



DEPARTMENT OF POLITICAL SCIENCE  
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# TALKING MINERALS, MAKING LAWS

A comparative frame analysis of the legislative procedure of the Critical Raw Materials Act

**Saga Persson**

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## Abstract

The European Union is critically dependent on a secure supply of Critical Raw Materials (CRM) for the green and digital transition. In response, the EU adopted the Critical Raw Materials Act (CRMA) in 2024 to reduce external dependencies and secure domestic supply. While previous research has examined the content and implications of the CRMA, less attention has been paid to how the EU's legislative institutions framed CRMs during the legislative procedure. This thesis addresses that gap by conducting a comparative framing analysis of the three main legislative institutions, the European Commission, the European Parliament, and the Council of the European Union, during the legislative procedure of the CRMA. The study applies Entman's (1993) framing theory, focusing on three analytical frames: geopolitical, security, and environmental. The results show that all three frames were present across the institutions, though expressed in different ways. The European Commission framed CRMs with a technical focus on strategic autonomy, industrial resilience, and circularity. The European Parliament framed CRMs using stronger language in the geopolitical frame and placed particular emphasis on environmental and social safeguards in the environmental frame. The Council, by contrast, emphasised internal risks and long-term efficiency, adopting a more cautious tone, particularly within the security and environmental frames.

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## **List of abbreviations**

BRI- Belt and Road Initiative

CRMA- Critical Raw Materials Act

CRM- Critical Raw Materials

EU- European Union

MEP- Member of European Parliament

US- United States

# 1. Introduction

The green transition, digital transformation, and technological innovation in the European Union are critically dependent on a secure supply of minerals and metals. Lithium, cobalt, and magnesium are among the key materials required for the production of batteries, wind turbines, solar panels, and other low-carbon technologies (European Commission, 2024b). These materials, collectively referred to as critical raw materials (CRM), are considered essential to economic development but are also highly vulnerable to supply disruptions (Barteková & Kemp, 2016, p. 5). The EU currently identifies 34 minerals and metals as CRM (European Commission, 2024b). As a result, securing a stable supply of CRMs has emerged as a strategic policy priority for the Union (De Ridder, 2013, p. 2–3).

Over the past two decades, CRM have become an increasingly prominent subject in both political and geopolitical debates. Once primarily regarded as an economic resource, CRMs are now recognized as a political and strategic concern (European Commission, 2024b). For example, access to CRM has been central to negotiations related to the war in Ukraine (Van Wieringen, 2025, p. 1). But, this is not the first time CRM supply has been a part of a geopolitical conflict, China's decision to halt rare earth element exports to Japan in 2010 triggered a surge in global market prices, highlighting the vulnerability of CRM supply chains (Kalantzakos, 2020 p. 5; Mancheri et al., 2019, p.103). In response to the growing urgency of securing CRMs, the European Union adopted new legislation in 2024: the Critical Raw Materials Act (CRMA) (Regulation 2024/1252). The CRMA seeks to reduce import dependence by strengthening domestic mining, processing, and recycling capacities within the EU (European Commission, 2024b). Although expanding mining and production is considered necessary to enhance resource security, it is not without significant challenges. Previous research, drawing on case studies of mining projects, has illustrated the complex social and environmental implications involved. For instance, mining operations in Kiruna, Sweden, have been shown to have substantial impacts on the Indigenous Sami community (Bogojević, 2024, p. 15). Mining in the Democratic Republic of Congo have also raised serious concerns, including widespread reports of child labour and unsafe working conditions (Kalantzakos, 2020, p. 9).

Although CRMA was adopted in 2024, a growing body of research has already examined its content. Several scholars describe the act as ambitious in scope but note a lack of clarity in key areas (Bogojević, 2024, p. 16; Hool et al., 2023, p. 4). Much of the early academic attention has focused on the CRMA's substantive measures, particularly the feasibility of increasing mining and production within the EU. Here, researchers generally agree that the domestic production targets will be difficult to achieve in practice, given the long lead times and the social and environmental challenges inherent in the development of new mining projects (Bogojević, 2024, p. 26; Hool et al., 2023, p. 21–23). However, there has not yet been a comparative frame analysis, focusing specifically on the role of EU institutions during the legislative procedure. A perspective that can gain insights into the institution's views on the problem of CRM, during the legislative process. This thesis addresses that gap by examining the role of different institutions through a comparative framing analysis. Analysing how institutions frame critical raw materials offers insights, both into the legislative procedure itself and into how CRMs are framed within EU policymaking. Frame theory provides a useful theoretical framework for clarifying the functions of frames within a text (Entman, 1993, p. 51). It not only identifies the definition of problem definition, causal interpretation, moral evaluation, and treatment recommendation but also illustrates how framing processes can influence policy outcomes by promoting and legitimizing certain courses of action (Entman, 1993, p. 51-52).

Based on previous research, geopolitical-, security-, and environmental frames have been identified as dominant in discussions surrounding critical raw materials (e.g. Bleicher et al., 2019, p. 18; Chen & Gao, 2021, p. 195; Eising et al., 2015, p.516; Proedrou, 2023, p.130; Vlaskamp, 2024, p. 150; Yang, 2024, p. 969–972). Consequently, this thesis expects to find these three frames present. However, the primary focus is not on the mere presence of frames, but rather on how framing compares across institutions. Specifically, this thesis examines the European Commission, the European Parliament, the

Council of the European Union. These institutions are selected based on their legislative role in the EU legislative procedure (Bache et al., 2015, p. 214-216). While previous research has examined the final version of the CRMA, is there a lack of research on how different EU institutions frame the issue of CRM during the legislative procedure. This thesis addresses that gap by conducting a comparative framing analysis on the legislative institutions in the legislative procedure of the CRMA.

## 1.1 Aim and research question

The aim of this thesis is to analyse and compare how different EU institutions frame critical raw materials during the legislative procedure of the Critical Raw Materials Act (CRMA) (Regulation 2024/1252). Framing theory serves as a useful analytical tool in this context, since it gives a framework of analysing how political actors construct meaning and highlight particular interpretations of policy issues (Entman, 1993, p. 51–52). By focusing on the legislative procedure of the CRMA, this study not only focuses the dynamics of this specific case, CRM, but also contributes to a broader understanding of EU institutions in legislative procedures

This thesis adopts a social constructivist approach, operating on the premise that the way issues are framed can significantly influence policy outcomes by shaping which solutions are prioritised and how responsibilities and resources are allocated (Eriksson, 2020, p. 2). In other words, understanding how frames used, and how they differ across institutions a way of understanding the legislative procedure of the CRMA. This study is guided by the following research question:

*How do the legislative EU institutions frame the problem of Critical raw materials, in the legislative procedure of the Critical Raw Materials Act?*

## 1.2 Thesis outline

This thesis began with an introduction to the subject and the research question. The following chapter will present previous literature on the subject of CRM and frame theory. Chapter three outlines the theoretical framework, elaborating on the social constructivist approach and frame theory. Chapter four presents the methodological framework that will be used in the thesis, including a discussion of relevant limitations and ethical considerations. Chapter five presents the analysis and results. The thesis concludes with a discussion of the results, followed by final conclusions and suggestions for future research.

## 2. Previous research

This chapter presents previous research relevant to the topic of this thesis and is structured into three main sections. The first section reviews existing literature on CRM and CRMA. The second section explores how CRMs have been framed in EU policymaking and in related policy fields. The chapter concludes with a brief discussion that positions this thesis in relation to the existing literature, identifying the specific research gap this thesis aims to address.

### 2.1 The European Union and Critical Raw Materials

Concerns about Europe's access to critical raw materials is not new (Hool et al., 2023, p. 2). As early as the 1970s, the European Commission acknowledged that the European Community was heavily reliant on external sources for CRM and that this dependence could become a strategic vulnerability (Bartekova & Kemp, 2016, p. 5). Although EU institutions have discussed CRM supply concerns for decades, CRM has only recently gained a dedicated policy focus. The development of the Critical Raw Materials Act (CRMA), a legally binding framework, began in 2022 and was adopted in 2024 (European Commission, 2024b; Regulation 2024/1252).

The CRMA emphasises the importance of enhancing domestic production and ensuring a stable supply of CRM (European Commission, 2024b). Scholars have observed that, while the Act seeks to promote domestic CRM production and recycling, several of its suggestions remain vague, requiring careful implementation to balance resource security with sustainability goals (Bogojević, 2024, p. 16; Hool et al., 2023, p. 4). Analyses of the Act's content have also raised doubts about whether streamlining permitting procedures alone, as proposed, will be sufficient to substantially increase mining output, given that mine exploration and development typically require many years (Tröster et al., 2024, p. 21–23). Historically, mining projects in Europe have often faced delays or cancellations due to social and environmental opposition (Tröster et al., 2024, p. 23). Although, the CRMA was adopted in a fast legislative procedure, this does not necessarily indicate a broad consensus across EU institutions regarding the topic of CRM. Significant divergences remain, particularly on matters such as accelerating domestic mining projects, which continue to be controversial (Petitjean & Verheecke, 2023, p. 30-33). In addition, while the CRMA underscores the need for international partnerships to secure supply chains, some scholars argue that the Act lacks clarity on how to address the global dimension of CRM security (Tröster et al., 2024, p. 23). Buysse and Essers (2023) further contend that boosting domestic production alone will be challenging, as many imported goods already contain CRM-rich components, making it crucial to consider the entire supply chain (Buysse & Essers, 2023, p. 22). They also highlight that the CRMA proposal remains largely focused on domestic regulatory measures and provides limited detail on addressing Europe's international vulnerabilities in CRM access (Buysse & Essers, 2023, p. 23, 26).

The CRMA has also been examined from the perspective of the legislative procedure, with particular attention to the negotiations leading up to the adoption of the final Act. Comparative studies of the proposal and the final legislation have shown that the European Parliament advocated for language emphasising cooperation with “like-minded countries,” implicitly referring to allies such as the United States, although not all of this language was retained in the final Act (Vlaskamp, 2024, p. 164). Within the European Commission, there was reportedly little internal disagreement during the drafting of the CRMA. Vlaskamp (2024) notes that the Commission had consistently stressed the importance of securing domestic supply chains for critical raw materials since the early 2000s (Vlaskamp, 2024, p. 164). Similarly, the Council of the European Union largely supported the core elements of the legislation. However, in one interview, an EU official highlighted a perceived duality in the EU–US relationship: while the EU relies on the US for certain resources, it also views the US as a strategic

competitor (Vlaskamp, 2024, p. 159). Bogojević (2024) additionally observed that the final version of the CRMA included clauses acknowledging the rights of affected communities, such as Indigenous peoples in mining regions, likely in response to critiques concerning the environmental and social costs of expanded mining (Bogojević, 2024, p. 13). These studies have primarily compared the legislative proposals to the final adopted Act, through comparative text analysis. Their focus has been on identifying institutional contributions and examining which elements from each institution were retained in the final version of the Act. However, there remains a gap in the literature when it comes to analysing how different institutions framed CRMs throughout the legislative procedure itself. It is within this research gap that this thesis is situated, focusing on a comparative analysis of how the main EU legislative institutions framed CRMs during the legislative process leading up to the adoption of the CRMA.

## 2.2 Framing of critical raw materials

Using frame theory as a theoretical framework allows for an analysis of how policymakers and stakeholders define what an issue is about, why it matters, and what should be done about it (Entman, 1993, p. 51–52). Scholars have long applied frame theory as a tool to analyse policy processes, as it provides an opportunity to examine how certain aspects of a problem are highlighted. This selective emphasis can shape perceptions of which policy responses are seen as necessary and justifiable (Saurugger, 2018, p. 25–26). In the context of the European Union, interest in policy framing grew in the late 1990s, as researchers observed that the EU’s complex, multi-level governance system provided a rich environment for studying the social construction of policy issues (Daviter, 2018, p. 91). The diversity of EU institutions and member state interests means that how an issue is framed can influence which institution takes the lead and which policy competences are invoked (Daviter, 2018, p. 91). Applying framing theory to the study of EU institutions, according to Eising et al. (2015), can enhance understanding of both EU policymaking and legislative processes (Eising et al., 2015, p. 517–518). In their prominent study applying frame analysis at the Member State level, Eising et al. (2015) found that multiple frames can appear simultaneously and coexist within the same documents when analysing policymaking in a multinational arena such as the EU (Eising et al., 2015, p. 522–525). Furthermore, the involvement of a greater number of actors in EU policymaking tends to intensify competition between frames. As a result, it can be difficult for individual actors to dominate the framing process, since different frames emphasise various aspects of EU policy proposals (Eising et al., 2015, p. 531).

