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The Raw Materials Situation in Neighboring European Countries:

Bosnia and Herzegovina, Serbia, Georgia, Armenia

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The Raw Materials Situation in Neighboring European Countries

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Introduction

The global demand for critical raw materials and rare earths is continually increasing. Indispensable for achieving the goals of the energy transition, digitalization, and the strategic autonomy of the European Union (EU), these materials are of great economic importance, and their supply is at high risk. Resource-rich third countries neighboring the EU are increasingly becoming the focus of strategic European economic policy. At the same time, the raw materials situation in countries of this region – geographically located in Europe but not members of the EU – is less well-known. Therefore, at the end of 2023, the Heinrich Böll Foundation invited experts from its partner network in the Western Balkans, the South Caucasus, and Ukraine to Berlin and Brussels for a study trip on the topic of raw materials.

This publication reflects the results of this exchange on the raw materials situation in four countries: Bosnia and Herzegovina, Serbia, Georgia, and Armenia. The authors focus on raw material deposits, the demand for raw materials, and the mining conditions in the local contexts, taking into account international standards and agreements. They address the ecological and social problems in the respective and potential mining cities in the Western Balkans and South Caucasus, as well as the political and legal environments in their countries.

The four states presented here – three of which are EU candidate countries, whereas Armenia is not – are showing increasingly authoritarian tendencies in various areas.[1] This gives legitimate cause for concern that they have little or no power on the ground to implement existing national and international agreements and legislation. International partners and representatives of EU institutions and EU member states have the task of aligning their policy content and instruments accordingly in order to promote resilient democratic institutions in the partner countries. Stable institutions adhering to the rule of law are a prerequisite for compliance with the minimum social and environmental standards for potential mining projects.

Strategic raw materials autonomy of the EU and the role of Germany

Over the past years, the topic of critical raw materials has become a staple on the political agenda, but at the same time procurement strategies have changed. As recently as 2011,

1 Freedom House, Nations in transit 2024, *https://freedomhouse.org/sites/default/files/2024-04/NIT_2024_Digital_Booklet.pdf*

the European Raw Materials Initiative was used to try and deploy instruments such as filing lawsuits against China with the World Trade Organization in order to obtain access to China's raw materials. Yet, since the start of Russia's war of aggression against Ukraine, many industrialized countries are aiming to decrease their dependency on China and diversify their sources of supply. At this moment up to 80% of rare earths needed for the energy transition and digitalization are mined there. And even if these raw materials are not extracted in China itself, more than 50% of the world's supply of (natural) graphite, cobalt, lithium, and manganese is refined there, according to a new study by the International Renewable Energy Agency (IRENA). But as industrialized countries are looking for new partners to secure their supply of raw materials, the geopolitical consequences are tremendous.

The German government's raw materials strategy[2] aims to revitalize existing project planning and raw materials partnerships and back them up with concrete entrepreneurial activities. As one of the largest consumers of raw materials and processors of critical metals with a high dependency on imports, Germany is becoming increasingly dependent on secure imports of lithium, cobalt, and rare earths for its energy and industrial transformation.[3] Without them, German car manufacturers cannot build electric cars, for example.

Recycling and the diversification of supply chains make important contributions, while at the same time domestic mining and processing in Europe[4] are essential to reduce the dependence of the German and European economies on dominant raw material players such as China in the face of geopolitical tensions.

Ever since the start of Russia's war of aggression against Ukraine in 2022, Germany and the EU have generally recognized the need to halt their dependence on Russian gas. The diversification of energy supplies has now been actively addressed by the German government. Years of foreign policy geared toward economic cooperation with Russia have clearly shown that cooperation with authoritarian regimes can lead to dead ends in terms of security policy.

2 Basic outline of the Federal Ministry for Economic Affairs and Climate Action 2023 (in German): *https://www.bmwk.de/Redaktion/DE/Downloads/E/eckpunktepapier-nachhaltige-und-resiliente-rohstoffversorgung.pdf?__blob=publicationFile&v=1*

3 *https://library.fes.de/pdf-files/international/21209.pdf*

4 *https://www.swp-berlin.org/10.18449/2022ZS01*

Civil society organizations in Europe are fighting against mining operations and for fairer rules[5]

The extraction of critical raw materials is associated with considerable ecological damage and human rights violations worldwide, while the profits are largely raked in by international mining companies and industrialized countries that process the raw materials. Although mining in Europe could be more environmentally friendly than in other regions of the world, conflicts of interest are also crystallizing here. The interest in security of supply is set against the interest in protecting the environment and the needs of local communities, which would suffer from the negative consequences of raw material extraction. In addition to harmful environmental impacts and negative social consequences, civil society organizations fear that mining countries will remain in the role of a raw materials supplier without any local development taking place.[6]

A region in transition between autocracy and democracy

The four countries presented are classified as hybrid political systems that fall somewhere between democracy and autocracy.[7] Within the hybrid spectrum, Serbia and Georgia are considered increasingly authoritarian – autocratizing hybrids on the way to semi-consolidated authoritarian regimes. Armenia and Bosnia and Herzegovina are considered cyclical hybrids, caught in a pattern of state capture, with their institutional frameworks remaining weak. Recent worrisome political developments in these countries highlight the far-reaching consequences of these shortcomings and pose substantial risks. None of the countries can present sustainable constitutional structures in accordance with the rule of law. An independent judiciary and free media is, to the greatest possible extent, absent.

In **Bosnia and Herzegovina**, the Dayton Peace Agreement ended the war but established an increasingly dysfunctional state structure, whose over-complex procedures dramatically hinder all political processes. The permanent threat of secession on behalf of the president of the Republika Srpska entity, Milorad Dodik, is paralyzing the development of democratic reforms throughout the country. His agenda, which is strongly supported by Serbia, threatens the very statehood of the country. New media and NGO laws are also planned in Republika Srpska, which would further massively restrict the radius of civil society activities. Despite being granted EU candidate status, Bosnia and Herzegovina has in fact made hardly any progress toward reforming the rule of law and democracy.

5 *https://www.boell.de/de/2023/10/01/boellthema-223-blendwerk*

6 *https://www.brot-fuer-die-welt.de/blog/europe-first-auch-in-der-rohstoffpolitik-1*

7 Freedom House, Nations in transit 2024, *https://freedomhouse.org/sites/default/files/2024-04/NIT_2024_Digital_Booklet.pdf*

Serbia has been experiencing a dramatic decline in democratic freedoms during the reign of the Serbian Progressive Party under President Aleksandar Vučić since 2014, reaching an all-time low starting in 2023. The recent elections saw massive manipulations, and communal administration experienced severe intimidation. As the largest financier and advertising mogul, the head of government under President Vučić exerts considerable influence on media coverage and largely dominates both public and private media[8]; journalism is caught between rampant fake news and propaganda. In between two rounds of elections over the last six months, the entire opposition was declared an enemy of the state, including the German political foundations[9] and our work on the ground to strengthen democratic forces and the rule of law. An EU that relies on commodity diplomacy in Serbia and disregards unacceptable political conditions for a candidate country is deligitimizing itself.

After **Georgia** was granted candidate status in December 2023, the accession process has now been frozen again by the EU, as the government passed a law against «foreign influence» in June, despite mass protests and vocal objections from the EU and the United States. The law is seen as a direct imitation of the Russian «agent law,» as it tightens controls on NGOs and runs counter to fundamental EU values.[10] Georgia's relations with the EU are at an all-time low due to the anti-Western rhetoric of the current government. Most EU programs have been frozen.[11]

Armenia's democratization efforts following the 2018 «velvet revolution» are being carried out under extremely fragile security-political circumstances. After the victory in the Second Karabakh War in 2020 and the military reconquest of Nagorno-Karabakh – coupled with the displacement of more than 100,000 Karabakh Armenians – Azerbaijan continues to maintain its pressure on Armenia. It remains to be seen whether the current government will succeed in democratically consolidating its domestic power and securing the country in terms of security policy.

Bosnia and Herzegovina, Serbia, Georgia as EU candidates and Armenia as a partner country are interested in political association with – and economic integration into – the EU.

But when looking for access to raw materials, international partners, representatives of the EU, and EU member states should be careful to uphold their own standards, otherwise they risk undermining the credibility of the enlargement process as such. The energy

8 *https://www.reporter-ohne-grenzen.de/serbien*

9 *https://www.danas.rs/vesti/politika/hajnrih-bel-fridrih-ebart-aleksandar-vucic*

10 *https://ge.boell.org/en/2024/07/04/geopolitical-economy-authoritarian-consolidation-georgia-many-faces-foreign-influence*

11 *https://civil.ge/archives/615670*

transition and decarbonization of EU industries and societies must not come at the expense of the health and livelihoods of communities in resource-rich countries.

We would like to thank the authors and participating colleagues from the four countries and hope you enjoy reading this report.

