

# Understanding the narratives in the public debate about mining in Europe

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The European Union is developing initiatives such as the Critical Raw Materials Act to ensure sustainable and affordable access to critical raw materials, while upholding environmental and social standards. However, domestic mining presents challenges as some deposits are situated within environmentally protected areas, necessitating a balanced approach between resource extraction and conservation efforts. This article delves into the public narratives surrounding mining projects in five European countries: Portugal, France, Slovakia, Italy, and the Czech Republic. The analysis unveils differing perspectives along two main divides: security of supply versus environmental protection. While policymakers stress the importance of increasing domestic mineral production to reduce import dependence, environmentalists and local communities voice concerns over the ecological impacts of mining. These narratives underscore a fear of change among local populations, driven by scepticism about prescribed solutions and a perceived disconnect between top-down directives and bottom-up concerns. The analysis highlights the necessity for inclusive policymaking, effective communication, and a nuanced approach that aligns the EU's sustainability goals with the legitimate aspirations of local communities.

L'Union européenne développe des initiatives telles que la loi sur les matières premières critiques afin de garantir un accès durable et abordable aux matières premières critiques, tout en respectant les normes environnementales et sociales. Cependant, l'exploitation minière nationale présente des défis, car certains gisements sont situés dans des zones écologiquement protégées, ce qui nécessite une approche équilibrée entre l'extraction des ressources et les efforts de conservation. Cet article se penche sur les récits publics entourant les projets miniers dans cinq pays européens : Portugal, France, Slovaquie, Italie et République tchèque. L'analyse révèle des perspectives divergentes selon deux axes principaux : la sécurité de l'approvisionnement et la protection de l'environnement. Alors que les décideurs politiques soulignent l'importance d'augmenter la production nationale de minéraux pour réduire la dépendance à l'égard des importations, les écologistes et les communautés locales expriment leurs préoccupations quant à l'impact écologique de l'exploitation minière. Ces récits soulignent la peur du changement parmi les populations locales, motivée par le scepticisme à l'égard des solutions prescrites et par la perception d'un décalage entre les directives imposées par le haut et les préoccupations de la base. L'analyse souligne la nécessité d'une politique inclusive, d'une communication efficace et d'une approche nuancée qui aligne les objectifs de durabilité de l'UE sur les aspirations légitimes des communautés locales.

La Unión Europea está desarrollando iniciativas como la Ley de Materias Primas Críticas para garantizar un acceso sostenible y asequible a materias primas críticas, respetando al mismo tiempo los estándares ambientales y sociales. Sin embargo, la minería nacional presenta desafíos, ya que algunos yacimientos se encuentran en áreas protegidas ambientalmente, lo que requiere un enfoque equilibrado entre la extracción de recursos y los esfuerzos de conservación. Este artículo profundiza en las narrativas públicas en torno a los proyectos mineros en cinco países europeos: Portugal, Francia, Eslovaquia, Italia y la República Checa. El análisis revela diferentes perspectivas a lo largo de dos divisiones principales: la seguridad del suministro frente a la protección ambiental. Mientras los responsables políticos enfatizan la importancia de aumentar la producción mineral nacional para reducir la dependencia de las importaciones, los ambientalistas y las comunidades locales expresan preocupaciones sobre los impactos ecológicos de la minería. Estas narrativas subrayan el temor al cambio entre las poblaciones locales, impulsado por el escepticismo hacia las soluciones prescritas y una desconexión percibida entre las directivas de arriba hacia abajo y las preocupaciones de abajo hacia arriba. El análisis destaca la necesidad de una formulación de políticas inclusivas, una comunicación efectiva y un enfoque matizado que alinee los objetivos de sostenibilidad de la UE con las aspiraciones legítimas de las comunidades locales.

## 1. Introduction

The European Union (EU) faces severe actual and potential supply risks for certain mineral raw mate-

rials. There are four primary underlying reasons for this vulnerability:

- Certain mineral resources are currently known to occur at only a few locations worldwide;
- Commercial recovery is dominated by a single or a small number of countries;
- Politically motivated or warfare-related threats to supply chains;

- A fragmented and inconsistent regulatory approach affecting sustainable and responsible use of resources.