This section focuses on previous studies that have applied framing theory. It is divided into three subsections: geopolitics, security, and environment. Each subsection presents how the respective frame has been used and interpreted in previous research. Given the limited number of studies applying framing theory specifically to the CRMA, these sections also include research that uses framing analysis in related policy areas, in order to provide a broader understanding of how these frames have been operationalised in EU policy contexts.

### 2.2.1 Geopolitical frame

This section further explores the geopolitical frame, particularly as it relates to CRM. Although the field of geopolitics is closely intertwined with CRM-related issues, the number of studies applying a geopolitical framing perspective to this area remains fairly limited. Therefore, will this section examine and discuss previous definitions and interpretations of the geopolitical frame both within the field of CRM and interlinked fields.

To begin, Vlaskamp (2024) applied framing theory and the geopolitical frame to analyse how CRM has been discussed historically within the EU. The study adopted a historical perspective and used both primary and secondary sources, including three semi-structured interviews (Vlaskamp, 2024, p.

150). The author found that CRM is framed as a potential source of fragmentation within the EU. The need for a unified European response to external challenges posed by countries such as Russia and China, was also found through the geopolitical framing (Vlaskamp, 2024, p. 168). In the context of the CRMA, there was generally strong consensus around promoting a EU approach to secure Europe's economic competitiveness and strategic sovereignty (Vlaskamp, 2024, p. 169).

Proedrou (2023) applies a geopolitical frame to the study of energy transitions within the EU, focusing particularly on the case of Greece (Proedrou, 2023, p. 122). Through this lens, framing is understood as a process that shapes governmental rationalities by offering distinct interpretative frameworks through which policymakers perceive social challenges and formulate corresponding solutions (Proedrou, 2023, p. 124). The geopolitical frame highlights how energy transitions are intertwined with global geopolitical dynamics (Proedrou, 2023, p. 130). Furthermore, Proedrou argues that adopting a geopolitical frame enables national governments, such as Greece's, to position energy transition policies as strategic tools for reinforcing their international position (Proedrou, 2023, p. 134).

Sundberg (2022) conducted a comparative analysis of five EU Member States, Estonia, Italy, Germany, France, and Hungary, focusing on their views regarding China's Belt and Road Initiative (BRI) (Sundberg, 2022, p. 2). In this study, the geopolitical frame was applied to examine how each government's geopolitical ambitions and achievements shaped their perspectives on the BRI (Sundberg, 2022, p. 18). While all five cases interpreted the BRI primarily as a geopolitical project, the geopolitical frame did not dominate the discourse in any of the Member States. However, Hungary emerged as an outlier; unlike the others, it framed the BRI more positively, viewing it as an opportunity rather than a threat (Sundberg, 2022, p. 42). Zhang (2022) also conducted a framing analysis of the Belt and Road Initiative (BRI) but with a particular focus on newspaper coverage in Switzerland and China. The geopolitical frame emerged as significant, as most political actors identified through the contextual perspective were associated with international relations rather than domestic politics (Zhang, 2022, p.16-19). Although the geopolitical frame appeared in both newspapers analysed, important contrasts were observed. China Daily tended to present general information and aimed to provide a comprehensive, overarching perspective, while Neue Zürcher Zeitung focused more narrowly on specific details (Zhang, 2022, p. 13).

To further understand the geopolitical dimensions of CRM, this section presents additional research that while not exclusively adopting a framing perspective, focuses on the geopolitical aspects of CRM. Incorporating these studies is important for gaining a comprehensive understanding of the broader context in which CRM policy is situated. A fundamental factor linking geopolitics and CRM is the concept of scarcity. Many critical minerals are geologically scarce or concentrated in a small number of regions. This dependency has raised significant strategic concerns within the European Union. An example this dependency occurred in 2010, when China, following a diplomatic dispute, halted exports of rare earths to Japan. The result was a sharp spike in global prices on CRM (Kalantzakos, 2020, p. 5; Mancheri et al., 2019, p. 103). More recently, during a trade conflict between China and the United States, fears arose that China might restrict exports of critical minerals as a means of exerting political pressure (Kalantzakos, 2020, p. 5). Thus, CRM has taken a place as a political factor in trade conflicts. Farrell and Newman (2022) argue that China's dominant position in critical materials markets effectively enables it to use these resources as instruments of political influence (Farrell & Newman, 2022, p. 221). One way the EU has begun to address CRM geopolitics is by seeking to diversify supply sources and develop its own resources. This has led to a new wave of interest in European mining projects. For instance, there are ongoing exploration efforts for lithium in northern Portugal (Dunlap & Riquito, 2023, p. 1-2), for rare earth elements in Sweden, and for nickel and cobalt in Finland (Kivinen et al., 2020, p.1).

As stated at the beginning of this section, the geopolitical framing of CRM, has not been researched in an extensive amount. Particularly not in the context of the CRMA legislative procedure. Nevertheless, the legislative process surrounding the CRMA is closely interlinked with broader geopolitical

dynamics and the actions of key geopolitical actors. Given these connections and considering the importance of applying a framing perspective to European Union policymaking, the geopolitical frame offers a valuable analytical lens for this study.

### **2.2.2 Security frame**

This section further explores the security frame, particularly as it relates to CRM. Although the field of security is closely intertwined with CRM-related issues, the number of studies applying a security framing perspective to this area remains fairly limited. Therefore, will this section examine and discuss previous definitions and interpretations of the security frame both within the field of CRM and interlinked fields.

CRM have also been analysed through the lens of security framing. Chen and Gao (2021) identified three dimensions of the security frame: regional security, economic security, and political security (Chen & Gao, 2021, p. 195). Their study found that EU officials and policy documents often portray China's dominance in global CRM supply chains as a security threat or risk (Chen & Gao, 2021, p. 195, 205). Similarly, Yang (2024) divided the security frame into national, military, and economic categories (Yang, 2024, p. 969–972), applying this framework to the U.S. chip export controls targeting China. In this context, U.S. officials explicitly framed China's access to advanced chips as a threat to national and allied security, thereby justifying export restrictions on the grounds of national security (Yang, 2024, p. 961, 973, 978).

Not all studies have divided the security frame into different categories, Macháček (2017) compared how the EU and the United States articulate the CRM challenge through a security frame. Two key policy documents were analysed, the EU's report on "Critical Metals in Strategic Technologies" and the U.S. "Critical Materials Strategy". Macháček found similarities both documents frame the reliability of CRM supply as something to be safeguarded, much like national security. Both documents show CRM as a situation where action is needed to secure the future supply for economic stability and technological leadership (Macháček, 2017, p. 368, 376).

While not in the aspect of the legislative procedure of the CRMA does Florian (2010) conduct a comparative study on the EU institutions in the green energy transition. The study compared the framing strategies of the European Commission, the European Parliament, and the Council in the context of EU energy policy during the Russian gas supply disruptions in 2006 and 2009 (Florian, 2010, p. 41-44). Florian found that the Commission and Parliament increasingly invoked an "energy security" frame, casting energy primarily as a security issue, to advocate for greater EU-level action and integration in external energy policy (Florian, 2010, p. 58-59).

Although different studies approach security framing from slightly different perspectives, both by dividing the frames into categories or not, there are notable similarities. A security frame typically involves the identification of a perceived threat to the actor's interests. Security threats can be framed in both military and economic terms. In contrast to the geopolitical frame, which emphasises broader geopolitical tensions and power dynamics, the security frame focuses more narrowly on specific threats and vulnerabilities faced by an actor. The security frame has been applied to multiple different studies. But it has not yet been explicitly incorporated into research on the CRMA legislative procedure. Accordingly, applying a security frame to the legislative procedure offers valuable insights into how EU institutions construct and respond to threats in the context of CRM policymaking.

### **2.2.3 Environmental frame**

This section further explores the environmental frame, particularly in relation to CRM. Although the field of environment is closely intertwined with CRM-related issues, the number of studies applying an environmental framing perspective to this area remains fairly limited. Therefore, this section will

examine and discuss previous definitions and interpretations of the environmental frame both within the field of CRM and interlinked fields.

Bleicher et al. (2019) examined the management of CRM in the context of waste policy in two German cities (Bleicher et al., 2019, p. 18). In their analysis, the environmental frame is further divided into a resource frame and a strategic frame. The resource frame reflects a conceptual shift in how materials are perceived, reclassifying them from 'worthless' waste to valuable resources (Bleicher et al., 2019, p. 25). Interestingly, this frame is supported by a wide range of actors, including those with historically divergent or even conflicting interests, such as industry stakeholders and environmental NGOs (Bleicher et al., 2019, p. 25).

Eising et al (2015) analyses policy framing of environmental policies in Germany, Sweden, the Netherlands and the United Kingdom. The authors highlight that we know rather little about the emergence and variation of frames in the EU, especially with regard to the contextual factors that impact these frames (Eising et al., 2015, p. 516). Frames can relate to different aspects of policy proposals. In their study, they identify that the actors participating in EU policy debates perceive to be the essence of the European Commission's directive proposals (Eising et al., 2015, p. 518).

Critical raw materials have a duality in the environmental context, they are essential for green technologies, yet the process of extracting and refining these materials can have significant environmental impacts. This duality means that environmental frames can be applied in different ways either highlighting CRM as enablers of sustainability or pointing out the environmental costs of obtaining them. There is also an aspect of the negative aspects of mining, while mining is the process of removing the ores from rocks is it a process that has negative environmental and societal impacts (Dou et al., 2022, p. 1-3; Turra, 2017, p. 26). Scholars highlight how the use of chemicals in processing ores can result in water contamination. Mining can also generate large amounts of waste that risk polluting waterways if not managed properly. Studies have highlighted these impacts, for instance, Bebbington et al. (2018) document cases of biodiversity loss and ecosystem damage due to mining activities (Bebbington et al., 2018, p. 1–2). Similarly, Dou et al. (2022) review the social and environmental impacts of rare earth mining, noting issues such as land degradation and health hazards for local communities (Dou et al., 2022, p. 1–3). These types of research highlight the complexity of CRM.

This section has presented previous findings on the environmental aspects of CRM and the environmental framing of CRM. These studies have highlighted that the environmental frame is not uniform; instead, it can include multiple, sometimes contradictory dimensions. On one hand, CRM are essential for enabling climate action through clean technologies, on the other hand can extraction and processing cause significant environmental harm. While this duality has been explored in various case studies, the environmental framing has not yet been applied to the legislative procedure of the CRMA.

## 2.3 Positioning this thesis in relation to previous research

The literature review has identified three frames, namely geopolitical-, security-, and environmental frames. These three frames have been used in previous research on CRM and CRMA. While these frames have been examined individually, they have not been previously applied together in a comparative analysis of how different EU institutions frame CRM. Based on previous literature, one expectation is that all three frames will appear in the analysed material. However, how these frames differ across institutions is harder to make an expectation about based on the findings in previous literature. This thesis seeks to address that gap by conducting a comparative framing analysis on the legislative procedure of the CRMA, with a focus on the three legislative institutions.

### 3. Theoretical framework

This chapter presents the theoretical framework that will guide the analysis. The theoretical framework that will be used is framing theory, which serves as the primary lens for examining how CRM framed in the legislative procedure.

#### 3.1 Framing theory

Framing theory is grounded in social constructivism. Social constructivism is an approach within political and social science that emphasises that reality, is not simply an objective collection of facts. Rather it is shaped through intersubjective interpretations (Peoples & Vaughan-Williams, 2014, p. 16). In the context of this thesis, adopting a social constructivist perspective means recognising that the significance of CRM in EU policy is produced through how EU actors speak and write about them (Peoples & Vaughan-Williams, 2014, p. 16). This stance in the thesis means communication plays a central role in how political issues are constructed and understood (Peoples & Vaughan-Williams, 2014, p. 6, 16–22; Saurugger, 2018, p. 20–22). By adopting a social constructivist lens, this study seeks to explore how CRM are framed within the EU's legislative procedure of CRMA. The three frames that will be used are: geopolitical, security and environmental. The focus is not on the material impacts or technical aspects of CRM policy, but on how the frames occur in the institutions in the legislative procedure of the CRMA. As such, CRM are not treated as strictly objective phenomena, but as political constructs shaped by social actors whose framing choices reflect particular interests, priorities, and perceptions (Szulecki, 2018, p. 10–12).