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Johanna Sydow, *Head of International Environmental Policy Division, Heinrich Böll Foundation*

Katja Giebel, *Senior Program Officer, East and South East Europe Division, Heinrich Böll Foundation*

Majda Ibraković and Ratko Pilipović

Critical minerals surge in Bosnia and Herzegovina

1. The political system of Bosnia and Herzegovina

The basic features of the political system in Bosnia and Herzegovina date back to the Dayton Peace Agreement, which ended the Bosnian War of 1992–1995. Almost 30 years later, the political system remains the result and cause of an ongoing dispute over the form of state institutions, its competencies, and whether the country should even exist within its current borders.[1] Thus, Bosnia and Herzegovina (BiH) represents a unique case with its complex decentralized governance structure, consisting of the autonomous entities of the Federation of BiH and Republika Srpska, as well as the district of Brčko. Namely, the mining industry in BiH operates without state regulation; instead, the entities are responsible. This decentralized approach complicates regulatory and legal frameworks. Both the Federation of BiH and Republika Srpska have their agencies overseeing mining management, policy, and environmental protection.

In Republika Srpska, the mining sector complies with regulations prescribed by the Law on Mining of Republika Srpska[2] and the Law on the Geological Institute of Republika Srpska.[3] In the Federation of BiH, key legislative acts regulating mining are the Law on Geological Surveys[4]and the Law on Mining.[5] However, mining management in the Federation of BiH becomes even more complex because each canton has its own legislation, which is not always harmonized with federal laws. The authority of the Federal Ministry of Energy, Mining and Industry is shared with competent cantonal ministries responsible for mining and geology, based on the different types of mineral resources. For example, the Federal Ministry of Energy, Mining and Industry oversees mineral resources for metal production, while cantonal ministries manage non-metallic mineral resources. The Federation of BiH issues permits for exploration and exploitation, but obtaining federal approval also requires permission at the cantonal and municipal levels. At the same time, competent cantonal ministries issue concession agreements. This complexity makes it more challenging for anyone, including civil society, to understand and track decision-making processes related to mineral resource management. With different levels of government being

1 Gromes, T (2018), Die Beschaffenheit des politischen Systems von Bosnien und Herzegowina, in Das politische System Bosnien und Herzegowinas (p. 59 ff.), Springer.

2 Official Gazette RS, No. 59/12.

3 Official Gazette RS, No. Republika Srpska, No. 110/13.

4 Official Gazette of the Federation of BiH, Nos. 9/10 and 14/10.

5 Official Gazette of the Federation of BiH, No. 26/10.

Map of Bosnia and Herzegovina
Please note: To ease orientation, the following maps merely illustrate the mining locations mentioned in the texts, they are not intended to be exhaustive.

responsible for issuing permits and approvals, there is a risk of inconsistencies in decision-making, criteria, standards, and procedures. This leads to the uneven application of regulations and creates opportunities for favoritism and corruption, undermining transparency and accountability.

2. Raw material occurrence and extraction

A significant concentration of ores has been identified in a small area of BiH, which has been categorized as mineral-rich. However, such recognition has not made the country economically prosperous, as is true for any other extractive country on the periphery.

During the Austro-Hungarian Empire, ores were mainly «extracted» from BiH by railway or processed for the needs of large industrial plants such as Zenica Ironworks. The Bosnian-Herzegovinian mining industry was well-developed in the former Yugoslavia. However, in the 1990s, it was devastated by the war as well as by the negative effects on account of the transition from a socialist to a capitalist system. Coal mines that were strategically important for the country were preserved and have been restarted to meet the electricity production needs of thermal power plants.

Since the end of the war and the establishment of the Dayton Peace Agreement, BiH has gone through various phases of concession allocation. Hydroelectric plants that were relevant until a few years ago have been replaced by concessions for solar power plants and wind farms. In recent years, there has been a trend of an increasing number of concessions for the exploration and excavation of ore minerals. Alongside coal mining, there is a growing trend of exploring and excavating critical mineral resources by (re)opening metal mines.

Currently, there are seven state-owned coal mines and eight private coal mines. Metal and non-metal mines mostly went into decline after the war – these are the iron mines in Vareš and Ljubija; bauxite mines in Vlasenica, Krajina, and Herzegovina; the chrome mine in Vareš; the lead mine in Olovo; the lead and zinc mines in Srebrenica; and the gold and silver mines in Fojnica and Srebrenica. Geological and mining experts agree that BiH has significant reserves of strategic minerals such as lead, zinc, copper, bauxite, iron ore, and uranium.

Even though BiH has large bauxite reserves, there has been less exploitation of this mineral. There are significant copper deposits in BiH, of which the most important are located in the areas of Tuzla, Zenica, and Olovo, and they are estimated to total several hundred million tons. The country's gross domestic product (GDP) per capita (purchasing power parity) is low and was estimated to be USD 17,899 in 2022 by the International Monetary Fund. The agricultural sector accounts for 5.2% of the country's GDP and nearly 18% of total employment. The industrial sector represents 25.5% of GDP, employing around 32%

of the workforce. Lastly, the service sector accounts for 54.9% of GDP and more than half of all employment. The most important service sector of the economy is trade, followed by business services, transport, and construction. Tourism has been growing fast in recent years (World Bank).[6] Mining has not been considered a relevant industry for post-war growth, and the economic significance of the mining industry is minor. Data from the Agency for Statistics of BiH for 2021 confirms that the mining industry accounts for 1.32% of GDP; 80% of the metal industry sector consists of small companies with limited investment potential. On the other hand, metals and related products (iron, steel, copper, and aluminum) from the country represent 22% of all exports.[7] The interest in geological surveys and the exploitation of mineral resources have significantly increased due to the global demand for critical raw materials. The sudden invasion of mining companies and projects in BiH has led to increased public concern and dissatisfaction.[8]

3. Amendments to the Law on Geological Surveys in Republika Srpska

At the end of 2023, the Ministry of Energy and Mining published the Draft Law on Amendments to the Law on Geological Surveys in the Republic of Srpska.

There are several objections from civil society on the proposed law:

1. The obligation to obtain the opinion of the competent authority on the need for a prior environmental impact assessment is removed from the decision-making procedure on granting exploration rights, thus eliminating the need to consult with environmental protection authorities.
2. The objection to the abolition of the need to obtain the opinion of local self-government bodies – bodies representing the interests of the local community's citizens – is particularly concerning, as it contradicts proactive transparency and participatory democracy in the management of public goods, which is an area chronically lacking in legitimately adopted public policies, and has already understandably raised public concern.

6 See *https://documents1.worldbank.org/curated/en/635971620703980472/pdf/Bosnia-and-Herzegovina-Tourism-Sector-Diagnostic-Challenges-and-Opportunities-for-Sector-Excellence.pdf*

7 See *https://tradingeconomics.com/bosnia-and-herzegovina/exports-by-category*

8 See *https://www.balcanicaucaso.org/eng/Areas/Bosnia-Herzegovina/BiH-civic-mobilisation-against-mineral-exploration-229296*

3. The proposed draft concerns the amount of excavated soil that can be exempted for the purpose of exploration. The proposed draft increases this amount by as much as 50 times, from 200 to 10,000 cubic meters.

The National Assembly of the Republic of Srpska adopted the Law in July 2024, even though CSOs submitted amendments to the proposal - they were not considered. CSOs will continue to point out the active absence of participation of the local self-government during the awarding of the research concession, which is currently contrary to the provisions of the Aarhus Convention (mandatory participation of the public in the procedures and decisions on the environment). Privatization, foreign companies, and environmental malpractices of operating mines.

Geomet mine

In 2018, 30 years after its abolition, a new lead mine named Geomet was reopened in Olovo («olovo» means «lead» in Bosnian) in the center of BiH. It is the first post-war operational metal mine conducting underground ore exploitation, and it is operated by the British company Mineco, which also owns the Gross mine in Srebrenica, formerly the zinc mine named Sase. This project was realized at the time without any involvement by civil society. It was promoted by the European Union (EU) and the Embassy of the United Kingdom as a promising project worth 12 million Bosnian convertible marks (BAM) (about EUR 6 million) in investment that would bring around 100 new jobs.[9] In February 2023, serious pollution of the Bioštica River was recorded. Laboratory findings detected high concentrations of heavy metals – primarily arsenic, zinc, manganese, and lead – coming from the nearby tailings of the Geomet lead mine. The company did not comment on this incident.[10] Generally, very little information has been made available to the public about the operation or about the impacts of this mine on the environment and workers' health.[11]

There was also environmental pollution of the Bioštica River in May 2024. The official statement of the Olovo municipality was that the incident was caused by the mining operations. The water-testing results have not yet been published. However, the environmental and water permits of the Geomet mine are under review, and the final decision by the commission about the permit renewals is expected by August 2024.[12]

9 See *https://poslovnenovine.ba/2018/05/10/u-bih-otvoren-prvi-rudnik-metala-nakon-30-godina*

10 For more on the incident, see *https://inforadar.ba/eko-katastrofa-kod-olova-rijeka-biostica-zagadena-otpadnim-vodama-iz-rudnika-olova-geomet*

11 For more on the incident, see *https://abrasmedia.info/akademik-muriz-spahic-o-oneciscenju-biostice*

12 See *https://www.slobodnaevropa.org/a/rudnik-olovo-bih-biostica-zagadjenje/32965464.html*

The Vareš silver mine

The Vareš silver project[13] in the eponymous mining town, which is close to Sarajevo, the capital, is owned by the British-Australian company Adriatic Metals Plc and its subsidiary, Adriatic Metals BH. It has attracted much more public attention and the support of foreign embassies as well as international and domestic institutions. This silver/zinc/lead/barite mine started operating in March 2024. Meanwhile, it has been granted the status of «Project of Special Importance for BiH» due to its announced contribution to export growth, its 2% contribution to GDP, and the proclaimed economic benefits for the local community of this former mining town.[14] However, the project is controversial and problematic for several reasons.