Furthermore, the Covid-19 pandemic has demonstrated that transport routes and capacities can be subject to disruption. To address these concerns, the EU has developed initiatives such as the Action Plan on Critical Raw Materials

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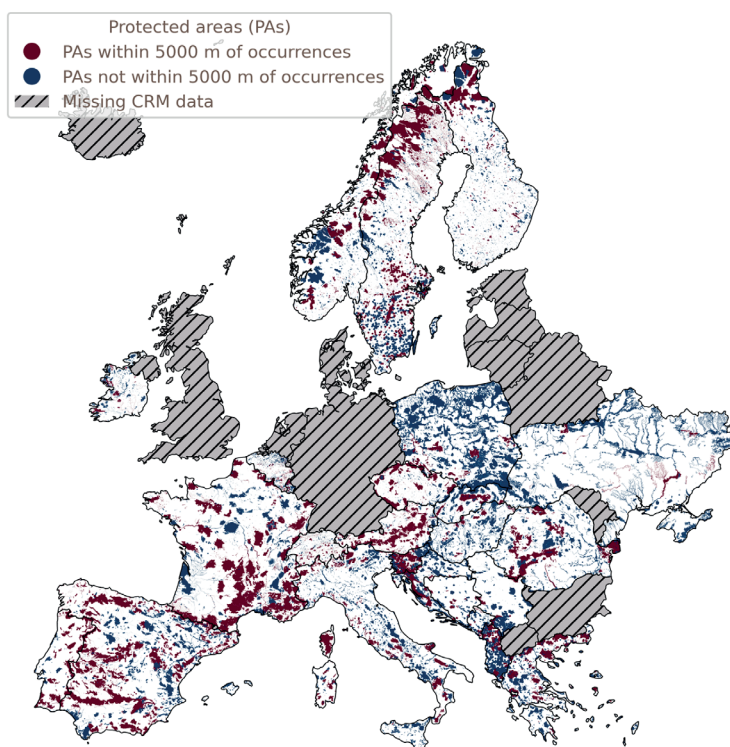


Figure 1: Schematic map of distance between environmentally protected areas and known CRM occurrences. The image shows that most CRM deposits are in the vicinity or inside environmentally protected areas. Sources: Map of European protected sites, European Environment Agency, April 2023 (<https://www.eea.europa.eu/data-and-maps/explore-interactive-maps/european-protected-areas-1>) and EGDI/MIN4EU Map of critical raw materials occurrence points, 2023 (<https://koordinates.com/layer/113131-critical-raw-material-occurrence-points-egdi-min4eu/>). Image provided by Nikolas Ovaskainen (GTK) for CIRAN.

(CRM) [1] and the recently advanced Critical Raw Materials Act [2]. However, policy decisions and instruments, such as the Green Deal [3] and the Net-Zero Industry Act [4], will result in a multiplication of primary raw material needs in the years and decades to come [5].

The EU Green Deal and the Circular Economy Action Plan [6] stipulate that the energy transition should be based on materials obtained in full respect of human rights, as well as compliance with social and ecological standards. Resource extraction within the EU is fully aligned with those principles, as it occurs under more stringent regulations than in most other countries and utilises shorter supply lines. However, the EU is densely populated and has many regions designated as nature reserves (e.g., wetlands designated under the Ramsar Convention, Natura 2000 sites, drinking water protection zones, cultural heritage areas), where mineral extraction is currently not accepted (see [7] for a review of the situation in the EU). Nevertheless, some deposits of CRM occur in part or even entirely beneath environmentally

protected areas (Fig. 1).

Within protected zones, such as Natura 2000 areas, that aim at the conservation of threatened species and habitats, other land-uses are permitted, but under strict conditions. An assessment of reference cases of extractive activity in Natura 2000 areas [8] showed that three elements are essential for successful shared use: (i) stakeholder cooperation and dialogue among actors, (ii) trustworthy and independent impact assessment/mitigation actions fostering the adoption of a Biodiversity Action Plan, and (iii) cohesive rehabilitation plans from the outset, enhancing biodiversity and ecological corridors. These cases demonstrated that extraction of mineral resources can be managed as a time-limited land-use, meaning recovery can be carried out responsibly with only limited damage to ecosystems and habitats.

Against this background, the European Commission is funding the Horizon Europe research project “Critical RAW materials extraction in environmentally protected areas” (CIRAN, 2023-2025), which is developing processes to arrive at

systemic policy-making, balancing environmental protection and societal needs for accessing CRMs [9].