Framing can be a theory and a method, referred to as framing analysis. Using framing is a way of analysing an actor and how their social realities work both in relation to them self and to others (van Hulst & Yanow, 2016, p. 94). Framing theory does not offer a single, universally accepted definition or approach. As a result, the application of framing can sometimes appear vague or inconsistent across studies. Therefore, it is particularly important in this context to specify the theoretical approach being used and to ensure methodological rigour by clearly outlining the coding procedures and their relevance to the analysis (Entman, 1993, p. 51). This thesis adopts Entman's (1993) conceptualisation of framing, which identifies four core functions: problem definition, causal interpretation, moral evaluation, and treatment recommendation (Entman, 1993, p. 52). This approach builds on the foundational works of Goffman (1974) and Rein and Schön (1977), who emphasised how the perception of social realities shapes policymaking (Entman, 1993, p. 52). Entman's model advances this perspective by specifying how frames function within texts and policy discourse (Knodt, 2018, p.225). The choice to use Entman's framing theory in this thesis, is since it allows for a structured comparison of how different institutions define problems, assign causal responsibility, make moral evaluations, and recommend solutions. Unlike broader or media-focused framing approaches, Entman's model offers a clear analytical tool to systematically trace variations in institutional language and what is emphasised across official policy texts. This makes it especially useful in the context of this thesis, where EU legislations are the actors what will be analysed.

#### 3.2 Frames & institutions

Based on previous research, this thesis will apply three analytical frames: geopolitical, security, and environmental. As noted earlier, these frames have been used in studies related to CRM, but not in the context of the legislative procedure of the CRMA. Furthermore, they have not been applied comparatively across the key EU institutions involved in that procedure. The focus of this thesis, therefore, is to examine how different EU institutions frame CRM during the legislative procedure and to compare their respective roles and positions. While the comparison of institutional roles is not a new approach, and has been employed in various studies on EU legislative procedures, this thesis contributes by applying it within the context of CRM legislation. The following section will present

key findings from previous research in order to establish a foundation for the expectations of the institutions' role in the legislative procedure.

To study institutions and how they differ in a legislative procedure is not new, for example Borzel (2000) looks at environmental compliance and found that the roles and influence of the Commission and the European Parliament can vary across different policy domains. Borzel found that the parliament can be particularly pronounced in policy areas aligned with its broader progressive agenda than the Commission (Borzel, 2000, p. 141-162). There is also an established field of research examining the power dynamics among EU legislative institutions and their role in shaping legislative outcomes. This body of work highlights how the predefined institutional roles influence the legislative procedure itself (Thomson & Hosli, 2006, p. 393). While many analyses of the EU's formal decision-making processes suggest that the European Parliament and the Council operate on relatively equal footing under the co-decision procedure (Thomson & Hosli, 2006, p. 413), this does not imply that they are the only institutions of significance. Thomson and Hosli emphasise the importance of considering both formal and informal actors in the legislative process. This perspective underscores the value of analysing a broader range of institutions, including advisory bodies, when assessing how EU legislation is negotiated, shaped, and ultimately adopted (Thomson & Hosli, 2006, p. 415).

Dobbels and Neuhold (2012) analysed the role of the European Parliament in the legislative process by examining the influence of civil servants in relation to Members of the European Parliament (MEPs) (Dobbels & Neuhold, 2012, p. 375–376). Their findings indicate that the role of civil servants varies depending on the policy area being analysed. For instance, in the field of fisheries, experienced MEPs tend to limit the involvement of civil servants, whereas in the field of migration, the extent of influence often depends on the strength of interpersonal relationships between MEPs and civil servants (Dobbels & Neuhold, 2012, p. 388). Further research has also shown that the European Parliament plays a significant role in shaping environmental legislation. Koch et al. (2016) found that decisions taken by the Parliament can directly affect EU emissions allowance prices and market volatility, underscoring its considerable influence in the area of environmental policy (Koch et al., 2016, p. 676). Studies indicate that the EP frequently proposes more stringent amendments to legislative proposals than those initially put forward by the Commission. For instance, research on the Energy Performance of Buildings Directive shows that the EP advocated for tighter implementation deadlines and reduced allowances for national discretion compared to the Commission's draft (Bruch et al., 2024 p. 6-9).

Based on previous research, the comparative roles of EU institutions in the legislative process have been analysed from various perspectives. While there is substantial literature comparing institutional behaviour, much of it begins by outlining the formal roles of the main legislative bodies; the European Commission as the legislative initiator, and the European Parliament and Council as co-legislators, often regarded as being on equal footing under the co-decision procedure (Thomson & Hosli, 2006, p. 413). The Commission's agenda-setting role is often reflected in a focus on the rationale and technical necessity of legislative proposals, frequently producing detailed and structured outputs (Börzel, 2000, p. 141–162). In contrast, the European Parliament, particularly in the field of environmental policy, has been found to adopt more ambitious and progressive positions (Koch et al., 2016, p. 676). The Council is typically expected to prioritise compromise and the accommodation of diverse national interests (Bruch et al., 2024, p. 6–9). Based on these previous studies, can one draw the expectations that the legislative institutions will adopt the same roles in the legislative procedure. But existing studies have not offered a detailed comparison of how these institutions frame issues such as CRM in the context of the CRMA. This uncertainty is precisely what this thesis seeks to address. By analysing the legislative documents produced by each institution, this study aims to explore how the geopolitical, security, and environmental frames are employed, to what extent they are emphasised, and how institutional roles in the legislative procedure shape the frames.

## 4. Methodology & material

This chapter will present the methodological framework of this study. The chapter begins with a discussion of the qualitative research design and the use of comparative case study. The following section presents the material that will be used in the analysis. The chapter then ends with presenting how framing theory is applied as an analytical framework.

### 4.1 Research design

The aim of this study which is to compare the frames of the legislative institutions in the legislative procedure of CRMA. To compare the different legislative institutions with one another, makes this thesis a comparative case study (Esaiasson et al., 2024, p. 292–293). The case is the CRMA legislative process, thus the time period of 2022–2024, which correlates with the time period of the negotiations in the legislative procedure. The material analysed consists of documents produced by the EU's legislative institutions during this period. As such, this study prioritises depth over breadth, it does not attempt to analyse all raw materials policies or conduct a cross-case comparison. Instead, does the thesis scope focus on the comparison of the legislative institution in the legislative procedure of the CRMA.

This study also includes a comparative dimension, where the different framings identified in each institution's are compared to identify both similarities and differences. A comparative case study approach is used to enable this analysis. In comparative case study research, theory plays a central role in ensuring that the cases are analysed consistently and systematically (Esaiasson et al., 2024, p. 292–293, 299–300). This is ensured, through a thorough theoretical and methodological framework based on framing theory.

Comparing the institutions involved in the legislative procedure provides a valuable way of exploring how actors with different roles, competences, and policy priorities frame the same issue. The institutions examined in this thesis are the European Commission, the European Parliament, and the Council of the European Union. These have been selected due to their central roles in the EU legislative process (Bache et al., 2015, p. 214–216). Although these institutions differ in function and mandate, they can still be meaningfully compared through a structured analytical framework. In this thesis, each institution is first analysed individually, then will the findings be compared to identify key patterns and divergences in how critical raw materials are framed, allowing for theoretically grounded conclusions to be drawn.

In a comparative framing analysis, the role of the researcher is central. One of the defining features of qualitative research is that the analysis is conducted and interpreted by the researcher. To ensure the validity of the study, it is essential to follow the theoretical framework closely and maintain consistency between theoretical concepts and their operationalisation (Esaiasson et al., 2024, p. 106–107). This is achieved by presenting and using to a theoretical scheme, based on framing theory. The transparency in the analysis is maintained by providing direct quotations and referencing the exact page numbers where the arguments are found. In addition to ensuring validity, it is equally important to ensure reliability, which is achieved by applying precision and methodological rigour throughout the entire research process (Esaiasson et al., 2017, p. 58).

### 4.2 Material

The material that will be used in the analysis comes from the material used in the legislative procedure of the CRMA. The material that will be used in this analysis is:

<b>European Commission</b>
COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Advanced Materials for Industrial Leadership
COMMISSION STAFF WORKING DOCUMENT- Subsidiarity Grid Accompanying the document Proposal for a Regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020
COMMISSION STAFF WORKING DOCUMENT. EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT REPORT Accompanying the document Proposal for a Regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020
Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/102
<b>European Parliament</b>
AMENDMENTS BY THE EUROPEAN PARLIAMENT* to the Commission proposal 2023/0079(COD) Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020
13 September 2023 debate: Framework for ensuring a secure and sustainable supply of critical raw materials (debate)
12 December 2023 debate: Framework for ensuring a secure and sustainable supply of critical raw materials (debate)
<b>Council of the European Union</b>
Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020 - Mandate for negotiations with the European Parliament
Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020 - Analysis of the final compromise text with a view to agreement

Table 1: Material (Author's own compilation)

The selection of material for this thesis is based on the legislative procedure of the CRMA. The documents analysed include contributions from the three main EU legislative institutions (Bache et al., 2015, p. 214–216). The decision to focus solely on the three main legislative institutions the European Commission, the European Parliament, and the Council of the European Union, excludes advisory bodies, individual member states and internal parliamentary group perspectives due to two primary limitations. First, the scope and timeframe of this thesis do not allow for a broader inclusion of actors. Second, the study's comparative approach requires a consistent and balanced analytical framework, which would be challenged by incorporating a wider range of actors with differing levels of influence and institutional roles. This same rationale also explains why the final adopted Act was not included in the analysis. As noted in the literature review, previous studies have already compared legislative proposals to the final Act (e.g. Bogojević, 2024, p. 16; Hool et al., 2023, p. 4; Vlaskamp, 2024, p. 164). However, incorporating the final Act in this comparative analysis would be problematic, as it does not clearly indicate which institutional actors were responsible for specific contributions, making it incompatible with the study's focus on comparing the institutions frames during the legislative procedure.

The selection of material is not entirely evenly distributed across the institutions, both in terms of the number of documents and the types of materials analysed. However, this reflects several important considerations that have taken place in the selection of the material. Since this thesis adopts a comparative approach, where each institution is analysed as a distinct actor, a key criteria for selection was that each document must have a single institutional author as the sender of the material. As such, co-authored documents, from multiple institutions were excluded from the analysis to maintain analytical clarity. To capture the European Parliament's position, two plenary debates specifically dedicated to the CRMA were included. These debates contain interventions from political groups and individual Members of the European Parliament (MEPs). In addition to the debates, one written document authored solely by the Parliament was selected. For the Council of the European Union, institution-specific material was more limited due to the confidential nature of its deliberations. Only two publicly available documents authored alone by the Council were included. While the European Commission is represented by four documents, making the dataset appear uneven, this is balanced by document length and content. The Commission's staff working documents, for example, are around 20 pages each, whereas the Council documents are significantly longer, exceeding 100 pages. Thus, while the number of documents varies, the overall volume and analytical depth are sufficiently comparable to support the study's comparative aims.

All documents included in the analysis are part of the official CRMA legislative procedure and are published by EU institutions. As such, they can be considered reliable sources that represent the official positions of these institutions. One advantage of using policy documents is that they are publicly available and not influenced by the researcher's presence or interpretation, as might be the case with interviews or surveys. They also offer broad and consistent coverage of the topic under investigation (Bowen, 2009, p. 31).

### 4.3 Framing analysis

The material that has been presented above, will be analysed through the framing theory, in a framing analysis. This thesis will use the definition of frames and framing by Robert Entman (1993). Entman framing theory consists of four parts, problem definition, causal interpretation, moral evaluation, and treatment recommendation (Entman, 1993, p. 52). The analysis will be guided by the theoretical framework that is presented in Table 2 later in this section.

Previous research has shown that environmental, security, and geopolitical frames are the most commonly used when analysing CRM (e.g. Bleicher et al., 2019, p. 25; Chen & Gao, 2021, p. 195; Eising et al., 2015, p. 516; Vlaskamp, 2024, p. 150; Proedrou, 2023, p. 122; Yang, 2024, p. 969–972). However, these frames have primarily been applied to broader CRM-related issues rather than directly to the legislative procedure of the CRMA. Using multiple frames in an analysis may result in some thematic overlap within the material; however, each frame remains important as a distinct analytical lens. To avoid misinterpretations, a clear methodological framework is applied. In framing analysis, the role of the researcher is central, while the methodological framework guides the process, interpretation inevitably plays a role in how the material is analysed. To ensure the validity of this thesis, the methodological scheme is applied transparently, with direct quotations and exact page references provided to support analytical claims. Equally important is ensuring reliability, which is achieved through precision and methodological rigour throughout the research process (Esaïasson et al., 2017, p. 58-60). While adhering to transparency and maintaining high validity is always challenging in qualitative research, such measures are essential for producing credible and trustworthy results.