Firstly, the Government of the Zenica-Doboj Canton, where the mine is located, legally prescribed a concession fee for geological research and ore exploitation of BAM 10,000 per hectare, but in the contract, it was reduced to BAM 150. This means that the fee Adriatic Metals will pay barely amounts to 1% per ton of raw ore (BAM 3.90).

Secondly, there were serious oversights regarding the issuance of the environmental permit to the investor. Due to a study that was presented and the issued permit, the mining operation regime was subsequently changed[15] to include new disposal locations for tailings, without specifying the damage caused by discharges into watercourses.[16] Based on the initial incomplete study, the competent ministry granted all subsequent permits to the company.[17]

Thirdly, the company was further favored by the fact that the public consultation was organized during the peak of the pandemic in 2020 in the small village of Borovica. The directly affected municipality of Kakanj was ignored – it is located in close proximity to the Trstionica forest, which is in an area that serves as the water supply for the city of Kakanj.

The Vareš project is being aggressively promoted in public, advertising only the positive contributions of the mine to the EU's green transition and decarbonization, with it allegedly having the highest environmental standards. From an environmental perspective, 2023

13 Also see Kraske, M., *https://www.boell.de/en/2024/01/23/southeast-europe-plundering-western-balkans*

14 See also *https://www.euronews.com/2023/11/16/the-vares-silver-mine-a-brighter-future-for-bosnia-and-herzegovina*

15 See *https://abrasmedia.info/prevara-u-studiji-utjecaja-na-okolis-kompanije-adriatic-metals-eastern-mining*

16 See also *https://zurnal.info/clanak/problemi-sa-kvalitetom-vode-u-kaknju-prisutni-su-decenijama/26585*

17 See *https://abrasmedia.info/2-dio-prevara-u-studiji-utjecaja-na-okolis-kompanije-adriatic-metals-eastern-mining*

Rupice mining deposit
Photo: © Robert Oroz

– before the mine had started operations – was particularly problematic: The company «accidentally» cut down, by its own admission, about 3,000 square meters of state forest, that is, more than 100 mature fir, spruce, beech, and maple trees. The Cantonal Forestry Administration of Zenica-Doboj filed two criminal complaints against the company and its directors in October 2023. The planned Rupice mine as well as the entire project are located in the protected area of the Bukovica River, which provides drinking water for about 40,000 citizens of Kakanj. In these zones, activities such as deforestation; excavations and earthworks; mineral exploitation; road construction; as well as other activities that could endanger surface and underground flows are strictly prohibited.[18]

With the intention to protect the British investor, the Government of the Federation of BiH made a decision contrary to the law on the prohibition of the disposal of state property, enabling the company to change the purpose of forest land in the Vareš area.[19] The Office of the High Representative warned the Government of the Federation of BiH that «the change of purpose of forest land could have significant legal consequences.» However, the government completely ignored this remark. Led by Prime Minister Nermin Nikšić, the government allowed a private company to clear forests in the Vareš area that are state property.[20] Recently, the Constitutional Court temporarily removed the legal force of the contested decision. What this decision means in practice, regarding the actual mining operations, has yet to be seen.[21]

4. Sudden interest of companies in the geological exploration of metallic minerals

In addition to the aforementioned operational metal mines, several dozen exploration rights have been granted to companies throughout BiH. Over the past decade, more than 10 new private mining companies have been established, mostly subsidiaries of offshore mining corporations from Canada, Australia, the United Kingdom, and Switzerland.

Currently, research is being conducted in BiH for future excavations of silver, zinc, lead, gold, nickel, copper, barite, magnesium, potassium, and lithium. The research is ongoing at almost all locations, while at two locations, the first phase has been completed and the next phase is expected soon.

18 See also *https://lefteast.org/bosnia-international-companies-wreak-havoc-on-the-environment*

19 See also *https://www.zurnal.info/clanak/kompanija-adriatic-metals-nekaznjeno-posjekla-3000-kvadrata-sume/26608*

20 See also *https://ba.bloombergadria.com/biznis/kompanije/52535/unatoc-upozorenjima-iz-vijeca-europe-vlada-nastavlja-podrsku-adriatic-metalsu/news*

21 See *https://6yka.com/bih/ustavni-sud-bih-donio-privremenu-mjeru-u-slucaju-vares-i-jahorina-evo-sta-to-znaci*

Indicative and problematic is the fact that exploratory work for mineral exploitation is being conducted in areas designated for protection, such as the Ozren and Majevica mountains, the Trstionica virgin forest, and the Pliva river basin. These areas are designated for protection in strategic documents at the III-V protection level, according to the entity strategies and spatial plans.[22] Another problem concerns the unresolved or questionable property–legal relations during geological exploration. Furthermore, these are extremely groundwater-rich areas where water is used for water supply, drinking water, and irrigation. The perception of the local population is very negative, and there is a great deal of skepticism toward geological exploration and the intentions of companies and the government in the exploitation of raw minerals. All of this is further complicated by the secretive and non-transparent behavior of companies and entity governments, which cover up documents, studies, and public consultations. For lithium and boron research in the Lopare area, the local population only found out in 2023 – after the official announcement by the company Arcore – about the research being conducted and the discovery of reserves of lithium, boron, magnesium, and potassium.

In the municipality of Jezero, the company Lykos Balkan Metals conducted geological research on copper, barite, lead, zinc, and silver minerals for more than a year until the research was halted by the vote of the municipality councilors in 2022. The company's research was also halted in the municipality of Petrovo due to the fact that the exploration permit was issued based on unresolved property–legal issues.

Table 1 Mining companies: Current explorations in Bosnia and Herzegovina

Concessionaire name	Mineral being explored	Municipality
Lykos Metals Limited (Australia)	Lead, zinc, copper, barite, and related metals	Municipality of Jezero, Šipovo, and Mrkonjić Grad (Republika Srpska)
Lykos Metals Limited (Australia)	Copper, lead, zinc, lithium	Municipality of Čajniče (Republika Srpska)
Lykos Metals Limited (Australia)	Nickel, copper, cobalt, zinc, lead, silver, gold	Municipality of Petrovo[23] (Republika Srpska)
Seven Plus d.o.o. Sarajevo	Chromium	Municipality of Vareš
«BBM» d.o.o. for construction, mining, internal, and external trade, Sarajevo	Silver and gold	Municipality of Fojnica (Federation of BiH)
Completed exploration phase		
Arcore Ltd (Switzerland)	Lithium	Municipality of Lopare
Adriatic Metals Plc (United Kingdom)	Silver, zinc, lead, gold	Municipality of Vareš

22 Spatial Plan of Republika Srpska until year 2025, *https://www.vladars.net/sr-SP-Cyrl/Vlada/Ministarstva/mgr/Documents/Nacrt%20draft%2025%2011%202013.pdf*

23 For more details and concession grants in RS entity, check the official register, *https://vladars.rs/sr-SP-Cyrl/Vlada/Ministarstva/mper/katastistraz/Pages/default.aspx*

Eko BiH network on Medna bauxite and coal mining site, April 2024
Text says Bosnia and Herzegovina is not a mining colony

Photo: © Dado Ruvic

5. Resistance of local communities and activists

Over the past three years, there has been noticeable resistance from people in the areas affected by geological exploration. Different communities all over BiH have been marked by protests, petitions, and intimidation attempts. There is growing public interest in the geological exploration of mineral resources and the impacts they can have on the environment and society, especially when it comes to foreign mining companies. This interest was initially fueled by alarming media reports about the so-called gold rush in BiH and the media's spin, which was aimed at stirring up and somehow «softening» the public for new mining explorations.[24] Companies either paid for or simply used this false narrative, often updating the list of sought-after minerals in concession documentation, while simultaneously seeking key mineral resources such as nickel, lithium, copper, cobalt, boron, magnesium, and some noble minerals.[25] There is much public uncertainty about the actual intentions and goals of this geological exploration. This is in addition to growing public suspicions about the intentions of companies exploring minerals due to information concerning trading on foreign exchanges, the lack of transparency in research, and the dissemination of false information. Such deceptive information was recently published by Lykos Metals, which announced the expansion of the exploitation field and the approval by competent institutions, even though permits have not yet been obtained. Two years ago, residents of the affected Ozren community reported illegal helicopter surveillance and geological surveys being conducted for this company. However, they have not yet received (adequate) responses from institutions regarding this issue.

