can take the form of already existing legally mandated schemes or the extension of already existing legislation. Here, counter-discourse assert the need for greater procedural mechanisms for affected and local communities. However, in some argumentative patterns, authorities and companies restrain public participation within permitting processes of extractive projects to be conducted “in a regulated manner”(Consejería de Política Industrial y Energía Junta de Andalucía, 2022, p. 2). In addition, one actor asserts that “albeit the outcomes certainly need to be preceded by public discussions, they should strictly be fact based and not modulated by biased public discussion” (Geological Survey of Finland, 2022, p. 4). This points to tensions in the argumentations between actors for public participation and requires contextualisation of the individual statements (see 6.1.1).

Alongside public participation, the responses reviewed indicate a strong favour by NGOs and academic/research institutes for (5) *community consent*. This is described as, “in the case of Indigenous communities, their free, prior and informed consent” (ICMM, 2022, p. 3) and for local communities as “full rights on making decisions concerning projects in the lands they inhabit – the Right to say No” (Earth Thrive, 2022, p. 1). Here, arguments are coupled to principles of environmental justice and reveal that the emerging counter-discourses are asserting the need for more binding mechanisms to allow local communities to steer the outcome of extractive projects.

Beyond participation and engagement of communities in on-ground mining processes, it is requested that communities (6) *become more involved in policy processes* itself, e.g., when selecting strategic projects. As the Business & Human Rights Resource Centre (2022) asserts “the process to determine such projects must be conducted in a transparent and participatory manner” (p. 5).

5.2.4 Summary of Environmental Justice Counter-Discourses

In summary, different environmental justice counter-discourses emerge in response to the dominant policy narratives through the public consultation process of the EU Raw Materials Act. To classify as counter-discourses they need to showcase a clear distinction from the argumentative patterns observed in the dominant policy narratives. Compared to the dominant policy narratives, the environmental justice counter-discourses identified reveal gaps in justice consideration within the CRMA and formulate a critique of the public-acceptance-for-mining dominant policy narrative.

First, with respect to the distributive dimension, the environmental justice counter-discourse raises that within the Act there should be a greater emphasis on distributive considerations, specifically with respect to avoiding the distribution of negative impacts through no-go-zones, preventing distribution issues by moving communities without compensation and avoiding unpaid wages and public debt because of (speculative) extractive activities. The counter-discourse to the dominant policy narrative here reveals that the CRMA pays too little attention on actual distributive concerns and stipulates distributive benefits to foster local acceptance.

Second, regarding the recognitional dimension, the environmental justice counter-discourse raises that there should be more emphasis on recognizing local communities' and the negative effect they are confronted with by extractive activities. The counter-discourse to the dominant policy narrative here implies that beyond recognition of local communities, there is a need to ensure greater compliance and binding agreements of communities' rights to enable a strong human rights framework and recognition of local communities' will.

Third, concerning the procedural dimension, the environmental justice counter-discourse raises that there should be a greater emphasis on procedural mechanisms that move beyond consultations, such as community participation or consent. Here, the counter-discourse to the dominant policy narrative raises that there is a need to ensure that existing public participation rights are enforced, and new legislative instruments included. It reveals that the dominant policy narrative should include procedural mechanisms beyond consultations that assert local communities' greater possibilities to steer the outcomes of extractive projects.

6 Discussion

6.1 Case-focused Discussion

From my result section, I first interpret my findings of the dominant policy narratives and environmental justice counter-discourses identified. I proceed to discuss tensions exposed in the dominant policy narratives by observing it through the environmental justice counter-discourses raised and elaborate on implications that can inform more precise critiques of green extractivism within the case. In addition, I discuss limitations in my approach.

My **findings** reveal that there are three dominant and intertwined policy narratives; (1) a mining-for-sustainability narrative, (2) a mining-for-security narrative and (3) a public-acceptance-for-mining narrative. These were observed through the environmental justice-counter discourses (see 5.2.4).

