



CIRAN

D5.1

Understanding the Narratives in Public Debate



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Executive Summary

Europe stands out as a leading region worldwide in terms of democracy, social standards, and overall quality of life. This status is possible thanks to the economic, industrial, social, and environmental policies promoted by the EU and its foreign partners. However, the new geopolitical context, the challenges posed by climate change and the necessary energy transition it entails, require Europe to redefine some of its fundamental policies. One of these policy adjustments is the recently published EU “Critical Raw Materials Act” (2022/2023).

This Act aims to respond to the fact that the EU is exposed to severe actual and potential supply risks for certain critical raw materials (CRMs), claiming that the only way for Europe to avoid them is to gradually reduce its dependence by looking for alternative sources and securing the extraction of CRMs from domestic EU resources, combined with an EU mechanism for centralising the acquisition and management of critical raw materials from trusted partners.

However, domestic sourcing poses specific environmental challenges, because some of these critical minerals may occur underneath environmentally protected areas, where biodiversity conservation is a high priority for society. Hence, CIRAN is trying to find a way to reconcile these two societal expectations and needs.

To find a viable solution and to design a realistic strategy, it is vital to develop a co-creation process between all relevant stakeholders: policy-makers, local citizens, conservation organisations, and mining companies.

For this purpose, under the Work Package 5 of CIRAN, we have studied the public debate narratives of relevant stakeholders in five countries (Portugal, France, Slovakia, Italy and Czech Republic) where, afterwards, two specific initiatives will be conducted: focus groups and public meetings that will take place between October 2023 and June 2025 and that will be led by the members of the CIRAN consortium.

Our research found out that the narratives of politicians and populations in the European public debate about the exploration and extraction of CRMs in Europe in general, and particularly in environmentally protected areas, are often divided along two main cleavage lines:

- **Security of supply:** Politicians and businesses often argue that Europe needs to increase its own production of critical raw materials 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 (critical) 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, showcasing the inner tension of the CRMs Policies’ Cycle (Fig. 1). While politicians and businesses tend to argue that the environmental concerns are overstated and that the benefits of increased self-sufficiency outweigh the risks, populations and environmentalists generally maintain that the risks are too great and that Europe should focus on developing sustainable alternatives to pursue their way of life instead.

Despite the commonality in narratives across Europe and among stakeholders, our research has revealed that these narratives, whether in favour of or against certain positions, are influenced by two key factors: the economic and energy development levels of the respective countries and the perceived climate change risks held by the population (see Annexe).

Europe CRM Policies' Cycle

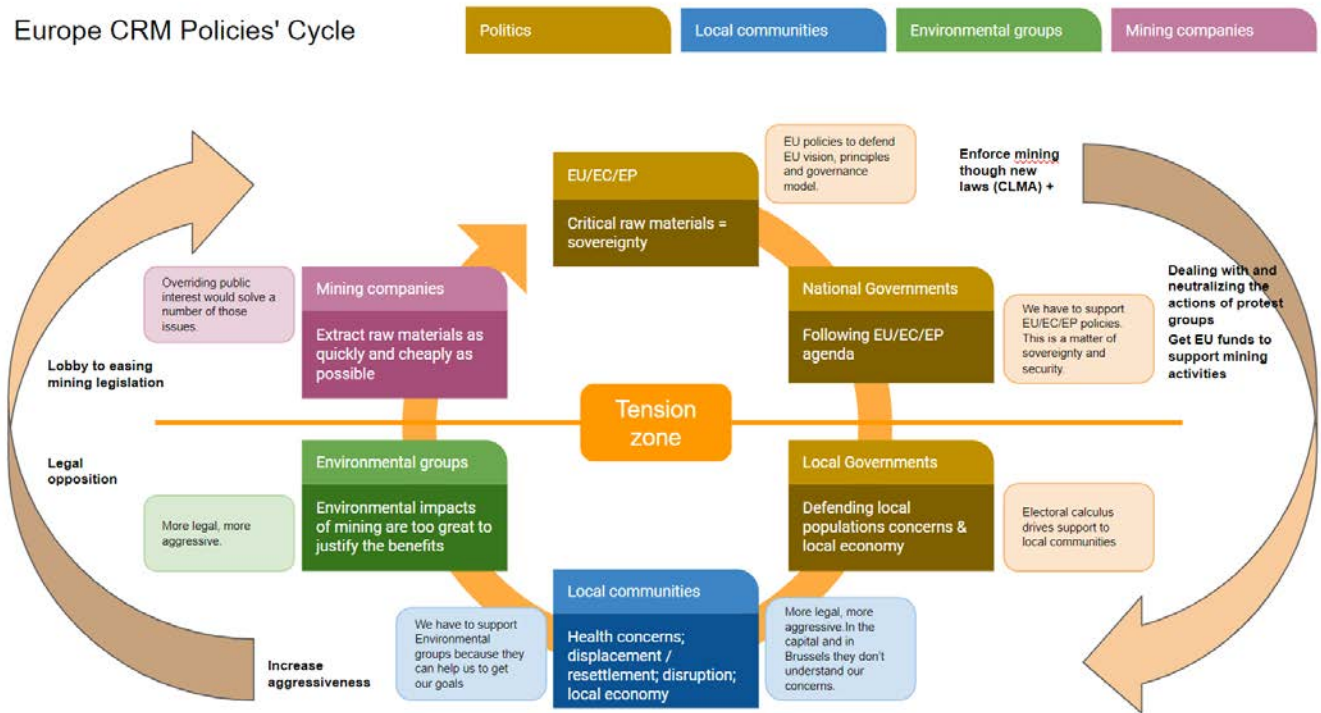


Figure 1: Representation of policy cycles and narratives of politicians and populations in the European public debate space about the exploration and extraction of CRMs in Europe, highlighting the tension zone that exists between different policy perspectives.

Table of Contents

1	Foreword	4
1.1	The fear of change	5
1.2	The other side of the same coin	6
1.3	A question of semantics	8
2	About the meaning of “Narratives”	9
2.1	From the perfection of the message to the incomprehension of the recipients.....	10
2.2	What’s at stake?	11
2.3	Beyond the narratives	12
3	Methodology	13
4	Main findings	16
4.1	Narratives by stakeholder group	17
4.1.1	Environmental interest groups & NGOs	17
4.1.2	Politics.....	18
4.1.3	Population	19
4.2	Narratives by country	20
4.2.1	Portugal	20
4.2.2	France	23
4.2.3	Italy	25
4.2.4	Slovakia.....	29
4.2.5	Czech Republic.....	31
4.3	Narratives from other countries outside of Europe that appeared in the European public debate	35
5	Are there any Common Narratives?.....	37
6	Conclusions and final remarks.....	38
7	References	39
7.1	Media and grey-literature reports by country	39
7.1.1	Portugal	39
7.1.2	France	41
7.1.3	Italy	42
7.1.4	Slovakia.....	43
7.1.5	Czech Republic.....	44
7.1.6	Europe in general and other national cases	46
8	Bibliography.....	48
9	Annexe – Excerpts	49

1 Foreword

Knowledge is irreversible, and Man cannot retreat into the penumbra of sweet ignorance.

Stanislaw Lem, *His Master's Voice*, 1968

As in so many other dimensions of our existence, understanding the public space narratives about the problem of critical raw materials depends, to a large extent, on the position that observers will occupy at each moment of their observation.

In the context of the CIRAN project and of Work Package 5.1 specifically, knowing the narratives that are produced and articulated in the public space is – as we have already stated elsewhere – essential to conceive, test and validate models of governance, through the participation of groups of citizens (including those who may be marginalised socially, economically, politically and culturally) in co-creation processes (through focus groups and consultations) with the aim of defining/improving standards for mining activities in environmentally protected areas (CIRAN Project Proposal).

This challenge is not very different from many others that Europe and Europeans have faced in their most recent history, which were overcome, with greater or lesser narrative density, towards a community-in-construction capable of sharing a moral, social and normative framework that has distinguished us Europeans as a civilization. Such a challenge amounts, in fact, to asserting the community spirit over any nationalist, regionalist or individualist drift that could jeopardise the development of the post-war European dream.

This European mission is, indeed, clearly evident, for instance, in one of the many issued structuring instruments, the so-called Environmental Impact Assessment (EIA), without which certain types of projects could not be carried out. Due to its characteristics, the EIA is one of the most important expressions of European democracy, since it allows for problems to be identified as well as for the definition and planning of impact mitigation strategies. It is also the instrument through which populations and civil society as a whole are called to participate and to assert their points of view. In fact, the European Commission's Impact Assessment and Strategic Environmental Assessment Directives (Directive 2011/92/EU amended by Directive 2014/52/EU; Directive 2001/42/EC, respectively) provide for such public participation. It should be noted, however, that competences for spatial planning lie at a national- or even sub-national or local level. The EU itself has no general competence assigned within this field.

With regard to the public opinion schism that we will describe below, it is worth noting the cultural and social impact of 50 years of policies that have crystalised the relevance of nature in the European public sphere, stressing ecosystem care and solidifying the value of nature as the most important asset of humankind. The European Union (EU) started pro-nature policies in the early 1970s. The first major environmental policy was the 1973 Programme of Action of the European Communities on the Environment (Council of the European Communities, 1973). This programme set out the basic principles of EU environmental policy, including the precautionary principle, the polluter-pays-principle, and the need for international cooperation. Since then, the EU has adopted a number of other environmental policies, including the Single European Act (1986), the Maastricht Treaty (1992), the Amsterdam Treaty (1997), and the Lisbon Treaty (2007). These treaties have strengthened the EU's environmental protection powers and have led to the adoption of a wide range of environmental legislation. Due to the required 'acquis' into national legislation and policies, these EU-level policies have also shaped policies and legislation at EU Member State level.

But the consensus is suddenly shifting, with some stakeholder narratives defying this cultural heritage due to the renewed relevance of domestic raw materials, which in turn demands a new popular consensus to be

reached. This very much depends on the change of citizens' mindsets as well as on their willingness to accept all the foreseen risks in a pacific way. And, as we know, belief systems change is a long-term process.

1.1 The fear of change

As we were saying, Europe is a bulwark of modern civilisational standards, a reality that demands dedication and constant and persistent effort. Europe, as a political system, is in permanent construction – just like a democracy; therefore, the normative frameworks are not always able to respond in the most adequate way to the demands of each moment. The political, cultural and media contexts end up having a decisive influence on all processes. After all, Europe is a democracy and is made up of representative democracies, thus being prone to the same set of key institutional influences.

From our perspective, in such political, cultural, and media scenarios, complexity increases, variables gain scale, and the decision-making process has to deal with aspects that go beyond mere rationality.

On the basis of this multifactorial reality, and regardless of the participants in the process and of the points of view that each party seeks to defend, in most situations the 'discussions' lay on the confrontation of different conceptions and worldviews regarding the development of our society. The arguments are often poorly sustained by those who demonise development, arguments that are based on a nostalgia for a golden past and that compare that which is incomparable. At the same time, other segments of the population, along with environmentalists, fully support the energy transition, even if they believe that it should not be undertaken at any cost.

Throughout the construction of Europe, we have been able to witness this type of phenomenon countless times and not just in the face of projects that involved the transformation of a landscape, to put it in a very generic way (it is a necessary simplification in the context of this narrative). Strange as it may seem, such contestation phenomena also happened when the decision was to create a natural landscape or to preserve a region, preventing a certain type of land-use in that territory. In such cases as well, there were those who complained that the decision should not constitute an obstacle to regional development and a penalty to the local inhabitants, who, with this limitation, were denied access to the same development tools as the neighbouring regions. As aforementioned, it took decades to change peoples' mind-set, and now we want to do the reverse with immediate effect – it is not hard to predict that no good will result from that.

In other words, we are facing two relevant dimensions of the narratives of the public space. On the one hand, the European community dimension of the development model and, on the other, the fear of change at the local community level (Fig. 2). What is also happening, and is relevant for the purpose of CIRAN, is that a significant part of the Europeans does not agree with the current European development model, something that is also under debate.

In other words, "development yes, but not here" is a simplistic translation of reality, which, incidentally, has given rise to very interesting acronyms such as the already beaten-to-death NIMBY (Not In My Back Yard) or the more recent BANANA (build anything near anywhere) syndromes.

This statement by Matti Blind Berg, head of the National Confederation of the Swedish Sami, is paradigmatic:

We're talking about this green transition. For me, it's not green, it is black, because it's going to destroy the rest of the nature that we have left (*Politico*, 2023).

This "fear of change" is, somehow, based on the conception - or misconception - that there are no scientific or academic guarantees that this is the right path to achieve our environmental goals. This also suggests that between Europeans (the ones that drew up the strategies) and local populations (those affected by these strategies) and other relevant actors (political parties, environmental groups, and other interest organisations) there is a disagreement about the solutions to be adopted in order to overcome the challenges of the EU Green Deal.

Local communities impact

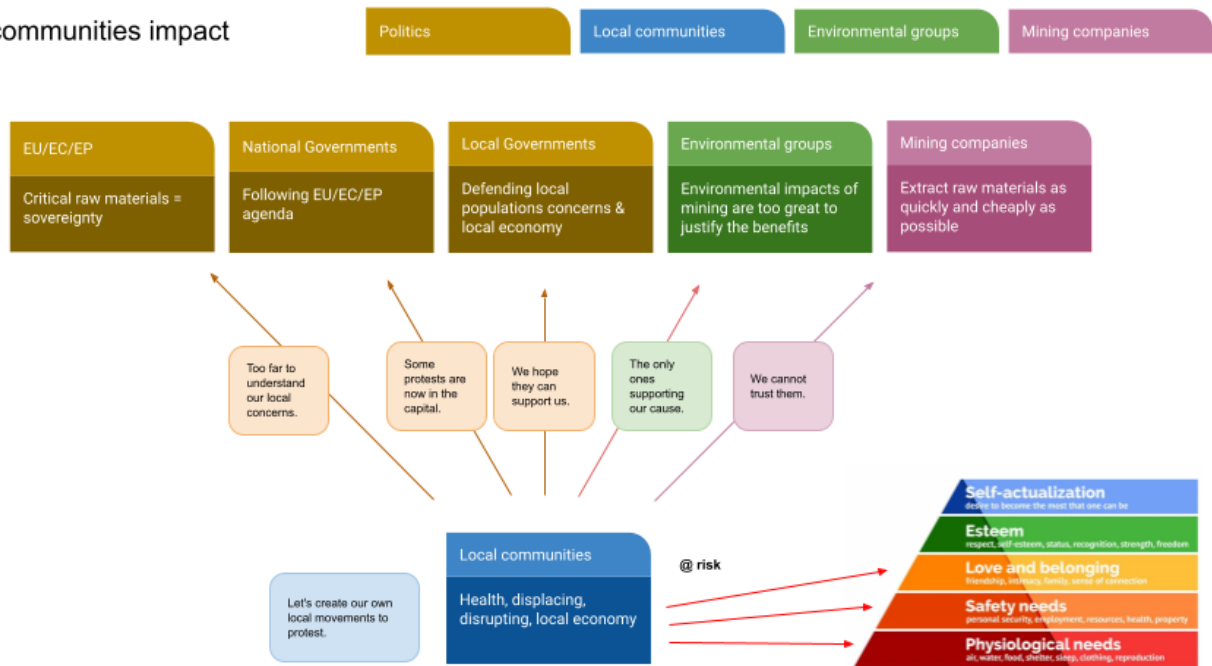


Figure 2: Representation of local communities' impact perceptions when faced with projects for exploitation and extraction of CRMs.

1.2 The other side of the same coin

Europe is probably the best region in the world to live in. It has the best democratic regime and the highest social standards, a status that is only possible thanks to the economic, industrial, social, and environmental policies that have marked the course of the EU and its Member States since its inception.

However, because of a new geopolitical context, aggravated by Russia's invasion of Ukraine, and due to the challenges posed by climate change, the European model needs to evolve and adapt to this new reality.

In fact, global tensions arise from a redefinition of the world order with the creation of alternative blocs to the Europe-UK-Canada-USA axis. The latter countries, as a result of the globalisation that developed over the past 50 years, ended up becoming seriously dependent on Asia in general and in particular on China, not only in terms of industrial products, but, above all, in terms of mineral resources.

In the light of these geopolitical changes, it might be relevant to mention that the EU is well aware of the repercussions that certain political decisions may have, such as the barring of Chinese companies from the 5G network due to EU security concerns. Such decisions may result in actions by China that can disrupt the EU capacity to achieve its set of policy goals.

Due to the unique characteristics of its political-institutional system, Europe's reaction is necessarily slower than that of its peers and, at the moment, this is reflected in the European Green Deal, the European Climate Law (Regulation 2021/1119) and the recently published "Critical Raw Materials Act" (CRMA, 2023), which aim to respond to the challenges of energy transition, on the one hand, and, on the other hand, to mitigate European exposure to real and potential risks in terms of the supply of certain raw materials critical for its sustained development (Fig. 3).