Protests on the Ozren mountain have been organized several times with the aim of stopping the geological exploration for nickel, cobalt, and associated minerals due to numerous irregularities and malpractice concerning permits. The positive side is that the institutions – the municipality and the Ministry of Energy and Mining – withdrew the permits. Other affected municipalities have begun to oppose the projects lately, but one needs to consider that this narrative may be strictly political due to the fact that local elections will be held this autumn.

In Lopare, where the lithium mine is planned, the municipality initiated a petition in February to halt the opening of the mine. The petition against opening up a lithium mine in Lopare was recently discussed in the National Assembly of the Republic of Srpska. However, in the end this declaration was not adopted by the Assembly.[26]

24 There are dozens of media articles using the term «gold rush in mid Bosnia» on search engines, for example: *https://n1info.ba/vijesti/a296303-zlatna-groznica-ponovo-trese-vares*

25 Also see responsible mining PR and media reporting, *https://www.gerila.info/odgovorno-pr-rudarenje-u-medijima*

26 See *https://www.gerila.info/nsrs-nije-usvojila-prijedlog-deklaracije-o-protivljenju-otvaranju-rudnika-litijuma-na-teritoriji-opstine-lopare*

It should be noted that the first (successful) protests against the opening of gold mines in BiH were initiated in the town of Fojnica in 2017. Residents blocked the road to mining machinery for days and then sued the relevant ministry due to numerous irregularities and almost seven years of unauthorized ore exploitation by the local company BBM.

Although the levels of activism and resistance of citizens and the public are rising, attention should be drawn to the increased amounts of repression and pressure being put on the environmental activists who oppose the opening of mines.[27] Hajrija Čobo, a resident of Kakanj and an environmental activist from the NGG Trstionica and Boriva Nature Park, was «SLAPPed» (sued) by the Adriatic Metals company at the end of 2023 for her allegations that Trstionica had been polluted with heavy metals due to mining operations.[28] This is a classic SLAPP lawsuit by companies aiming to intimidate and silence activists. Activist Amela Šabić Ahmečković from Jezero was also slapped in 2022; however, Lykos Metals has withdrawn the lawsuit in the meantime.[29] Zoran Poljašević, a resident and activist from the association Ozrenski Studenac – Sočkovac, also faces threats due to his public appearances and criticism regarding geological exploration on Ozren, and he recently lost his job because of it. The pressures or conditioning (direct and indirect) also come from the officials of foreign embassies – especially those actively promoting the projects of companies from the United Kingdom, Norway, and the United States.[30] As reported in the article «Is BiH becoming one big European mine?»: «In recent years we have seen [these] diplomats acting as opportunistic promoters for companies that are mentioned above – even though they are aware that these companies are involved in cases of environmental destruction. The diplomats' advocacy is often couched in the language of ‹green transition› and ‹economic progress.›»[31]

6. Criticality of the raw materials rush in BiH and how to overcome it

Critical minerals are not the answer for addressing the issues of the green transition as well as the climate and environmental crises, especially in countries with a high level of environmental destruction and corruption, such as BiH – especially if it becomes a sacrifice zone for the decarbonization of EU countries.

27 See also *https://www.slobodnaevropa.org/a/jezero-rude-geoloska-istrazivanja/32190539.html*

28 See also Front Line Defenders, *https://www.frontlinedefenders.org/en/case/woman-environmental-rights-defender-hajrija-cobo-facing-defamation-lawsuit*

29 See *https://antikorupcija.info/ekoloska-aktivistkinja-na-sudu-u-jajcu-po-tuzbi-investitora-geoloskih-istrazivanja-u-jezeru*

30 See *https://sarajevotimes.com/activists-sent-a-letter-to-the-ambassadors-of-the-u-s-britain-and-norway-because-of-their-support-of-the-mine*

31 See *https://lefteast.org/environmental-resistance-corporate-raiding-bosnia-part-ii*

Recommendations

- The Bosnian government (entity level) should revise the operations of existing mines and assess the overall damage they have caused to the environment and human health, before considering the idea of geological exploration and the exploitation of mineral resources. The assessment and calculation of the damage to nature and people must be included in the overall economic calculation of all planned new mines in BiH.
- The government needs to follow a strategic approach to geological exploration, and mining the concession allocation program needs to be revised for this purpose at all government levels. Furthermore, the governments should regulate the mining and geological research as well as the concession documentation and nature protection legislation; any exploration of mineral resources conducted by private companies for mineral exploitation in protected areas – or those areas included for protection in spatial planning documentation – must be prohibited.
- Local communities and units of local self-government need to have a granted right of opinion and consent regarding geological exploration. This is necessary to reject the proposals of the draft laws on geological exploration in Republika Srpska in a way that removes the draft law from the procedure until legitimate and legal prerequisites necessary for potential amendments and supplements are created to formulate more sustainable solutions.
- Public financiers should not invest in mining projects in countries that do not have a proven track record of enforcing environmental legislation, that is, the country has not demonstrated its ability or commitment to properly enforce environmental and social standards under international law (e.g., open files at the Aarhus Convention, Bern Convention, Espoo Convention, Energy Community).
- No-go zones must be established for mining projects to secure protected areas. These should include the Banks&Biodiversity criteria; in addition, the availability of high-quality arable land in each country needs to be considered and avoided.
- All mining projects, including exploration, must be classified as «A» category, which indicates high-risk projects requiring comprehensive and participatory impact assessment and management.

The EU, specifically DG NEAR and DG GROW, should halt the promotion of the Critical Raw Materials Act in BiH as well as the call for strategic projects and investments until the legal system and democracy truly become established, and also until environmental standards and human rights are at the same level they are in EU countries.

Predrag Momčilović

Raw materials – perspectives from Serbia

1. The history of mining in Serbia

The traces of mining in the territory of present-day Serbia extend far into the past. Between 8000 and 7000 BCE, the Vinča civilization, located around Belgrade, utilized some metals and mined them in nearby mountains. During the reign of the Roman Empire over the Balkan Peninsula, several mines were open, primarily for lead and zinc, but also for gold and silver. After the Roman period, mining became a forgotten skill until the 13th century, when Saxon miners arrived in medieval Serbia. They brought with them technology for the extraction and processing of ore, and soon the Novo Brdo mine became the center of the medieval Serbian state and one of the richest mines in the world at that time. In medieval Serbia, gold, silver, copper, lead, zinc, and iron ores were exploited. Mining was the backbone of the wealth as well as the economic, political, and military power of medieval Serbia.[1]

After the Middle Ages, mining in the territory of Serbia almost ceased during the Ottoman period, and it was only with the reestablishment of statehood in the 19th and 20th centuries that mining in Serbia experienced a revival.[2]

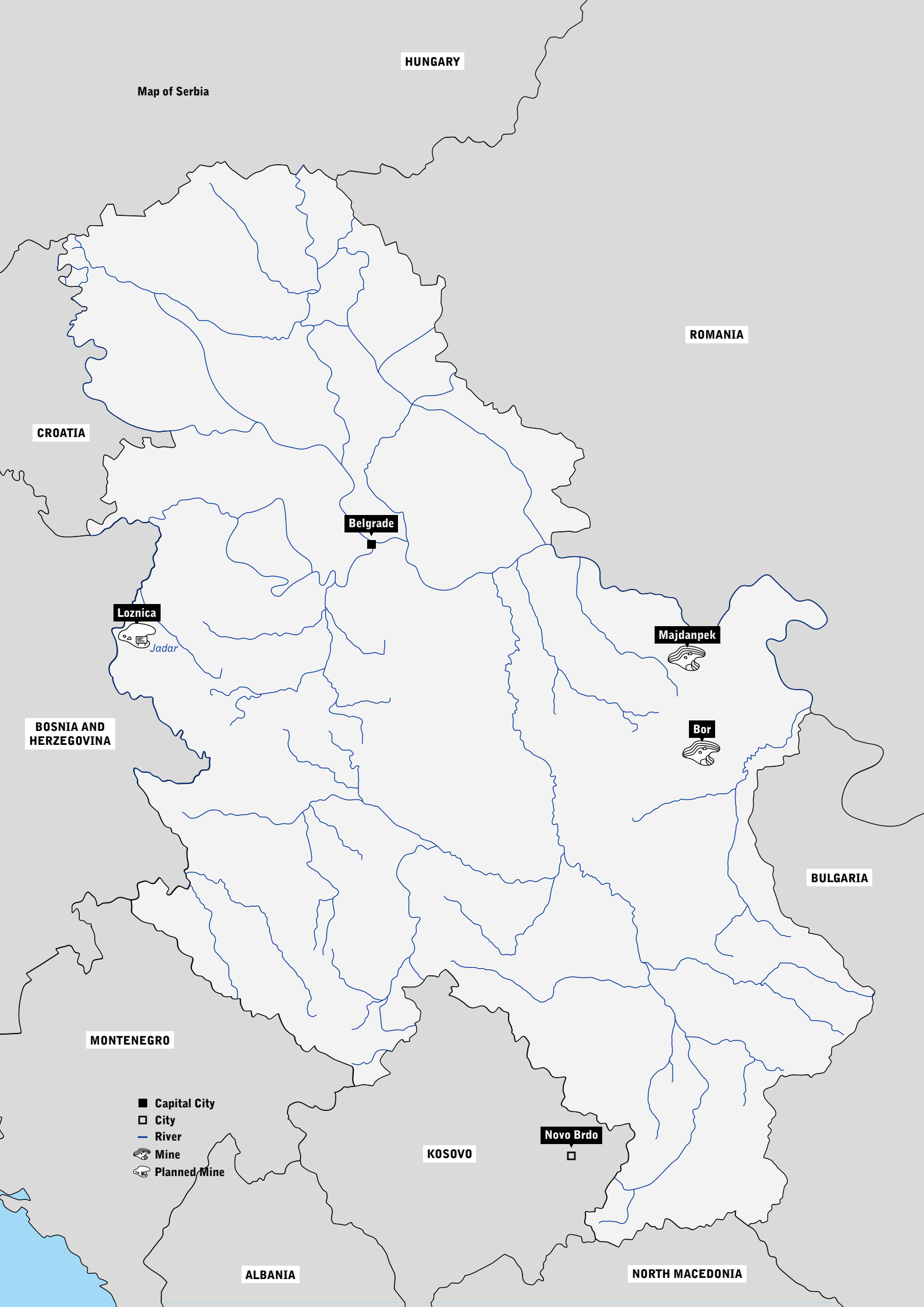
The periods of World War I and World War II witnessed massive destruction in all sectors of the economy, including mining. After World War II, the new socialist state embarked on accelerated modernization, which necessitated the acquisition of various ores. Consequently, a large number of mines were opened in a short period, and their production steadily increased until the late 1980s. Miners were considered heroes of the working class, and special merits were attributed to their work.[3]