The (1) mining-for-sustainability dominant narrative displays discursive tendencies of the CRMA to advocate for extractive activities by coupling the sustainability transition to raw material extraction. Similar reasoning is employed in other EU policy papers and projections, where the need for a transition in energy production is coupled to the projected surge in demand for raw materials and minerals essential to produce green technologies (see e.g. Carrara et al., 2020; Herrington, 2021; IEA, 2022). The (2) mining-for-security dominant narrative within the CRMA reveals discursive tendencies of linking extractive activities to arguments of security. Research has shown that such argumentation can be beneficial for policymakers to reduce mining conflicts (see e.g. Uji et al. (2023)). Combining both policy narratives, the emergence of what Riofrancos (2022) describes a ‘security-sustainability nexus’ becomes apparent in the EU’s CRMA. This nexus describes “an interlocking set of policies and justifications that promote [...] extraction and emphasize the environmental credentials of Global North mining” (Riofrancos, 2022, p. 22). While the environmental justice counter-discourses I identified do not specifically correspond to these two dominant policy narratives, their identification opens avenues for future research and critique of reshoring extractivist practices in Europe. This is linked to limitations in my approach to consider material reality arguments (see 6.1.2) and to argumentations employed in how extractive activities are framed within the (3) public-acceptance-for-mining dominant policy narrative.

In addition, the Act displays a tendency to foster a (3) public-acceptance-for-mining dominant policy narrative. The need to include and consult local and Indigenous communities is mentioned, yet there are tendencies to argue for distributive, procedural or recognitional mechanisms with the intention of fostering public acceptance. As one actor asserts, the Commission should “not only [...] respect the self-determination of local communities, but also analyze the real causes of the current lack of social

acceptance” (MiningWatch Portugal, 2022, p. 1). Here, it is essential to contextualise my results and highlight that some argumentative patterns identified reveal some level of alignment with the dominant narratives. As mentioned before, some actors connect the provision of distributive benefits or the need for greater engagement with local communities to the need for greater “social acceptance” (Geological Survey of Italy Portal, 2022, p. 2) or “a better understanding of the extractive industry” (Consejería de Política Industrial y Energía Junta de Andalucía, 2022, p. 5). Where such patterns emerge, a reinforcement, not tensions between dominant policy narrative and counter-discourses becomes apparent. Further, this points to how throughout the policy process the argumentation of local acceptance is established within the dominant policy narrative.

Simultaneously, my findings of the environmental justice counter-discourses identified (see 5.2.4) enable a critique of the public-acceptance-for-mining narrative by highlighting the tendency within the Act to pay too little attention on actual distributive concerns, recognition of local communities’ will and greater procedural rights beyond fostering local acceptance. Here, my findings of the environmental justice counter-discourses raised are in line with other research, where scholars point to the need for greater attention on how local communities are recognized within policy-making processes, and given distributive and procedural rights; to avoid an acceleration of mining conflicts (Mononen et al., 2022). Including and acknowledging the environmental justice counter-discourses stipulates possibilities for how a space toward a more democratic, citizen-informed and green transition agenda rooted in environmental justice principles could be opened up within European resource governance and the CRMA.

Moreover, from observing the dominant policy narratives through the environmental justice counter-discourse **tensions** within the CRMA are exposed. First, the way in which dominant patterns of the CRMA couple local community justice considerations to the aim of fostering local acceptance reveal a tendency to use this framing to expand onshore activities in Europe. Given this, the CRMA could place greater emphasis on exploring the real causes for societal concerns, foster greater inclusion of local communities’ views on transformation and not just position them as objects for education and awareness-raising campaigns.

Second, within its arguments, the Act reveals tensions of how factors of recognition and engagement are implemented. The Act argues to select Strategic Projects which are granted public interest status in engagement with local communities to accelerate permit processes. However, the proposed Critical Raw Materials Board that is to consult in the strategic project selection is not intended to be composed of representatives from civil society, nor are its advising sub-groups. Here, the environmental justice counter-discourses reveal that recognitional dimensions for consideration of local communities are

included, yet no actual procedural justice for local communities executed. From this, one recommendation would be for local community representatives to be included in the Critical Raw Materials Board and to avoid the co-optation of justice concerns in dominant policy narratives without actual structural or transformative changes.

Further, my findings are important for understanding the **implications** of current raw material policy trends in Europe and enable avenues for a critique of a rise in green extractivist methods and argumentative patterns in the CRMA. My analysis of the dominant policy narratives reveals how policy makers are increasingly promoting extractivist arguments for sustainability and security and seek to communicate this idea to local communities and the public. The environmental justice counter-discourses identified enable a critique of this understanding and matter to foresee and adapt to potential future developments in which the publics' perception on extractive projects could increasingly be altered. Here an observation of the dominant policy narratives through the environmental justice counter-discourses identified in the policy process feed into debates of how community recognition and involvement is justified. It reveals tensions in where local communities are positioned within the greater aim of decarbonization. Also, where local communities' perception on extractive activities is perceived as essential to be altered, local conflicts can occur and communities' agency is impeded as they are positioned as obstructing the greater societal aim of decarbonization (Wolsink, 2000, 2006). This further highlights to the need for a comprehensive consideration of why local opposition exists and the "environmental justice counter-discourses" emerge. Here, future research could enable a more in-depth understanding of why justice considerations are raised, and why environmental justice arguments within the policy process mainly revolve around how local communities should be engaged.