CIRAN includes the design, testing and validation of raw materials governance models through the participation of citizen groups from five different EU communities in co-creation processes (through focus groups and consultations), aiming to define/improve standards for mining activities in environmentally protected areas. These consultations require close collaboration between geosciences and social sciences, and the active engagement of public relations experts to foster public knowledge and awareness on ecosystem services, nature conservation, climate change resilience, and the enabling factors of the energy transition (including the domestic extraction of CRMs).

Before delving into public engagement, a preliminary assessment of narratives in the public debate around mining projects was conducted in five countries: Portugal, France, Slovakia, Italy, and the Czech Republic [10]. The analysis made it possible to gauge the articulation of nuanced perspectives (including peoples’ values and ‘how’ they come to their current positions), which is crucial before embarking to challenge peoples’ presumptions and inviting public representatives to consider other perspectives and define collective positions. This paper is based on the results of these studies.

## 2. Methodology

The assessment of narratives around mining projects and CRM sourcing involved the collection of open-source information from a large variety of media sources. The process encompassed the screening of news published by internationally recognised sources, alongside country and local media sources, to obtain a more nuanced view integrating regional and local perspectives [10]. Data collection encompassed news published between January 2022 and May 2023, accessible on platforms such as Bloomberg, Reuters, and The Guardian, supplemented by additional searches in regional and local media outlets to find relevant articles specific to each country and region. This comprehensive approach ensured a well-rounded assessment, drawing from both, worldwide and local perspectives.

The research process involved three phases [10]: Data Collection; Data Validation & Quality Assessment; and Data

Analysis. This process allowed the identification of global trends that shape the narratives surrounding CRM sourcing, as well as mapping the tensions between mining activities and environmental protection objectives. In addition, the assessment also provided insights into the impact of political leaders' visions and narratives on peoples' reactions.

### 3. The European Standpoint

Europe is widely regarded as one of the most desirable regions in the world to live in. It boasts the most robust democratic systems and the highest social standards, a status that was only achievable thanks to the economic, industrial, social, and environmental policies that have shaped the trajectory of the EU and its Member States since its inception.

However, the EU is a political construct in a state of perpetual evolution, and the normative frameworks are not always able to respond in the most adequate manner to the demands of each moment. The political, cultural, and media contexts ultimately exert a decisive influence on all processes, and as complexity increases, variables gain scale, and the decision-making process must grapple with aspects that transcend mere rationality. In this situation, given the distinctive characteristics of its political-institutional system, the EU's response to challenges naturally unfolds with greater length and complexity compared to national ones.

Criticisms have been levelled at the EU's governance of mineral raw materials, deeming it excessively intricate and fragmented, and at times, contentious. Examples of such complexity include: 1) the absence of nuclear energy in the list of "net-zero strategic projects" in the Net-Zero Industry Act [4]— technologies that can benefit from the fastest permitting process — meaning nuclear energy does not contribute to achieving the 40% target for domestically produced clean energy; and 2) the EU Biodiversity Strategy for 2030 [11], that aims to widen the EU network of protected areas to transform at least 30% of Europe's lands and seas into effectively managed protected areas, with 10% of them strictly protected, alongside setting legally binding restoration targets for 2021 onwards for conservation trends and status.

### 4. The Fear of Change

Against the backdrop of the multidimensional realities in the EU, decision-

making processes have to deal with aspects that transcend mere rationality. In discussions on securing access to CRM through domestic mining, irrespective of the participants in the process and the viewpoints that each party seeks to uphold, in most situations, the debates hinge on the confrontation between disparate conceptions and worldviews regarding a desirable development of society. The arguments are often poorly substantiated by those who demonise development, stemming from a nostalgia for a bygone era and drawing comparisons between incomparable entities. Concurrently, other segments of the population wholeheartedly endorse the energy transition, even if they believe that it should not be pursued at any cost, which often challenges traditional 'green' values.

Throughout the construction of Europe, this type of phenomenon has been witnessed on countless occasions, and not merely in the face of projects that involved the transformation of a landscape (to put it in a very generic way). Remarkably, such contestation phenomena have also arisen in discussions around the creation of natural parks or conservation areas [12], by thwarting certain types of land-use in a territory. In such cases as well, there were those who lamented that the decision should not constitute an obstacle to regional development and a penalty for local inhabitants, who, with these limitations, were denied access to certain development opportunities that neighbouring regions had [12].