After the growth period, new wars – this time the civil wars in Yugoslavia during the 1990s – slowed the economy of Serbia and reduced the scope of the mining sector. During years of international economic sanctions and subsequent privatization, only a small number of metal mines continued to operate without interruption. In the last few years, there has been renewed growth in the mining sector and increased interest in the various metal ores found in the territory of Serbia.

1 Vujić, S., History of Serbian mining, Academy of Engineering Sciences of Serbia, Matica srpska and Mining Institute Belgrade, 2014.

2 Ćirković, S., Kovačević–Kojić, D., and Ćuk, R., Old Serbian mining, Prometheus – Vuk's endowment, Belgrade, 2002.

3 Simić, V., Prominent miners of Serbia, Rudarski glasnik, volume 3, 1966.


Map of Serbia
HUNGARY
ROMANIA
CROATIA
Belgrade
Loznica
Jadar
Majdanpek
Bor
BOSNIA AND HERZEGOVINA
BULGARIA
MONTENEGRO
Capital City
City
River
Mine
Planned Mine
Novo Brdo
KOSOVO
ALBANIA
NORTH MACEDONIA

2. Mining statistics in Serbia

In Serbia, there are currently several active metal mines. The largest ones are part of the Bor mining and metallurgical basin, which has been owned by the Chinese company Serbia Zijin Copper LLC since December 2018. This basin primarily exploits copper ore, but it also contains gold and silver ores. In addition to these ores, various amounts of lead, zinc, molybdenum, manganese, cadmium, and antimony,[4] for example, are also exploited or used to be exploited in the territory of Serbia.

The mining sector in Serbia is currently relatively small but not insignificant, with a tendency toward growth. In the fourth quarter of 2023, there were 30,383 directly employed workers in this sector, representing approximately 1.3% of the total employed workforce in Serbia. The majority of employees – 14,460 – in the mining sector work on the extraction of coal, which is the most prevalent energy source in Serbia. Only 7,198 workers are involved in the extraction of metal ores, with an additional 3,344 workers engaged in other mining activities.[5]

In 2022, the mining sector constituted 2.7% of Serbia's total gross domestic product (GDP), marking a significant increase compared to 2021, when the sector contributed 2.1% to GDP, or to 2020, when it accounted for just 1.8% of GDP.[6]

Simultaneously, the mining sector is the largest source of waste, contributing 94.4% of the total amount of generated waste across all economic sectors, according to 2022 data. Of the total amount of waste from mining, 18% is classified as hazardous and requires special treatment, making it a much higher proportion of hazardous waste compared to other economic sectors.[7] For now, no data is available on what percentage of hazardous waste is processed and in what way. Additionally, there was a staggering 177% increase in waste generation in 2022 compared to 2021,[8] representing a significantly higher rate of increase than that of the mining sector's share of total GDP. This data shows that the mining sector in Serbia is rapidly growing, but it is also growing at the expense of environmental protection, which is the source of various environmental struggles.

4 Monthel, J., Vadala, P., Leistel, M., and Cottard. F., Mineral deposits and mining districts of Serbia compilation map and GIS databases, Republic of Serbia, Ministry of Mining and Energy, 2002.

5 Registered employment, IV quarter, Republic Institute for Statistics of Serbia, 2023.

6 Gross domestic product, Republic Institute for Statistics of Serbia, 2022.

7 Generated and treated waste, Republic Institute for Statistics of Serbia, 2022. *https://www.stat.gov.rs/sr-latn/vesti/statisticalrelease/?p=13623*

8 Ibid.

Majdanpek town close to the mine

Photo: © Marija Jankovic

3. New extractivism

In old geography textbooks, children were taught from an early age that Serbia is a country rich in minerals as well as other resources such as water, fertile land, and pristine nature. However, only a few decades later, it turns out that Serbia is not overly rich in any of these resources, and that the preservation of these resources requires sensible management.

Some minerals classified as «critical raw materials» (e.g., lithium, nickel, antimony, borates, manganese, copper) in Serbia have been known about for a while, but the proportions of their concentrations are relatively small. Moreover, their geographical distribution is not very beneficial, as some deposits are located in protected natural reserves.[9] With the increasing interest in critical minerals, there has been growing pressure to explore and exploit various raw materials in Serbia.

The turning point was in 2015, when the Law on Mining and Geological Research[10] was amended, simplifying the procedure for obtaining permits and researching minerals in Serbia for investors. More than half of the companies conducting geological research in Serbia were established after 2015. Significant portions of the exploration areas in Serbia are controlled by foreign companies that do not have any working mines in their portfolios. Their financial success relies primarily on the trust of investors and shareholders in what they represent as being potentially good investments on stock exchanges.[11]

The total area under exploration covers 5,673 square kilometers, which is nearly 8% of the total territory of the state of Serbia. Around 90% of the territory for which the state has issued permits for exploration is controlled by a dozen companies based in Australia, Canada, and China through offshore companies and affiliated entities in Serbia.[12] In some cases, exploration areas encroach on the territory of protected natural reserves. According to the spatial plan draft for 2021 until 2035, Serbia intends to have at least 40 mines – including 10 lithium and boron mines – and to open mines for other critical minerals.[13]

9 Marković, M., Gold rush: Are new mines springing up in protected areas?, Birn Srbija, November 25, 2021. *https://birn.rs/zlatna-groznica-da-li-nicu-novi-rudnici-u-zasticenim-podrucjima*

10 Law on mining and geological research, Official Gazette of the RS, No. 53/2017.

11 Marković, M., Mining business in Serbia and (re)sale of gold mist, Birn Srbija, October 26, 2022. *https://birn.rs/rudarski-biznis-u-srbiji*

12 Marković, M., Who are the main players in the mineral exploration business in Serbia?, Birn Srbija, 2022. *https://birn.rs/ko-su-glavni-igraci-u-biznisu-istrazivanja-ruda-u-srbiji*

13 Insider series: «Rio Tinto in Serbia: Treasure hunt – no rules,» Insider TV, May 10, 2022. *https://insajder.net/teme/insajder-serijal-rio-tinto-u-srbiji-potraga-za-blagom-bez-pravila-prvi-deo*

Boreholes with no alive plants around it

Photo: © Tibor Moldvai

The royalties from mining are regulated by the Law on Fees for the Use of Public Goods.[14] The basis for royalties is the revenue that the company has earned from the used or sold mineral raw materials, and royalties are determined in percentages, which vary depending on the mineral raw material. For metallic and non-metallic minerals, the percentage is generally around 5% of the revenue after their sale.

All of this suggests that, in the future, new mines will be opened in Serbia, as critical minerals are the fuel for the green energy transition, and without them it would not be possible to implement the energy transition as the European Union (EU) envisions it. Expectations are that there will be a further intensification of positions and a continuation of the struggle between the local populations and environmental activists against the companies and a government that supports extractive mining projects.

4. Environmental struggles

The expansion of existing mines, the opening of new ones, and above all, the announcements about new mine openings have sparked revolts among citizens and environmental activists, leading to larger and smaller environmental uprisings. These uprisings have become the most significant form of civic activism outside of large cities, and they have attracted a considerable number of people in recent years. The largest protests have undoubtedly been organized against lithium ore exploitation in western Serbia.