6.2 Limitations

Furthermore, I want to discuss **limitations** in observing the dominant policy narratives through the environmental justice counter-discourses, alongside limitations in relation to theory-method-data and practice.

There is a need to consider what role agency plays in the formulation of the environmental justice counter-discourses. On the one hand, the counter-discourses raised reveal how people and actors can assert agency through their formulation of policy contradictions and emphasis on the Acts need to greater include distributive, recognitional and procedural justice considerations. However, to what extent the counter-discourses raised in the public consultations influence the top-down policy processes around the CRMA remains open. This indicates how the policy process itself enables people to assert agency through the counter-discourses raised within the public consultation process, yet simultaneously confines their agency to the policy process, its context, and mechanisms. Here, the

institutionalized structures in which the discourses and narratives are embedded and from where the counter-discourse was formed contributes to actors adopting certain argumentative patterns, languages, and knowledge to raise their points. This also reveals a limitation in my choice of method where the selection of documents for analysis were limited to the responses from the public consultation process. I thereby exclude other ways and forms actors engage in counter-discourses.

In addition, limitations arise from my focus in relation to theory-method-data and practice. First, my integrated analysis of dominant policy narratives and environmental justice counter-discourse limited my focus in relation to the data obtained, and the practical implications that could be outlined. They are confined to arguments that are raised within the Act to justify and outline the policy development of EU onshore mining and focus on environmental justice contradictions between the CRMA and the counter-discourses raised. As such, my practical contribution is confined to arguing for greater consideration of distributive, procedural and recognitional mechanisms within EU raw material policy. Here, my focus in relation to theory-method-data did not allow for a consideration of other counter-discourses raised in relation to material reality arguments such as decommodification and alternative mobility for demand-reduction. Such arguments would have enabled a different observation of the dominant policy narratives and could have enabled a different critique of the dominant policy narratives of (1) mining-for-sustainability and (2) mining-for-security identified. They are taken up in other research where mainstream sustainability policies are critiqued for focusing on notions of 'green growth' (see e.g., (Ramcilovic-Suominen, 2023)) or individual 'electric mobility' (see e.g., (Remme & Jackson, 2023)). Future research could apply my identification of argumentative strands of the 'security-sustainability' nexus in the CRMA and expand it by such material reality arguments. In addition, these are important factors to consider so that defending the interests on local communities in Europe does not contribute to an externalisation of EU resource extraction and the offshoring of justice implications to local communities abroad.

Second, related to my research design, there is a need to discuss the continuous reference to 'local' communities in my thesis. Throughout my work I continuously mention local communities in relation to what the dominant policy narratives within the CRMA entails for them and what environmental justice counter-discourses are raised. Yet there are differences in how the type of actors that engage in the public consultation and formulation of the counter-discourses are related to the voice of the 'local'. Within the policy process, counter-discourses advocating for greater community recognition, procedural justice and distributive dimensions beyond the dominant policy narratives are mostly asserted by NGOs and EU citizens. These actors are mostly those who are concerned with possible local extractive activities and seek to reverse them through establishing the aforementioned counter-discourses. This makes the 'local' appear as rather unified in my research; opposed to extractive activities

and in demand for greater justice consideration. However, a more regional approach could have produced different outcomes in which the voice of the 'local' may have been more diversified and enabled a closer look into how and why local communities are or are not concerned with extractive activities. At the same time this would not have allowed for an analysis at EU scale.

Lastly, limitations arise from my combination of two types of post-structuralist analytical methods. There is potential for my work to be biased by my own positionality and my development of discursive categories conflicted. Furthermore, the scale of my work is limited to the European context and expansion of domestic extraction in this context.

7 Conclusion

My thesis elucidates the EU's tendency to foster arguments of 'mining-for-sustainability', 'mining-for-security' and 'public-acceptance-for-mining' in its 2023 proposal for a EU Critical Raw Materials Act. Here, I outline implications of the current CRMA and its tendency to engage in green extractivist argumentative patterns and point to how this idea seems to be increasingly communicated to local communities and public. By observing these argumentative patterns through environmental justice counter-discourses that are raised in the policy process, I pose avenues for a critical reflection on justice implications for local communities. My findings reveal that counter-discourses emphasize the need for greater distributive mechanisms, recognition of local communities and the incorporation of more far-reaching procedural mechanisms like community participation or consent that go beyond the aim of fostering local-acceptance. The counter-discourses raised enable a critique of the 'public-acceptance-for-mining' understanding and matter to foresee and adapt to potential future developments in which the publics' perception on extractive projects could be increasingly altered. Here my research feeds into debates of how community recognition and involvement is justified. Further research could look more into why engagement with local communities is argued to be needed and what type of framings and solutions are proposed. In addition, future research should consider material arguments that are raised by counter-discourses and are related to the onshoring of extractivist practices. This is especially important to allow for a consideration that moves beyond the European scale and considers the impacts EU resource governance has for communities worldwide.