The research undertaken shows that there are two relevant dimensions that overarch the narratives in the public discourse concerning domestic extraction of CRM. On the one hand, there is the grander dimension of the EU development model, and on the other, the "fear of change" at the local community level.

Arguments in favour of domestic extraction of CRMs are rooted in the assumption that free access to CRM is crucial for keeping the EU autonomy and lifestyle, and to sustain the EU development model. These arguments are normally conveyed by EU policymakers and political leaders in Member States.

This "fear of change" is, to some extent, rooted in the assumption that there are no scientific guarantees that the domestic extraction of CRM is the correct path to address climate change. This also suggests a discord between EU policymakers (who formulated the strategies) and local populations (those affected by

these strategies), as well as other relevant actors (political parties, environmental groups, and other interest organisations) regarding the paths to attain the goals of the EU Green Deal.

While it is an undeniable fact that no human activity, including mining, can occur without some level of environmental impacts, modern mining technologies and governance frameworks have demonstrated that such impacts and their legacies can be minimised and mitigated to a considerable degree. Advances in sustainable mining practices, coupled with stringent environmental regulations and robust oversight mechanisms, have enabled the mining industry to significantly reduce its environmental footprint and prioritise the wellbeing of local communities.

In essence, while politicians recognise the necessity of adapting to the new geopolitical and environmental realities, they are confronted with constraints posed by opposition to change, stemming from concerns about regional development, access to resources, and scepticism regarding the potential consequences of the proposed solutions.

### 5. Public Narratives

In the examination of the public discourse surrounding mining projects in Portugal, France, Slovakia, Italy, and the Czech Republic [9], we found that the narratives of politicians and citizens in the public debate arena are often divided along two main cleavage lines:

**Security of supply:** Politicians and businesses often argue that the EU needs to increase its own production of CRM in order to reduce its reliance on imports from China and other non-EU partner countries. They especially point to the fact that China currently controls over 60% of the global supply of rare earths, which are essential for the production of many high-tech products.

**Environmental protection:** Populations and environmentalists argue, on the other hand, that the exploration and extraction of mineral raw materials can have a significant impact on the environment. They claim that mining can contaminate water supplies, damage ecosystems, and that it actually plays a negative role in climate change.

These two narratives often clash in the public debate, demonstrating the inner tension of policy cycles. While politicians and businesses tend to argue that environmental concerns are overstated and benefits of increased CRM self-suf-