The organized protests against potential lithium exploitation are not the first example of such types of assembly in Serbia. The earliest environmental uprising erupted in 1935[15] due to pollution near the city of Bor. In the mid-2000s and later, residents of western Serbia successfully prevented nickel ore exploration on their territory. In eastern Serbia, locals have been fighting against air pollution from copper exploitation for years, advocating for a more strategic planning process for mine expansion that does not harm local populations.[16]

In addition to these larger activist movements, local communities throughout Serbia are taking local actions to prevent exploration and exploitation, whether it be lithium in western and central Serbia or gold and copper in eastern Serbia. The impression remains that

14 Law on fees for the use of public goods, Official Gazette of the RS, Nos. 95/2018, 49/2019, 86/2019, 156/2020, 15/2021, 15/2023, 92/2023 and 120/2023.

15 Krivelj through historical legacies, 2021. *https://www.krivelj.org/index.php/blog/krivelj-kroz-istorijska-nasledja/150-prva-ekoloka-buna-u-evropi-i-svetu-1935-godine*

16 Residents of Krivelj blocked the road, demand compensation from Žiđin, and see the solution in a conversation with the president and the minister; Danas, January 30, 2024. *https://www.danas.rs/vesti/ekonomija/krivelj-blokada-puta-zidjin/*

the voices of the local populations are often weak until they grow into significant protests and move from local areas to Belgrade.

Amidst the wave of environmental protests against lithium exploitation; the construction of small hydroelectric power plants, which cause significant degradation; and the high levels of air pollution in Serbia, Green parties and movements – in coalition with «Moramo» – had good results in the 2022 parliamentary and Belgrade city elections.[17] This marked the first time that a coalition many perceive to be a credible green option garnered enough votes, and that the environmental struggle was brought into institutions. Currently, the parliamentary group of the Green-Left Front consists of 10 MPs out of a total of 250 in the Serbian parliament.

5. Case study – Lithium

The story of lithium in Serbia begins in the early 2000s, when the multinational company Rio Tinto received the first permit for exploration in the western part of Serbia. The company's focus was on borates, and lithium itself was not in high demand on the global market at that time. In 2004, a new mineral called jadarite[18] – composed of sodium lithium borosilicate hydroxide – was discovered. The mineral was named after the Jadar River and the region in western Serbia.

Geological exploration continued for years until 2020, when the company announced the construction of a mine. Until that point, most agreements between this large company and various Serbian governments were shrouded in secrecy. Local activists then realized that things were getting serious, and despite the lack of documentation – such as publicly available environmental impact assessments and strategic impact assessments – a mine could soon be operational. Protests were organized in Loznica to prevent changes to the local spatial plan, and by 2021 the protests had moved to Belgrade. Following significant protests (with around 100,000 people participating) in December 2021 and blockades of major traffic routes, the Serbian government announced the withdrawal of controversial laws that were intended to expedite lithium exploitation and declared the abandonment of the disputed project.[19] After a few years of quiet, during which the company Rio Tinto, through its subsidiary, continued preparatory work for lithium exploitation, there were announcements made about reactivating the project in the summer of 2024. In June, Rio

17 Green-left coalition Moramo enters Serbian parliament, Progressive International, October 27, 2022. *https://progressive.international/wire/2022-10-27-green-left-coalition-moramo-enters-serbian-parliament/en*

18 Jadarite mineral data. *https://www.webmineral.com/data/Jadarite.shtml*

19 Serbia revokes Rio Tinto lithium mine permits following protests, BBC, January 21, 2022. *https://www.bbc.com/news/world-europe-60081853*

Tinto published a Draft Environmental Impact Assessment, and the President of Serbia and the President of the National Assembly announced that the mine could be opened by 2028. On the other hand, concerned citizens, residents of Loznica and the surrounding area, and environmental organizations led a protest against the reactivation of the project and announced further resistance against any exploration and exploitation of lithium and boron ores.

Miroslav Mijatović, from the Podrinje Anti-Corruption Team (PAKT), believes that the stories about the suspension of the lithium excavation project in the Jadar Valley should not be trusted. He also emphasizes that the territory of Serbia, regardless of the number of companies involved, is generally too small for so many mining projects and is unequivocally harmful to the environment.

Concerning the Jadar project, environmental activists, local residents, as well as green political parties and an array of citizens groups have criticized the lack of transparency in the negotiation process between the Serbian state and Rio Tinto.[20] It is not known how much money the company has invested so far and how much the Serbian state would have to pay if the contract were unilaterally terminated. Another criticism is the exclusion of citizens because – despite a process that is intended to guarantee citizen participation in the decision-making for large projects – it is being conducted technocratically and pro forma.[21] Other concerns are the conversion of fertile agricultural land[22] into a mine, the ongoing population displacement, and the potential environmental threat to the surface and groundwater in the Jadar River Valley due to the lithium mining process. Finally, according to the spatial plan, mine tailings should have been 14 km away from the shaft/mine in the area of the municipality of Krupanj, which is next to the Loznica municipality, in a hilly area covered by forest in the suburbs of the village of Štavice. However, in parallel with the adoption of the special purpose spatial plan of Jadar, in which this location of the tail was adopted, Rio Tinto changed the location of the tail, which is now right next to the mining shaft in the Jadar River Valley, that is, in an extremely flooded area. In other words, the new location is much closer to villages and water bodies, which is believed to greatly increase the risk of groundwater contamination. The local organization PAKT assumes that the company was driven by economic interests, because lower levels of investment and fewer storage costs were anticipated if the landfill was located next to the shaft/mine itself alongside the Jadar and Korenita rivers.

20 Marković, P., The need for effective public participation in decision-making in the field of mining, CEKOR, 2022. *https://www.cekor.org/documents/pages/724_1.pdf*

21 Public participation and the fight against corruption in spatial and urban planning, RERI, 2022. *https://reri.org.rs/wp-content/uploads/2023/04/Ucesce-javnosti-i-borba-protiv-korupcije-u-prostornom-i-urbanistickom-planiranju.pdf*

22 Healthy land for a healthy life Mačva, Ministry for Agriculture, 2015. *https://www.sepa.gov.rs/download/zemljiste/ZdravaZemljaZaZdravZivotMacve.pdf*

This information is what actually alarmed the local population, which has been organizing and actively resisting since learning about this.

On the other hand, the Ministry of Mining and Energy, the president of Serbia,[23] and the prime minister have said that this project is a crucial opportunity for Serbia and that lithium exploitation and processing can create many new jobs and revenue.

6. Challenges

When it comes to mining and other sectors of the economy as well as Serbian society as a whole, one of the biggest challenges is the mutual distrust between citizens and institutions, coupled with the absence of debate on key societal issues. This is a consequence of years of authoritarian rule. According to various international organizations measuring the level of democracy, Serbia is no longer considered a democracy but a hybrid regime that combines frequent and insufficiently democratic elections with authoritarian rule.[24] As a result of such governance, there is no trust, and citizens have no confidence that any mining project can be implemented transparently and in accordance with the highest standards. The lack of debate on crucial developmental issues leads to uncertainty about what kind of state Serbia aims to be (e.g., agricultural, mining, IT, tourist).

Another significant challenge are the frequent violations of environmental regulations. Serbia has only a few environmental inspectors and three national mining inspectors,[25] which is far from sufficient to supervise those entities already operating. Additional entities would only increase the pressure on inspectors and reduce the possibility of oversight.

There are other major challenges that Serbians are worried about as well. How can they avoid becoming a colony of the EU, China, or Russia where cheap metals and non-metals are extracted? And how can they ensure that the surplus value from this process stays in the country? Questions about ownership and the nationalities of companies are not tied to nationalism but rather to the citizens' concerns that large multinational companies are only

23 Vučić: Lithium is our treasure, as far as I'm concerned – it can be mined in the morning, Politika, January 22, 2024. *https://www.politika.rs/scc/clanak/595361/Vucic-Litijum-je-nase-blago-sto-se-mene-tice-moze-ujutru-da-se-kopa*

24 Freedom House report – Serbia. *https://freedomhouse.org/country/serbia*

25 There are 709 contaminated locations in Serbia, and only three mining inspectors, Vreme, March 27, 2024. *https://vreme.com/drustvo/u-srbiji-ima-709-kontaminiranih-lokacija-a-samo-tri-rudarska-inspektora*

seeking quick profits, regardless of the damage to the environment and society. Hence, there is a fear that Serbia will become a sacrificial zone for someone else's green transition.[26]

7. Critical Raw Materials Act and Serbia

Serbia is not directly mentioned in the Critical Raw Materials Act, but that does not mean the Act will not affect Serbia, even though it is not yet an EU member. The Act states that the EU wants to control the supply chains for critical raw materials and become less dependent on China. As Serbia is located on the EU border and surrounded by EU countries, it is likely that shortening the supply chain also means increased pressure on Serbia to start exploiting critical minerals. For the EU, Serbia is an important player for minimizing the roles of China and Russia as actors and potential exploiters of critical raw materials. The EU has to be careful in handling this issue and to do so in a fair manner to maintain the trust of Serbian citizens.