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Appendix

Appendix 1. Documents included in Analysis 2 (Counter-Discourses)

| Document Running Number | Document Name | Actor & Abbreviation | Type of Actor |
|-------------------------|--|--|-------------------------------------|
| 2 | Feedback from: Geological Survey of Italy | Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA) | Academic/research institution |
| 4 | Feedback from: Earth Thrive | Earth Thrive | Non-governmental organisation (NGO) |
| 8 | Feedback from: North Norway European Office | North Norway European Office | Public authorities |
| 9 | Citizen Feedback: Isabel Silva | Isabel Silva | EU Citizens |
| 10 | Feedback from: Yes To Life No To Mining | Yes To Life No To Mining (YLNM) | Environmental organisations |
| 26 | Feedback from: Global Witness | Global Witness | Non-governmental organisation (NGO) |
| 27 | Feedback from: Form Energy | Form Energy | Company/business |
| 30 | Feedback from: Engineers Without Borders Canada | Engineers Without Borders Canada | Non-governmental organisation (NGO) |
| 34 | Feedback from: Federation of German Industries | Federation of German Industries (BDI) | Business associations |
| 37 | Feedback from: AFEP | French Association of Large Companies (AFEP) | Business associations |
| 46 | Feedback from: The Association of Swedish Engineering Industries (Teknikföretagen) | The Association of Swedish Engineering Industries (Teknikföretagen) | Business associations |
| 50 | Feedback from: Danish Institute for Human Rights | Danish Institute for Human Rights | Other |
| 54 | Feedback from: ECOS | Environmental Coalition on Standards (ECOS) | Non-governmental organisation (NGO) |
| 58 | Feedback from: NTNU Raw Material Forum | NTNU Raw Material Forum (NTNU) | Academic/research institution |
| 63 | Feedback from: Akku Minerals Oy | Akku Minerals Oy | Company/business |
| 78 | Feedback from: FARN | FARN | Non-governmental organisation (NGO) |
| 80 | Feedback from: EIT RawMaterials | EIT RawMaterials | Other |
| 87 | Feedback from: ASOCIACION DE EMPRESARIOS DEL MARMOL DE ANDALUCIA | Asociacion de Empresarios del Marmol de Andalucia | Business associations |

| | | | |
|-----|--|--|-------------------------------------|
| 91 | Feedback from: Worldwide Fund for Nature | Worldwide Fund for Nature (WWF) | Non-governmental organisation (NGO) |
| 93 | Feedback from: PETRONAVIT AS | Petronavit | Company/business |
| 94 | Feedback from: General Directorate for Energy and Geology | General Directorate for Energy and Geology (DGEG) | Public authorities |
| 110 | Feedback from: Platform for electromobility | Platform for electromobility | Other |
| 111 | Feedback from: Fair Trade Advocacy Office | Fair Trade Advocacy Office | Non-governmental organisation (NGO) |
| 120 | Feedback from: Geological Survey of Finland | Geological Survey of Finland | Academic/research institution |
| 131 | Feedback from: Secretaria General de Industria y Minas. Consejería de Política Industrial y Energía Junta de Andalucía | Consejería de Política Industrial y Energía Junta de Andalucía | Public authorities |
| 143 | Feedback from: MiningWatch Portugal | MiningWatch Portugal | Non-governmental organisation (NGO) |
| 157 | Feedback from: Business & Human Rights Resource Centre | Business and Human Rights Resource Centre | Non-governmental organisation (NGO) |
| 163 | Feedback from: Albemarle | Albemarle | Company/business |
| 165 | Feedback from: Rare Earths Norway AS | Rare Earths Norway | Company/business |
| 174 | Feedback from: Initiative for Responsible Mining Assurance (IRMA) | Initiative for Responsible Mining Assurance (IRMA) | Non-governmental organisation (NGO) |
| 187 | Citizen Feedback Anonymous | Citizen Feedback | EU Citizens |
| 195 | Feedback from: Europeans for Safe Connections | Europeans for Safe Connections | Non-governmental organisation (NGO) |
| 212 | Feedback from: Northvolt | Northvolt | Company/business |
| 216 | Feedback from: Industrial European Trade Union | Industrial European Trade Union (Industrial) | Trade Union |
| 220 | Citizen Feedback: Julio César Pintos Cubo | Julio César Pintos Cubo | EU Citizens |
| 227 | Feedback from: Infinity Lithium Corporation Limited (ASX:INF) and its wholly owned subsidiary, Extremadura | Infinity Lithium Corporation Limited (ASX:INF) and its wholly owned subsidiary, Extremadura New Energies SL (Infinity Lithium) | Company/business |