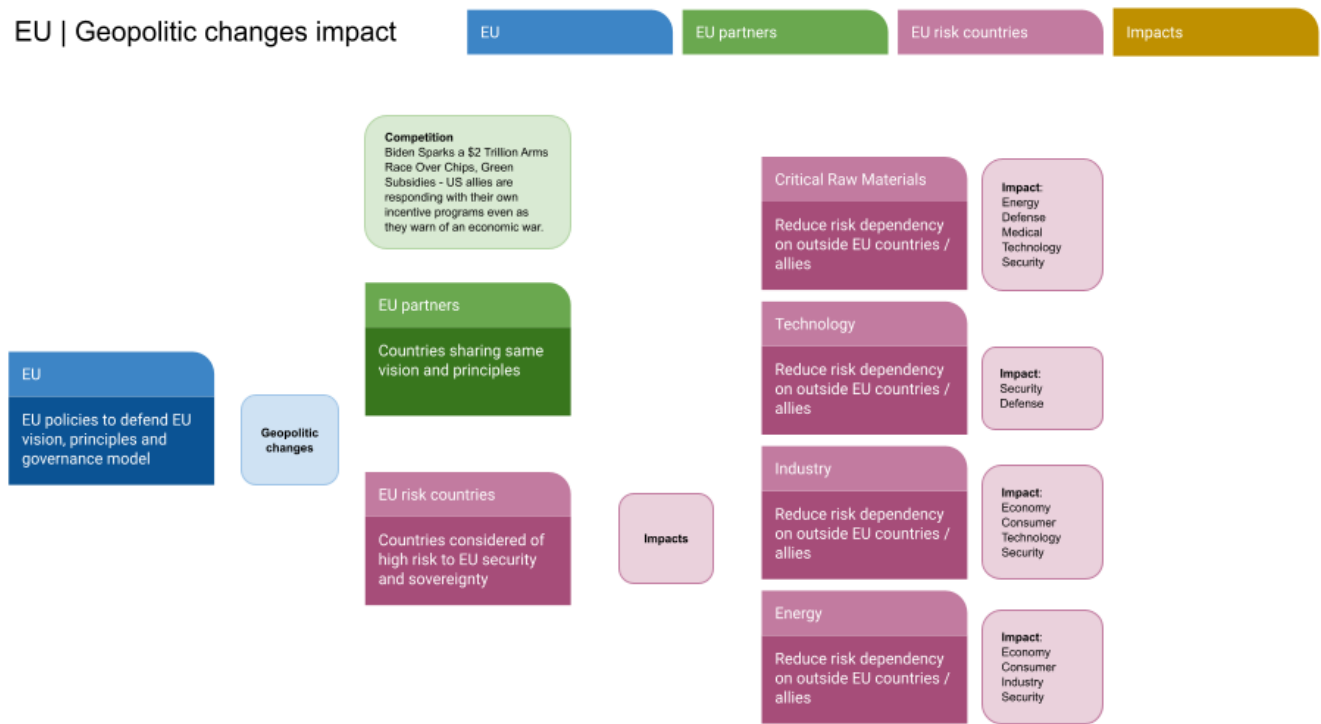


Figure 3: The geopolitical context of CRMs supply from the EU perspective.

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For the present case, we are specifically interested in the ‘Critical Raw Materials Act’, because it is the document that establishes the guidelines on how Europe can and must gradually reduce its dependence on the outside in terms of these resources and how it can and must look for alternatives on its own territory for the extraction and treatment of critical minerals.

However, this entails specific institutional and environmental challenges, because some of these critical minerals may exist under environmentally protected areas, where biodiversity and ecosystem conservation are a high priority for the EU. A subject that, by the way, is not forgotten in the ‘Act’. Quite the contrary. Right at the beginning of the text, it can be read that one of the conditions for the success of this policy is precisely “to ensure the free movement of critical raw materials on the single market while ensuring a high level of environmental protection, by improving their circularity and sustainability”.

In other words, in a Europe that has always educated its citizens to respect Nature and that has created numerous policies to encourage and even enforce this matter, European elites are now facing the probable inevitability of having to ask their fellow citizens to accept a change in this paradigm without, however, wanting to change the fundamental principle of environmental protection.

In fact, the creation of protected landscapes, nature networks or natural parks are a small but key example of policies that have involved citizens, families, companies, regions and countries in the adoption of laws and procedures with a view to defend and preserve the environment, along with others promoted, e.g., by the United Nations, such as the World Agricultural Heritage Seal or the status as a UNESCO natural heritage site. In fact, sustainability and biodiversity, unavoidable words in current global discourses, have long been part of the European lexicon, in which the abovementioned EIA is integrated and for which it is a good example.

This means, therefore, that the dichotomy between environmental protection and economic development is not new to Europeans and that contestation is a piece of the complex puzzle of democracy that must be seen and treated in a natural way and that the best way to deal with this contention involves learning from the past. Hence the suitability of Stanislaw Lem's quote at the beginning of this chapter.

1.3 A question of semantics

Despite all existing mechanisms in the European regulatory structure, including that of the Member States, which provides for democratic procedures such as listening to the people, the truth is that they largely forget to consider them as real stakeholders. Namely, if we read carefully the Critical Raw Materials Act, for example, we find that throughout the text the people are only recipients of the measures of the "other actors in the process" and not an interested party, with the same level of participation. The role of the people, basically, is only taken into account in the public consultations phase, which is an old hallmark of technocratic projects pursued under representative democracies (Selznick, 1949).

And even considering that some national laws give the local power elected by the populations a preponderant weight on the decision to accept or reject the location of a certain project in 'their' region, the truth is that the populations are treated in the legal instruments as a kind of amorphous mass that will have to gladly accept all the goodwill of whoever wants the project to happen.

This statement is not, necessarily, a criticism of the legal texts, but rather a mere challenge that, without prejudice to what may be done in the future, served in the past to build the European Union.

However, the situation now appears to be more dramatic. As we have already had the opportunity to mention, what is now at stake is the safeguarding of such societal models that, as in Europe, privilege democracy, popular consultation and public participation in political processes, against those who aim to centralise power and subject populations to the designs they decide, regardless of peoples' choices.

And, in fact, this is exactly what is at stake when Europe intends to redesign its interdependences in a new geopolitical reality and with the need for shifts in some paradigms that result from climate change. But there is more. The Covid-19 pandemic has also brought to the fore the weaknesses of the globalisation model promoted by the West, namely in terms of its supply-webs. As a result, many European leaders and Member States now realise the need for Europe to redefine its industrial policies, calling to its territory the installation and control of some critical industries.

The same was true, for example, with the computer chip crisis of the early 2020s, which forced the redesign of interdependencies and supply-webs as we knew them.

As far as critical raw materials are concerned, the problem deepens due to the impact of changing policies and of Europe's geostrategic positioning, for its dependence on the outside world may require time that we may not have and thus demand more drastic measures to shorten the so-called time-to-market.

All these considerations about the demands of Europe's challenges in the face of the current geopolitical and economic context are, directly or indirectly, present in the narratives of political and business leaders that we find in the European public space and in the target regions of this study. However, a growing and increasingly consistent narrative of opposition to European policies is also visible, which is easily instilled in local populations through the exploitation of the fear of profound changes in the logic of land-use in their vicinity.

Once again, we stress the fact that this antagonism between EU level political decisions and the individual preferences of local populations is a striking feature of European construction. However, current narratives show us that there are other factors that weigh in on this equation and that deserve to be addressed beyond the semantics of European normative texts.

2 About the meaning of “Narratives”

While many regions have flourished in recent decades, many others are stuck — or are at risk of becoming stuck— in a development trap. Such regions experience relative decline in economic growth, employment, and productivity relative to their neighbours and to their own past economic trajectories. Many of these regions have been in a development trap for lengthy periods of time and this condition is increasing political discontent and unrest. Such discontent is often translated into support for anti-system parties at the ballot box.

(...) The results highlight the strong connection between being stuck in a development trap and support for Eurosceptic parties. They also suggest that the longer the period of stagnation, the stronger the support for parties that oppose European integration. This relationship is also robust to considering only the most extreme Eurosceptic parties or to including parties that display more moderate levels of Euroscepticism (Rodríguez-Pose et al., 2023).

As part of the research carried out for CIRAN, we identified four main patterns in the narratives.

- There is a correlation between contestation-acceptance and the distance that the ‘author’ of the narrative is from the place of intervention. That is, contestation takes place essentially at the local level or by actors with links to a given region.
- The fact that the environmentalist movements are ‘stuck’ in a contradiction: They support the energy transition, the end of the use of fossil fuels, but they also do not want mining in Europe because of the environmental impacts.
- The population's fear of change is exploited in the political arena.
- And finally, the disappointment of the populations on how Europe has evolved and that is well illustrated in several studies (see, for instance, Rodríguez-Pose et al., 2023; Rodríguez-Pose, 2018; Dijkstra et al., 2020).

What these narratives show, in essence, is the mismatch of expectations or, if you like, the misalignment of interests. That is, we have managed to find, above all, what divides Europeans and not what unites them.

They also display a contradiction in itself between both sides of the ‘barricade’. On the one hand, European leaders are committed to the development of Europe as a community and the global policies that they consider to be the best for our collective future. On the other hand, the populations are also concerned about their future, but with different beliefs, since they often prefer to position themselves as the last guardians of the regions’ status quo, preserving ‘nature’ as it is and preventing its destruction by the so-called economic interests.

In this antagonism, the fact is that none of the sides holds the truth or have the reason on their side. Likewise, the problem seems to boil down to how European leaders are leading, particularly on how they are implementing the top-down politics.

In fact, populations are not against development. What the narratives show, deep down, is that their discontent results from the fact that they are taken back by the seeming inevitability of the “there is no alternative” argument.

In the narratives that mark this struggle, some nationalist strains also start to emerge, in the sense that Europe is not safeguarding the interests and sovereignties of all Member States equally, namely in terms of energy policy.

These narratives give strength to dissenting voices and increase the populations' distrust in the good will of European policies for their territories.

It is interesting, for example, to see how US experts assert these contradictions, by emphasising the potential litigation that may arise from the bottom:

Enabling Tribal Nations to become full project partners could be an important step in increasing their leverage, knowledge, and power, creating a more just system of shared economic opportunity, reducing the possibility of future litigation, and building the trust between the private sector and local communities that will be required to sustain an increase in the domestic production of critical minerals required to meet at least a portion of future American needs. (Johnston and Vazir, 2023: 26).

On the other hand, the environmentalists' paradox is very well recognised by Marie-Monique Franssen, who, writing for the Green European Journal, states that

... the debate around lithium extraction is a microcosm of the broader cultural-philosophical crisis faced by contemporary industrialised societies. We continue to view the environment as the backdrop to human activity, thus placing ourselves outside nature. This clashes heavily with the worldview of communities seeking to preserve their environments and traditions. The example of lithium also highlights the importance of climate justice: it is often the most vulnerable groups in society that are hit hardest by the effects of climate change. The case of the salt flats, however, seems to present us with a 'Sophie's choice' between the consequences of climate change and the harm done by extracting the resources necessary to fight it. There is no doubt that the energy transition is a necessary step in the move to a post-fossil society. The continued rollout of renewable energy is crucial to keep our planet liveable. The only question is how to make it happen in an equitable way, involving all parties. There is much talk in progressive European circles about a just transition, but this is still too often limited to workers' rights within the borders of our own continent. If we want to combat global inequality, we need to broaden our perspective and apply these principles of justice and compensation to the entire supply chain. (Franssen, 2023).

There's also a relevant trend for global legislation against protests that needs to be highlighted. The intent to silence environmentalist organizations is already taking place in Italy, Germany and France, but also in the UK and the USA. The response from some NGOs is to enlarge their scope, become more global and more assertive in the demonstrations, often ending with clashes with the police. The following news extracts illustrate this tendency:

Environment protest being criminalised around world, say experts Peaceful environmental protesters are being threatened, silenced and criminalised in countries around the world including the UK and the US, according to some of the world's leading climate scientists and academics (The Guardian, 2021a).

Beyond Extinction Rebellion: the protest groups fighting on the climate frontline We're lobbying for the environment bill, which is currently in parliament, to include more comprehensive targets and strategies to reduce air pollution," says Brauer-Maxaia. Their reach is not only local – the founders lobbied the London mayoral candidates to become a mayor for clean air – but also global. Choked Up works with the environmental charity Global Action Plan to get clean air "enshrined as a children's right globally (The Guardian, 2021b).

Lützerath, the eviction continues: but the most irreducible activists do not give up After a night of negotiations, around 200 environmental activists have voluntarily left Lützerath, but others are resisting to the bitter end. They oppose the expansion of a nearby lignite mine, a very polluting type of coal. Climate Minister Robert Habeck: 'We need it'. In Lützerath, Germany, German police in riot gear break down doors and clear out the last warehouses of the "ghost town", which will have to give way to a lignite mine, a particularly polluting type of coal. On Saturday, there should be a demonstration at the site, in which the activist Greta Thunberg is also expected to participate (Euronews, 2023a).

2.1 From the perfection of the message to the incomprehension of the recipients

In this antagonism between message senders and recipients, it is clear that narratives are carefully constructed, with each party choosing the best assets of their arguments to defend the goodwill of their reasons. And it is hard for any audience not to be touched by all the arguments that are advanced.

Social networks, which brought a new dynamic to the form and content of communication, also came to add a layer of complexity in the interpretation of narratives. Mainly because the authorship of the messages is

not always known (there can be even chatbots behind them) and because it seems that their purpose is only to destabilise the receiver and make him distrust the institutional forces present.

Faced with this tangle of narratives, more or less clear in their content and purpose, we find that there is little effort to reveal the real impact of the policies, in particular on how populations have benefitted from past policies and how they will benefit from present and future policies. In fact, what we see in the public space is as if the goal is only the outcome of a game about who is right in this dispute, rather than focusing on the central reason of 'why the game is played'. In other words, what we feel is missing in the narratives is the emphasis on why/how the development policies are key to our common future and why they are a fundamental piece of the ongoing effort to maintain the European social and economic model.

The question that arises, however, is which of the parties really holds the sceptre of this higher cause that is European democracy: the political authorities or, in the other corner of the playing field, the populations. Following the already mentioned study by Rodrigues-Pose et al. (2023), we realise that the narratives that come from 'above', from the institutional authorities, are seen with distrust by the populations. These same authorities distrust what populations say, since they believe that, in a way, populations are being manipulated by 'grey' (or should we say 'green') forces whose main purpose seems to be destabilisation.

2.2 What's at stake?

(...) but what to do when an important fact is lost in a flood of falsehoods and the voice of truth is drowned out by an incredible turmoil and, although it spreads freely, it cannot be heard, because information technologies have led it to the situation in which it is captured better the message of those who scream louder, even if they speak more falsely?

Stanislaw Lem, *His Master's Voice*, 1968.

Once again, the task of generating comprehensions, if not quicker, at least in a more accessible manner, is posed by the intricate web of diverse meanings brought by these narratives. In Johnston and Vazir's previously mentioned report (2023), US Americans are called upon to solve this dilemma: "Project Equity - Congress should endorse and further facilitate the ability of Tribal Nations to obtain equity in critical mineral projects" (Johnston and Vazir, 2023: 5).

This reference appears on the first pages of the US report, while in the European CRMA (2023), the first reference to 'population' appears on page 43, to say that

The project promoter shall establish and regularly update a dedicated project website with relevant information about the Strategic Project, including information on the environmental, social and economic impacts and benefits associated with the Strategic Project. The website shall be freely accessible to the public and shall be available in a language or languages that can be easily understood by the local population. (CRMA, 2023: 43, Article 7 (9))

Some authors also consider that climate litigation could drive the energy transition. Holly Stebbing (2023), for instance, states that "it is undeniable that climate litigation is being used as one of many tools to drive the energy transition, as environmental organizations and private individuals target governments and corporations over their sustainability policies".

Even if the North-American case should not be generalized due to the very particular USA state-building process, the European experience, nonetheless, pales in comparison regarding the juridical salience of popular participation. That is, despite the quality of the narratives in the European public space, the official documentation seems to relegate the role that populations can play to the background of the entire licensing process, which suggests an apparent lack of concern on the part of the legislator in what relates to the creation of real conditions so that the result of the operation is shared with local populations. This way of redacting the normative papers can raise questions about the purpose and effectiveness of the so-called social contracts, since, on the front-end, politicians and operators say that they are committed to allow for popular engagement and active participation, but on the corridors of the legislative process, populations are

considered a silent partner and a mere recipient of ‘one way’ measures for “an economy that works for people” (CRMA, 2023: 64).

The challenge is, therefore, for European leaders to strike the right balance between the rights of populations, our democracy standards and way of living, and the need for a healthy economy. This requires careful consideration and measures that must be proactively disclosed along the decision-making processes related to critical raw materials extraction in environmentally protected areas.

On the other hand, besides these promises that are already part of the European framework, maybe there is an additional and possible game-changer layer that should be considered in this complex equation: the participation of the population in the institutional configuration of the corporation that will be responsible for the extraction and processing of the CRMs. Take, for instance, the example of Slovakia, where “what at first seemed a naive local initiative, against the will of a large mining company and the government, resulted in a uniquely participatory process to develop an Action Plan for the post-coal future of Upper Nitra that no one could ignore” (Just Transition, 2020). Finding the right balance between the rights and interests of populations, democracy standards, and economic growth is an ongoing process that requires citizen and judicial vigilance, technocratic adaptability, and a corporate commitment to democratic values and human rights. By incorporating the populations as shareholders, issues like transparency, inclusivity, sustainability, and responsible governance practices, mining projects can navigate better complex challenges and foster an environment where rights and economic prosperity can coexist.

2.3 Beyond the narratives

At the moment that this report was completed, the International Energy Agency (IEA) released on July 11 a report stating that the critical minerals market is about to show “unprecedented growth as clean energy demand drives strong increase in investment”). According to its first annual market review, the IEA noted a

... surge in planned projects but finds more work is needed to ensure diversified and sustainable mineral supplies to support energy transitions. The market for minerals that help power electric vehicles, wind turbines, solar panels and other technologies key to the clean energy transition has doubled in size over the past five years. (...) [R]ecord deployment of clean energy technologies is propelling huge demand for minerals such as lithium, cobalt, nickel and copper. From 2017 to 2022, the energy sector was the main factor behind a tripling in overall demand for lithium, a 70% jump in demand for cobalt, and a 40% rise in demand for nickel. The market for energy transition minerals reached USD 320 billion in 2022 and is set for continued rapid growth, moving it increasingly to the centre stage for the global mining industry. (...) [I]f all planned critical mineral projects worldwide are realised, supply could be sufficient to support the national climate pledges announced by governments, according to the IEA’s analysis. However, the risk of project delays and technology-specific shortfalls leave little room for complacency about the adequacy of supply. And more projects would in any case be needed by 2030 in a scenario that limits global warming to 1.5 °C” (IEA, 2023; see also IEA, 2023a).