Of particular concern is the fact that the EU, through this Act, anticipates increasing the total extraction amount of critical minerals within its territory to 10% of annual consumption and increasing processing to 40% of annual consumption by 2030. This 30% difference implies that raw ore must be imported from somewhere. This is one of the biggest fears of Serbian residents: that they will become a sacrificial zone exporting raw ore with the lowest added value, and that industrial processing will take place elsewhere.

It is also concerning that the EU aims to accelerate the opening of new mines with this Act, which could lead to lower or disregarded environmental standards due to haste. Serbia already faces problems due to the lack of transparency and non-compliance with environmental standards, and this EU decision could negatively spill over into Serbia.

Considering all of the above, it is expected that now – with the adoption of the Critical Raw Materials Act – the pressure to start exploiting lithium and other metals, such as nickel, in Serbia will further increase, especially since the aforementioned spatial plan of Serbia includes the opening of numerous mines.

In October 2023, Serbia signed a letter of intent to initiate a strategic partnership with the European Commission for batteries and critical raw materials.[27] After more than two

26 Momčilović, P., Serbia's lithium: Sacrifice zones or opportunity for Europe's peripheries?, Green European Journal, 2023. *https://www.greeneuropeanjournal.eu/serbias-lithium-sacrifice-zones-or-opportunity-for-europes-peripheries*

27 Leaked – Serbia signs lithium exploitation agreement with European Commission, Balkan Green Energy News, October 28, 2023. *https://balkangreenenergynews.com/leaked-serbia-signs-lithium-exploitation-agreement-with-european-commission*

years of controversies, there has been strong resistance in Serbia against such activity, but the authorities have remained silent.

8. Recommendations

- The EU and member states should not put pressure on Serbia to start exploiting certain critical raw materials before an inclusive democratic dialogue about mining projects is established in Serbia.
- The EU should take care that there is oversight in the implementation of projects funded by the EU. This is necessary not only to ensure that funds are used for their intended purpose, but also to verify compliance with the environmental and social standards of EU countries.
- Serbia should ensure that public consultation processes and other citizen participation processes are open to the public and transparent. Also, it is important to involve local communities and environmental activists in decisions regarding projects that will impact these people.
- The Serbian Ministry of Finance should initiate a public debate on the potential increase in fees for their use toward public goods.
- Serbia should adopt a strategy for managing mineral resources in the Republic of Serbia and combine this strategy with measures geared toward participatory spatial planning.

Kety Gujaraidze

Georgia: Mining sector challenges

1. Mining sector overview

Georgia is host to an array of minerals and materials, including arsenic, barite, bentonite, clay, coal, construction materials, copper, diatomite, gold, lead, manganese, marble, precious gems and stones, zeolites, and zinc.[1] The Georgian mining sector is basically comprised of two parts: the extraction of construction materials (e.g., sand, gravel, limestone, marble), which is carried out by numerous small companies, often in rivers and coastal zones all over the country; and the mining of metals and minerals – which is concentrated on several large extraction sites for manganese, copper, and gold – done by large companies.

Mining comprises only 1.19% of Georgia's gross domestic product.[2] Despite such a small contribution, the mining sector remains one of Georgia's most important sectors. It is estimated that about 30% of Georgia's exports are metal- and mineral-related.[3] In 2022, copper ores (18.3% of total exports) and ferroalloys (8.2% of total exports) were among the top three commodities exported from Georgia.[4] Due to the country's policy of not taxing exports, Georgia has become a re-export or transit country for gold, copper, and ferrous metals mined in other countries.[5] According to the International Council on Mining and Metals (ICMM), in 2022, Georgia received a score of 78.2 and ranked 28th among 183 countries[6] on the Mining Contribution Index.[7] Since 2018, Georgia has continued to rank high on the Index, meaning that the country's dependence on the mining sector is significant.[8]

1 Adam Smith International and European Bank of Reconstruction and Development (2018), *Status report: Georgia mining sector development programme*.

2 ICMM (2022), *Mining Contribution Index (MCI): 6th Edition*.

3 Ibid.

4 National Statistics Office of Georgia (2023), *External trade of Georgia: 2022*.

5 Adam Smith International and European Bank of Reconstruction and Development (2018), *Status report: Georgia mining sector development programme*.

6 ICMM (2022), *Mining Contribution Index (MCI): 6th Edition*.

7 According to the *ICMM*, the Mining Contribution Index (MCI) is a composite of four indicators, each capturing different aspects of mining's contribution to national economies: (1) mineral and metal export contribution in selected year; (2) increase/decrease in mineral and metal export contribution over a five-year period; (3) mineral production value expressed as a percentage of GDP in the same year; and (4) mineral rents as a percentage of GDP in the same year.

8 Georgia ranked 31st (2018), 22nd (2020), and 28th (2022).

Historically, certain minerals were developed that continue to be explored today (gold, copper, ferroalloys, manganese, and coal). In 2019, the United States Agency for International Development commissioned a survey of the mining sector.[9] It concluded that, based on geological characteristics, there could be undiscovered mineral reserve deposits of interest in Georgia. It added that the country has the potential to become an attractive destination for mining companies in search of new exploration projects. A strong communication strategy and promotional campaigns would have helped potential investors to consider Georgia as a prospective destination for mining investments. In 2022, in order to encourage international investments in the mining industry, the World Bank's Multi-Donor Trust Fund[10] helped the National Agency for Mineral Resources to develop investment portfolios[11] for 10 prospective deposits and mining areas for the extraction of copper, ore, manganese, tungsten, marble, and bentonite. Since 2018, another multilateral donor – the European Bank for Reconstruction and Development (EBRD) – has been assisting Georgia in reforming the policy, legal, and regulatory environment.[12],[13] This has been done to take advantage of the mining sector's potential. It is believed that the sector has a bigger role to play in the country's economy, and that investors should be confident enough to commit investments.[14]

Since Georgia's potential to join the European Union (EU) has grown with the awarding of candidate status in December 2023,[15] it is noteworthy that the EU-Georgia Association Agreement[16] includes an article (Chapter 5: Industrial and enterprise policy and mining, Article 314) in which parties make a commitment to cooperate in the mining sector. Parties commit to cooperate with mining industries and in the production of raw materials to improve the business environment. There is also to be information exchange and cooperation in the area of non-energy mining, in particular metallic ores and industrial minerals. Parties further state that «the exchange of information will cover developments in mining and raw materials sector, trade in raw materials, best practices in relation to sustainable development of mining industries as well as training, skills and health and safety.»

9 PMO Business Consulting (2019), *Business perception survey of the mining sector: Final report*, Delloite Consulting, USAID Governance for Growth (G4G) in Georgia.

10 Policy and Management Consulting Group (2024), *Mining investment promotion in Georgia*.

11 National Agency of Mineral Resources (2022), *Explore the new territory of raw materials opportunities*.

12 EBRD (2017, November 1), *Georgia mining sector – development support programme: Invitation for expression of interest*. Procurement notice.

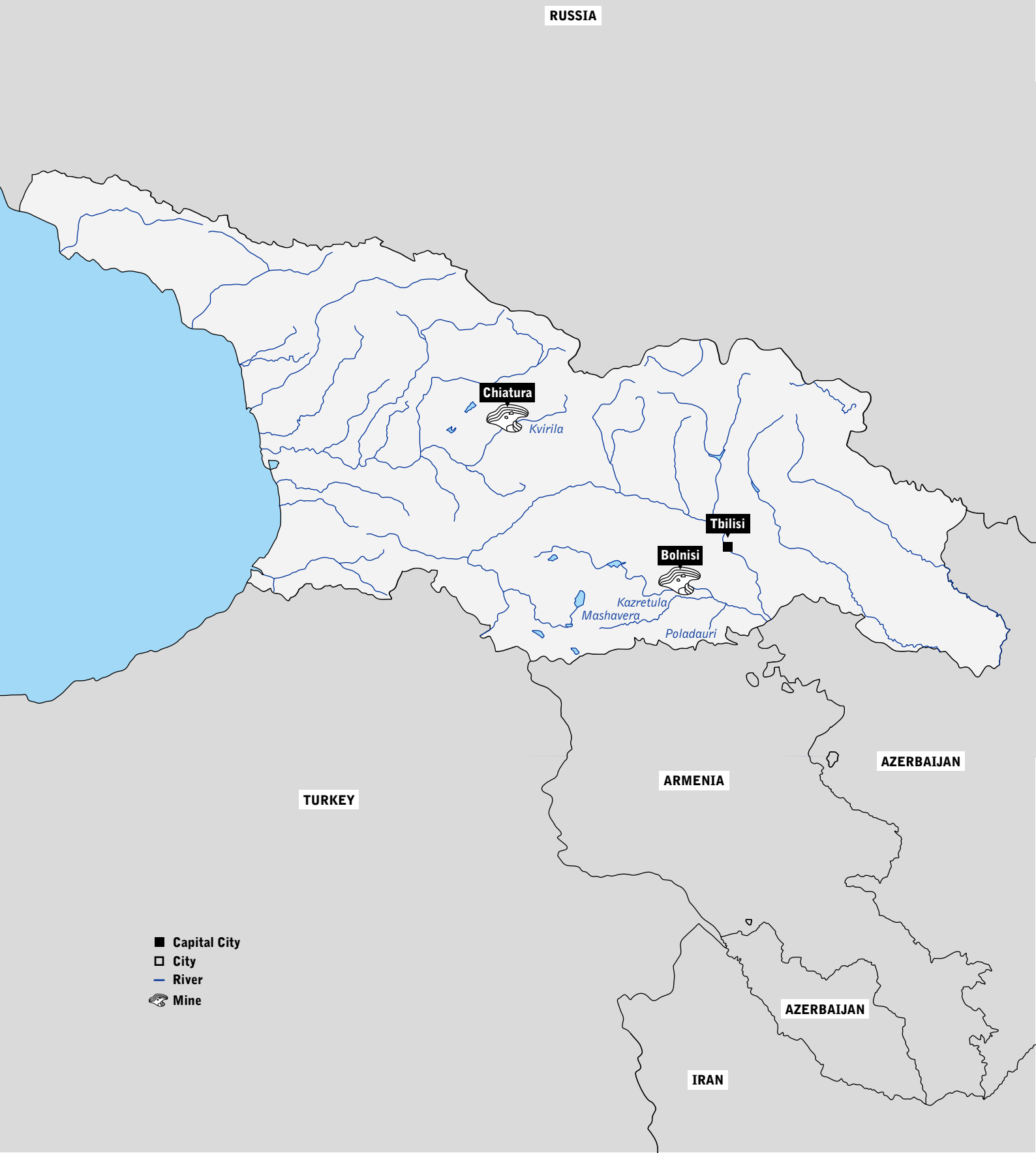
13 EBRD (2019, June 25), *Georgia – mining sector development programme phase II – legislative framework development*. Procurement notice.

