

# Social and environmental impacts of mining activities in the EU<sup>1</sup>

## ABSTRACT

This study, commissioned by the Policy Department for Citizens' Rights and Constitutional Affairs for the Committee on Petitions, provides a brief overview of the main social and environmental impacts of mining activities in the EU. It also gives an overview of the most important relevant EU legislation and a short assessment of implementation and compliance by Member States. It discusses and assesses a number of petitions on mining, as well as possible measures to reduce unwanted impacts of mining, and the future of mining. Finally, the study provides conclusions, policy recommendations and suggestions to help improve the existing EU mining policy and legislation.

## Aim

The aim of this study is to provide an overview of the impacts of mining activities in the European Union, to give a brief overview of the relevant legislation in the EU, to analyse a number of selected petitions, to discuss possible measures to reduce unwanted impacts of mining, to discuss the future of mining activities, and to provide policy recommendations and suggestions to help improve the existing EU mining policy and legislation. In addition, the study aims to discuss the future of mining activities in light of the Green Deal.

## Findings

In mining activities numerous concerns and impacts are involved. It is, however, difficult to generalise these impacts as the location, size, and mined ore of mines vary widely. What works well in one place may have negative impacts and cause problems elsewhere. Individual mining projects are always a balance between the benefits and impacts at different locations and on varying scales. Mining is place dependent and global at the same time. It is connected to global cyclical economic changes and risks of continuity are always present. The variety of potential environmental and social impacts from mining activities is broad and in individual mining projects only some of them are realised.

As can be seen in the analysis of the petitions selected for this study, environmental and social impacts are tightly intertwined and are part of the whole issue. Moreover, they are difficult to deal with as impact categories in their own right. In many cases, petitions also involve legislative issues. Not all are expressed as impacts, but

<sup>1</sup> Full study in English: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/729156/IPOL\\_STU\(2022\)729156\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/729156/IPOL_STU(2022)729156_EN.pdf)



as concerns and issues that arise. One of the potential environmental impacts mentioned is connected to water issues. A connection with sensitive areas, especially in the case of mining activities in or nearby Natura 2000 areas or other protected areas, is among the greatest concerns, as mining activities here are seen as a threat to these areas. Other important concerns reported are potential environmental impacts, ecological damage to the surroundings, and impacts on other sources of livelihood (in many cases agriculture, food production, nearby farms). These effects can also be interpreted as social impacts as they potentially affect people's incomes.

One of the most common concerns - with some serious potential impacts - is the issue of Environmental Impact Assessments (EIA). In many petitions an inadequate EIA, lack of EIA or incomplete EIA was mentioned, and one of the main groups of social issues and impacts is related to health issues among the local residents, as mining activities are seen as a serious risk to health. Other serious social concerns and impacts are related to municipalities and communities close to the mining activities. Here the mining activities are seen as a threat to the local community and the quality of life in communities. According to some petitions, mining activities can cause irreversible damage, not only to the environment and the countryside, but also to private property and infrastructure. In some cases, local communities considered that plans for future mining activities threatened their social and economic interests. A considerable number of petitions questioned the legitimacy of certain mining activities. Many were submitted to oppose plans for specific mining activities, many also against mining activities in general, so the social issues, concerns and impacts mentioned were wide and significant. Based on the results of the analysis of the petitions, it is obvious that there is a clear tension between global mining activities and local communities and the environment.

Mineral resource management, permitting and mining legislation are within the full competence of the Member States, since raw materials are generally considered to be national natural assets. Member States have their national legislation on exploration, mining activities and mineral rights.

## Recommendations

However, EU legislation concerning environmental regulation plays a significant role in providing instruments for the design and various phases of mining activities, and it can be used to ensure that mining and mining waste do not endanger human health and the environment in an unacceptable way. Still, the EU should look more closely into the role of Social Impact Assessments (SIA) in mining. The Aarhus Convention sets the minimum standard for public participation rights in environmental matters in the EU. These rights are often realised through the EIA processes. Integrating SIA, and regarding the Sámi, potentially also the human rights impact assessment (HRIA), as a compulsory element in the impact assessment, could further improve the implementation of public participation rights during permitting of mining activities.

Currently, the prevailing narrative for much of the mining activities is the growing demand for critical minerals and materials for the energy transition in the EU. However, several mines of non-critical minerals are putting additional strain on the system. Thus, the EU's attempts to secure raw materials from its own territory should focus on the "right" minerals to justify this reasoning. Regulation could, thus, favour critical minerals over others, such as gold. One option for mining activities (to be more acceptable) is that mines should be required to use 100% renewable energy. They should also be required to compensate for the biodiversity they destroy (e.g. through biodiversity offsetting). This means, that ecological compensation should be mandatory in legislation.

In the future, more attention needs to be paid to the social justice impacts in order to understand and mitigate the ongoing and potential future conflicts arising from the increasing need for minerals, which, among other uses, are critical for electrification and the production of renewable energy. An EU level survey should be conducted to systematically bring together the latest scientific insights and to identify both EU and MS level issues regarding social justice impacts stemming from the energy transition, including the production and use of critical minerals.

Identifying and considering different perspectives of the concerns and impacts allows for an exchange of ideas and is a starting point for mitigating impacts and improving legislation. It would also be worthwhile to examine the lessons learnt from the positive mining projects that exist in the EU: how have local concerns and

experiences been considered, and how have mining companies responded to them? There might be something to be learned which could aid sustainable and responsible mining.

Furthermore, it is important to increase people's knowledge and awareness of mining activities in general and in relation to the use of critical materials. More attention to the justice effects of the Green Deal needs to be paid in the future in order to understand and mitigate the current and future tensions and conflicts arising from the increasing need for minerals. Here also an EU level survey is needed to systematically bring together the latest relevant scientific expertise and to identify the multiple dimensions of justice in the context of the EU's just transition. This should include the production and use of critical minerals. In addition, the monitoring and evaluation of a just transition and its progress in a comprehensive manner needs to be ensured.

As this study progressed, it became apparent that there is no comprehensive database on mining activities at the EU level. This makes many types of assessments difficult, or even impossible. An openly available database would increase the transparency of the sector from the perspective of EU civil society as well as the understanding of the scale and the nature of the various kinds of mining activities.

There is a clear lack of EU-wide assessments of mining conflicts and there is no systematic analysis at the EU level of the environmental and social impacts. The information about actual impacts is scattered and finding the existing research, if any can be found, is arduous and time-consuming. Moreover, an analysis of measures aiming to mitigate the impacts of mining activities, and especially the social impacts, is missing. This is needed however, because every mine operates in a unique social and environmental context, and the same measures are unlikely to work in different cases. The literature and analyses used in this study suggest that the number of mining conflicts is only going to grow in the future. The EU should prepare for this, both by investing in public mediation and conflict resolution, and by assessing the root causes of conflicts.

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