On the other hand, some overseas press stated that

European leaders complained for years that the United States was not doing enough to fight climate change. Now that the Biden administration has devoted hundreds of billions of dollars to that cause, many Europeans are complaining that the United States is going about it the wrong way. That new critique is born of a deep fear in Germany, France, Britain and other European countries that Washington’s approach will hurt the allies it ought to be working with, luring away much of the new investments in electric car and battery factories not already destined for China, South Korea and other Asian countries. (New York Times, 2023).

This *New York Times* piece went even further, noticing that for auto experts “the tax credits and other incentives offered by President Biden’s main climate policy, the Inflation Reduction Act, had syphoned some investment from Europe and put pressure on European countries to offer their own incentives” (New York Times, 2023).

These two faces of the same coin show how critical ‘CRMs’ are for the next decades of our western civilisation.

3 Methodology

The methodology used to elaborate this report was based on the influence-interest matrix (Eden and Ackermann, 2013) hence facilitating the identification of the relevant narratives whenever possible in each country and location. We use a *Competitive Intelligence Framework* that provides a structured basis for gathering, analysing, and interpreting information that generates relevant insights. The application of *Competitive Intelligence* techniques allows one to gain a comprehensive understanding of the landscape, actors, policies, and legislation, ultimately leading to more informed and effective decision-making.

1. Identifying the requirements: Understanding the narratives in public debate

Narratives play a crucial role in deliberations on CRMs extraction in environmentally protected areas. The main goal is to define the key narrative functions to be considered in public deliberation processes:

- a) enabling the articulation of nuanced perspectives (including peoples’ values and ‘how’ they arrived at their current positions);
- b) diversifying how perspectives are communicated (for example, other than through ‘logical reasoning’);
- c) encouraging the participation of people who are less familiar with the use of formal reasoning;
- d) being open to challenging the presumptions made by policymakers, experts, or industry actors in the broader context or framing of the deliberation issues.

2. Goal definition

To discover, analyse, and understand the overall landscape of the CRM ecosystem: finding the main topics, identifying the stakeholders, knowing the mining player's perspectives, going deep on local populations' concerns, understanding how players keep the dialogue with communities and extract the most relevant narratives from each stakeholder - depending on their perspective/category.

3. Case Scope

The scope of this research involved five countries: Czech Republic, France, Italy, Portugal, and Slovakia.

4. Stakeholders

Statements, positions, and narratives depend on each stakeholder's role in and outside the CRM ecosystem. EU political concerns are strategic, going beyond the CRMs itself; local populations are more directly involved in the projects and therefore more focused on each of the possible consequences; and business and national players must balance environmental concerns with the profitability of the projects. In sum, each of the defined stakeholder groups represents the different perspectives needed to understand the narratives regarding CRMs in the public debate.

Taking all these principles into account, the following categories have been identified:

Politics	European Union level
	National level
	Local level
Players (business)	
NGOs	
Populations	
Media	

The time range of data to be collected and analysed was January-May 2023; whenever it was needed the analysis was completed with specific data collected from the previous year (2022) and in some cases years (e.g., Slovakia).

Furthermore, the information obtained was enriched with insights from secondary sources – mainly news –, so that we could define, in greater depth, the relevant stakeholders, and all categorised entities.

5. Sources

The comprehensive assessment of the CRMs ecosystem involved gathering open-source information from a variety of media sources. This process encompassed internationally recognized sources, which contributed to a credible and expansive overview of the CRMs landscape on a global scale. Simultaneously, local media sources were consulted to provide insights enriched by regional expertise and nuances. The methodology included targeted searches across prominent platforms such as Bloomberg, Reuters, and The Guardian, supplemented by Google searches. Additionally, an online media database was used to find articles specific to each country case. This holistic approach ensured a well-rounded assessment, drawing from both worldwide and localized perspectives.

Throughout the process, quantitative data was analysed to validate information integrity and data quality, as well as to establish correlations between Human Development and Climate Risk levels and the narratives. Its sources were: the Human Development Index (HDI); the Planetary pressures–adjusted Human Development Index (PHDI), and the ND-GAIN Index.

6. Research Process

The research process was based on a set of media information and social media analyses. Once the stakeholders were identified, further research was carried out. In general, the research process involved three phases: Data Collection; Data Validation and Quality Assessment; and Data Analysis, with five stages (each stage focus being determined by the findings of the previous round):

- Stage 1 | Information gathering to identify generic search terms and to collect raw data;
 - Macro level data collection- International and national views about CRMs in general;
 - Mining - General views on CRMs and mining projects in the regions within the scope of the CIRAN project;
 - NGOs & Companies;
 - Local entities.
- Stage 2 | Information processing and manual validation of which articles to include in the report;
- Stage 3 | Translation of all content into English;
- Stage 4 | Content analysis and identification of general narratives, arguments, policies and stakeholders, including the levels of:
 - Community engagement;
 - Expert participation;
 - Social concerns and responses;
 - Economic concessions vs Environmental concessions.
- Stage 5 | Identification of a framework and delimitation of boundaries for a general narrative.

From this process we were able: to identify global trends that affect global politics on critical raw materials and the best practices in place in some regions; to map the tension line within the CRMs ecosystem; to understand how political leaders' visions and narratives affect people's reactions; and to introduce topics that invite deeper consideration or discussion, such as:

Are EU countries limiting the rights of protest?

Is violence increasing in (environmental) protests?

Are EU countries moving away from the 2030 climate goals?

How are scientists reacting to deep-sea mining?

Are communities from high climate risks countries more sensitive to CRMs?

Are EU sovereignty risks perceived by the population? And if so, how?

7. Reporting

Reporting of findings and insights was done by country-case. Each case is presented in four sections:

- Summary
- Overview
- Narratives by stakeholder
- Sources (organized in by-country lists in the References chapter)

As a result of the research process, it was also added the topic “Narratives from other countries outside of Europe that appeared in the European public debate” and three infographics:

EU | CRM Policies' Cycle; CRMs | Local communities' impact; and EU | Geopolitical changes impact.

4 Main findings

In the public debate about critical raw materials in Europe, several narratives have emerged as particularly relevant. These narratives are employed by different stakeholders to shape the discourse, influence policy decisions, and engage the public. The following are some of the most significant public narratives in the debate:

- **National Security and Geopolitical Concerns:** This narrative highlights the importance of securing a domestic supply of critical raw materials to protect national security interests. It emphasises the risks associated with relying heavily on imports from politically unstable regions or countries with different strategic priorities. Proponents of this narrative argue for the development of domestic extraction and processing capabilities to reduce dependency and ensure control over critical resources.
- **Sustainable and Responsible Sourcing:** This narrative emphasises the need for environmentally and socially responsible sourcing of critical raw materials. It highlights the negative impacts of extraction activities, such as deforestation, water pollution, and human rights abuses. Advocates for this narrative promote the adoption of strict environmental and social standards in the supply-webs and advocate for the support of responsible mining practices and fair-trade initiatives.
- **Economic Competitiveness and Innovation:** This narrative focuses on the economic benefits of having a stable and diverse supply of critical raw materials. It emphasises the role of these materials in driving technological advancements, innovation, and economic growth. Proponents argue that secure supply-webs enhance Europe's competitiveness in global markets, attract investments, and foster job creation and economic development.
- **Supply Chain Resilience and Risk Management:** This narrative highlights the vulnerabilities and risks associated with global supply-webs for critical raw materials. It emphasises the potential disruptions caused by geopolitical tensions, trade disputes, or sudden changes in supply availability. Advocates for this narrative call for diversification of supply sources, development of alternative materials, and the establishment of strategic reserves to ensure resilience against supply disruptions.
- **Circular Economy and Resource Efficiency:** This narrative centres on the principles of a circular economy and resource efficiency. It emphasises the importance of reducing waste, promoting recycling and reuse, and minimising resource consumption. Proponents argue that a circular economy approach can help mitigate the demand for new raw materials and reduce the environmental impacts associated with their extraction and processing.
- **Environmental Impacts of Raw Materials Extraction:** This narrative highlights the negative environmental consequences of extracting critical raw materials. It emphasises issues such as habitat destruction, water pollution, and greenhouse gas emissions associated with mining activities. Advocates for this narrative call for stricter regulations, improved environmental management practices, the development of cleaner extraction technologies and, in extreme cases, for stopping mining activities.
- **Collaboration and International Cooperation:** This narrative emphasises the need for international collaboration and cooperation in addressing the challenges of critical raw materials. It recognises that no single country or entity can address the issue alone and encourages partnerships, knowledge sharing, and joint research and development initiatives. Proponents argue for the establishment of international frameworks and agreements that promote sustainable and responsible sourcing practices.

These narratives reflect the diverse perspectives and priorities of stakeholders in the public debate about critical raw materials in Europe. Each narrative carries its own weight and can shape public opinion, policy decisions, and future strategies related to the management and availability of critical raw materials.

4.1 Narratives by stakeholder group

In what follows, we present each stakeholder group's position within the narrative matrix discussed above, from a general viewpoint. This is but an aggregated output of the fine-grained research analysis of each national case. See section 5.2. for the national narratives and the related sources on which the following summary draws.

4.1.1 Environmental interest groups & NGOs

Environmental activists play a significant role in the critical raw materials debate, advocating for sustainability, responsible resource management, and the protection of the environment. They employ various narratives to raise awareness and address the environmental and societal challenges associated with raw materials extraction. The following are key narratives commonly employed by environmentalists:

- **Environmental Impacts of Raw Materials Extraction:** Environmentalists emphasise the negative environmental impacts of raw materials extraction, including habitat destruction, deforestation, water pollution, and greenhouse gas emissions. They highlight the potential loss of biodiversity, disruption of ecosystems, and long-term environmental degradation caused by mining activities. This narrative seeks to raise public awareness about the environmental consequences of resource extraction and to advocate for more stringent regulations, improved environmental management practices, and the adoption of cleaner technologies in the industry.
- **Circular Economy and Resource Efficiency:** Environmentalists advocate for a shift towards a circular economy and resource efficiency as a solution to the challenges posed by critical raw materials. They emphasise the importance of reducing waste, promoting recycling, and maximising resource efficiency throughout the product life cycle. The narrative highlights the potential of recycling and reusing materials to reduce the need for extracting virgin resources. Environmentalists call for the adoption of policies and practices that support the circular economy principles, such as extended producer responsibility, eco-design, and product stewardship.
- **Social and Human Rights Concerns:** Environmentalists also raise concerns about the social and human rights impacts associated with raw materials extraction. They highlight issues such as displacement of local communities, violation of indigenous rights, and exploitation of labour. This narrative emphasises the importance of considering social equity, justice, and human rights in the extractive industry. Environmentalists advocate for the adoption of ethical and responsible sourcing practices, community engagement and consultation, and the protection of the rights of affected communities and indigenous peoples.

These narratives align with environmentalists' goals of minimising the environmental footprint of resource extraction, promoting sustainable consumption and production patterns, and ensuring the protection of communities and ecosystems affected by mining activities. By emphasising the environmental impacts, advocating for a circular economy, and raising societal and human rights concerns, environmentalists aim to influence public opinion and policies in favour of more sustainable and responsible approaches to raw materials extraction.

It's important to recognize that environmentalists' narratives are not limited to these aspects and can encompass a broad range of environmental and societal concerns. Additionally, some environmental groups often collaborate with other stakeholders, including policy-makers, industry representatives, and communities, to promote sustainable practices and develop innovative solutions to the challenges associated with critical raw materials.

On the other hand, there is an apparent ~~perceived~~ paradox between environmentalists' positions towards the exploration and exploitation of critical raw materials and what they advocate for an energy transition. This paradox arises from the complexities and necessary trade-offs involved and it is important to understand that environmentalists' opposition to exploration and exploitation of critical raw materials is not always absolute but rather focuses on the need for responsible and sustainable practices. Their support for the

energy transition is driven by the urgency to address climate change and promote renewable energy sources. By emphasising responsible sourcing, circular economy principles, and technological advancements, environmentalists seek to reconcile the need for critical raw materials with their commitment to environmental protection and sustainability.

4.1.2 Politics

Policy-makers play a crucial role in shaping the discourse on critical raw materials. Bearing in mind that political decisions are fundamentally shaped by the institutional and contextual variables that influence informational capital flows and political interests and ideas, there still remains a modicum of strategic rationality in political decision-making spheres. In this sense, political actors can employ various narratives to advance their own policy agendas and to address the challenges associated with CRMs, while contributing to the salience of certain issues at the expense of others, thus helping construct the very same narratives they seek to convey. The following are key narratives commonly employed by policy-makers:

- **National Security and Geopolitical Concerns:** Policy-makers often emphasise the national security and geopolitical concerns associated with raw materials. They highlight the risks of overreliance on imports, especially from politically unstable regions or countries with differing strategic priorities. Policymakers argue that securing a domestic supply of critical raw materials is essential for reducing vulnerability, protecting national interests, and ensuring economic stability. This narrative seeks to rally public support for policies that prioritise domestic production and resource independence, and, in so doing, securitisation goes hand in glove with the representation of certain raw materials as critical.
- **Promoting Domestic Production and Diversification:** Policy-makers employ a narrative centred around promoting domestic production and diversification of critical raw materials. They argue that by expanding domestic extraction capabilities and supporting mining projects, a country can reduce its dependency on foreign sources and enhance its economic competitiveness. Policy-makers emphasise the potential benefits of job creation, technological innovation, and increased self-sufficiency. This narrative seeks to mobilise public and industry support for policies that encourage investment in domestic mining projects.
- **Ensuring Sustainable and Responsible Sourcing:** Policy-makers also prioritise the narrative of ensuring sustainable and responsible sourcing of critical raw materials. They acknowledge the environmental and social challenges associated with mining activities and advocate for policies that address these concerns. Policy-makers aim to promote responsible mining practices, transparency in the supply-webs, and adherence to environmental and social standards. They stress the importance of reducing the environmental footprint of mining operations, mitigating societal impacts – also by preventing their externalisation to third parties –, and safeguarding human rights. This narrative aligns with broader sustainability agendas and aims to gain public trust and support for policies that prioritise responsible sourcing practices.

These narratives are, of course, interconnected and policy-makers often combine elements from several narratives to reinforce their arguments and policy proposals. By framing critical raw materials as an issue of national security, policy-makers also seek to garner support for policies that ensure a reliable supply chain. Simultaneously, promoting domestic production and diversification helps address concerns about dependency on foreign sources. Policy-makers' emphasis on sustainable and responsible sourcing demonstrates a commitment to environmental and societal considerations, aligning with public expectations and international sustainability goals.

Understanding these narratives is crucial for assessing policy-makers' motivations, identifying potential policy directions, and evaluating the implications of their decisions. Additionally, recognising the potential tensions and trade-offs between these narratives is essential for developing comprehensive and balanced policies that consider both economic and environmental/societal aspects of critical raw materials.

4.1.3 Population

The perception of new mining projects in Europe varies among different populations and it is influenced by a range of factors including the specific context, the local communities' concerns, and the overall societal values. Here are some common perspectives that can be observed:

- **Economic Opportunities:** Some segments of the population view new mining projects as potential sources of economic growth, job creation, and increased local prosperity. They see mining as an opportunity to stimulate regional development, attract investment, and generate revenue for communities and governments. This perspective often prioritises the potential economic benefits over environmental and societal considerations.
- **Environmental Concerns:** Another segment of the population expresses strong environmental concerns regarding new mining projects. They highlight the potential negative impacts on ecosystems, biodiversity, and natural resources. These concerns may focus on water pollution, habitat destruction, deforestation, and the release of greenhouse gases. Proponents of this perspective advocate for rigorous environmental impact assessments, strict regulations, and sustainable mining practices.
- **Health and Societal Impacts:** Some populations worry about the potential health and societal consequences of mining projects. They raise concerns about the exposure to hazardous substances, air and noise pollution, and the disruption of local communities. This perspective emphasises the need for comprehensive health and safety regulations, community engagement, and the protection of indigenous (when applicable) rights and historical/cultural heritage.
- **Land Use and Land Rights:** Certain populations express concerns related to land use and land rights. They question the ownership and control of land, as well as the potential displacement of communities or the disruption of traditional livelihoods. This perspective often demands proper consultation processes, fair compensation, and respect for land rights and the rights of indigenous or native local peoples.
- **Sustainability and Transition:** A growing segment of the population prioritises sustainability and the transition to a low-carbon economy. They scrutinise new mining projects in terms of their compatibility with climate change goals and the broader sustainability agenda. This perspective advocates for responsible and ethical mining practices, as well as the exploration of alternative materials and technologies that reduce dependency on mineral raw materials.
- **Transparency and Public Participation:** Many individuals and communities emphasise the importance of transparency and meaningful public participation in decision-making processes related to new mining projects. They seek access to information, open dialogue, and opportunities for public input. This perspective aims to ensure that decisions about mining projects are inclusive, democratic, and accountable.

It is important to note that these perspectives are not mutually exclusive, and populations often hold a combination of views. The specific attitudes towards new mining projects can also vary depending on the location, history of mining activities, level of trust in regulatory systems, and the effectiveness of communication and engagement efforts by mining companies, regulators, and policy-makers.

Overall, understanding the diverse perspectives of populations is crucial in shaping mining policies, conducting thorough stakeholder consultations, and fostering sustainable and responsible mining practices that balance economic development with environmental and societal considerations.

4.2 Narratives by country

In general, all the European countries aspire to greater autonomy regarding Critical Raw Materials, but the implementation of such politics has not been as smooth as desired.

In fact, all country-level narratives follow a similar pattern, with the governments, on one side, aligned with the EU narrative, and, on the other, the populations and the environmentalists raising concerns about the new mining projects. As *The Wall Street Journal* put it, “Europe is embarking on a Mining Renaissance. Winning over locals is proving a challenge. Governments in Portugal and elsewhere on the continent want a secure supply of critical minerals to power the green transition, but opposition is often strong” (*The Wall Street Journal*, 2023).

4.2.1 Portugal

In Portugal, the current government intends to attract greater investment with the promotion of mining projects and seeks to assume a more independent role with regard to the import of these materials. But will the country be prepared to exploit its resources in an intensive and non-harmful way?