Based on previous research, this study applies three analytical frames: geopolitics, security, and environment (e.g. Bleicher et al., 2019, p. 25; Chen & Gao, 2021, p. 195; Eising et al., 2015, p. 516; Vlaskamp, 2024, p. 150; Proedrou, 2023, p. 122; Yang, 2024, p. 969–972). These frames have been selected deductively, meaning that the material is analysed using pre-defined categories derived from

earlier literature (de Vreese, 2005, p. 53). Previous research can also build the expectations regarding how the different EU institutions may approach the issue of CRM. The European Commission, as the legislative initiator, and the European Parliament and Council, as co-legislators, are generally viewed as being on equal footing within the co-decision procedure (Thomson & Hosli, 2006, p. 413). The Commission’s agenda-setting role is often reflected in a focus on the rationale and technical justification of legislative proposals, typically producing structured and detailed outputs (Börzel, 2000, p. 141–162). In contrast, the European Parliament has been found to adopt more ambitious and progressive positions, particularly in environmental and social policy areas (Koch et al., 2016, p.676). The Council is generally expected to prioritise consensus-building and the accommodation of diverse national interests (Bruch et al., 2024, p. 6–9).

These institutional tendencies and previously identified frames, will be explored and examined through methodological scheme used in this thesis, based on the framing theory by Entman (1993):

	Geopolitics	Security	Environment
Problem definition	The EU is dependent on CRM sourced from countries with which it is in a geopolitical tension	EU’s dependence on CRM in other countries can cause national security issues, e.g., disruption in crucial service	The EU is dependent on the type of extraction of CRM which is environmentally harmful.
Causal interpretation	Political and economic forces concentrate critical raw materials in certain countries, creating global supply chain power imbalances and vulnerabilities.	External threats like trade wars, sanctions, and economical competition are framed as key risks to the EU’s CRM security, highlighting its over-reliance on non-EU countries and vulnerability to global supply chain disruptions.	The rising demand for CRMs, particularly for green technologies, drives unsustainable and often unregulated mining practices, leading to over-exploitation and significant environmental harm.
Moral evaluation	Non-EU countries like China and Russia, which dominate CRM supply, are perceived as using their control for political leverage and economic advantage.	Countries or entities that control or monopolize the supply of CRMs and may exploit these materials for strategic leverage or economic dominance.	Companies or countries that engage in environmentally harmful extraction practices, often without adequate regard for the ecological impact.
Treatment recommendation	Diversification of the supply chain, securing access to alternative suppliers, and/or strategic partnerships with other nations (e.g., African or Latin American countries) are proposed as solutions.	Proposals focus on developing EU-based resources like mining and recycling, along with international agreements to secure CRM supply, aiming to boost energy and defence security and reduce reliance on external actors.	Solutions include promoting circular economy initiatives, enhancing recycling programs, and encouraging environmentally responsible sourcing practices for CRMs.

Table 2: Methodological scheme for empirical analysis (Author’s own compilation)

The analytical framework guiding this study is based on Entman’s (1993) definition of frames (Entman, 1993, p. 52). The categories and guiding questions under each sub-section are primarily derived from Entman’s conceptualisation of framing, which identifies four core functions: problem definition, causal interpretation, moral evaluation, and treatment recommendation (Entman, 1993, p.

52). The specific content included within each sub-section has been further informed by previous research findings on CRM, as well as the contextual insights provided by the existing literature. This ensures that the framework remains both theoretically grounded and empirically relevant to the subject matter.

The analytical scheme developed from this framework will be systematically applied to all documents included in this study. Each frame, geopolitical, security, and environmental, will be used individually to analyse all of the material. This means that each document will be examined three times, once for each frame. The analysis will begin by assessing all documents from the same institution through the lens of each frame. Following this, a broader, cross-institutional comparison will be conducted, drawing on the findings from all three frames. This structure enables a comprehensive comparison of how different EU institutions frame critical raw materials within the legislative procedure of the CRMA.

## 5. Results & analysis

This chapter will present the findings and results of the analysis. The chapter is organised in four sections, beginning with presenting the findings on each frame. The chapter ends with a comparative discussion of the key findings and the main differences observed between the institutions.

### 5.1 Geopolitical framing

In this section, the geopolitical framing will be analysed for each institution based on the selected material. The analysis is guided by the theoretical framework presented in Table 2.

#### 5.1.1 European Commission

The analysis of the European Commission's documents, through the lens of geopolitical framing, reveals a clear focus on the risks associated with external dependencies. In its problem definition, the Commission emphasises the EU's heavy reliance on third countries for CRM imports, with a particular concern directed toward China and Russia (European Commission., 2023b, p.16). This concern is evident from the earliest stages of the legislative process, where the initial proposal explicitly links geopolitical events to potential supply chain disruptions (European Commission., 2023c. p.1). The proposal highlights both the COVID-19 pandemic and the war in Ukraine as key examples of geopolitical crises that have exposed vulnerabilities in CRM supply and underscored the strategic importance of securing access to these materials (European Commission., 2023c, p.1). The Commission also frames CRM dependency as a structural vulnerability, since the supply is concentrated in a limited number of countries. The Commission underscores that access to CRM may be controlled by states, whose political interests do not align with those of the EU. (European Commission., 2023b, p.5.).

Currently, the global production of CRMs is highly concentrated in few countries in the world. The European supply of CRMs is therefore highly dependent on third countries, not always like-minded ones (European Commission., 2023b, p.5).

Moving to the causal interpretation, the Commission highlights both political and economic forces as the underlying causes of CRM vulnerability (European Commission. 2024a, p.14; European Commission., 2023b, p.188; European Commission., 2023c, p. 82). Geopolitical tensions and international dependencies are presented as central factors, bringing political concerns to the forefront of CRM policy. The material also emphasises the growing global competition for access to critical materials, framing it as a race between countries to secure future supply (European Commission., 2023b, p.23). This framing suggests that CRM scarcity is not only a technical or environmental issue but one deeply embedded in international power dynamics.

Most risks of supply come from geopolitical vulnerabilities that affect non-energy and non-agricultural raw materials of high economic importance, emphasized by the concentration of supply from a few third countries and an increasingly strong competition to secure critical raw materials for the digital and green transition (European Commission., 2023a, p. 3).

A second causal interpretation concerns the economic risks associated with the concentration of CRM supply. This concentration is framed as a strategic vulnerability, particularly for European industries and companies that rely heavily on uninterrupted access to these materials. The Commission's framing suggests that limited diversification of supply sources not only threatens industrial competitiveness but also poses a broader risk to the EU's overall security of supply (European Commission., 2023b, p. 12).

In the moral evaluation, the Commission places particular emphasis on industrial and technological development. In its Staff Working Document, it highlights the need for the EU to catch up with technological advancements made by other global actors (European Commission., 2023b, p.24). This framing shifts the focus to the opportunities within the EU particularly the potential for expanding domestic mining and processing capacities. These ambitions are closely tied to the EU's broader policy goals, including the twin transition, referring to the green and digital transformations, as well as the pursuit of strategic autonomy (European Commission. 2024a, p.11; European Commission., 2023c, p.9). By connecting CRM policy to these overarching objectives, the Commission frames domestic action not only as necessity but as a desirable and forward-looking response to external dependencies.

The Commission's moral evaluation also frames global industrial leadership as a desirable goal for the European Union. The emphasis is placed on the Union's domestic potential for success, particularly in developing its own CRM supply capacities. However, the Commission also acknowledges the importance of international partnerships (European Commission. 2024a, p.13; European Commission., 2023c, p.6) Rather than positioning domestic mining and external cooperation as mutually exclusive, it presents them as complementary strategies. Expanding domestic extraction and processing is framed as essential for reducing vulnerabilities, but this effort is expected to coexist with strategic partnerships with third countries, thereby enhancing resilience and supply security (European Commission., 2023b, p. 188; European Commission., 2023c, p.5)

Within this section of the analysis, it has become evident that the Commission views geopolitical aspects, such as supply chain risks and the dominance of third countries, as key concerns reflected in the legislative proposal and accompanying documents. However, the documents do not merely highlight these issues as problems; they also contain recommendations for how these challenges should be addressed. The legislative proposal and the introduction of the Critical Raw Materials Act (CRMA) are framed as forward-looking policy instruments (European Commission. 2024a, p.14). The Commission presents the Act as a strategic response to geopolitical risks, aiming to enhance the EU's resilience by reducing external dependencies and strengthening internal capacities. Where the role of the member states remains central and the Commission explicitly acknowledges that no single country can address these risks of CRM alone (European Commission., 2023b, p. 26). This part of the analysis provides clear evidence of the presence of geopolitical framing across the Commission's documents. The Commission addresses a broad range of issues, including international trade, supply chains, and strategic vulnerabilities, through a geopolitical lens, framing these areas as central to the EU's ability to secure access to critical raw materials.

### **5.1.2 European Parliament**

The geopolitical framing in the European Parliament's material emphasises the risks associated with dependency on third countries for the supply of critical raw materials. Resource competition and the fragility of global supply chains are highlighted as key drivers of geopolitical tension (European Parliament. 2023a, p. 2). This framing reflects a broader concern within the Parliament about the strategic implications of relying on non-EU actors for access to essential resources.

The risk of supply disruptions is increasing against the background of rising geopolitical tensions and resource competition (European Parliament. 2023a, p. 2).

Within the European Parliament's problem definition, the risk of supply disruptions is closely linked to the influence of geopolitical actors, most notably China. This concern was frequently raised by Members of the European Parliament (MEP) during the parliamentary debates. China was not only described as an economic competitor but also as a political actor whose control over global supply chains threatens the EU's autonomy, values, and strategic identity. For example, MEP Nicola Beer

declared, “*being 99% dependent on China is something we can no longer afford,*” (European Parliament, 2023b) while MEP Jessica Polfjård further highlights the dependency both on China and Russia “*In the geopolitical landscape we currently face, we must reduce our dependence on countries such as Russia and China.*”(European Parliament, 2023b).

The causal interpretation of the geopolitical framing is closely interlinked to the description of China. Where the CRM is highlighted as an important actor for the supply chains, that also create and forces global supply disruptions (European Parliament. 2023a, p.111). At the core of the Parliament’s causal interpretation lies a dual failure, externally the EU is overly dependent on monopolistic suppliers such as China and internally it has lacked the industrial capacity and strategic planning necessary to build resilient supply chains (European Parliament. 2023a, p.6).

In its moral evaluation, the European Parliament continues to emphasise the geopolitical risks posed by external actors, particularly China. MEP Anna-Michelle Asimakopoulou warned that “*we will be held hostage by China if we fail to act*” (European Parliament, 2023b.). This statement reflects a broader framing in which geopolitical dependencies are not only seen as strategic risks, but as threats to the EU’s values and autonomy.

The Parliament’s treatment recommendations are based on conditional partnerships with third countries, ones that reinforce good governance, labour rights, and local development:

The Union will support third countries in reinforcing their legal framework, good governance capacity and transparency in the raw materials sector (European Parliament. 2023a, p. 8).

The Parliament also wants to require transparency on job creation, gender equity, and working conditions in all CRM projects. This to signal a geopolitical reframing from exclusive power-seeking to inclusive sovereignty (European Parliament. 2023a, p. 46).

The analysis reveals that geopolitical framing is both evident and consistent in the European Parliament’s approach. What emerges is not only a concern about supply chain security, but also a broader emphasis on democratic values and the importance of cooperation with like-minded countries. The Parliament does not downplay the EU’s vulnerabilities; instead, it explicitly acknowledges them while advocating for a solution and response.

### **5.1.3 Council of the European Union**

The Council’s documents analysed from a geopolitical framing, shows the problem definition with a focus on the external dependencies on other countries. The Council recognizes that:

The risk of supply disruptions is increasing against the background of rising geopolitical tensions and resource competition (Council of the European Union. 2023b, p. 3).

The focus on the geopolitical tensions is evident in the texts from the Council. The Council gives a nuanced picture with focus on increasing the EU’s internal capacity and reducing reliance on any single external actor. As the Council states, “*the Union must increase the processing capacity along the whole value chain*” (Council of the European Union. 2023b, p. 8).

The Council’s problem definition is closely linked to geopolitical tensions. Rather than focusing solely on risks, the Council emphasises the possibility for the EU to shift its perspective and view the situation as an opportunity for strategic adjustment (Council of the European Union. 2023a, p. 70). This optimistic dimension continues in the causal interpretation, where the diversification of supply

chains is presented as a key response to external dependencies. At the same time, the Council recognises that complete independence is unrealistic and underlines that the EU will continue to rely on imports from third countries to meet its CRM needs (Council of the European Union. 2023b, p. 52).