| | | | |
|-----|--|--|-------------------------------------|
| | New Energies SL | | |
| 232 | Feedback from: European Chemical Regions network (ECRN) | European Chemical Regions network (ECRN) | Non-governmental organisation (NGO) |
| 236 | Feedback from: Finnish Minerals Group | Finnish Minerals Group | Business associations |
| 254 | Feedback from: Plataforma veciñal Mina Touro O Pino Non | Plataforma veciñal Mina Touro O Pino Non (Plataform veciñal) | Other |
| 263 | Feedback from: NomoGaia | NomoGaia | Academic/research institution |
| 264 | Feedback from: Heinrich Böll Foundation | Heinrich Böll Foundation | Non-governmental organisation (NGO) |
| 277 | Feedback from: Germanwatch e. V. | Germanwatch | Non-governmental organisation (NGO) |
| 281 | Feedback from: International Council on Mining and Metals (ICMM) | International Council on Mining and Metals (ICMM) | Business associations |
| 284 | Feedback from: S.C. Verde Magnesium S.R.L. | S.C. Verde Magnesium | Company/business |
| 305 | Feedback from: European Green Metals Ltd | European Green Metals | Company/business |

Appendix 2. Overview of Events Attended and Informal Interviews conducted for supplementary background information

| Type of informal measure | Detail | Date |
|--------------------------|---|------------|
| Online Event | The Gaia Foundation: The Right to Say No To Mining Europe. Online. URL: https://www.gaiafoundation.org/video-the-right-to-say-no-to-mining-in-europe/ | 29.09.2022 |
| Online Event | Euractiv: EU Energy Transition - What Role for Critical Raw Materials? URL: https://events.euractiv.com/event/info/eu-energy-transition-what-role-for-critical-raw-materials | 08.02.2023 |
| Online Event | Ent: Europe's Critical Raw Materials Act and the rise of Green Extractivism. URL: https://ent.cat/en/pensaments-de-febrer-amb-diego-francesco-eeb-europes-critical-raw-materials-act-and-the-rise-of-green-extractivism/ | 15.02.2023 |
| Hybrid Event | EEB, CIDSE, CATAPA: Putting Rights First in the Green Transition – Due Diligence, Environmental Justice and the Right to Say No. | 28.02.2023 |
| Informal Interview | Representative from a network of environmental citizens' organisations in Brussels | 02.02.2023 |
| Informal Interview | Representative of a local mining protest in Sweden | 09.03.2023 |
| Informal Interview | NGO representatives | 21.03.2023 |

Appendix 3. Coding Scheme for Identification of Dominant Policy Narratives

| Code | Sub-Code/Theme |
|-----------------|---|
| Problem | Supply risk of CRM: concerns regarding green and digital transition |
| | Supply risk of CRM: security concerns |
| | Supply risk of CRM: economic concerns |
| | Underexploitation of domestic resources |
| | Lack of legislative/regulatory incentives |
| | Mining conflicts and societal concerns |
| Cause | Rising demand of critical raw materials |
| | Central role of CRM (for green and digital transition) |
| | EU dependency on imports for CRM |
| | Lack in public acceptance |
| Solution | Common regulatory framework |
| | Ensure security of CRM supply: diversification and strengthen EU capacity along CRM value chain |
| | Strategic projects with shorter permitting processes |
| | Facilitate public acceptance |

Appendix 4. Coding Scheme for Identification of Environmental Justice Counter-Discourses

| Code | Sub-Code/Theme |
|---------------------|--|
| Distribution | Grant distributive benefits |
| | Development |
| | Avoid distribution of negative impacts |
| Recognition | Recognize negative benefits for local communities |
| | Recognize need to include local communities |
| Procedural | Engagement: with local communities (to avoid conflicts, foster acceptance) |
| | Engagement: with wider civil society, politicians and public authorities |
| | Engagement: with workers and trade unions |
| | Community Participation |
| | Community consent |
| | Participation in policy process |