In the realm of domestic policies, Portugal’s stance towards large corporations continues to be characterized as “hostile,” according to the Minister of Economy, who preferred to highlight the country’s success in attracting a major international battery manufacturer, which has chosen Portugal as the location to develop their battery project (*Diário de Notícias*, 2023). The Portuguese government commitment was strongly reasserted at the time Brussels began advocating for 10% of the raw materials extracted within European territories, as Portugal competes in the race for lithium. The European Commission has also set specific targets of 40% for refining and 15% for recycling these materials. This comes at a time when the EU, as we have already noted, heavily relies on imports for CRMs. The list of raw materials deemed strategically important is vast, ranging from bismuth, boron and copper to rare earths, among others (*Jornal de Negócios*, 2023). In the context of the race for lithium, Portugal stands ready to contribute towards achieving these European objectives, a position backed by centre-left Portuguese MEPs (*Euronews*, 2023). Moreover, the US and the European Commission have initiated an agreement concerning critical minerals (*Público*, 2023). Raw materials crucial for decarbonization strategies, such as lithium and tungsten, sourced or processed within the European Union, will now enjoy the same benefits when entering the North American market as those sourced from the United States.

The EU CRMs strategy, however, faces tremendous challenges, and Portugal’s stance is right at the centre of the debate. The US-EU bargain is being sealed while the potential loss or relocation of European lithium-ion battery production, equivalent to 18 million electric cars' capacity, starts to be fully acknowledged. Transport & Environment's research, for instance, suggests that 68% of Europe's planned battery production could be moved to the US due to incentives, emphasizing the need for a stronger EU industrial policy and de-bureaucratization efforts (*Away*, 2023; *New York Times*, 2023a). Furthermore, Germany's hesitation to support the EU's ban on combustion engine cars from 2035 (*Expresso*, 2023) reflects concerns about the economy, while low-carbon synthetic fuels (eFuels) could offer an alternative by reducing emissions.

The controversial example of the Portuguese Barroso lithium mine, one of the 300 large global mines to be opened, shows how entangled these processes are: deemed vital to the electrification of the automotive industry, it also highlights the scarcity of resources for battery production on meeting the future global demand. With considerable reserves of lithium, Portugal has been an object of interest for national and foreign investors. Even so, expressions of discontent with the decisions to explore areas that must be protected proliferate, as doubt remains amongst the populations directly affected by ongoing or future processes. In a press release, *MiningWatch Portugal*, a monitoring NGO founded by Nik Völker, has already denounced the fragility of Portuguese conditions to receive projects of such scale: “the country does not currently have any extractive project capable of being classified as a strategic project, nor is it ready for accelerated environmental and social licensing” (*RTP*, 2023).

The Ecologist Party Os Verdes (PEV) warned of the lack of transparency of one of the lithium mine projects, (in Montalegre), and stressed the fact that "environmental problems and the quality of life of the populations that live there are at stake" (Público, 2023a). Local interest associations that were established in the region to oppose mining, such as the Associação Montalegre com Vida, have accused the Portuguese Environment Agency (APA) of jeopardizing lives and expressed apprehension about the impact on local communities and the municipality. They also reproached the lack of effective participation in the project's EIA concluded in May 2023, even if it garnered 511 submissions on the "Participa" portal, one of the portal's most significant responses to a mining project (Público, 2023a).

In the Seixoso region a radical movement - "Movimento Seixoso - Lithium No!" has developed in opposition to prospecting for lithium (Diário de Notícias, 2023a; Etc e tal, 2023). It proclaims the need to conserve the quality of the waters of Ribeira de Borba and Ribeira de Santa Natália that eventually flow into the Douro River in the northern part of the country, which otherwise would jeopardise the health of the population of the city of Porto. The Government's carelessness with regard to the assessment of the possible consequences of the exploitation of lithium in Monte do Seixoso was the target of criticism by the leader of the Braga district of the PSD (PressMinho, 2023). Being a process that could seriously compromise the quality of water, cause its scarcity, affect the practice of agriculture and harm the tourist sector, the population is concerned about making hasty decisions that could endanger their quality of life and the protection of the environment that surrounds them. Also to the north, the association of Serra d'Arga municipalities, including Caminha, Ponte de Lima, Viana do Castelo, and Vila Nova de Cerveira, is embarking on efforts to secure the classification of Serra d'Arga as a Protected Landscape. Initiated in 2017, the classification process is supported by studies within the project "Da Serra d'Arga à Foz do Âncora." Rui Lages, mayor of Caminha, highlighted that the association's primary goal is to achieve formal classification as a Regional Protected Landscape. The area covers 10,000 hectares, with 4,280 hectares classified as a Site of Community Importance. The association aims to speak with one unified voice and leverage community funds for preservation and enhancement. Notably, the Serra d'Arga region was excluded from a public tender for lithium research and prospecting in February 2022, a move supported by studies showcasing the unsuitability of lithium exploration in the area. The joint effort seeks to harmonize the preservation, protection, and enhancement of Serra d'Arga's unique landscape. (Jornal C, 2023).

However, these disputes have not prevented important industrial companies from investing in the development of lithium mines elsewhere in the country. Savannah Resources, with its proposed Vila Real mine (in Boticas), is a case in point (Água e Ambiente, 2023). As well as several other projects already underway in the southern regions of Setúbal, Alentejo and Algarve. From desalination plants and "mega photovoltaic parks" to automotive, naval, and aerospace company clusters (some of them embedded in national defence strategies), these projects have attracted the negative attention of the left, as ecological concerns are raised and more natural reserves are being demanded (Jornal de Nisa, 2023; Setubalense, 2023). A similar pattern can be found in the case of the International Seabed Authority's new Mining Code of the Sea – a set of regulations that will govern the extraction of precious metals from depths exceeding two thousand meters in international waters. The Portuguese Government argues that these regulations will facilitate the future regulation of such activities and guide maritime policies. However, various ocean conservation organizations are urging Portugal to abandon its wait-and-see stance and join other countries in advocating for a moratorium on the document's viability or even a complete ban on such activities. They emphasize the need to ensure exploration doesn't jeopardize marine habitats, food security, and the overall survival of the planet (Jornal de Notícias, 2023).

OVERVIEW

- Portuguese government wants to attract investments
- European Commission established targets of 40% for refining and 15% for recycling
- MiningWatch Portugal considers Portugal is "not ready" for strategic mining projects
- New projects to produce batteries in Europe are at risk
- EU + US launch deal on critical minerals
- Germany will not support the ban on the sale of new cars with combustion engines

NARRATIVES BY STAKEHOLDERS

POLITICS | EU/NATIONAL

EC: "we know that the pandemic and war have taught us a bitter lesson about excessive dependency"

EC: "This at a time when the EU imports almost all of some of the critical raw materials from countries like China" (Jornal de Negócios, 2023; Público, 2023)

PT GOV: "Portuguese government wants to attract investments" (Diário de Notícias, 2023).

DE GOV: "will not support the ban on the sale of new cars with combustion engines from 2035, prepared by the European Union" (Expresso, 2023).

PEV: "Hydrogen and lithium projects do not solve the needs of the population and the development of the territory."

PEV: "environmental problems and the quality of life of the populations that live there are at stake"

POLITICS | LOCAL

PSD's Braga: "quality of the water, cuts in the groundwater, the scarcity of water"

PSD's Braga: "economic consequences: devaluation of the land, agriculture will become almost impracticable and tourism will also lose a lot." (PressMinho, 2023).

PLAYERS

MB: "recycling of the raw materials used, such as lithium, nickel and cobalt, is an integral part of this approach"

NGOs

MW: "Portugal not ready" for strategic mining projects or for "accelerated environmental and social licensing" (RTP, 2023)

Mining Code of the Sea - NGOs and scientists ask Portugal for the defence of a moratorium that prevents the document from being made viable, or even a total ban on activity, at least until science proves that exploration can be done without jeopardising marine habitats, food security and even the survival of the planet." (Jornal de Notícias, 2023).

Montalegre com Vida: "Green mining doesn't exist"

POPULATIONS

Serra d'Arga Association: "we were right when we opposed the exploitation of lithium in Serra d'Arga - it would destroy the entire 'habitat', the culture, everything that we know as Serra d'Arga" (Jornal C, 2023).

MEDIA

Setubalense: "The challenge facing the District of Setúbal is to be reborn from the industrial stagnation. The industry in Portugal has a future, just as it has a future in Europe" (Setubalense, 2023).

4.2.2 France

Much like in Portugal, the French government intends to reduce its carbon footprint as well as its reliance on supplies from Asia. Emmanuel Macron uses this pretext to justify the urgency of re-industrialization, not only at the national level, but also at the European level. France's strategic approach intertwines industry, climate, and resource management to position the nation as a leader in global sustainability progress. This integrated strategy encompasses diverse spheres of economic growth, environmental sustainability, and resource utilization, yielding a dynamic synergy that is expected to drive innovation and resilience. Underpinning France's strategy is a commitment to reindustrialization, epitomized by collaborative endeavors such as the XTC and Orano partnership. This 1.5 billion euro investment in a lithium battery site in Dunkirk is portrayed as a collaboration for not only fostering technological advancements but also for generating 1,700 employment opportunities (Bbdivers, 2023). President Emmanuel Macron's call for reindustrialization (Macron, 2023) resonates as a strategic response to curbing dependencies that may arise from deindustrialization. France's fortified industrial prowess contributes to geopolitical strength and global competitiveness. However, France's government is decided to counterbalance reindustrialization with environmental commitments, a compromise echoed by the French PM Elisabeth Borne's assertion that the nation's dedication to the European Green Pact remains steadfast (France Bleu, 2023). This unwavering commitment to achieve carbon neutrality by 2050 underscores France's pledge to infuse sustainability across industries and daily lives. This is an enduring stance that reflects France's recognition of climate change as a pivotal challenge (Evolen/Accenture, 2022).

France's strategic engagement with CRMs (Transitions et Énergies, 2023) further manifests through initiatives such as the Imerys group's launch of the first lithium mining project. This endeavor exemplifies France's proactive stance in contributing to Europe's electric vehicle battery materials sector, reducing reliance on imports, and bolstering resource sovereignty (Le Monde, 2022; Euronews, 2022). The nation's active role in the mining sector is further highlighted by the substantial net income surge of certain corporations, such as Eramet, due to escalating raw materials demand (Le Figaro, 2023). These efforts have not gone unnoticed in the scholarly community: a study by the Massachusetts Institute of Technology's "Green Future Index 2023" positions France in a 9th position score almost on par with South Korea, in terms of preparedness for a sustainable, low-carbon future. The announcement of a €2.5 billion undersea hydrogen pipeline between Marseille and Barcelona and the pursuit of renewable electricity production and energy consumption reduction by 40% by 2050 affirm France's steadfast evolution in energy management. Additionally, the report's focus on skills and professions essential for "carbon-free" energies by 2030 showcases France's foresight in cultivating a competent workforce for evolving sectors (Mémento, 2023). This strategic emphasis on workforce development complements France's overarching sustainability goals.

Nevertheless, populations and environmentalists in France are demonstrating against some of the decisions. For instance, in February 2022 Facebook-organized demonstrators allied with the Brotherhood of Breton Druids (the Fraternity of the Druids, Bards, and Ovates of the Brittany region, and the nationalist-regionalist Breton Democratic Union to launch protests against potential lithium mining on a protected site in Tréguennec (Ouest-France, 2023). These organizations expressed concerns over the polluting exploitation of lithium, despite opposition from local officials and the population. The UDB supports the preservation of natural areas, transparent information, and involving directly affected populations in discussions about lithium mining. The next year saw the emergence of more violent environmentalist uprisings, led by the "Les Soulèvements de la Terre" – a coalition of various environmental activist groups in France that are known for their more radical approach to climate action. This umbrella group is at the forefront of advocating for direct action against big businesses, state projects, and large-scale farming operations, often using high-profile methods to draw attention to their cause. In one notable incident, the group participated in a demonstration against a controversial irrigation project in Sainte-Soline, western France, in March. This protest escalated into clashes between around 5,000 protesters and over 3,000 police officers. Some young activists criticized the French government's response to protesters, alleging a reliance on violence, weapons, and surveillance as their approach. Such was also the UN's understanding, when the clashes gained international visibility. The government responded to some of these demonstrations with the cancellation of a green movement (The Guardian, 2023; 2023a).

The environmental groups associated with "Les Soulèvements de la Terre" employ various strategies to advocate for their cause:

- Public Protests: They organize public protests, both physical and online, to oppose mining projects and raise awareness about their environmental risks. These protests have been successful in pressuring the government to reconsider its support for mining ventures.
- Legal Challenges: Environmental activists challenge mining projects in court, arguing that they violate environmental laws and regulations. These legal challenges have sometimes succeeded in delaying or stopping mining projects.
- Media Campaigns: They launch media campaigns to increase public awareness about the environmental dangers posed by mining. These campaigns utilize social media, television, and print media to reach a wider audience.

Although not directly related to mining activities, it is not yet clear whether this 'radical protest model' will spill over into related environmental dimensions.

OVERVIEW

- Reindustrialization of France and Europe is a key issue of sovereignty
- Decarbonization and sovereignty
- Not taking a break at all in climate ambition
- A Radical of Protest Model?

NARRATIVES BY STAKEHOLDER

POLITICS | EU/NATIONAL

Emmanuel Macron: "The reindustrialization of France and Europe is a key issue of sovereignty"

Emmanuel Macron: "1.5 billion euros for 1,700 jobs"

Emmanuel Macron: "It's not just a geopolitical shock, but it's a fairly asymmetrical energy shock because we are much more affected than the others." (Macron, 2023).

Elisabeth Borne: France is "not taking a break at all in climate ambition" (France Bleu, 2023)

Breton Democratic Union: "We defend the line of preservation of our protected natural areas and transparent information and debate on the subject of lithium, involving in the first place the populations most directly concerned" (Ouest-France, 2023).

PLAYERS

Imerys: reduce reliance on battery supplies from Asia

Imerys: Decarbonization and sovereignty (Le Monde, 2022)

Eramet: increased demand for raw materials (Le Figaro, 2023)

NGOs

"Les Soulèvements de la Terre: is an umbrella group of several different environmental activist associations across France. It is seen as leading a new form of more radical climate action in Europe with high-profile direct action often aimed at big business interests, state projects and large-scale farming. The group was part of a demonstration over a controversial irrigation project in Sainte-Soline, western France, in March that led to fierce clashes with police. Around 5,000 protesters battled with more than 3,000 police officers.

Birdie, young activist: ‘The French government has this doctrine of how they want to deal with protesters, which is violence and weapons and surveillance’’. (The Guardian, 2023a; see also The Guardian, 2023).

POPULATION

Brotherhood of Breton Druids: The Gorsedd, fraternity of druids, bards and ovates of Brittany supports this call to demonstrate: "The central power seems ready to impose an extremely polluting exploitation of lithium in a site of the Conservatoire du littoral, protected and classified Natura 2000, in spite of the opposition elected officials and the population of Tréguennec". (Ouest-France, 2023).

MEDIA

Euronews: to meet increasing demand, suppliers require vast quantities of rare earth metals
Euronews: To achieve climate neutrality by mid-century, the EU will require 18 times more lithium than it currently uses by 2030 and almost 60 times more by 2050 (Euronews, 2022).

STUDIES

Evolen/Accenture: A need for 350,000 jobs in "carbon-free" energies in 2030 (Evolen/Accenture, 2022).

4.2.3 Italy

Italy is one of the most vulnerable European countries to climate change. The country is already experiencing the effects of climate change, such as more frequent and intense heat waves, droughts, floods, and wildfires. These effects are having a significant impact on Italy's environment, economy, and society (The Guardian, 2023b).

This means that all the decisions regarding environmental topics are very sensitive. A 2022 survey by the European Union found that 85% of Italians are concerned about climate change. The survey also found that 70% of Italians believe that climate change is a very serious problem. There is, accordingly, a growing movement in Italy to address climate change.

Under all this pressure from society and environmental groups, the Italian government is taking steps to address climate change. However, the shift away from Russian gas has obviously affected the climate targets and the policies previously established. Nonetheless, even considering that some decisions will slow down the pace of the Italian green transition, the government decided to pursue investments in new fossil fuel projects and reopen mines.

The economic rationale is often used by advocates of fossil fuel projects. "The problem is that we cannot help the environment by destroying our industries", said Prime Minister Giorgia Meloni (Reuters, 2023). This new stance is in line with the general policy set by the new right-wing government, which purportedly tries to temper the green transition with "social and economic sustainability" from a conservative viewpoint (Politico, 2022). Meloni emphasized, accordingly, that harming industries could not effectively contribute to environmental protection, characterizing the EU's Green Deal as "climate fundamentalism" and questioning the allocation of financing for the green transition. This criticism is closely articulated by Italy's Vice PM, Matteo Salvini, who condemned the timeline for transitioning to electric vehicles, describing it as "economic and social suicide" and a "gift" to China. His focus is rather on reinforcing security measures and penalizing individuals who disrupt public spaces in the name of environmental causes or others (The Guardian, 2022a; 2023b). In practice, this entails slowing down Italy's push towards a green transition to safeguard local businesses. This shift in stance was prompted by the energy crisis following Russia's invasion of Ukraine, with the government reversing its 2021 commitment to halt funding for international fossil fuel projects, citing the need for caution in light of the crisis (Financial Times, 2023).

Shortly after the Intergovernmental Panel on Climate Change (IPCC) issued a stern warning about the necessity of reducing global emissions, the Italian government revealed its policy for the Servizi Assicurativi del Commercio Estero (SACE), the government's export credit agency that is Italy's primary financier of fossil fuels in Europe. This policy permits continued fossil fuel support well beyond the 2022 deadline, diverging from the fossil fuel phase-out trajectories outlined by the IPCC. SACE's support for fossil fuels has been substantial, with €13.7 billion provided between 2016 and 2021. A study by Oil Change International unveiled that SACE is contemplating financing for international fossil fuel projects that would result in emissions equivalent to over three times Italy's annual emissions (Earth.Org, 2023; OilChange, 2023).