The Council's moral evaluation also highlights the role of domestic companies in addressing geopolitical vulnerabilities. It places part of the responsibility for supply chain resilience on large firms operating within the EU. Specifically, the Council proposes that these companies should conduct risk assessments by mapping the origins of their strategic raw materials, analysing factors that may affect their supply, and identifying potential vulnerabilities (Council of the European Union. 2023a, p. 38). Where risks are identified, companies are expected to take appropriate steps to mitigate them. This framing positions industry not just as a passive stakeholder, but as an active participant in securing the EU's strategic autonomy (Council of the European Union. 2023a, p. 125).

Within the moral evaluation of the geopolitical frame is it a pragmatic view where uncoordinated national actions are framed as harmful to competition and to the cohesion of the single market.

Uncoordinated actions by Member States risk distorting competition and fragmenting the internal market (Council of the European Union. 2023a, p. 5).

The Council also emphasises the role of Member States in strengthening international partnerships to secure the supply of CRM. It highlights the need for Member States to inform the Commission of their engagements and partnerships with third countries. This emphasis reflects a broader strategy focused on enhancing coordination at the EU level while encouraging the development of diversified, resilient supply chains through external cooperation. The Council thus frames international partnerships not only as a shared responsibility but as a key element in mitigating geopolitical risks associated with CRM dependency (Council of the European Union. 2023a, p. 130).

Strategic partnerships are a recurring element in the Council's treatment recommendations. Particular emphasis is placed on third countries and their role in supporting the EU's efforts to diversify supply and secure access to critical raw materials (Council of the European Union. 2023a, p. 103). These partnerships are framed as essential tools for enhancing resilience and reducing geopolitical vulnerabilities, reinforcing the idea that external cooperation is a necessary complement to internal policy measures (Council of the European Union. 2023b, p. 108).

The geopolitical framing is clearly present in the Council's documents, with a strong emphasis on securing supply chains and strengthening domestic capacity. The Council consistently frames the stability of CRM supply as a strategic priority, linking it to both internal preparedness and external collaboration. In particular, it highlights the importance of building and maintaining strategic partnerships with third countries as a means to diversify sources and reduce geopolitical risk.

### **5.1.4 Comparison, geopolitical frame**

This section will compare the results that have been presented in the sections above. A primary finding is that the geopolitical frame is present across all three institutions. For a geopolitical frame to be considered fully present, all key analytical elements of the theoretical scheme: problem definition, causal interpretation, moral evaluation, and treatment recommendation.

Geopolitical framing is present by all three institutions, but with notable differences in intensity and focus. The European Commission frames the issue in geopolitical terms, identifying the concentration of supply and the vulnerability this creates for the EU, especially in light of recent crises such as the COVID-19 pandemic and the war in Ukraine (European Commission., 2023c, p.1). However, its framing is more structural and embedded in a broader discussion on resilience and strategic autonomy. The European Parliament presents the most explicit geopolitical language, frequently referring to external threats, overdependence on third countries, particularly China, and the strategic risks this

poses to the EU (European Parliament. 2023a, p.111; European Parliament. 2023a, p.6). The Parliament emphasizes the need to reduce reliance on dominant suppliers and highlights the role of global power competition in shaping raw material access. The Council, by contrast, refers to geopolitical challenges more cautiously. It acknowledges global tensions and the importance of international competition but avoids adversarial language and focuses instead on strengthening internal capacity and diversifying supply sources (Council of the European Union. 2023a, p. 38; Council of the European Union, 2023b, p. 52). In short, while all three institutions recognize CRM access as a geopolitical challenge, the Commission focuses on the strategic planning and systemic risks. While the Parliament applies a direct framing and mentions China and Russia explicitly multiple times. This in relation to the Council which is more restrained and does not mention any of the countries by name but instead focuses on internal coordination and risk mitigation.

## 5.2 Security framing

This section presents the security framing of each institution included in the analysis. The security frame will be used as an analytical lens to examine all selected documents, focusing on how issues of vulnerability, risk, and protection are constructed in relation to critical raw materials.

### 5.2.1 European Commission

The security framing of the European Commission begins with the problem definition of CRM. This problem is closely linked to national and economic security, as the Commission highlights how supply disruptions can have serious consequences for industries and businesses across the Member States.

Disruptions jeopardize EU industries and businesses and compromise EU main climate and digital goals (European Commission., 2023a, p. 3).

In addition to economic vulnerabilities, the Commission also frames CRM as a potential strategic security risk, drawing parallels to the EU's previous dependence on Russian gas exports (European Commission., 2023b, p. 169). This comparison is used to highlight how critical raw materials could similarly be subject to geopolitical leverage or sanctions. The Commission points to the role of CRM in key sectors such as defence, aerospace, and digital infrastructure, suggesting that a disruption in access could compromise not only industrial production but also national security interests (European Commission., 2023b, p. 168). This framing places CRM within the broader context of military and geopolitical risk, reinforcing its relevance to the EU's overall strategic resilience.

Within the causal interpretation of the analysis, does the Commission highlight the external threats that can affect access to CRM (European Commission. 2024a, p. 1). In this part, the supply chain is the main focus, with an emphasis on the risks posed by external factors (European Commission., 2023c, p. 34). This is particularly evident in discussions of critical value chains that are closely linked to the defence sector and renewable energy infrastructure (European Commission. 2024a, p. 15; European Commission., 2023b, p.169). In these cases, the Commission moves beyond abstract warnings and highlights the concrete implications of CRM supply disruptions, framing them as immediate threats to the EU's security, industrial autonomy, and energy transition goals:

However, if price spikes can be partly handled by industry, the fact that some CRMs are indispensable (with no known substitute and sometimes in very low concentrations) to some key components of the industry (e.g. heavy rare earth elements in magnets), a lack of access to CRM could lead to a major disruption of entire value chains in the EU (from electric mobility to defence and renewable energy production) (European Commission., 2023b, p. 169).

The Commission highlights and discusses security in the different documents, where one aspect is interlinked with the lack of coordination, which is seen to be attributed to fragmented monitoring

systems (European Commission. 2024a, p. 2), poor coordination among Member States (European Commission., 2023b, p.14), and the absence of predictive tools such as early warning mechanisms (European Commission., 2023c, p. 125-126). The impact assessment warns that the situation will likely persist “*in the case of no targeted intervention*” (European Commission., 2023b, p. 24).

The moral evaluation, part of the framing analysis, here stresses the need for shared responsibility, where coordination is both a technical necessity and a moral imperative. Where the commission highlights the importance of having an ecosystem where stakeholders can work together, to have a stable supply of CRM (European Commission. 2024a, p. 4).

The treatment recommendations in the Commission’s security framing are extensive and detailed. They include the establishment of CRM monitoring dashboards, joint stockpiling systems, the designation of strategic projects, and mandatory risk preparedness assessments for large companies (European Commission., 2023b, p. 125, 193, 196). These proposals are particularly prominent in the CRMA proposal, where the secure supply of critical raw materials is explicitly linked to key EU priorities such as strategic autonomy, industrial competitiveness, and defence preparedness.

The expected result of the CRM Act is the secure supply of CRMs and strengthened EU capacity for the green and digital transitions and strengthened defence investments (European Commission., 2023b, p. 61).

The Commission’s security framing is closely intertwined with various policy dimensions, ranging from industrial resilience to defence and energy security. The problem definition is particularly prominent, with multiple facets of security being identified and emphasised. The Commission presents CRM supply not only as a matter of economic concern but as a strategic issue with implications for national security, technological sovereignty, and critical infrastructure. This comprehensive framing highlights the central role of CRM in the EU’s broader security agenda.

## **5.2.2 European Parliament**

In its security framing, the European Parliament situates CRM within the broader context of economic sovereignty, strategic autonomy, and internal cohesion. Beginning with the problem definition, the Parliament frames CRM dependency as a security concern, particularly in relation to defence and strategic infrastructure:

Access to raw materials is essential for the Union economy, digital and green transition, security and defence and the functioning of the internal market. There is a set of non-energy, non-agricultural raw materials that, due to their high economic importance and their exposure to high supply risk, often caused by a high concentration of supply from a few third countries, are considered critical (European Parliament. 2023a, p. 2).

This defence perspective is further reinforced through the Parliament’s focus on supply chains, highlighting the critical role of CRM in supporting Europe’s defence capabilities. By explicitly linking CRM to defence, the Parliament underscores the strategic importance of securing access to these materials across multiple sectors, demonstrating how CRM supply is essential not only for industrial resilience but also for national and collective security (European Parliament. 2023a, p. 3).

In the causal interpretation, the European Parliament places strong emphasis on external threats and strategic vulnerability. MEP Hervé Juvin stated, “*This is not just about markets, Europe must assert its strategic priorities,*” (European Parliament. 2023c) reflecting the Parliament’s view that CRM policy goes beyond economic considerations and must be anchored in broader security and autonomy goals. The Parliament also highlights disparities in preparedness among Member States and companies, which contribute to an uneven playing field within the Union. This internal imbalance is

seen as a structural weakness that must be addressed to ensure collective security and cohesion. This through risk-awareness and anticipation (European Parliament. 2023a, p. 20).

This discussion leads to a framing of the problem not only in terms of vulnerability but also injustice. The Parliament argues that it is unacceptable for some Member States or corporations to be better protected from CRM-related shocks simply because they possess greater administrative or financial capacity (European Parliament. 2023a, p.30). From a moral evaluation perspective, the Parliament also draws attention to China's dominant role in the global CRM market, framing this control as a strategic risk. However, the emphasis is not solely on naming external threats, but also on reinforcing the Union's capacity to act. The Parliament calls for a fairer and more resilient internal system that ensures all Member States are equally equipped to respond to external supply disruptions. And the importance of safeguarding the EU's resilience and strategic autonomy (European Parliament. 2023a, p. 2).

MEP Marie Dauchy reinforces the moral urgency of the security framing by stating, "*We have repeatedly warned of the dangers of this situation in strategic sectors such as security, aerospace, and health.*" (European Parliament. 2023b). This highlights a sense of institutional responsibility and the need for corrective action. From a moral evaluation perspective, such statements underscore the dual concern of economic and security dependence. The Parliament frames the issue not only as a strategic threat but also as a failure of foresight, calling for decisive measures to safeguard the EU's economic resilience and strategic autonomy (European Parliament. 2023a, p.13). This aligns with the broader moral narrative that inaction threatens both EU values and internal cohesion.

Within the treatment recommendation, is the CRMA seen as an important Act that needs to be adopted to tackle the problems with CRM (European Parliament. 2023a, p. 3). MEP Hildegard Bentele highlights that the CRMA is well welcomed and needed, "*The current compromise is a good one. It makes raw material projects a priority.*" (European Parliament. 2023b.). The CRMA's emphasis on supply chain monitoring, corporate risk assessments, and national stockpiles is, seen as a part of a solution.

The treatment recommendation is also closely connected to more explicit preparations for the legislation. Where the supply distributions and the strategic decisions is in focus.

In order to ensure that they are sufficiently prepared to face supply disruptions, large companies manufacturing strategic technologies in the Union using strategic raw materials should ensure an appropriate internal risk management (European Parliament. 2023a, p. 22).

The security framing of the European Parliament is clearly present, with a strong emphasis on defining CRM as a core strategic issue. The problem definition is particularly prominent, focusing on the urgency of securing a stable and resilient supply of critical raw materials. The Parliament links this security concern to several key sectors, including industry, defence, and climate policy, thereby framing CRM as essential not only for economic competitiveness but also for the Union's overall strategic stability.

### **5.2.3 Council of the European Union**

The security framing within the Council has a focus on resilience, risk anticipation, and shared institutional responsibility. Beginning with the problem definition of CRM, by the security framing, shows a problem definition that highlights the security sector and the security issues:

In addition, critical raw materials are needed at the beginning of many industrial value chains and are often indispensable inputs for a wide set of strategic sectors

including renewable energy, the digital industry, and the space and defence sectors. They therefore play an essential role in underpinning economic activities in the internal market and disruptions in their supply could have a significant cross-border impact between Member States (Council of the European Union. 2023b, p. 4).