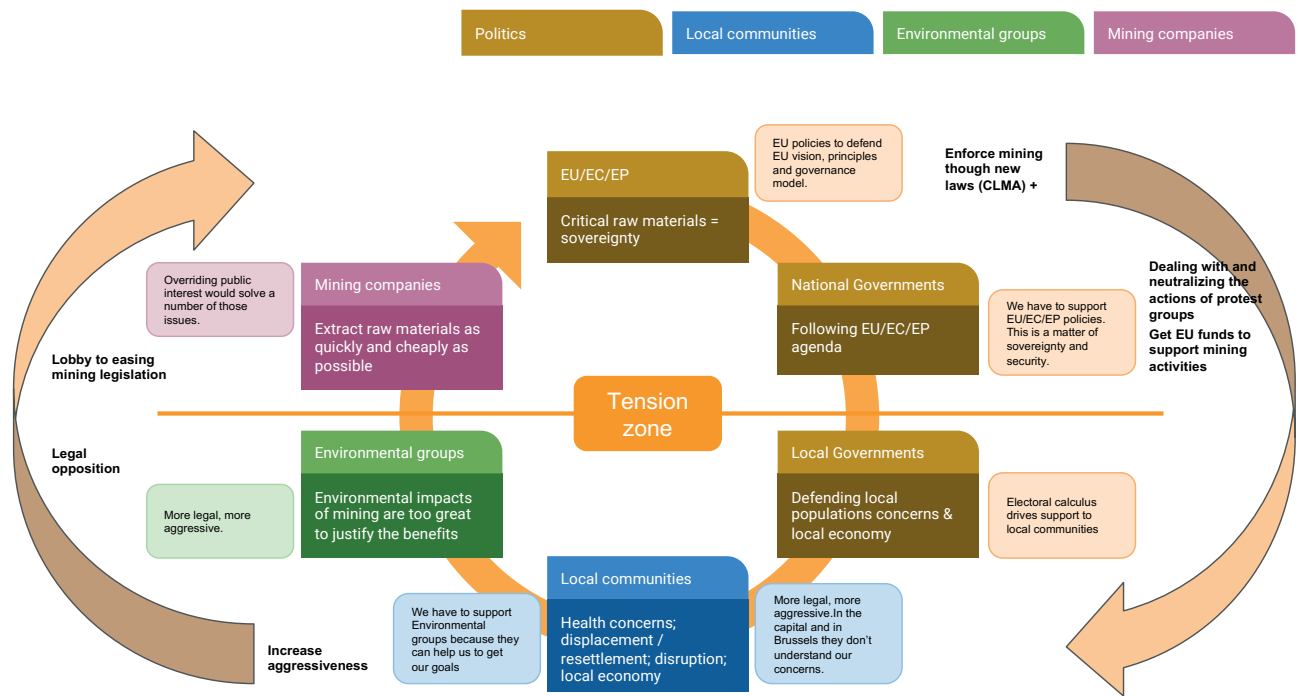


Figure 2: Representation of policy cycles and narratives of politicians and populations in the European public debate space about the exploration and extraction of CRMs in Europe, highlighting the tension zone that exists between different policy perspectives.

efficiency outweigh the risks, the population and environmentalists generally maintain that risks are too great and the EU should focus instead on developing sustainable alternatives to pursue its way of life.

Despite the commonality in narratives across Europe and among stakeholders, our research has shown that these narratives, whether in favour of or against mining, are influenced by two external key factors: the economic and energy development levels of the respective countries and the climate change risks perceived by the population (Fig. 2).

In the course of the research conducted, four main patterns were identified in the narratives around mining projects and CRM sourcing:

- A correlation exists between contestation-acceptance and the proximity of the narrative's author to the site of intervention. Contestation predominantly occurs at the local level or involves actors with ties to specific regions;
- Environmental groups face a dilemma: While they advocate for the energy transition and the phasing out of fossil fuels, they also oppose mining activities in Europe due to their environmental impacts;
- Political actors often exploit communities' fear of change for their own agendas;

- Lastly, there is a prevailing sense of disillusionment among citizens regarding Europe's trajectory, as highlighted by various studies (e.g., [13], [14]).

These patterns reveal a discord of expectations, or put differently, a misalignment of interests among various stakeholders. They also highlight an inherent contradiction between both sides of the fence: EU policymakers are dedicated to Europe's development as a collective community and the global policies they believe to be optimal for our collective future; however, local communities harbour concerns about their own future, often positioning themselves as the last guardians of a region's status quo. They aim to preserve 'nature' as it is, preventing its destruction by what they perceive as economic interests.

In the current state of antagonism, it is evident that neither side holds an absolute truth nor possesses the sole claim to reason. Similarly, the crux of the issue seems to lie in the leadership approach adopted by EU politicians, particularly in their implementation of top-down decisions.

The analysis of the narratives also uncovers that communities are not inherently opposed to development. Instead, their discontent stems from a feeling of being caught off guard by the apparent inevitability of the "there is no

alternative" argument, as if their perspectives and concerns are being dismissed.

## 6. Conclusions

The prevalent narratives about mining projects in Europe underscore the tension between the EU's overarching goals for sustainable development and energy transition, and the concerns of local communities regarding the potential impacts on their immediate surroundings and way of life. While policy-makers envision a path towards a greener, more resilient future, some local populations are wary of the changes that such a transition might entail, especially when it involves extractive activities in their vicinity.

This dichotomy highlights the imperative for effective communication, stakeholder engagement, and a nuanced approach that strikes a balance between the broader objectives of the European Union and the legitimate concerns and aspirations of local communities. Bridging this gap will necessitate a concerted effort to align interests, address fears, and foster a shared understanding of the challenges and opportunities that lie ahead.

Ultimately, the analysis of the narratives underscores the necessity for a more inclusive and collaborative approach to policymaking and implementation. EU policymakers must find ways to bridge the divide between top-down directives and bottom-up concerns, fostering genu-

ine dialogue and co-creation with local communities. That co-creation must also extend to knowledge-building on the nexus between our desired socio-cultural well-being and the raw materials supplies that can support it.

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