Concerning the reopening of old deactivated mines, the Italian government has argued that it is a necessary step to secure the country's supply of critical minerals, such as lithium, cobalt, and graphite, amidst major (foreign) investments in the sector (UPI, 2023; Reuters, 2022). These minerals are essential for the production of electric vehicles and other green technologies, thus securing the country's supply of CRMs (Euractiv, 2023; Il Giornale, 2023). The Italian government also argued that by reopening mines thousands of jobs will be created. This will allegedly boost the economy, seeing as the mining sector is a labor-intensive industry, and it has the potential to attract investment and to lead the creation of new businesses. These features, so it is claimed, make the sector a driver of economic growth. Furthermore, the Italian government acknowledges that mining can have an environmental impact, but it argues that this impact can be mitigated with proper planning and management. The government has said that it will only approve mining projects that meet strict environmental standards.

The policy reversal announced by the government was met with shock and fierce critique by local populations and environmental organisations (such as ReCommon and Ecco), who had recently been very active in demanding grassroots participation in environmental regulation (The Guardian, 2021c). A milestone of such a trend, which antedated the more recent arrival of the right-wing coalition to the Executive, happened during 2022 around the reactivation of the zinc mining site of Gorno by the Australian company Energia Minerals. For all the attempts made by the latter at making the decision process as participative as it should be (from the perspective of business leaders) through local consultations (MyValley.It, 2022), several authorities, including Ministries, environmental commissions, regional bodies, and local municipalities have systematically rejected the reopening on archaeological preservation and environmental impact grounds, that range from heavy traffic to groundwater pollution (Prima Bergamo, 2022; Corriere della Sera, 2022). The project, despite its potential €120 million investment and creation of over 200 jobs, is thus facing significant skepticism. Similar events are currently taking place in the region of Calabria, where the ENEL Group was planning to reopen a power plant aimed to produce renewable energy through hydrogen and solar power. This project may have reached a halt, due to significant pressures from the Movimento Corigliano-Rossano Pulita, a non-profit organisation fighting for the cleanliness, safety and liveability of the city of Corigliano-Rossano, who denounced Enel for failing to comply with environmental regulations and called for the closure of the plant. Enel rejected the MCRP's accusations and stated that the plant complies with environmental regulations. The company also announced that it will invest EUR 1.5 billion to decarbonise the plant and reduce polluting emissions. The conflict between the MCRP and Enel is still ongoing. The MCRP continues to call for the closure of the plant, while Enel continues to deny the allegations of pollution. The conflict is important because it concerns the future of the city of Corigliano-Rossano and the citizens' right to live in a healthy environment. Moreover, the project faced another setback due to the refusal of a €15 million funding offer from the Calabria Region under the National Recovery and Resilience Plan (PNRR). The mayor's hesitation in providing a required project opinion, as well as bureaucratic delays, ultimately contributed to Enel's decision to reject the funding. Meanwhile, the movement "Corigliano-Rossano Pulita" strongly opposes Enel's decisions. They assert that Enel should not treat the Calabrian people and the Sibaritide region as second-class citizens, criticizing the potential renouncement of a significant public investment that Enel has speculated on for decades. They call for a united front against Enel's choices and urge support for the Corigliano-Rossano Municipal Administration to prevent what they view as an unsustainable decision (TusciaWeb, 2023; Quicosenza, 2023; Cosenzachannel, 2023).

In general, environmentalist arguments against CRMs in Italy can be summarised as follows:

Environmental impact: Mining can have a significant impact on the environment, including water pollution, air pollution, and soil contamination. Local populations and environmental organisations are concerned that reopening mines will lead to further environmental degradation in Italy.

Social impact: Mining can also have a negative social impact, including displacement of local residents, loss of jobs, and increased crime. Local populations are concerned that reopening mines will further disrupt their communities.

Economic impact: The economic benefits of mining are often overstated, while the costs are often underestimated. Local populations and environmental organisations argue that the government should focus on developing sustainable industries that will create jobs and boost the economy without damaging the environment.

Lack of transparency and accountability: The Italian government has been accused of a lack of transparency and accountability in its decision-making process on mining. Local populations and environmental organisations argue that the government has not properly consulted with stakeholders and that it has not adequately assessed the environmental and social impacts of reopening mines.

The narrative of local populations and environmental organisations against reopening mines in Italy is strong and well-argued. In fact, the background framework of a country facing a significant climate crisis with storms, high temperatures of 48.8C, wildfires and glacier collapse - considering how it affects the society, demands a unique and sensitive approach to have everyone on board with the public policies.

OVERVIEW

- Italy slows down green transition
- Explore rare materials is strategic
- Italy wants to reopen mines
- Italy will continue investments in new fossil fuel projects
- Italy's shift away from Russian gas clashes with its climate targets

NARRATIVES BY STAKEHOLDER

POLITICS | EU/NATIONAL

Giorgia Meloni, Prime Minister: "The problem is that we cannot help the environment by destroying our industries" (Reuters, 2023).

Giorgia Meloni, Prime Minister: "The road to a green economy must be socially and economically sustainable" (Politico, 2022).

Matteo Salvini: timetable for transition to electric vehicles as "economic and social suicide", and a "gift" to China.

Matteo Salvini: "The League is working to strengthen the security decrees and to punish with arrest, fine and imprisonment those pseudo-environmentalists who allow themselves to deface works of art and annoy students and workers by blocking traffic. Enough is enough." (The Guardian, 2023b).

Adolfo Urso, Minister of Enterprises and Made in Italy : will make Italy the gas hub and reopen the deposits of rare materials: there are 30 critical ones (Euractiv, 2023).

SACE (owned by Ministry of Economy and Finance): Italy's policy for its export credit agency, Servizi Assicurativi del Commercio Estero (SACE), will permit the continued support of gas exploration and production until 2026, as well as oil transport, storage and refining until 2024 and oil distribution until 2028. (Financial Times, 2023; Earth.Org, 2023; OilChange, 2023).

Italian Government: Law enacted by government that punishes organisers of illegal raves (The Guardian, 2022).

PLAYERS

Energia Minerals: discuss with the population the reopening of the mines

Geraint Harris, managing director of Energia Minerals: "if the permits take too long, that's a whole other story" (MyValley.it, 2023).

Li-Cycle & Glencore: Portovesme Hub is a landmark project for Europe's battery recycling industry (UPI, 2023)

Kunal Sinha, global head of recycling at Glencore: "recycling has a unique role in the energy transition" (UPI, 2023).

Enel: Decided not to accept the financing, and as a result that opportunity has been lost, because the Municipality of Corigliano Rossano, which was supposed to give an opinion on the project, procrastinated and never expressed itself (TusciaWeb, 2023; Quicosenza, 2023; Cosenzachannel, 2023).

ENTITIES

Luca Mercalli, president of the Italian Meteorological Society: describes Italy as 'one of the most fragile places in the world' after recent storms, wildfires and glacier collapse (The Guardian, 2023b).

NGOs

Last Generation: main objective is to force the government to establish a citizens' assembly as a way to urge politicians to take swift action to address climate issues (The Guardian, 2021c).

ReCommon: Simone Ogno "It is shocking", "The government is using the recent energy crisis to justify everything, but we are talking here about the future of the planet"(Reuters, 2023).

Ecco: "It's very disappointing (...) a terrible precedent for other countries" (Financial Times, 2023).

Amnesty International Italia (on the Law restricting the freedom of gathering of over 50 people): "It risks having a discretionary and arbitrary application to the detriment of the right to peacefully protest" (The Guardian, 2022a).

Il Movimento Corigliano-Rossano Pulita: As a movement, we will not allow Enel to once again treat the people of Calabria and the citizens of the Sibaritide as second-class citizens, for whom it is not worth investing and for whom it can even think of renouncing almost 15 million euros of public investment on a site on which it has speculated for decades. We appeal to all territorial and regional forces, both social and political, to join the Municipal Administration of Corigliano-Rossano and not to allow Enel to make an unsustainable choice. (TusciaWeb, 2023; Quicosenza, 2023; Cosenzachannel, 2023).

UNIONS

Yesterday we were informed of Enel's renunciation of the experimental project for the production of hydrogen from renewable energy sources planned for the Corigliano Rossano site, as well as for the La Spezia site affected by a similar project. We consider this renunciation a serious fact, **a choice that we do not understand because hydrogen is one of the options that our country has placed at the center of its energy strategy** (Cosenzachannel, 2023).

4.2.4 Slovakia

On January 31, 2023, Slovakia introduced its ground-breaking Climate Law, marking a historic milestone by officially committing to achieve carbon neutrality by 2050. The law, presented by the Slovakian Environment Ministry, not only sets ambitious targets but also empowers citizens to file climate-related lawsuits against the state if climate goals are not met. The legislation establishes a Council for the Climate, granting it the authority to monitor and enforce climate plans across various ministries, including the imposition of sanctions if required (Euractive, 2023a). This law builds on and substantially expands the scope of measures taken in the previous years, such as the €1.5 billion plan announced by the Slovak Finance Minister in May 2022 aiming to replace the fossil-fueled furnaces at the US Steel plant in Kosice, a facility responsible for 18% of the country's greenhouse gas emissions (InnovationOrigins, 2022; see also Central European Times, 2022; Electrive, 2022, for similar schemes). By transitioning to electrical furnaces, the plan sought to address both environmental concerns and the viability of the plant, which employs over 10,000 individuals.

A rapidly developing Central European country, Slovakia has a strong foundation in mineral-based industries such as metallurgy, electronics, chemicals, ceramics, and glass. While hosting the world's largest magnesite deposits, its natural resources primarily comprise brown coal, lignite, iron ore, copper, and manganese in smaller quantities (Azoming, 2021). Despite a robust mining industry, recent years have seen limited contributions to mineral production.

The escalating demand for lithium – crucial for battery production – has sparked interest in Slovakia's mineral potential. In the neighbouring Czech Republic, for instance, significant lithium reserves have been discovered, prompting debates about mining effectiveness and prices. Slovakia also holds lithium ore reserves, albeit smaller than the Czech ones (Postoj, 2021). The potential for ecologically-friendly lithium mining from geothermal sources exists in Slovakia, supposedly aligning with the country's automobile industry (Energiazozeme, 2021).

The exploration of ecological lithium extraction from geothermal sources is gaining traction in Slovakia. With comparable natural conditions for such endeavours, prospects of finding lithium in Slovak brines are encouraging. The concentration and economic viability of such projects remain uncertain but hold promise for valuable global raw material production. The European Geothermal Energy Council (EGEC) lists Slovakia among nations with rich geothermal resources, anticipating lithium battery production through this approach (DennikN, 2021).

Furthermore, the European Union is set to ease extraction conditions for critical raw materials (Postoj, 2022). Slovakia's notable exception lies in magnesite and talc deposits, and a mapped deposit in Švedlár within the Slovak Ore Mountains holds potential for lithium extraction, provided mining regulations are relaxed in the future. This potential evolution aligns with Slovakia's broader transition towards more sustainable practices, highlighted by recent initiatives such as the introduction of the country's first-ever climate law.

The shift from traditional fossil fuels to critical minerals like copper, nickel, cobalt, and lithium is driving the mining industry's transformation. These minerals, essential for "clean energy," hold potential for ecological consequences despite their eco-friendly image. Slovakia, however, continues to grapple with mining's environmental impacts and tragic incidents as seen through the explosion in the Nováky mine in 2006 (Postoj, 2023). The explosion served as a grim reminder that mining, although historically significant, comes with

hazards that persist even in the pursuit of greener resources. While the country's mining tradition has waned, globally, these minerals are considered a new golden age.

In Central and Eastern Europe (CEE), including Slovakia, transitioning to sustainable energy sources also faces newer challenges. A recent report on CEE countries' efforts towards EU climate goals – which can be found in a piece by Central European Times (2023) – highlights some of the problems identified within Slovakia's National Energy and Climate Plan (NECP). For instance, Slovakia's NECP lacks a clear carbon neutrality target, instead favouring a shift from coal to fossil gas, nuclear, and biomass. The country's renewable energy target of 19.2% by 2030 is deemed insufficient due to inaccuracies, which weakens its credibility. Misleading data provided to Eurostat further undermines Slovakia's renewable energy figures. Positive steps, nonetheless, include plans to phase out lignite mining and combustion by 2023. However, the report underscores Slovakia's reliance on Russian fossil fuels, revealing the need to prioritize phasing out such fuels. A robust NECP should focus on eliminating fossil fuels, promoting renewables, and modernizing district heating in line with EU climate targets. Slovakia's experience reflects broader challenges and prospects in CEE countries' energy transition.

Additionally, Slovakia has also faced environmental protest-related difficulties across different mining sectors. In the late 2000s, the Civic Association Kremnica nad zlato (KNZ) rallied against gold mining in Kremnica due to environmental risks, particularly the use of cyanide method, which has caused significant damage in previous accidents (Domov, 2006). In 2012, Upper Nitra Mines countered Greenpeace's complaints about coal mining by stressing their progress in introducing green schemes and energy-efficient practices (Slovak Spectator, 2012). In contrast, Greenpeace activists who protested coal mining in the Novaky mine in 2018 faced legal action, leading to their custody as their actions were deemed to have escalated (Tasr, 2018). However, citizens in Upper Nitra ultimately achieved success in their fight against coal mining, securing a government-approved plan for a post-coal future (Just Transition, 2020). More recently, Greenpeace Slovakia extended their protests to gas-related issues, targeting the construction of a gas LNG terminal on the Danube, asserting that such projects perpetuate fossil fuel dependency instead of reducing emissions (Greenpeace, 2021). These protests underscore the ongoing tensions between resource extraction and environmental concerns in Slovakia's transition to sustainable practices.

It is not yet clear whether these challenges will be met in a more peaceful social climate, seeing as the current political situation in Slovakia is unstable and uncertain (The Guardian, 2023c; DW, 2023). The former Prime Minister Eduard Heger resigned in May 2023 after losing the support of his coalition partners and has since been replaced by a caretaker government led by the central bank governor Peter Kazimir, who will run the country until the next election, which is expected to take place in September 2023.

OVERVIEW

- Political instability, next election September 2023;
- Slovak government presents first-ever climate law;
- National Energy and Climate Plan lacks a target for carbon neutrality.

NARRATIVES BY STAKEHOLDER

POLITICS | EU/NATIONAL

Ján Budaj, Ex-Minister of Environment: It is our first climate law in history. For the first time, we will learn how to adapt the country to the challenges of the 21st century (Euractive, 2023a).

Igor Matovič, Minister of Finance: announced a €1.5 billion plan to replace the fossil-fuelled furnaces. “There’s no other way to help the U.S. Steel Košice than to decarbonize” (InnovationOrigins, 2022).

POLITICS | LOCAL

Katarina Machackova, the mayor of Prievidza: “First they ignore you, then they laugh at you, then they fight you and then you win”

Katarina Machackova, the mayor of Prievidza: The Action Plan confirmed the rejection of a new mining field for the Novaky coal complex, which the company HBP had intended to open, as well as the end of electricity production from coal by 2023. (Just Transition, 2020).

PLAYERS

Upper Nitra Mines: "We're carrying out all our business activities with regard to preserving the environment for future generations. We view the revitalisation of areas affected by mining as a natural process in ending the use of the coalfield (2018) (Slovak Spectator, 2012).

NGOs

Zuzana Balážová de KNZ: protest by the inhabitants of Kremnica and its surroundings against the Kremnica Gold Project. The project envisages gold mining in Kremnica using the cyanide method (Domov, 2006).

Greenpeace Slovakia: protest against gas terminal in Bratislava. The kayak protest was accompanied by a bike ride organised by Cyklokuchyna and Concerned Mothers (Greenpeace, 2021).

CEE Bankwatch: “The modelling that underlies Slovakia’s current NECP lacks a target for carbon neutrality. Instead, the plan adopts an unambitious approach that emphasises a switch from coal to fossil gas, nuclear and biomass”

CEE Bankwatch: “Slovak authorities have been supplying misleading information to Eurostat, the European Statistical Office, dating back to 2010. Therefore, the country’s renewable energy share needs to be revised to reflect the actual figures.

CEE Bankwatch: NECP progress reports “have not always been taken seriously in some countries, such as Slovakia, where data are missing” (Central European Times, 2023).

STUDIES

EGEC association: lists Slovakia among the countries with rich geothermal resources, where the production of lithium batteries in this way is expected (2021) (DennikN, 2021).

4.2.5 Czech Republic

Mining has historically been a significant part of the Czech Republic's economy. The country has a diverse range of mineral resources, and mining has played a role in supplying raw materials for various industries. The mining industry is a significant part of the Czech economy, and it provides jobs for thousands of people. In 2020, the mining industry contributed \$2.3 billion to the Czech GDP, and it employed around 30,000 people.

Mining is also relevant because it provides energy, income and jobs for many regions. Coal mining is one of most important types of mining in Czechia, accounting for about 40% of the electricity generation in 2020. Coal mining is also an important sector for the regions’ employment and economy, especially in the north-western part of the country. According to GlobalData, the five largest mines in Czechia produced about 33.5 million metric tons of coal in 2021.

However, mining also has negative impacts on the environment and human health, such as greenhouse gas emissions, air pollution, soil contamination and water quality degradation. Therefore, the Czech government

is planning to phase out coal by 2038 and invest in renewable energy sources, energy efficiency and innovation. The government is also providing support for the economic restructuring and fair transformation of mining areas, to ensure a smooth transition for the affected workers and communities.

On the other hand, the Czech Republic has the largest lithium reserve in Europe and the fourth largest in the world, located in the region of Cinovec. The reserve accounts for 3% of the global lithium stock and is estimated to be worth 87 billion US dollars. The project is expected to start mining lithium in 2024 and produce about 25,000 tonnes of lithium carbonate per year for 21 years.