In its problem definition, the Council highlights concerns related to market function and the security of supply. A particular emphasis is placed on the lack of transparency in CRM supply chains, which is identified as one of the most significant current challenges (Council of the European Union. 2023a, p. 39). The Council links this issue to broader economic and digital sectors, framing CRM access as essential for ensuring the stability of industrial and technological activities across the Union. Moreover, the Council warns that insufficient supply chain transparency can itself become a security risk, particularly if disruptions remain undetected or unmanaged (Council of the European Union. 2023a, p.108). This framing situates the CRM challenge at the intersection of market efficiency, industrial resilience, and strategic security.

Within the causal interpretation, that focuses on key risks of wars and sanctions. Is it only the aspect of geopolitics that is found in the documents from the Council. Instead, is it the geopolitical aspects of supply disruptions that take a bigger place (Council of the European Union. 2023b, p. 16, 73). Whereas security of defence and wars is not mentioned.

In the Council's moral evaluation of the security framing, the focus lies primarily on economic activity and the stability of the EU's internal market. The Council frames CRM preparedness as a matter of economic coordination, highlighting the importance of EU-wide mechanisms such as stress testing and CRM monitoring. At the same time, it grants Member States discretion in defining strategic stock levels and managing national preparedness. This dual approach is evident in the assertion that *"uncoordinated actions by Member States risk distorting competition,"* (Council of the European Union. 2023a, p. 12), while also allowing national programs to shape risk management strategies. The moral evaluation underpinning this framing centre on the protection of the internal market, as reflected in the statement: *"Supply disruptions likely to distort competition and fragment the internal market"* (Council of the European Union. 2023a, p. 16). Here, security is not treated as an abstract geopolitical concept but is instead intimately linked to market stability, affordability, and the reliability of industrial activity.

The treatment recommendations include stress tests (Council of the European Union. 2023a, p. 35) and joint purchasing mechanisms (Council of the European Union. 2023b, p. 117). Notably, does the treatment recommendations by the Council focus on improvements in procurement and coordination. The Council's security framing adopts a distinct stance, rather than focusing on external threats such as war or sanctions, it emphasises the protection of the internal market as a central security concern.

## 5.2.4 Comparison, security frame

All three institutions, Commission, Parliament, and Council, frame CRMs as a security issue, but they differ in how strongly and in what context this framing is applied. The European Commission presents the most comprehensive and multi-layered security framing, positioning CRM access as a matter of strategic resilience, industrial continuity, and defence preparedness. The European Commission draws parallels to past energy dependencies and stresses both present vulnerabilities and future risks across sectors such as defence, digital infrastructure, and renewable energy (European Commission. 2024a, p. 15; European Commission., 2023b, p.169). The Commission identifies concrete risks tied to supply chain disruptions and proposes detailed institutional responses, such as joint stockpiling and mandatory risk preparedness (European Commission., 2023b, p.125, 193, 196). The European Parliament also frames CRM supply as a central security issue, particularly emphasizing strategic sectors like defence and the internal market (European Parliament. 2023a, p.3). The Parliament language focuses on external threats and unequal preparedness among Member States, treating CRM

dependency as a structural vulnerability that undermines collective resilience. While its framing is similar to the Commission's in substance, it is more urgent in tone and centred around institutional failure and response. In contrast, the Council adopts a more functional and market-oriented security framing. While the Council recognizes CRMs as essential to key sectors, including defence and space (Council of the European Union. 2023b, p. 4), it avoids framing the issue through explicit references to external threats. Instead, the Council focuses on internal coordination, transparency, and supply chain resilience (Council of the European Union. 2023a, p. 16). In short, all institutions have the security frame present in the documents, and the Commission frames it through strategic preparedness, the Parliament through structural urgency and institutional responsibility, and the Council through market stability and risk coordination.

## 5.3 Environmental framing

This section presents the analysis based on the environmental framing. The environmental frame will be applied across all three legislative institutions, with a focus on how climate and environmental aspects are addressed within the documents.

### 5.3.1 European Commission

Beginning with the environmental framing in the European Commission's documents, CRM are represented as essential to enabling the environmental transition. In the problem definition, the Commission frames CRM as a key component in achieving climate and sustainability goals, given their use in technologies that reduce emissions, such as wind turbines, electric vehicles, and solar panels (European Commission. 2024a, p.15). At the same time, the Commission acknowledges a more complex reality, the extraction and processing of these materials also carry significant environmental costs. This framing highlights a duality, while CRM are indispensable to the green transition, their production can create new environmental challenges (European Commission. 2024a, p. 3; European Commission., 2023a, p. 2 European Commission., 2023b, p.3). Recognising this tension is central to the Commission's problem representation

Continuing with the causal interpretation, the Commission links the environmental challenges associated with CRM to broader structural issues in the transition to a sustainable economy. A central theme in the documents is the emphasis on circularity specifically, the need to reduce environmental impacts through increased recycling, reuse, and more efficient material use (European Commission. 2024a, p.3; European Commission., 2023a, p.2). This focus is supported by quantitative data and statistics, which are used to illustrate the current shortcomings in circular practices and the potential gains from improving them (European Commission. 2024a, p. 3; European Commission., 2023b, p.183). The Commission thus presents a clear causal relationship between insufficient circularity and the environmental footprint of CRM extraction and use.

The theme of duality also continues within the causal interpretation of the Commission's environmental framing. This is particularly evident in the context of technologies such as wind turbines and electric motors (European Commission. 2024a, p.15), which are central to the EU's energy transition. While these technologies rely heavily on CRM and contribute to reducing carbon emissions, their production and material requirements also pose environmental risks. The Commission thus frames CRM as both enabling the shift to renewable energy and simultaneously contributing to new ecological pressures, reinforcing the complexity of the green transition

The CRM value chain is associated with a range of environmental impacts. For example, the production of rare earth elements (REEs), used for instance in electric motors and wind turbines, is associated with significant material and energy

consumption and generates large amounts of air and water emissions and solid waste (European Commission., 2023b, p. 22).

In its moral evaluation, the Commission adopts a balanced approach that reflects differing priorities across environmental, economic, and regulatory dimensions. Rather than imposing strict regulatory burdens, the Commission emphasises the role of incentives and soft governance mechanisms to encourage environmentally responsible practices. This is reflected in its reassurance that the reporting requirements are limited: *“The burden on companies for providing information is very limited as it only captures large companies active in extraction, refining or recycling”* (European Commission., 2023a, p. 6). Furthermore, the Commission acknowledges the role of other stakeholders in environmental monitoring and data transparency (European Commission., 2023a, p. 2), underlining the importance of accessibility and comprehensive coverage in tracking environmental impacts within the legislative framework.

One notable feature of the environmental framing, particularly within the moral evaluation, is its more cooperative perspective on third countries. Unlike the security and geopolitical framings, where third countries are often portrayed as sources of risk or dependency, the environmental perspective positions them as both part of the solution and as actors that must themselves undertake reforms toward greater sustainability (European Commission., 2023b, p. 30). This reflects a shift in emphasis from competition and control to collaboration and mutual responsibility in addressing global environmental challenges.

In the treatment recommendations, environmental considerations occupy a central place within the legislative proposal. Several measures are introduced or proposed, but the Commission begins by acknowledging that existing frameworks are inadequate: *“EU waste legislation does not provide for incentives or information gathering to promote recovery of CRMs”* (European Commission., 2023b, p. 21). In response, it proposes improvements such as updated waste legislation, mineral mapping, and environmental footprint tracking (European Commission., 2023c, p. 61). However, it notably avoids introducing binding targets, signalling a framing in which environmental priorities are treated as essential, but more aligned with long-term system transformation than immediate regulatory enforcement.

Moreover, the Commission explicitly connects CRM policy to innovation strategies, stating that *“implementing the ‘Safe and Sustainable by Design’ concept will be at the core of the material transformation process”* (European Commission. 2024a, p. 15). This broad view of CRM in the environmental frame, shows how the development of new materials and technologies, positions environmental goals as a part of a broader transition.

The environmental framing is particularly prominent in the documents analysed from the European Commission. Key areas of focus include circularity, with an emphasis on recycling and reuse, as well as the dual nature of critical raw materials, viewed both as enablers of the green transition and as contributors to environmental harm through their extraction and processing.

### **5.3.2 European Parliament**

In the European Parliament, the environmental framing also places strong emphasis on the dual nature of CRM. Environmental risks are not presented as acceptable trade-offs, but as unjustifiable consequences if left unregulated. This is reflected in the problem definition, where MEPs question whether the extraction of CRM can ever truly be sustainable. MEP Henrike Hahn articulated this tension clearly, stating: *“There is no such thing as truly sustainable mining.”* (European Parliament. 2023b) Such statements reflect a more open and critical engagement with the environmental costs of CRM policy. The overall problem representation within the Parliament places considerable emphasis on the negative environmental impacts of CRM extraction and the need for stricter safeguards.

The production of critical raw materials causes climate and environmental impacts, notably on water and biodiversity (European Parliament. 2023a, p. 28).

The Parliament's causal interpretation links environmental degradation to structural gaps in EU law, particularly the absence of binding circularity targets, weak recycling infrastructure, and insufficient protection for affected communities. These are not mere oversights, but manifestations of a policy approach that prioritizes industrial urgency over ecological limits. Mohammed Chahim: *"Demand for CRMs will increase; we need ambitious goals for reuse and upcycling."* (European Parliament. 2023b). MEP Jens Geier stated *"But recycling is sustainable. The goal must be to meet 25% of Europe's demand through recycling"* (European Parliament. 2023c). Thus, emphasising the need for recycling of CRM in the future in the EU.

Within the moral evaluation, does the Parliament connect the environmental aspects to social justice. MEPs repeatedly called for Free, Prior and Informed Consent to be codified in CRM partnerships, particularly with Indigenous communities. MEP Anna Cavazzini stated *"We must include the principle of free, prior, and informed consent for Indigenous peoples"* (European Parliament. 2023b). Thus, environmental protection is not only about reducing emissions or conserving habitats (European Parliament. 2023a, p.85), it is about affirming the dignity and rights of people impacted by CRM extraction (European Parliament. 2023, p.114).

Treatment recommendations flow logically from this framework. Parliament supports binding reuse and recycling targets, circular economy incentives, environmental permitting reforms, and stronger enforcement mechanisms. Proposals like setting a 25% recycling target for strategic CRMs, reprocessing of extractive waste, and mineral mapping to avoid ecological hotspots reflect an insistence that environmental considerations must be proactive, not reactive (European Parliament. 2023a, p. 3,11,62).

Increase the use of secondary critical raw materials that can be used instead of or alongside primary critical raw materials, including materials originating from metal scraps and end-of-life products, and promote the refurbishment of products including, where appropriate, by taking recycled content into account in award criteria related to public procurement or considering financial incentives for the use of such materials (European Parliament. 2023a, p. 72).

The European Parliament's environmental framing of CRM highlights both the duality of these materials and the centrality of environmental values in shaping policy. Environmental protection is not treated as a secondary concern or an add-on to CRM governance; rather, it is presented as a foundational principle that reflects the type of Union the Parliament envisions. Critical raw materials are framed as a necessary component of the green transition, but their governance must be guided by strong environmental standards. In this context, CRM policy is not only about securing resources, but also about laying the groundwork for a sustainable and environmentally responsible future.

### **5.3.3 Council of the European Union**

The Council's environmental framing recognises the strategic importance of CRM while also acknowledging their environmental implications. In the problem definition, particular emphasis is placed on the dual nature of CRM: they are essential for enabling green technologies but also have the potential to generate significant negative environmental impacts, especially during extraction and processing. This framing reflects a cautious approach, acknowledging that CRM are necessary for climate goals while also posing environmental risks that must be carefully managed.

If not managed properly, increased demand could lead to negative environmental and social impacts (Council of the European Union. 2023a, p.11).

The Council also highlights recycling and improved recycling rates as critical components of its environmental framing. This emphasis is partly driven by the recognition that a significant amount of waste containing valuable raw materials is currently exported outside the EU (Council of the European Union. 2023a, p. 40). As such, the problem representation encompasses both the environmental impacts of production and extraction, and the inefficiencies in recycling and material recovery. In its causal interpretation, the Council points to both technological and informational shortcomings. It notes that *“recycling systems and technologies are often not adapted to the specificities of these raw materials”* (Council of the European Union. 2023b. p. 29), and further observes that *“a lack of attention to critical raw materials content is a key barrier to greater use of recovery potential”* (Council of the European Union. 2023a, p. 43). These statements reflect a framing that sees environmental challenges as rooted not only in extractive practices, but also in systemic barriers to circularity.

Within the moral evaluation, the Council underscores the importance of human rights and social sustainability in the context of CRM governance. It stresses that economic considerations related to mining and material extraction must not override the potential social and human rights impacts. This framing reflects a broader normative position: that environmental and economic objectives must be pursued in a manner that safeguards communities and respects fundamental rights, particularly in relation to extraction practices both within and outside the EU (Council of the European Union. 2023a, p. 20).

One element that distinguishes the Council’s environmental framing from that of the other institutions is its explicit focus on deep-sea mining (Council of the European Union. 2023a, p. 20). The Council draws attention to the potential environmental risks associated with this type of extraction and calls for greater scrutiny and regulation. This emphasis reflects a broader concern with the sustainability of all forms of mining and resource extraction. In addition to promoting recycling and circularity, the Council frames environmental sustainability as a principle that must guide the entire life cycle of CRM, from sourcing to disposal (Council of the European Union. 2023a, p. 20-21). This more comprehensive framing positions the Council as particularly attentive to the long-term ecological implications of CRM policy.

The treatment recommendations by the Council, focuses on waste and recycling. Operators of extractive waste facilities are encouraged to improve sustainability practices by, for example, conducting assessments of CRM recovery potential: *“perform an assessment of recovery potential for CRMs”* (Council of the European Union. 2023b, p. 43). In parallel, Member States are urged to strengthen their role in circularity by *“build databases on extractive waste recovery potential”* (Council of the European Union. 2023b, p. 87). These measures indicate an environmental framing that supports innovation, recycling, and long-term circularity. Overall, the Council aligns CRM policy with the broader objectives of the circular economy and low-carbon industrial transformation, framing sustainability as a strategic asset rather than a regulatory burden.

Within the Council’s environmental framing, the dual nature of CRM is a recurring theme. While CRM are essential for advancing sustainability goals, their extraction and processing raise significant environmental concerns. The Council places particular emphasis on improving recycling rates and reducing waste, identifying these as critical challenges for both the mining phase and the overall use of CRM. This focus reinforces the Council’s broader framing of CRM policy as part of a circular and resource-efficient economic model.

### **5.3.4 Comparison, environmental frame**

All three institutions recognize the environmental dimension of CRMs, though they frame it with varying degrees of urgency, responsibility, and regulatory emphasis. The European Commission adopts a balanced environmental framing that highlights the dual role of CRMs, as essential enablers of the green transition and as sources of environmental harm through their extraction and processing

(European Commission. 2024a, p. 3; European Commission., 2023a, p.2; European Commission., 2023b, p.3). While acknowledging these tensions, the Commission emphasizes circularity, innovation, and soft governance tools, proposing incentives, monitoring, and gradual reforms over binding obligations (European Commission., 2023c, p. 61). The European Parliament's environmental framing treats environmental harm not as a side effect but as a central concern that must be addressed through stricter regulation and justice-oriented policy (European Commission., 2023c, p. 61). MEPs challenge the premise of sustainable mining and advocate for binding targets, stronger safeguards, and the protection of communities, particularly through principles like Free, Prior, and Informed Consent (European Parliament, 2023b.). In contrast, the Council of the EU frames environmental concerns with another focus, emphasizing recycling, material recovery, and long-term sustainability while avoiding prescriptive tools (Council of the European Union. 2023a, p. 20-21). What is interesting is also the Councils focus on deep-sea mining, which the other institutions do not put much emphasis on (Council of the European Union. 2023a, p. 20). Across all three institutions is the duality of CRMs highlighted. But their responses diverge: the Commission advances system-level transformation through incentives, the Parliament pushes for enforceable protections and environmental justice, and the Council favors strategic alignment with circular economy goals through coordination and non-binding tools.

## 5.4 Comparison across institutions

The previous sections have presented the analysis of each of the three frames individually. This section now turns to a comparative analysis across the different institutions. By comparing the institutions' framings all together will this section shed light on the broader institutional similarities and differences in the framing of the legislative procedure.

Based on previous literature, expectations regarding how the frames would differ between the institutions were not entirely clear, as earlier studies have not explicitly focused on institutional differences in the legislative procedure of the CRMA. However, the findings from this thesis show that all three frames, geopolitical, security, and environmental, are present across all the main legislative institutions. This section will therefore present a more explicit comparison of how each institution differs in its use and emphasis of these frames, offering a cross-frame perspective on institutional variation within the legislative process.

The European Commission frames critical raw materials as a strategic issue, in all three frames. In the geopolitical frame was the emphasises on systemic dependency on non-EU suppliers, particularly in light of global disruptions (e.g. European Commission., 2023c, p.1). The Commission does this through structural and detailed language. In the security frame, the Commission presents a detailed view of vulnerabilities in key sectors such as defence and digital infrastructure, proposing tools like stockpiling and monitoring to strengthen resilience (European Commission. 2024a, p. 15; European Commission., 2023b, p.169). In the environmental frame does the Commission recognise the dual nature of CRMs, as vital for the green transition but also environmentally damaging, and promotes circularity and innovation in these areas (European Commission. 2024a, p. 3; European Commission., 2023a, p. 2 European Commission., 2023b, p.3). What is occurring in all of the three frames from the Commission is the focus of the coming legislation and detailed formulations.

The European Parliament presents the most outspoken and urgent framing of CRMs across all three dimensions. Geopolitically, it directly identifies overdependence on third countries, especially China, as a strategic risk (e.g. European Parliament. 2023a, p. 2). In the security frame, the Parliament highlights unequal preparedness across Member States and frames CRM policy as a necessary correction to past failures, demanding stronger institutional safeguards (European Parliament. 2023b, European Parliament. 2023a, p.13). In the environmental frame does the Parliament places significant

weight on the negative social and ecological impacts of extraction, calling for binding rules, recycling targets, and the protection of affected communities, particularly through principles like Free, Prior, and Informed Consent (European Parliament. 2023c, European Parliament. 2023, p.114). What's occurring in all of the frames by the European Parliament is that the suggestions are often more ambitious and more explicitly stated, in comparison to the two other institutions.

The Council of the EU adopts a more cautious and coordination-oriented framing across all three areas. In the geopolitical frame, the Council acknowledges international competition but avoids naming specific countries or using confrontational language, instead focusing on internal capacity-building (Council of the European Union. 2023b, p. 8). The Council's security framing emphasises market stability, supply chain transparency, and the risks of fragmentation within the EU, prioritising functional tools like joint procurement and stress tests (e.g. Council of the European Union. 2023a, p. 1, Council of the European Union. 2023a, p. 35). In the environmental frame the Council supports circularity and long-term sustainability goals, but favours guidance and soft measures over regulation. What's noticeable in all of the frames by the Council, is that the language is more careful, for example are different countries not mentioned by name and the formulations are more vague.

In conclusion, while all three institutions frame CRMs as a matter of strategic importance, their approaches reflect distinct institutional roles and priorities. When comparing the three institutions positions and frames in this aspect can one find that the institutions take on different roles. While the European Commission adopts a more detailed, structured, and agenda-setting approach. Does the Parliament give more ambitious statements, pushing for stronger commitments and broader policy scope. Meanwhile, the Council puts emphasis on compromise and reveals a more cautious and consensus-driven approach. Although these patterns confirm established institutional behaviours, the way each frame, geopolitical, security, and environmental, is discussed differs significantly across the institutions.

## 6. Conclusion

The aim of this thesis was to analyse and compare how different EU institutions frame critical raw materials during the legislative procedure of the Critical Raw Materials Act (Regulation 2024/1252). Documents from the legislative procedure were selected for an analysis. Based on previous research, three frames were chosen to guide the analysis: the geopolitical, security, and environmental (e.g. Bleicher et al., 2019, p. 25; Chen & Gao, 2021, p. 195; Eising et al., 2015, p. 516; Vlaskamp, 2024, p. 150; Proedrou, 2023, p. 122; Yang, 2024, p. 969–972). The analysis was structured using Entman's (1993) framing theory, which provided a systematic approach to identifying how these frames were present in the selected documents. The research question guiding the analysis was: *How do the legislative EU institutions frame the problem of Critical raw materials, in the legislative procedure of the Critical Raw Materials Act?*

The results of the analysis reveal how the three different frames are applied differently across the institutions. To begin with the geopolitical frame does the European Commission focus on strategic risks and supply vulnerabilities, while the European Parliament emphasizes external dependency, using stronger a more explicit language, while the Council takes on a cautious tone in formulations. In the security frame are CRM framed as essential to defence, industrial resilience, and preparedness, with the Commission highlighting structural vulnerabilities, the Parliament stressing institutional urgency, and the Council focusing on coordination and internal risks. Within the environmental framing, a shared understanding emerged around the dual nature of CRMs, that they are both essential for the green transition and potentially harmful to the environment. But, the institutions still focused on different areas within the environmental frame, the Commission concentrated on waste reduction and recycling, the Parliament stressed social and environmental rights for workers, and the Council particularly focused on the risks of deep-sea mining. Within the treatment recommendations, did they also emphasise different aspects, the Commission promoted innovation and circularity, the Parliament demanded stronger safeguards, and the Council emphasizes long-term efficiency without strict regulation.

When the results of the framing analysis are combined and examined from a cross-framing perspective, they largely align with findings from previous research on institutional behaviour in EU legislative processes. While the dynamics of EU lawmaking have been studied extensively in other policy areas, previous research has found that the European Commission is frequently portrayed as the actor that provides the technical foundation for legislation, focusing on coordination, policy design, and strategic implementation (Krelinger, 2023, p.9). The European Parliament, by contrast, has consistently been characterised as a policy frontrunner, often pushing for more ambitious and progressive outcomes (Borzel, 2002, p. 141-150; Koch et al., 2016, p. 676). The Council of the European Union is typically expected to prioritise consensus-building and the accommodation of diverse national interests (Bruch et al., 2024, p. 6–9). These patterns are reflected in the findings of this thesis. When the three frames are analysed in a cross-framing perspective, the analysis shows that the Commission provided much of the technical background, while the European Parliament stood out as particularly outspoken, pushing for more explicit measures in its treatment recommendations. In contrast, the Council adopted a more cautious tone, avoiding direct references to specific countries and opting for more neutral language.

One reason why this study's findings align with previous research may be that the CRMA legislative process does not significantly differ from other legislative procedures. Which makes the legislative institutions take on the same legislative role. However, such a conclusion could not have been drawn without conducting a study on the legislative procedure of CRMA. The results may also reflect the type of material analysed; this thesis focused exclusively on official documents that were part of the legislative procedure. Including additional sources such as interviews with policymakers involved in

the process might yield different insights and reveal further framings not captured in this study. The analytical approach was guided by Entman's framing theory, which provided a structured framework for identifying and comparing institutional framings. This thesis used a deductive approach, relying on predefined frames, geopolitical, security, and environmental rather than allowing new frames to emerge inductively from the material. While this provided clarity and focus, it also means that other potentially relevant frames may not have been captured. Due to the scope and time constraints of this thesis, such inductive framing analysis was not feasible. For further research, would these aspects be important to analyse to gain broader knowledge and understanding of the legislative procedure of the CRMA.

This comparative thesis has analysed the legislative institutions during the legislative procedure of the CRMA, but has not included an analysis of the final adopted legislation. This exclusion was due to the time and scope limitations of the thesis. However, analysing the legislative procedure can nonetheless provide valuable insights into the political dynamics that shaped the final Act. The analysis revealed clear differences in the positions adopted by the various legislative institutions. Despite these divergences, the CRMA was adopted relatively quickly through the EU's legislative process. Previous research has interpreted this rapid adoption as indicative of political urgency and a broad consensus (e.g., Vlaskamp, 2024, p.150). This thesis contributes to that discussion by showing, through a comparative framing analysis, that institutional perspectives during the legislative process were far from uniform. As such, the findings of this thesis offer indirect but meaningful insights into the legislative outcome of the CRMA, even though the final act itself was not analysed.

Although this thesis has focused specifically on the case of critical raw materials, the comparative aspects of the institution's role in the legislative procedure make this thesis contribute to the broader field of research on EU legislative procedures. At the same time, given its thematic focus on CRM, the result also offer valuable insights for the growing body of research on CRM. By showing how CRM is framed differently by EU institutions, this thesis helps to deepen our understanding of the legislative procedures and the knowledge of CRM. However, as noted earlier, further research is needed in this area. CRM and the CRMA represent a relatively new and evolving policy field, and future research is therefore needed.