This is a mining venture of exceptional proportions. The geological composition of the site, known as Greisen, holds the potential to revolutionize lithium production in Europe. European Metal Holdings (EMH), along with its subsidiary Geomet, owns the exploration licenses for the project. Signifying its strategic importance, the Czech utility company CEZ invested significantly in the project, securing a majority equity interest (Mining.com, 2023; Trend, 2021; Mining Technology, 2020). This project has garnered attention not only for its potential mineral wealth but also for its significance in terms of energy security and sustainability.

The Cinovec project carries substantial energy security benefits for the Czech Republic and Europe as a whole, as lithium becomes a strategic and valuable resource for the green energy transition. As the demand for lithium skyrockets, driven by the burgeoning electric vehicle market and renewable energy storage solutions, having a domestic supply source becomes imperative. The Cinovec deposit's strategic location, just 100 kilometers northwest of Prague and near the German border, places it in proximity to major end-users, including car manufacturers and planned battery plants (Postoj, 2021; Standard, 2021). For instance, Volkswagen's electric car production plant in Zwickau, Germany, is merely 90 kilometers away (Trend, 2021). Prime Minister Petr Fiala emphasized the unique opportunity the Czech Republic holds in contributing to Europe's energy security through lithium mining and processing (Novinky, 2023; Euractiv, 2023c; on processing see Ct24, 2017). With the largest lithium deposit in Europe within its borders, the Czech Republic stands poised to play a pivotal role in the burgeoning lithium revolution, amidst a lithium price upsurge (Seznam Zprávy, 2022), prioritizing Cinovec for grant funding from the Just Transition Fund (Mining.com, 2023). Fiala's vision extends beyond domestic security, as he highlights the potential for Europe to intensively support the production of these critical raw materials.

The lithium project could bring significant economic benefits and employment opportunities for the Czech Republic, as well as contribute to its energy security and climate goals. However, the project – as many others from different sectors – also faces some challenges and risks, such as environmental impacts, social acceptance, legal disputes, technological uncertainties and market fluctuations. In coal mining, for instance, the Czech-Polish Turów mine deal has come under criticism from Czech and German NGOs due to its potentially negative environmental impact (Euractiv, 2022). The electric vehicle revolution has spurred the development of large-scale battery production. The Czech Republic's planned “Gigafactory”, capable of producing over 30 gigawatt hours of batteries, could supply up to 800.000 car batteries annually (Fintag, 2021). However, the government's pursuit of the “Gigafactory” has encountered resistance from local communities concerned about its implications (Euractiv, 2023d). Regarding the Cinovec project, the subject of lithium mining has permeated political discourse more recently in 2017 (Hospodářské noviny, 2017). The quest for lithium has taken on political significance, with parties offering varied stances on its extraction. EMH, for its part, has demonstrated its commitment to responsible mining by outlining mitigation strategies for the Cinovec lithium project, such as renewable energy use and environmentally conscious technologies (Proactive, 2021). However, despite the potential environmental benefits, the cost of initiating lithium mining at Cinovec has raised financial concerns, with the startup expenses estimated at 11 billion crowns (Ekonomickydenik, 2023).

OVERVIEW

- Government fully supports EU policy to reduce raw materials dependence;
- Government sees the lithium ecosystem as an opportunity for development;
- Not to sell the extracted ore on world markets, but to create an entire production chain.

NARRATIVES BY STAKEHOLDER

POLITICS | EU/NATIONAL

European Commission, Government and Regional Government in Ust: Cinovec Project has been classified as a Strategic Project for the Usti Region of the Czech Republic. Means that the Cinovec Project has priority for grant funding from the Just Transition Fund (“JTF”) co-funding (Mining.com, 2023).

Petr Fiala, Prime Minister: “We are on the verge of the lithium revolution because the use of lithium will grow significantly, and Europe will intensively support the production of critical raw materials on its own territory”

Petr Fiala, Prime Minister: “It is a chance to attract new investors to the region, improve the standard of living and create thousands of jobs. We have a chance to create a centre of modern energy and renewable resources from a once coal region”

Petr Fiala, Prime Minister: “In lithium, the Czech Republic has a unique opportunity to contribute not only to its raw material security, but to the raw material security of the whole of Europe” (Euractiv, 2023c).

Government: mining of lithium caused disputes in the Czech government coalition

Jozef Síkela, Industry and Trade Minister: “project (Volkswagen gigafactory) will bring new technologies, jobs and stable revenues to the state budget” (2023)

Jiří Havlíček, ex-Industry and Trade Minister: Lithium obtained from the Cínovec deposit should be further processed until its final form in the Czech territory (Ct24, 2017).

Andrej Babiš, ex-Prime Minister and ANO chairman: do not want foreign companies to mine lithium - “I find it scandalous... Reserves are estimated at USD 87 billion”

Karel Havlíček, ex-Industry and Trade Minister: a unique value chain is emerging in the Czech Republic thanks to lithium in Cínovec and the efforts of the state-owned ČEZ to build a so-called Gigafactory (2021) (Fintag, 2021).

Elections: Lithium mining in Cínovec has become one of the important topics of the recent elections (Hospodářské noviny, 2017).

Government: memorandum of understanding with European Metals, the Australian mining group, to develop the large lithium resource that lies scattered under the fields around Cinovec (Hospodářské noviny, 2017).

PLAYERS

Geomet: investor finally obtained all the necessary permits and should mine for 13 years

Geomet: currently in talks with the mayors of the surrounding villages about the mining

Geomet: “The opening of the mine would also have a favourable impact on employment in the region, where many job opportunities are expected to be created not only in the mine itself, but also in related industries or services. A significant amount of funds would be added to the budget of the city of Dubí from fees for mined minerals and mining areas annually”

Keith Coughlan, executive chairman of European Metals: “With the use of solar power and other optimisations the Cinovec project will set a standard by which all other conventional lithium producers could be judged.” (Proactive, 2021).

PGE Group: “was mining from February to September 2022 without having an environmental impact assessment, which is in total contravention of European law” (Euractiv, 2022).

Otto Janout, prospector: Cínovec precious metals can turn the Czech Republic into a new Kuwait (Seznam Zprávy, 2022).

NGOs

Greenpeace, Bund Sachsen and the association Uhelná: filed the complaint, which notes that the bilateral agreement does not resolve the negative impact caused by the mining (Turów) as promised during the negotiations (Euractiv, 2022).

Greenpeace: calls on Minister of Industry and Trade Jozef Síkela for the Czech Republic to oppose the commencement of destructive deep-sea drilling at the ISBAHQ

POPULATION

Residents: Residents near the deposit also protested

Residents: Volkswagen gigafactory - The realisation of the gigafactory project would lead to the removal of a local airport. According to local workers, there are 20,000 domestic and international flights annually, and flight schools and emergency services operate there. The city of Pilsen and surrounding municipalities are also against the airport's closure.

President of the Czech Aviation Association: organised a demonstration in Pilsen against the planned gigafactory.

4.3 Narratives from other countries outside of Europe that appeared in the European public debate

The narratives about the exploration and exploitation of critical raw materials in Europe are similar to those in the USA, Canada, and South America. However, there are some key differences.

In Europe, there is a greater focus on security of supply. This is because Europe is more reliant on imports of critical raw materials than other regions. For example, Europe imports over 90% of its rare earths from China. This makes Europe vulnerable to supply disruptions from China.

In the USA, Canada, and South America, there is a greater focus on environmental protection. This is because these regions have a longer history of mining and have seen the negative environmental impacts of mining first-hand. For example, the mining of copper in the USA has polluted water supplies and damaged ecosystems.

Another difference is that the debate about the exploration of critical raw materials is more polarised in Europe than in other regions. This is because there is a strong divide between those who support increased mining and those who oppose it. In the USA, Canada, and South America, the debate is more nuanced and there is more support for a balanced approach that takes into account both security of supply and environmental protection.

Overall, the narratives about the exploration and exploitation of critical raw materials are similar in Europe, the USA, Canada, and South America. However, there are some key differences, such as the focus on security of supply in Europe and the focus on environmental protection in the USA, Canada, and South America.

POLITICS

Ursula von der Leyen, President of the European Commission: “This Act will bring us closer to our climate ambitions. It will significantly improve the refining, processing and recycling of critical raw materials here in Europe. Raw materials are vital for manufacturing key technologies for our twin transition – like wind power generation, hydrogen storage or batteries. And we're strengthening our cooperation with reliable trading partners globally to reduce the EU's current dependencies on just one or a few countries. It's in our mutual interest to ramp up production in a sustainable manner and at the same time ensure the highest level of diversification of supply chains for our European businesses.” (von der Leyen, 2023)

Hildegard Bentele, MEP - conservative European People's Party: “We keep expanding protected areas, and we can't afford that anymore right now” (Politico, 2023).

Emma Wiesner, MEP - Renew Europe group: “We can't on the one hand say we want more raw materials and minerals. And then on the other hand, go regulate so it's impossible to open a new mine in Europe” (Politico, 2023).

PLAYERS

Kerstin Brinnen, legal counsel at LKAB (government-owned Swedish mining company): The EU's water laws, for example, require companies to pass “very high thresholds,” such as “zero emissions to water,” which is “quite difficult to do”. Treating mining activities as projects of overriding public interest would solve a number of those issues, she said. Industry bodies Eurometaux and Euromines have called for similar measures (Politico, 2023).

NGOs

Michael Reckordt, section head for raw materials at the NGO PowerShift: “Especially in light of the climate crisis and the high rate of biodiversity loss, the priority cannot simply be: more mining, more mining” (Politico, 2023).

POPULATIONS

“The problem is that Europeans don’t trust mining companies in their backyards. The resistance that Rio Tinto has faced in Serbia is not unique. Portugal also witnessed protests against lithium mining in October. The following month, mining company Vulcan Energy “paused” its lithium operation in Germany’s Upper Rhine region after facing community opposition to its plans. But the ferocity of Serbia’s opposition to the mine marks a major problem for the European Union’s ambitions to source lithium from closer to home. In 2020, Šefčovič said the EU cannot achieve its climate goals without raw materials like lithium, adding that the bloc will need 18 times more lithium by 2030, and 60 times more by 2050. (Wired, 2022).

Matti Blind Berg, heads the National Confederation of the Swedish Sami: “We’re talking about this green transition. For me, it’s not green, it is black, because it’s going to destroy the rest of the nature that we have left”. (Politico, 2023)

Marijana Petković, resident in Gornje Nedeljice, in western Serbia: “she is among those who believe Serbia’s fertile Jadar Valley—where locals grow raspberries and keep bees—is being asked to make huge sacrifices to enable other countries to build electric cars.” (Wired, 2022).

Petković, who is a member of the local campaign group Ne Damo Jadar: The villagers weren’t too worried when Rio Tinto said it wanted to build a modest mine on just 20 hectares. “They said it is going to be a modern mine that will not damage nature,” Petković says. But last year, locals discovered that plans for their village had drastically changed. Rio Tinto wanted to build on 600 hectares, nearly the size of 10,000 tennis courts. “We started to fight against the mine when they found out the company was lying to us for 14 years; when we found out how big the mine really is,” says Petković. Environmental concerns also started to emerge. The Guardian obtained a study, funded by Rio Tinto, which outlined how the mine would cause irreversible changes to ecosystems and local rivers. The study recommended “the abandonment of planned exploitation and processing of the mineral jadarite.” (Wired, 2022; see also The Guardian, 2021).

5 Are there any Common Narratives?

Looking at all the narratives of policy-makers, populations, businesses, and environmentalists, in the critical raw materials public debate we can find a few common ones that often align across these groups and that are, in the end, the fundamental pillars of our living standards. Among them are concepts like Sustainable and Responsible Resource Management, Diversification of Supply Sources, Technological Innovation and Research, Public Engagement and Stakeholder Collaboration, and Sustainable Economic Growth and Job Creation.

In fact, stakeholders may have different perspectives and emphasise certain aspects instead of others. It is also true that these common narratives demonstrate shared goals and values that allow to raise the foundations of a common ground to work collaboratively towards solutions that balance economic development, environmental protection, and social well-being.

However, despite these common narratives, the truth is also that there are always clashes between the two sides of the barrier. This Serbian is quite paradigmatic of this kind of contention:

... citizens, environmental activists, and green political parties stand on one side. On the other stands a major company supported by Serbia's ruling parties, as well as certain political forces from within the EU. Polarisation between supporters and opponents of lithium extraction has made genuine debate impossible. The question of whether there is even a need for lithium mining – and under what conditions it might be acceptable – rarely figures (Momčilović, 2023).

The underline is the authors' and it perfectly summarises the real problem of the common “narratives in the public debate”. In fact, it is not a question of arguments or common narratives. The real issue is to find a solution that brings all the actors onto the same playing field level.

The solution could be, in our opinion, to consider the populations/communities as shareholders of the projects and not mere stakeholders with royalty rights and/or as members of consultative committees.

This option does not appear in the narratives but looking at the similarity of the arguments across the countries, this option can be a game-changer since it will bring the population to a new level of commitment very much different from the level of ‘engagement’.

We have good examples already in Europe that lend support to this option. In Germany, for instance, this is the outcome of the endorsement and enforcement of the codetermination principle (Zumbansen, 2007; Jäger et al., 2021), already applied in many companies, where worker representatives have a place on the board of directors.

6 Conclusions and final remarks

All in all, we may have to consider if the duality is Europe's economic development vs. Environmental protection or Europe's sovereignty vs. Environmental protection.

As a recent study on CRMs produced by the European Commission's Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs states:

Pressure on resources will increase - due to increasing global population, industrialisation, digitalisation, increasing demand from developing countries and the transition to climate neutrality with metals, minerals and biotic materials used in low-emission technologies and products. OECD forecasts that global materials demand will more than double from 79 billion tonnes today to 167 billion tonnes in 2060. Global competition for resources will become fierce in the coming decade. Dependence on critical raw materials may soon replace today's dependence on oil.

Raw materials are indispensable for the EU's industry and stand at the very beginning of each value chain. Amongst the non-energy, non-agricultural raw materials that are assessed by the European Commission, some are defined as critical based on objective criteria including their economic importance and their supply risk. CRMs are often produced and used in relatively small quantities but have special characteristics that make them essential ingredients for products in strategic areas such as renewable energy, digital, aerospace and defence technologies. Well-known examples include the rare earths elements found in the permanent magnets used to manufacture wind turbines' motors, lithium used for batteries, and silicon used for semiconductors.

In light of these applications, critical raw materials are key to enable the European industry to meet the political goals of the EU. The European Green Deal, the REPowerEU Communication, the Joint Communication on Defence Investment Gaps Analysis and Way Forward and the Digital Strategy have all established objectives or targets to achieve the green and digital transitions and strengthen the EU's resilience and strategic autonomy, which depend on the availability of critical raw materials, while the European Commission has already begun the implementation of the action plan set up in the 2020 Communication on Critical Raw Materials (Grohol and Veeh, 2023)

The narratives that we have analysed tell us that they are somehow similar to others that have been articulated in the past, in relation to other industries or, more generally, to other development policies and infrastructures.

The novelty, now, is that Europe is not facing a development problem but a threat to its pillars. And for that reason, European leaders need to go far beyond what they have done in dealing with the populations, seeing as older techniques and strategies may not work – not because they are wrong, but because of the severely limited timeframe that Europe now disposes of to implement the different transition processes.

7 References

7.1 Legislation

Amsterdam Treaty (1997)

Council of the European Communities, (1973). *Declaration of the Council of the European Communities and of the representatives of the Governments of the Member States meeting in the Council of 22 November 1973 on the programme of action of the European Communities on the environment.*

CRMA (2023), *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, Critical Raw Materials Act.*

Directive 2001/42/EC, *Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment.*

Directive 2011/92/EU, *Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment.*

Directive 2014/52/EU, *Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.*

Lisbon Treaty (2007).

Maastricht Treaty (1992).

Regulation 2021/1119: Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law').

Single European Act (1986).

7.2 Media and grey-literature reports by country

7.2.1 Portugal

Água e Ambiente. (2023). "Savannah announces that it updated the project of the lithium mine in Boticas". March 16. <https://imapp.invisiblemeaning.com/view/articles/83a70b3d-ffac-4942-ac1c-af557cdf8b8?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Balkan Green Energy News. (2021). "Portugal to call off lithium project amid EU's scramble for battery materials". May 5. <https://balkangreenenergynews.com/portugal-to-call-off-lithium-project-amid-eus-scramble-for-battery-materials/>

Diário de Notícias. (2023). "Portugal continues to "hostilize" large companies, says Minister of Economy". May 17. <https://imapp.invisiblemeaning.com/view/articles/b0e3736c-9c22-4fc9-a58a-f42e116b9dcc?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Diário de Notícias. (2023a). "Hundreds demonstrate in Lixa against lithium". February 20. <https://imapp.invisiblemeaning.com/view/articles/66d96c49-660e-4ba4-b577-89709ea817c5?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Etc e tal. (2023). "Hundreds of people demonstrated against prospecting for lithium in the Seixoso area, with the (strange and contested) absence of the region's mayors". February 20. <https://imapp.invisiblemeaning.com/view/articles/3e1254e5-72ee-4b66-b162-c679dc7ec23c?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Expresso. (2023). "End of polluting cars in 2035 may be at stake in Europe: Germany says it does not agree". March 02. <https://imapp.invisiblemeaning.com/view/articles/aa8b1e5e-d087-4bb1-b506-052f2c040f9b?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

GreenSavers. (2023). "Lithium: Association asks the APA for clarification on the green light for the mine in Montalegre". February 3. <https://imapp.invisiblemeaning.com/view/articles/9fc8361c-5204-4f74-9200-6bb569742c01?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&LANG=2>

Jornal C. (2023). "Caminha: Serra d'Arga Association starts work in March with Caminha as president". February 9. <https://imapp.invisiblemeaning.com/view/articles/1ad36425-74ff-4553-8a44-a39af69e1e46?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&LANG=2>

Jornal de Negócios. (2023). "Brussels wants 10% of the raw materials extracted on European soil. Portugal is in the race for lithium". March 16. <https://imapp.invisiblemeaning.com/view/articles/f9796198-36f3-4486-92d3-81d1ba127b32?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Jornal de Nisa. (2023). "The 'Roteiro da Água' in the Algarve and Alentejo is over". March 15. <https://imapp.invisiblemeaning.com/view/articles/8c918f25-53b6-4142-94d0-e1272e3532b3?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Jornal de Notícias. (2023). "Exploitation of precious metals at the bottom of the sea raises alarms". March 6. <https://imapp.invisiblemeaning.com/view/articles/a06bb98d-ba39-4670-90df-f6a8adfa28ea?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

PressMinho. (2023). "PSD Braga demands that the Government present "concrete studies" on lithium exploration". February 23. <https://imapp.invisiblemeaning.com/view/articles/44a9f2f3-4b79-4699-8fd3-4b521b9bf043?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Público. (2023). "Biden and Von der Leyen launch deal on critical minerals." March 10. <https://imapp.invisiblemeaning.com/view/articles/0399b71c-820c-409f-b181-3020902e5767?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Público. (2023a). PEV concerned about the impact of the Montalegre mine on populations and wolves". February 2. <https://imapp.invisiblemeaning.com/view/articles/f7c41d5b-e948-4138-8e9c-f3b3c5d84644?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&LANG=2>

RTP. (2023). "MiningWatch warns that Portugal is 'not ready' for strategic mining projects". March 16. <https://imapp.invisiblemeaning.com/view/articles/b714160b-80ef-4a9e-bf39-ccc2a1b03b0c?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Setubalense. (2023). "NUTS II and III and the Industrial Rebirth of the Whole District of Setúbal". February 2023. <https://imapp.invisiblemeaning.com/view/articles/426e40ff-be76-480b-9bed-f3ebd4131360?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

7.2.2 France

Bbdivers. (2023). "Lithium batteries: Macron announces 1.5 billion euros of investment between Orano and the Chinese XTC in Dunkirk". May 13. <https://bbdivers.info/batteries-lithium-macron-annonce-15-milliard-deuros-dinvestissement-entre-orano-et-le-chinois-xtc-a-dunkerque-tv5monde-2/>

Evolen/Accenture. (2022). "Rapport COMED: Compétences et métiers des énergies décarbonées." December. https://www.evolen.org/wp-content/uploads/2023/03/Rapport-COMED-2022_V9.pdf

France Bleu. (2023). "Environment: "No break at all in France's climate ambition" according to Elisabeth Borne". May 13. <https://www.francebleu.fr/infos/politique/environnement-pas-du-tout-de-pause-dans-l-ambition-climatique-de-la-france-selon-elisabeth-borne-5223900>

Le Figaro. (2023). "Eramet more than doubled its net income in 2022 with the surge in raw materials". February 22. <https://www.lefigaro.fr/flash-eco/eramet-a-plus-que-double-son-resultat-net-en-2022-avec-la-flambee-des-matieres-premieres-20230222>

Le Monde. (2022). "First lithium mining project launched in France". October 24. https://www.lemonde.fr/en/economy/article/2022/10/24/first-lithium-mining-project-launched-in-france_6001570_19.html?random=880837533

Macron, Emmanuel. (2023). "Discours du Président de la République à l'occasion de la réception Accélérer notre reconquête industrielle". May 11. <https://www.elysee.fr/front/pdf/elysee-module-21186-fr.pdf>

Mémento. (2023). "France among the countries best prepared for a green future". May 13. https://www.memento.fr/article_13-05-2023-la-france-parmi-les-pays-les-mieux-prepares-a-un-avenir-vert

Ouest-France. (2023). "Lithium in Tréguennec: the UDB and the brotherhood of druids support the call to demonstrate". February 23. <https://www.ouest-france.fr/bretagne/treguennec-29720/lithium-a-treguennec-l-appel-a-manifester-recoit-des-soutiens-0379f988-94b5-11ec-a7ee-106c58bd499b>

The Guardian. (2023). "Fire and concrete: will France's model of radical climate protest catch on?". May 4. <https://www.theguardian.com/environment/2023/may/04/will-france-model-of-radical-climate-protest-catch-on>

The Guardian. (2023a). "France to shut down climate protest group citing public safety risks". June 20. <https://www.theguardian.com/world/2023/jun/20/france-to-shut-down-climate-protest-group-citing-public-safety-risks>

Transitions et Énergies. (2023). "Les dix minéraux stratégiques indispensables à la transition". May 11. <https://www.transitionsenergies.com/dix-mineraux-strategiques-indispensables-transition/>

7.2.3 Italy

Corriere della Sera. (2022). "Gorno mine, the no also of the second ministry". June 8. https://bergamo.corriere.it/notizie/cronaca/22_giugno_08/miniera-gorno-no-anche-secondo-ministero-64737844-e6f5-11ec-bc81-fb93af2ab36c.shtml?refresh_ce

Cosenzachannel. (2023). "Enel's about-face on the hydrogen conversion of the Rossano plant 'irritates' the union". August 11. cosenzachannel.it/2023/08/11/centrale-rossano-enel-riconversione-idrogeno-sindacati/

Earth.Org. (2023). "Italy Vows to Support Fossil Fuel Projects At Least Until 2028 Despite COP26 Pledge to Cut Investments". March 28. <https://earth.org/italy-fossil-fuel-projects/>

Euractiv. (2023). "Italy plans to reopen mines that were closed 30 years ago in a bid to deal with the shortage of critical raw materials in the European Union". July 14. <https://www.euractiv.com/section/politics/news/italy-wants-to-reopen-mines-by-years-end/>

Financial Times. (2023). "Italy's shift away from Russian gas clashes with its climate targets". March 23. <https://www.ft.com/content/762e9d17-d5ab-41ca-9394-d668b30fb072>

Il Giornale. (2023). "Assemblea di Federacciai: la siderurgia, settore chiave dell'industria italiana". May 10. <https://www.ilgiornale.it/news/politica-economica/lindustria-italiana-esiste-perch-esiste-siderurgia-2149199.html>

MyValley.It. (2022). "Gorno: Mining company and population discuss the reopening of the mines". April 7. <https://myvalley.it/2022/04/gorno-societa-mineraria-e-popolazione-si-confrontano-sulla-riapertura-delle-miniere/>

OilChange. (2023). "Italy breaks climate promise to end public financing for international fossil fuel projects, publishing 'worst-in-class' climate policy". March 21. <https://priceofoil.org/2023/03/21/italy-breaks-glasgow-statement-climate-promise/>

Politico. (2022). "Italy's Meloni aims to make climate change a right-wing issue". October 20. <https://www.politico.eu/article/italy-giorgia-meloni-climate-change-right-wing/>

Prima Bergamo. (2022). "Gorno, for the activation of the mines the "no" also from the ministry". June 8. <https://primabergamo.it/attualita/gorno-per-lattivazione-delle-miniere-il-no-anche-dal-ministero/>

Quicosenza. (2023). "Enel power plant in Corigliano Rossano: '15 million in smoke'. Quarrel breaks out between Rapani and the mayor". August 11. <https://www.quicosenza.it/news/provincia/centrale-enel-di-corigliano-rossano-rapani-attacca-stasi-manda-in-fumo-15-milioni>

Reuters. (2022). "Vulcan Energy partners with Enel Green to develop Italian lithium project". July 8. <https://www.reuters.com/business/sustainable-business/vulcan-energy-partners-with-enel-green-develop-italian-lithium-project-2022-07-08/>

Reuters. (2023). "Italy looks to slow green transition drive to shield local firms". March 27. <https://www.reuters.com/business/environment/italy-looks-slow-green-transition-drive-shield-local-firms-2023-03-27/>

The Guardian. (2021c). "Environmental activists 'spat at by drivers' at Rome protest". December 17. <https://www.theguardian.com/world/2021/dec/17/environmental-activists-spat-at-by-drivers-at-rome-protest>

The Guardian. (2022a). “‘Freedom-killing monster’: illegal rave crackdown in Italy draws criticism”. November 2. <https://www.theguardian.com/world/2022/nov/02/freedom-killing-monster-italian-leader-giorgia-meloni-criticised-rave-laws>

The Guardian. (2023b). “The extreme events scare me the most’: climatologist warns of Italy’s vulnerability to climate crisis”. August 4. <https://www.theguardian.com/world/2023/aug/04/the-extreme-events-scare-me-the-most-climatologist-warns-of-italys-vulnerability-to-climate-crisis>

The Guardian. (2023c). “The Guardian view on Europe’s green transition: moving to the slow lane?”. March 22. <https://www.theguardian.com/commentisfree/2023/mar/22/the-guardian-view-on-europes-green-transition-moving-to-the-slow-lane>

TusciaWeb. (2023). “Lithium, ok from the region to Enel's research around Lake Bolsena”. May 10. <http://www.tusciaweb.eu/2023/05/litio-ok-della-regione-alle-ricerche-dellenel-intorno-al-lago-bolsena/>

UPI. (2023). “Li-Cycle, Glencore mull plans for giant battery recycling plant in Italy”. May 9. https://www.upi.com/Top_News/World-News/2023/05/09/italy-battery-licycle-glencore-lithium/4551683647373/

7.2.4 Slovakia

Azomining. (2021). “Slovakia: Mining, Minerals and Fuel Resources”. November 20. <https://www.azomining.com/Article.aspx?ArticleID=241>

Central European Times. (2022). “Batteries are powering CEE’s e-mobility transition - CET analysis”. September 12. <https://centraleuropeantimes.com/2022/09/batteries-power-cee-e-mobility-transition/>

Central European Times. (2023). “CEE needs to prioritise climate plans – report”. July 2. <https://centraleuropeantimes.com/2023/07/cee-climate-plans-risk-lip-service-report/>

DennikN. (2021). “Will we reach a revolution in lithium mining in Slovakia as well?”. October 8. <https://dennikn.sk/blog/2565410/dopracujeme-sa-k-revolucii-v-tazbe-litia-aj-na-slovensku/>

Domov. (2006). “KNZ members are protesting against gold mining in Kremnica”. February 20. <https://domov.sme.sk/c/2599599/clenovia-knz-protestu-proti-tazbe-zlata-v-kremnici.html>

DW. (2023). “Slovakia's interim government hopes to end political turmoil”. May 17. <https://www.dw.com/en/slovakias-interim-government-hopes-to-end-political-turmoil/a-65650650>

Electrive. (2022). “Slovakia releases €46 million for ‘E-Mobility Action Plan’”. December 1. <https://www.electrive.com/2022/12/01/slovakia-releases-e46-million-budget-for-e-mobility-action-plan/>

Energiazozeme. (2021). “Lithium for cars and batteries is mined non-ecologically. Geothermal energy can bring a breakthrough “. September 16. <https://energiazozeme.sk/zaujimavosti/litium-do-aut-ci-baterii-sa-tazi-neekologicky-prelom-moze-priniest-geotermalna-energia/>

Energiazozeme. (2021). “Lithium for cars and batteries is mined non-ecologically. Geothermal energy can bring a breakthrough”. September 16. <https://energiazozeme.sk/zaujimavosti/litium-do-aut-ci-baterii-sa-tazi-neekologicky-prelom-moze-priniest-geotermalna-energia/>

Euractiv. (2023a). “Slovak government presents first-ever climate law ECO Plans”. January 31. <https://www.euractiv.com/section/politics/news/slovak-government-presents-first-ever-climate-law/>

Greenpeace. (2021). "Greenpeace Slovakia activists protested on kayaks against the construction of a gas LNG terminal on the Danube". July 15. <https://www.greenpeace.org/slovakia/tlacova-sprava/4275/aktivisti-greenpeace-slovensko-protestovali-na-kajakoch-proti-vystavbe-plynového-lng-terminalu-na-dunaji-protest-proti-fosilnému-plynu-podporila-aj-cyklojazda-cez-pristavny-most/>

InnovationOrigins. (2022). "Slovakia is slowly transitioning to a greener future". May 10. <https://innovationorigins.com/en/slovakia-is-slowly-transitioning-to-a-greener-future/>

Just Transition. (2020). "From local initiative to national strategy: how citizens in Upper Nitra took control of their region's post-coal future". September 3. <https://www.just-transition.info/from-local-initiative-to-national-strategy-how-citizens-in-upper-nitra-took-control-of-their-regions-post-coal-future/>

Postoj. (2021). "Ecology is just a cover for the new global business". August 31. <https://www.postoj.sk/87026/ekologia-je-len-zasterkou-noveho-globalneho-biznisu>

Postoj. (2022). "The EU is about to ease the conditions for the extraction of key raw materials". November 23. <https://www.postoj.sk/119018/eu-sa-chysta-ulahcit-podmienky-tazby-klučovych-surovin>

Postoj. (2023). "Instead of oil and gas, miners rush to minerals used in the energy industry". May 2. <https://www.postoj.sk/129550/namiesto-ropy-a-plynu-sa-taziari-vrhnu-na-minerality-vyuzivane-v-energetike>

Slovak Spectator. (2012). "Upper Nitra Mines rejects Greenpeace's complaints". October 24. <https://spectator.sme.sk/c/20045009/upper-nitra-mines-rejects-greenpeaces-complaints.html>

Tasr. (2018). "Court Remands Greenpeace Protesters at Novaky Mine in Custody". December 2018. <https://www.tasr.sk/tasr-clanok/TASR:20181202TBB00103>

The Guardian. (2023c). "Slovakia PM quits and is replaced by caretaker as political crisis deepens". May 8. <https://www.theguardian.com/world/2023/may/08/slovakia-pm-quits-replaced-caretaker-political-crisis-deepens>

7.2.5 Czech Republic

Ct24. (2017). "Lithium from Cínovec will be processed in the Czech Republic. Mining could start in 2022". October 2. <https://ct24.ceskatelevize.cz/ekonomika/2260438-lithium-z-cinovec-se-melo-zpracovavat-v-cesku>

Ekonomickydenik. (2023). "The start-up of lithium mining at Cínovec should cost 11 billion crowns. ČEZ is asking for a subsidy exceeding one billion". June 16. <https://ekonomickydenik.cz/nastartovani-tezby-lithia-na-cinovci-by-melo-stat-11-miliard-korun-cez-zada-o-dotaci-presahujici-miliardu/>

Euractiv. (2022). "Czech-Polish Turów mine deal criticised by German and Czech NGOs". October 26. <https://www.euractiv.com/section/energy-environment/news/czech-polish-turow-mine-deal-criticised-by-german-and-czech-ngos/>

Euractiv. (2023b). "Czech lithium could contribute to European energy security". May 17. <https://www.euractiv.com/section/politics/news/czech-lithium-could-contribute-to-european-energy-security-says-pm/>

- Euractiv. (2023c). "Czech lithium could contribute to European energy security, says PM". May 17. <https://www.euractiv.com/section/politics/news/czech-lithium-could-contribute-to-european-energy-security-says-pm/>
- Euractiv. (2023d). "Local communities fight against gigafactory in Czechia". February 2. <https://www.euractiv.com/section/politics/news/local-communities-fight-against-gigafactory-in-czechia/>
- Fintag. (2021). "ČEZ has begun testing lithium processing technology from Cínovec". August 26. <https://www.fintag.cz/2021/08/26/cez-zacal-s-testy-technologie-na-zpracovani-lithia-z-cinovce/>
- Fintag. (2021a). "Gigafactory could produce up to 800,000 car batteries a year". July 29. <https://www.fintag.cz/2021/07/29/gigafactory-by-mohla-vyrabet-az-800-tisic-baterie-do-aut-rocne/>
- Hospodářské noviny. (2017). "A technical problem has become politics. Readers' questions about the possibilities of lithium mining in the Czech Republic were answered by geologist Jaromír Starý". November 1. <https://byznys.hn.cz/c1-65936270-z-odborneho-problemu-se-stala-politika-jak-je-to-ale-s-lithiem-doopravdy-ptejte-se-geologa-jaromira-stareho>
- Mining Technology. (2020). "Cinovec Lithium and Tin Project". May 18. <https://www.mining-technology.com/projects/cinovec-lithium-and-tin-project/>
- Mining.com. (2023). "European Metals soars as Czech lithium project labelled 'strategic'". January 30. <https://www.mining.com/european-metals-soars-as-czech-lithium-project-labelled-strategic/>
- Mining.com. (2023a). "World's largest clay and hard rock lithium project". August 10. <https://www.mining.com/featured-article/ranked-worlds-largest-clay-and-hard-rock-lithium-projects-2/>
- Novinky. (2023). "Lithium mining at Cínovec could begin at the end of 2026". May 16. <https://www.novinky.cz/clanek/ekonomika-tezba-lithia-na-cinovci-by-mohla-zacit-koncem-roku-2026-40431758>
- Postoj. (2021). "Ecology is just a cover for the new global business". August 31. <https://www.postoj.sk/87026/ekologia-je-len-zasterkou-noveho-globalneho-biznisu>
- Proactive. (2021). "European Metals outlines environmental strategies to make Cinovec the lithium project against which all others are judged". November 23. <https://www.proactiveinvestors.co.uk/companies/news/967054/european-metals-outlines-environmental-strategies-to-make-cinovec-the-lithium-project-against-which-all-others-are-judged-967054.html>
- Seznam Zprávy. (2022). "The price of lithium is skyrocketing, it is worth 10 trillion in Cínovec". April 19. <https://www.seznamzpravy.cz/clanek/ekonomika-firmy-cesko-jako-kuvajt-cena-lithia-leti-vzhuru-na-cinovci-je-ho-za-10-bilionu-198419>
- Standard. (2021). "Lithium over gold? Serbs refuse a mine worth billions. They don't want her to destroy their nature". October 26. <https://standard.sk/129519/litium-nad-zlato-srbi-odmietaju-banu-za-miliardy-nehcu-aby-im-znicila-prirodu/>
- Trend. (2021). "The Czechs are sitting on the largest lithium deposit in Europe. And they have big plans for it". April 9. <https://www.trend.sk/nazory-a-komentare/cesi-sedia-najvacsom-nalezisku-litia-europe-maju-nim-velke-plany>

7.2.6 Europe in general and other national cases

Away. (2023). "New projects to produce batteries in Europe are at risk". March 15.