## References

- Bache, I., Bulmer, S., George, S., & Parker, O. (2015). *Politics in the European Union* (4th, edition Ian Bache, Simon Bulmer, Stephen George, Owen Parker. eds.). Oxford University Press.
- Bartekova, E., & Kemp, R., (2016). "Critical raw material strategies in different world regions," MERIT Working Papers 2016-005, United Nations University - Maastricht Economic and Social Research Institute on Innovation and Technology (MERIT)
- Bebbington AJ, Humphreys Bebbington D, Sauls LA, Rogan J, Agrawal S, Gamboa C, Imhof A, Johnson K, Rosa H, Royo A, Toumbourou T, Verdum R. *Resource extraction and infrastructure threaten forest cover and community rights*. Proc Natl Acad Sci U S A. 2018 Dec 26;115(52):13164-13173. doi: 10.1073/pnas.1812505115. Epub 2018 Dec 3. PMID: 30509982; PMCID: PMC6310830
- Bleicher, A., David, M., & Rutjes, H. (2019). "When environmental legacy becomes a resource: On the making of secondary resources". *Geoforum*, 101, 18–27.  
<https://doi.org/10.1016/j.geoforum.2019.02.018>
- Bogojević, S. (2024) "The European Green Deal, the rush for critical raw materials, and colonialism" *Transnational Legal Theory*, DOI: 10.1080/20414005.2024.239940
- Borzel, T. A. (2000). "Why there is no "southern problem". On environmental leaders and laggards in the European Union". *Journal of European Public Policy*, 7(1), 141–162.  
<https://doi.org/10.1080/135017600343313>
- Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Bruch, N., Knodt, M., & Ringel, M. (2024). "Advocating harder soft governance for the European Green Deal. Stakeholder perspectives on the revision of the EU governance regulation". *Energy Policy*, 192, 114255. <https://doi.org/10.1016/j.enpol.2024.114255>
- Buysse. K & Essers. D , 2023. "Critical raw materials : from dependency to open strategic autonomy ?," *Economic Review, National Bank of Belgium*, 1-35,
- Chen, X. & Gao, X.,(2022). "Role enactment and the contestation of global cybersecurity governance". *Defence Studies*, 22(4), 689–708. <https://doi.org/10.1080/14702436.2022.2110485>
- Council of the European Union. (2023a). "Analysis of the final compromise text with a view to agreement". (Document 15686/23). <https://data.consilium.europa.eu/doc/document/ST-15686-2023-INIT/en/pdf>
- Council of the European Union. (2023b). "Outcome of proceedings: Mandate for negotiations with the European Parliament – Proposal for a regulation on the Critical Raw Materials Act" (Document 11297/23). <https://data.consilium.europa.eu/doc/document/ST-11297-2023-INIT/en/pdf>
- Daviter, F. (2018). "The framing of EU policies". Edward Elgar Publishing. In Heinelt, H. & Münch, S. (Eds.) *Handbook of European Policies*. 91-112. Edward Elgar Publishing.
- De Ridder, M. (2013). "The geopolitics of mineral resources for renewable energy technologies." The Hague Centre for Strategic Studies.

- De Vreese, C. H. (2005). "News framing: Theory and typology". *Information Design Journal : IDJ*, 13(1), 51. <https://doi.org/10.1075/idjdd.13.1.06vre>
- Dobbels, M., & Neuhold, C. (2012). "'The Roles Bureaucrats Play': The Input of European Parliament (EP) Administrators into the Ordinary Legislative Procedure: A Case Study Approach." *Journal of European Integration*, 35(4), 375–390. <https://doi.org/10.1080/07036337.2012.689832>
- Dou, S. *et al.* (2023). "Critical mineral sustainable supply: Challenges and governance", *Futures : the journal of policy, planning and futures studies*, 146, p. 103101. Available at: <https://doi.org/10.1016/j.futures.2023.103101>.
- Dunlap, A., & Riquito, M. (2023). "Social warfare for lithium extraction? Open-pit lithium mining, counterinsurgency tactics and enforcing green extractivism in northern Portugal". *Energy Research & Social Science*, 95, 102912. <https://doi.org/10.1016/j.erss.2022.102912>
- Eising, R., Rasch, D., & Rozbicka, P. (2015). "Institutions, policies, and arguments: context and strategy in EU policy framing". *Journal of European Public Policy*, 22(4), 516–533. <https://doi.org/10.1080/13501763.2015.1008552>
- Eriksson, J. (2020). "Threat framing". In Oxford Research Encyclopedia of Politics. 1- 17.
- Entman, R. M. (1993). "Framing: Toward Clarification of a Fractured Paradigm". *Journal of Communication*, 43(4), 51-58.
- Esaiasson, P., Gilljam, M., Oscarsson, H., Sundell, A., Towns, A. E., & Wängnerud, L (2024) "*Metodpraktikan : konsten att studera människor, organisationer och samhällen*" (6th edition). Norstedts Juridik.
- Esaiasson, P., Gilljam, M., Oscarsson, H., Towns, AE., Wängnerud, L. (2017). "*Metodpraktikan: konsten att studera samhälle, individ och marknad*", fifth edition, Wolters Kluwer,
- European Commission. (2024a). "*Advanced materials for industrial leadership*" (COM(2024) 98 final). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52024DC0098>
- European Commission, 2024b. "*European Critical Raw Materials Act*." [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/european-critical-raw-materials-act\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/european-critical-raw-materials-act_en) [Accessed: 17-02- 2025]
- European Commission. (2023a). "*Commission staff working document: Subsidiarity grid (SWD(2023) 160 final). Accompanying the proposal for a regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020*". <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023SC0160>
- European Commission. (2023b). "*Commission staff working document: Impact assessment report (SWD(2023) 161 final). Accompanying the proposal for a regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020*". <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023SC0161>
- European Commission. (2023c). "*Proposal for a regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020*

(COM(2023) 160 final). 2023/0079(COD) ” <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023PC0160>

European Parliament. (2023a). ”AMENDMENTS BY THE EUROPEAN PARLIAMENT\* to the Commission proposal 2023/0079(COD) Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020 ”. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023PC0160>

European Parliament. (2023b). ”Framework for ensuring a secure and sustainable supply of critical raw materials (debate) [Transcript]. ”(09.13.2023) [https://www.europarl.europa.eu/doceo/document/CRE-9-2023-09-13-ITM-013\\_EN.html](https://www.europarl.europa.eu/doceo/document/CRE-9-2023-09-13-ITM-013_EN.html)

European Parliament. (2023c). ”Framework for ensuring a secure and sustainable supply of critical raw materials (debate) [Transcript]. ”( 12.12.2023) [https://www.europarl.europa.eu/doceo/document/CRE-9-2023-12-12-ITM-002\\_EN.html](https://www.europarl.europa.eu/doceo/document/CRE-9-2023-12-12-ITM-002_EN.html)

Farrell, H., & Newman, A. L. (2022). ”Weak links in finance and supply chains are easily weaponized.” *Nature*, 605(7909), 219–222. <https://doi.org/10.1038/d41586-022-01254-5>

Florian, S. (2010). ”The quest for a single voice in EU foreign energy policy: a framing theory approach”. *Studia Diplomatica*, 63(3/4), 43-59.

Goffman, E. (1974). ”*Frame analysis*.” New York, NY: Harper & Row.

Hool, A., Helbig, C. and Wierink, G. (2023) ”Challenges and opportunities of the European Critical Raw Materials Act”, *Mineral economics : raw materials report, 2023-09*.

Kalantzakos, S. (2020) ”The Race for Critical Minerals in an Era of Geopolitical Realignments”, *The International Spectator*, 55:3, 1-16, DOI: 10.1080/03932729.2020.1786926

Kivinen, S., Kotilainen, J., & Kumpula, T. (2020). "Mining conflicts in the European Union: environmental and political perspectives". *Fennia - International Journal of Geography*, 198(1-2), 163–179. <https://doi.org/10.11143/fennia.87223>

Knodt, M. (2018). ”*EU energy policy*.” In Heinelt, H. & Münch, S. (Eds.). *Handbook of European Policies* (224-240). Edward Elgar Publishing.

Knodt, M., & Ringel, M. (2022). ”*European Union Energy Policy: A Discourse Perspective*”. In Knodt, M & Kemmerzell, J. (Eds.). *Handbook of energy governance in Europe* (121-142). Springer Nature.

Koch, N., Grosjean, G., Fuss, S., & Edenhofer, O. (2016). ”Politics matters: Regulatory events as catalysts for price formation under cap-and-trade”. *Journal of Environmental Economics and Management*, 78,. <https://doi.org/10.1016/j.jeem.2016.03.004>

Macháček, E. (2017). "Constructing criticality by classification: Expert assessments of mineral raw materials". *Geoforum*, 84, 368–377. <https://doi.org/10.1016/j.geoforum.2017.03.028>

Mancheri, N. A., Sprecher, B., Bailey, G., Ge, J., & Tukker, A. (2019). "Effect of Chinese policies on rare earth supply chain resilience". *Resources, Conservation and Recycling*, 142, 101–112. <https://doi.org/10.1016/j.resconrec.2018.11.017>

- Peoples, C., & Vaughan-Williams, N. (2014). *"Critical security studies: An introduction"*. Taylor & Francis Group.
- Petitjean, O., & Verheecke, L. (2023). *"Blood on the Green Deal. Brussels: Corporate Europe Observatory and Observatoire des Multinationales"*.
- Proedrou, F. (2022). "How Energy Security and Geopolitics Can Upscale the Greek Energy Transition: A Strategic Framing Approach". *The International Spectator*, 57(2), 122–137. <https://doi.org/10.1080/03932729.2021.2014102>
- Regulation 2024/1252. *Regulation (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1724 and (EU) 2019/1020* <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri>
- Rein, M., & Schön, D. A. (1977). *"Problem setting in policy research"*. In C. H. Weiss (Ed.), *Using social research in public policy making* (pp. 235-251). Lexington, MA: Lexington Books.
- Saurugger, S. (2018). *"The constructivist turn in EU public policy approaches"*. In Heinelt, H. & Münch, S. (Eds.). *Handbook of European Policies* (pp. 19-34). Edward Elgar Publishing.
- Sundberg, E. (2021). *"To BRI or not to BRI? A framing analysis on the European Union's member states' views on China's Belt and Road Initiative"* (Swedish Defence University). DiVA Portal. <https://www.diva-portal.org/smash/get/diva2:1633423/FULLTEXT01.pdf> DiVA Portal
- Szulecki, K. (2018). *"The Multiple Faces of Energy Security: An Introduction"*. In Szulecki, K. (Ed.). *Energy security in Europe: Divergent perceptions and policy challenges*, (1-31). Palgrave Macmillan.
- Thomson, R., & Hosli, M. (2006). "Who Has Power in the EU? The Commission, Council and Parliament in Legislative Decision-making". *Journal of Common Market Studies*, 44(2), 391–417. <https://doi.org/10.1111/j.1468-5965.2006.00628.x>.
- Tröster, B; Papatheophilou, S; Küblböck, K. (2024). "In search of critical raw materials: What will the EU Critical Raw Materials Act achieve? An analysis of legal and factual implications of the CRMA", Research Report, No. 18/2024, *Austrian Foundation for Development Research (ÖFSE)*, Vienna, <https://doi.org/10.60637/2024-rr18>
- Turra, C. (2017) "Sustainability of rare earth elements chain: from production to food – a review", *International Journal of Environmental Health Research*. Taylor & Francis, 3123, pp. 1–20.
- Van Hulst, M., & Yanow, D. (2016). "From policy "frames" to "framing" theorizing a more dynamic, political approach". *The American review of public administration*, 46(1), 92–112.
- Van Wieringen, K. (2025). "The future of rare earths mining in Ukraine" (EPRS At a Glance Briefing PE 765.789). *European Parliamentary Research Service*. [https://www.europarl.europa.eu/RegData/etudes/ATAG/2025/765789/EPRS\\_ATA\(2025\)765789\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2025/765789/EPRS_ATA(2025)765789_EN.pdf)
- Vlaskamp, M. C. (2024). "Looking for Resource Sovereignty in a Fragmenting Global Order: The EU's Response to Critical Raw Materials Challenges". In *EU Foreign Policy in a Fragmenting International Order* (pp. 147-175). Cham: Springer Nature Switzerland.
- Yang, H. (2023). "Securitization, frame alignment, and the legitimation of US chip export controls on China". *The Pacific Review*, 37(5), 961–984. <https://doi.org/10.1080/09512748.2023.2288961>

Zhang, Z. . "The Mediated Engagement of Switzerland with BRI: A Transnational Comparative Framing Analysis" *Journal of Transcultural Communication*, vol. 2, no. 1, 2022, pp. 1-23.  
<https://doi.org/10.1515/jtc-2022-0001>