<https://imapp.invisiblemeaning.com/view/articles/0e1902cb-a5df-423d-9751-e899ffc3966d?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Euronews. (2022). "France's massive new lithium mine could supply 700,000 electric car batteries a year".

October 24. <https://www.euronews.com/green/2022/10/24/frances-massive-new-lithium-mine-could-supply-700000-electric-car-batteries-a-year>

Euronews. (2023). "Two new laws aim to foster EU autonomy in accessing raw materials". March 15.

<https://imapp.invisiblemeaning.com/view/articles/ab3f173b-217f-46d6-869d-82753feb9597?crowId=54770f9b-3745-43d2-a032-e22969ad7ed7&lang=2>

Euronews. (2023a). "Lützerath, the eviction continues: but the most irreducible activists do not give up".

January 12. <https://it.euronews.com/2023/01/12/lutzerath-lo-sgombero-continua-ma-gli-attivisti-piu-irriducibili-non-mollano>

Franssen, Marie-Monique. (2023). "If the water disappears, life will disappear". *Green European Journal*.

June 13. <https://www.greeneuropeanjournal.eu/if-the-water-disappears-life-will-disappear/>

Grohol, Milan, and Veeh, Constanze. (2023)., *Study on the critical raw materials for the EU 2023: final report*, European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Publications Office of the European Union, <https://data.europa.eu/doi/10.2873/725585>

IEA (2023). "Critical minerals market sees unprecedented growth as clean energy demand drives strong increase in investment". July 11. <https://www.iea.org/news/critical-minerals-market-sees-unprecedented-growth-as-clean-energy-demand-drives-strong-increase-in-investment>.

IEA (2023a). *Critical Minerals Market Review 2023*. <https://iea.blob.core.windows.net/assets/afc35261-41b2-47d4-86d6-d5d77fc259be/CriticalMineralsMarketReview2023.pdf>

Johnston, Robert and Vazir, Cina. (2023). "A critical minerals policy for the United States: The Role of Congress in Scaling Domestic Supply and De-Risking Supply Chains." Report. The Aspen Institute, Energy & Environment Program.

Momčilović, Predrag. (2023). "Serbia's Lithium: Sacrifice Zones or Opportunity for Europe's Peripheries?". *Green European Journal*. June 13. <https://www.greeneuropeanjournal.eu/serbias-lithium-sacrifice-zones-or-opportunity-for-europes-peripheries/>

New York Times. (2023). "As U.S. Races Ahead, Europe Frets About Battery Factory Subsidies". May 31.

<https://www.nytimes.com/2023/05/31/business/energy-environment/europe-battery-factory-subsidies.html>

Politico. (2023). "Europe's green dilemma: Mining key minerals without destroying nature". March 15.

<https://www.politico.eu/article/europes-green-dilemma-mining-key-minerals-without-destroying-nature/>

[Stebbing, Holly. \(2023\). "Is climate litigation driving the energy transition?", *Norton Rose Fulbright*. February. <https://www.nortonrosefulbright.com/en/knowledge/publications/f3cce7dd/is-climate-litigation-driving-the-energy-transition>](https://www.nortonrosefulbright.com/en/knowledge/publications/f3cce7dd/is-climate-litigation-driving-the-energy-transition)

The Guardian. (2021). "Rio Tinto's past casts a shadow over Serbia's hopes of a lithium revolution".

November 19. <https://www.theguardian.com/global-development/2021/nov/19/rio-tintos-past-casts-a-shadow-over-serbias-hopes-of-a-lithium-revolution>

The Guardian. (2021a). "Environment protest being criminalised around world, say experts". April 29. <https://www.theguardian.com/environment/2021/apr/19/environment-protest-being-criminalised-around-world-say-experts>

The Guardian. (2021b). "Beyond Extinction Rebellion: the protest groups fighting on the climate frontline ". October 30. <https://www.theguardian.com/environment/2021/oct/30/beyond-extinction-rebellion-the-protest-groups-fighting-on-the-climate-frontline>

The Wall Street Journal. (2023). "Europe Is Embarking on a Mining Renaissance. Winning Over Locals Is Proving a Challenge". August 10. <https://www.wsj.com/articles/europe-is-embarking-on-a-mining-renaissance-winning-over-locals-is-proving-a-challenge-b7d14f5f>

Von der Leyen, Ursula. (2023). "Official Statement on CRM Act", March 26. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1661

Wired. (2022). "Europe's Biggest Lithium Mine Is Caught in a Political Maelstrom". April 2. <https://www.wired.co.uk/article/serbia-europe-lithium-mining-electric-cars>

8 Bibliography

Dijkstra, Lewis, Poelman, Hugo, and Rodríguez-Pose, Andrés. (2020). "The geography of EU discontent", *Regional Studies*, 54:6, 737-753, DOI: [10.1080/00343404.2019.1654603](https://doi.org/10.1080/00343404.2019.1654603)

Eden, Colin, and Ackermann, Fran. (2013 [1998]) *Making Strategy: the Journey of Strategic Management*, (London: Sage Publications).

Hall, Peter A., and Soskice, David (eds). *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (Oxford, UK: Oxford University Press).

Jäger, Simon, Noy, Shakked, and Schoefer, Benjamin. (2021). "What does codetermination do". *National Bureau of Economic Research*, MA. Working Paper 28921. October. <http://www.nber.org/papers/w28921>.

Rodríguez-Pose, Andrés. (2018). The revenge of the places that don't matter (and what to do about it). *Cambridge Journal of Regions, Economy and Society*, 11(1), 189–209. doi: <https://doi.org/10.1093/cjres/rsx024>

Rodríguez-Pose, André, Dijkstra, Lewis, and Poelman Hugo. (2023). "The geography of EU discontent and the regional development trap". EU Directorate General for Regional and Urban Policy Working Paper no 3.

Selznick, Philip. (1949). *TVA and the Grass Roots: A Study in the Sociology of Formal Organization*. (Berkeley and Los Angeles: University of California Press.)

Vitols, Sigurt. (2001). "Varieties of Corporate Governance: Comparing Germany and the UK", in Hall, Peter A., and Soskice, David (eds). *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (Oxford, UK: Oxford University Press).

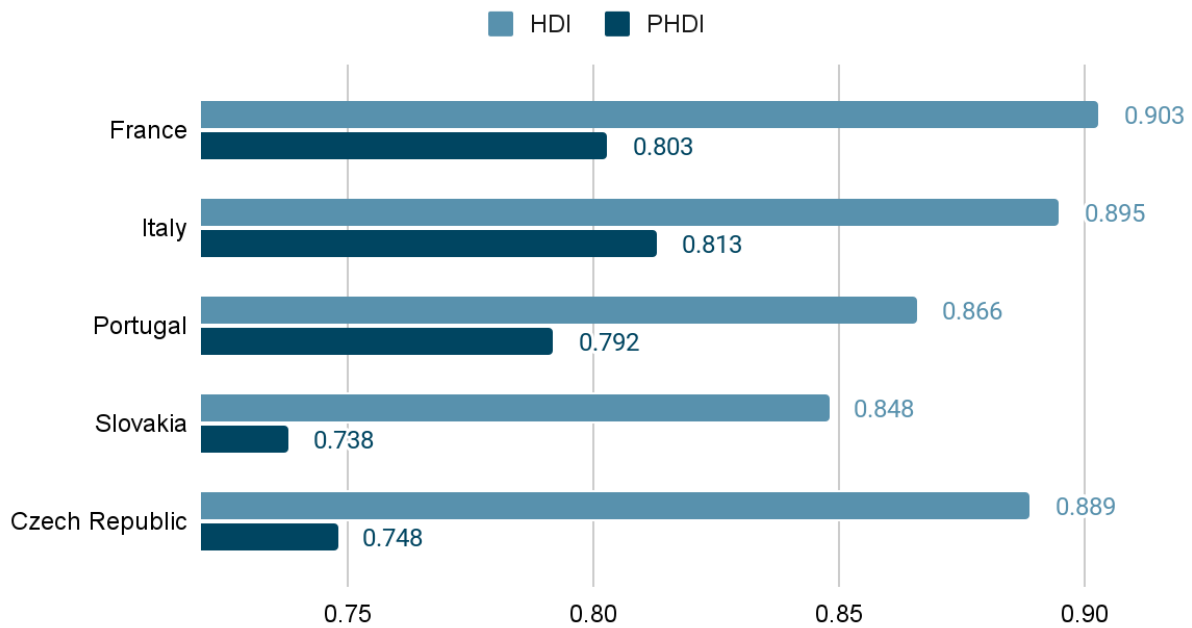
Zumbansen, Peer (2007). "Varieties of Capitalism and the Learning Firm: Corporate Governance and Labour in the Context of Contemporary Developments in European and German Company Law." *European Business Organization Law Review*, 8: 467-496 doi:10.1017/S1566752907004673.

9 Annexe – Excerpts

HUMAN DEVELOPMENT REPORT 2021-22

Uncertain Times, Unsettled Lives: Shaping our Future in a Transforming World

HDIVs PHDI



Planetary pressures-adjusted HDI

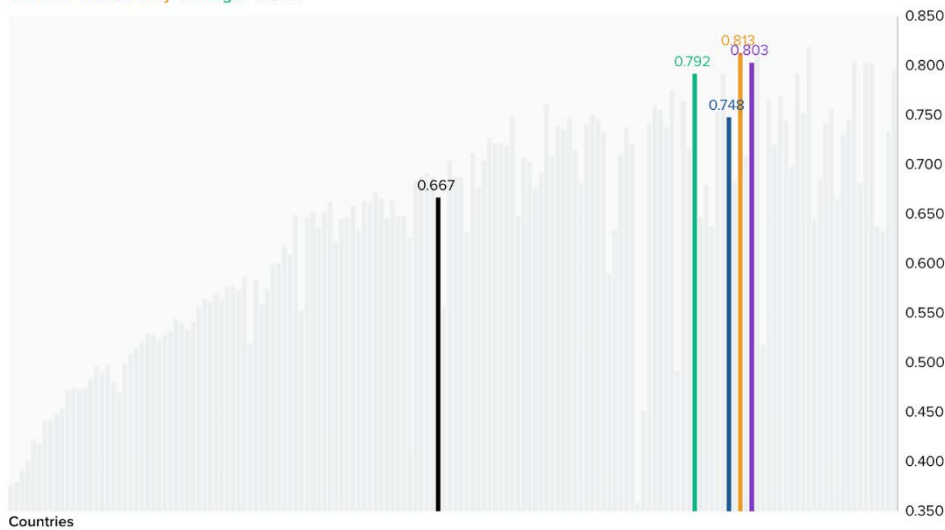
PHDI in comparison of year 2021

ADD COUNTRY TO COMPARE

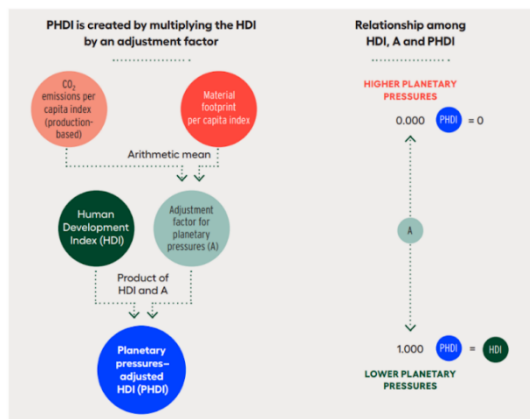
FRANCE ITALY PORTUGAL

SYNC

Czechia France Italy Portugal World



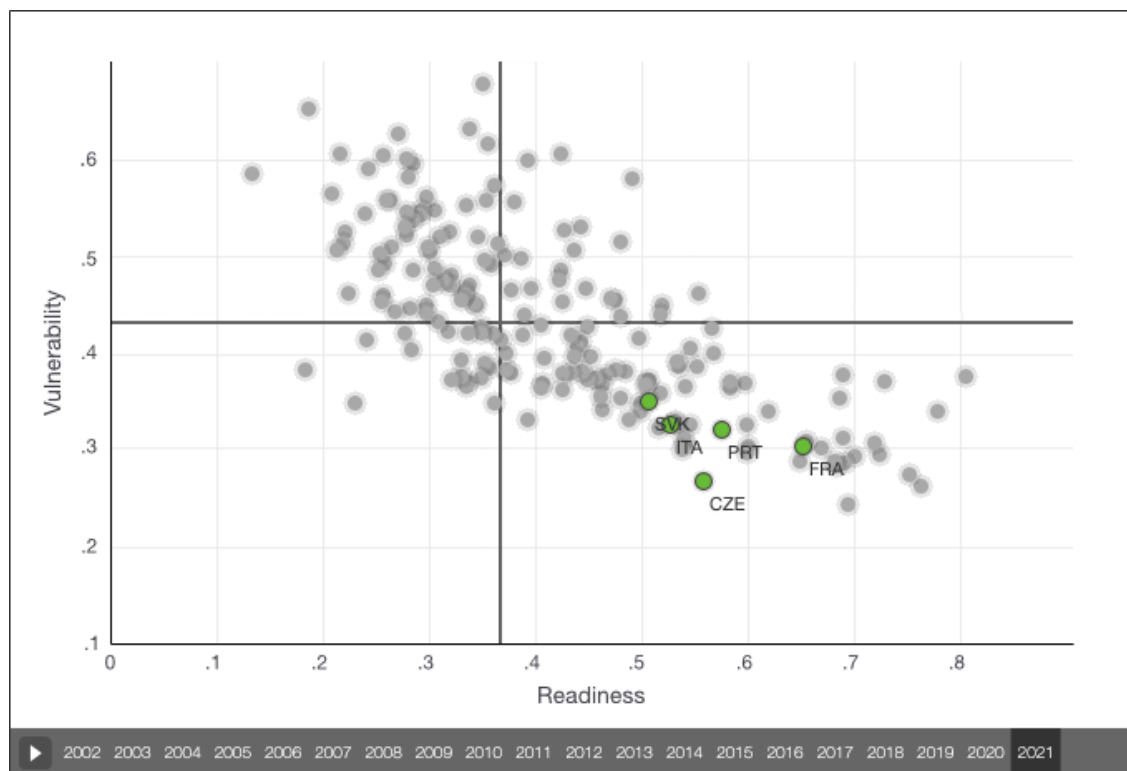
PLANETARY PRESSURES-ADJUSTED HUMAN DEVELOPMENT INDEX (PHDI)



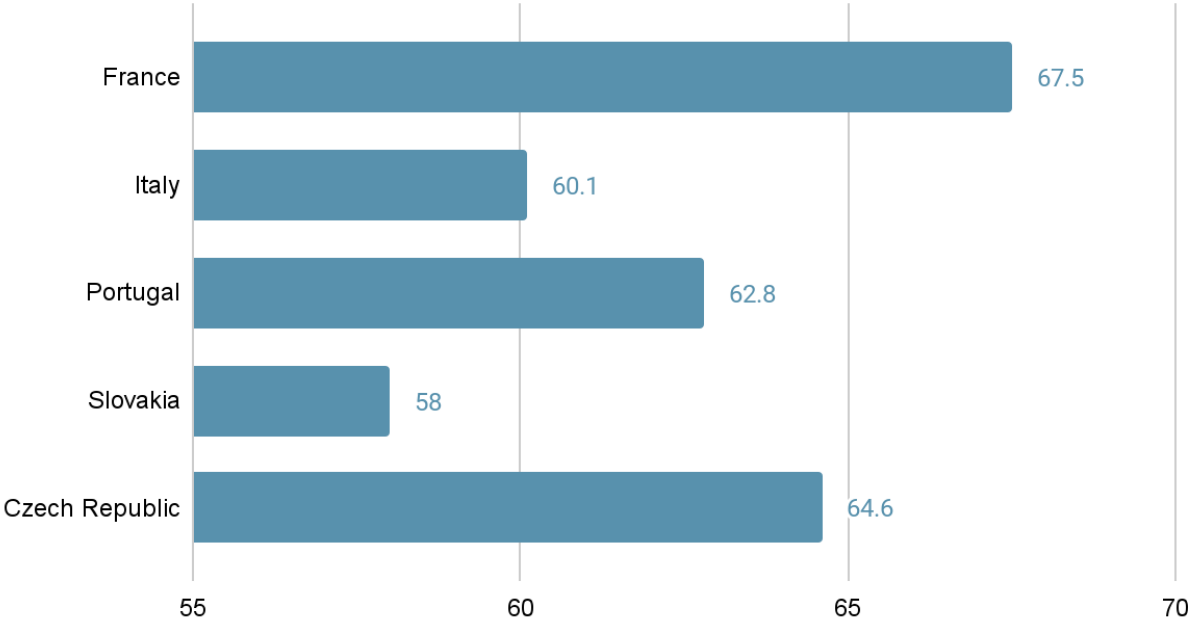
PHDI is an experimental index that adjusts the Human Development Index (HDI) for planetary pressures in the Anthropocene.

ND-GAIN Country Index

A country's ND-GAIN index score is composed of a Vulnerability score and a Readiness score. Vulnerability measures a country's exposure, sensitivity and ability to adapt to the negative impact of climate change. ND-GAIN measures the overall vulnerability by considering vulnerability in six life-supporting sectors – food, water, health, ecosystem service, human habitat and infrastructure.



ND-GAIN Score



COUNTRIES | LEVEL OF SENSITIVITY

The background framework of a country facing a significant climate crisis with storms, high temperatures of 48.8C, wildfires and glacier collapse - considering how it affects the society, demands a unique and sensitive approach to have everyone on board with the public policies.

COUNTRIES | LEVEL OF DEVELOPMENT

Countries have different levels of development. GDP per capita, Human Development Index, Infrastructure, Education or Healthcare. The different levels of development affect population priorities in a number of ways. People in less development countries are more likely to prioritize basic needs, job opportunities, and quality of life factors. People in more development countries are more likely to prioritize job satisfaction, career advancement, leisure activities, travel, and cultural experiences.