14 Moffatt, P. (2019, May 8), *Reforms needed to balance benefits of mining in Georgia*, in: Law in transition 2019: Better laws for better economies, EBRD.

15 Council of the EU and the European Council (2024, January), *EU enlargement policy: Georgia*.

16 *Association agreement between the European Union and the European Atomic Energy Community and their member states, of the one part, and Georgia, of the other part*, entered into force on July 1, 2016.

Map of Georgia

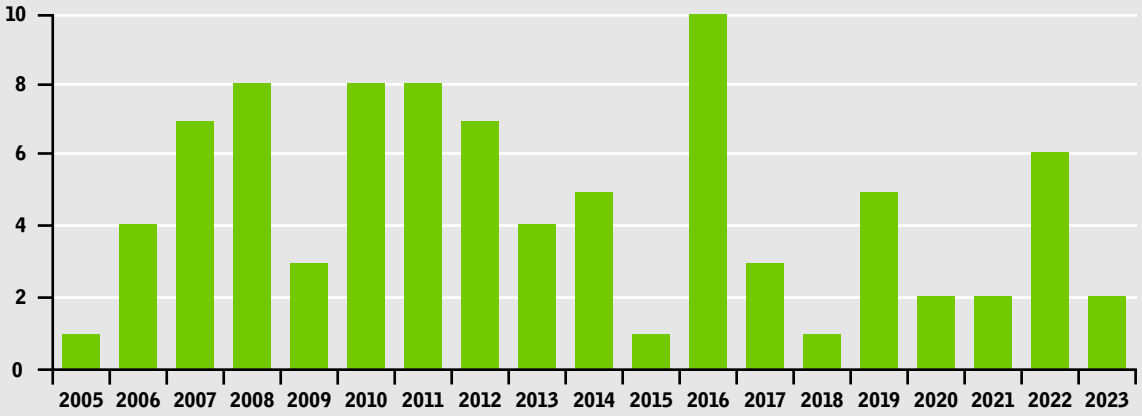


2. Mining policy and legislation

After regaining independence in the 1990s, Georgia – similar to many post-Soviet countries – resorted to the mining sector to survive. However, the country did not formalize a national policy in the mining sector until December 2019, when the first-ever national mining strategy was developed with the assistance of the EBRD. It was meant to be developed as a policy document (to be approved by the parliament), but it ended up as a strategy document that was approved by the government of Georgia.[17]

Georgia's current mining legislation dates back to the mid-1990s (the framework Subsoil Law was adopted in 1996). It underwent major changes in licensing rules in the mid-2000s with the adoption of the framework Law on Licenses and Permits and the subsequent approval of the bylaw – government decree #136 of 11 August 2005[18] – which is specifically devoted to mining licensing procedures. The latter is considered to be the major act in the mining sector today, and it is frequently amended to serve different needs and interests.[19] As of February 2024, it had been amended 87 times since its adoption in 2005. Figure 1 shows the number of amendments made each year.

Figure 1: Number of amendments made to the governmental decree regulating mining licensing (2005–2023).
(Adapted from «Labyrinths of Georgian Mining Sector Development Planning» by Gujaraidze, K. (2020), Green Alternative.)



As Figure 1 shows, the decree was amended every year – in most cases several times a year. Amendments were especially frequent in 2007–2008, 2010–2012, and in 2016. During

17 Gujaraidze, K. (2020), *Labyrinths of Georgian mining sector development planning*, Green Alternative.

18 *Decree #136 of 11 August 2005 of the Government of Georgia* approving the Regulation on terms and conditions for granting a license for extraction of mineral resources.

19 For instance, Green Alternative's study *Deep seabed mining – legislation and practice in Georgia* (2020) describes changes introduced in the governmental decree in 2009. As a result of the September 2009 amendment, the norms regulating continental shelf mining at the Black Sea coast of Georgia were introduced to allow granting of sea bed mining license to the Romanian billionaire that had business ties with Georgia's prime minister at that time.

these years, the decree was amended almost every month, and sometimes several times per month. For example, in November 2010, there were three amendments to the decree only a few days apart; in July and August 2016, there were two amendments in one week.[20]

Similar to licensing rules, the authorities responsible for the sector have changed many times. From the mid-1990s until 2008, the Ministry of Environment and Natural Resources Protection was the agency responsible for the sector. From 2008 onward, the responsibilities have been transferred from one agency to another several times:

- In 2008, the Ministry of Economic Development became responsible for the regulation of the mining sector;
- in 2011, the responsibility migrated to the Ministry of Energy and Natural Resources;
- in 2013, it was transferred back to the Ministry of Environment and Natural Resources Protection;
- in December 2017, it was transferred to the Ministry of Economy and Sustainable Development, in which a specialised National Agency of Mines (later renamed to the National Agency on Mineral Resources, NAMR[21]) was established.

The numerous amendments and frequent changes in the competent authority speak of the low quality of decision-making in the Georgian mining sector as well as the low credibility and sustainability of mining sector governance as a whole.

3. Transparency in the mining sector

Decision-making processes in the mining sector are almost entirely closed to the public, at all levels.

Mining licenses in Georgia are awarded through time-based online auctions to the highest bidders. The legislation does not differentiate between domestic and foreign investors, nor does it require investor due diligence. The public has no influence over the licensing processes, as the public is not notified of the intentions of the competent authority awarding permissions, nor are they notified about final decisions. Communities often learn about mining projects when geologists working for the license holder start exploring the area or when trucks appear on the site. They often respond by blocking mining sites, challenging decisions in the courts, or using other venues to protest.

20 Gujaraidze, K. (2020), *Labyrinths of Georgian mining sector development planning*, Green Alternative.
21 National Agency of Mineral Resources (s.a.), *Homepage*.

The register of mining licenses is provided to the public upon request.[22] Information about enforcement and compliance assurance efforts are also provided upon request, often with delays, omissions, and/or refusals to provide information. Public notifications about illegal mining activities are often ignored by competent authorities or responded to after significant delays.

Since 2017, companies have been required to disclose financial and governance information – including information on beneficial ownership – on the dedicated online reporting portal,[23] though not all companies follow the rules. For instance, from the largest mining companies operating in Georgia – gold and copper mining companies – provide reports, whereas the manganese mining company does not. Such noncompliance is not properly enforced.

Public participation in the decision-making about laws and regulations is very limited. In general, the public is rarely notified or involved in the decision-making on sub-laws (executive regulations).[24] None of the amendments made to the aforementioned governmental decree on licensing procedures (nor the decree itself) ever became a subject of public discussion. The public is given the opportunity to express opinions about draft laws from the moment the drafts are officially registered in the parliament, although not everyone has this opportunity, as the drafts are published silently on an online repository without notification.

In 2019, the first attempt to define a national strategy in the mining sector, unfortunately, also unfolded without public participation. It was hoped that the involvement of the EBRD would help to set a higher standard of participation, though in reality it did not live up to expectations.[25] Environmental authorities and representatives of civil society advocated for a strategic environmental assessment (SEA) for the national mining strategy, though the SEA was also rejected by the NAMR. A new mining code is being developed by the NAMR with the assistance of the same donor from the last four years; a draft has not been disclosed so far to help in obtaining opinions or feedback from stakeholder groups.

To increase transparency and accountability in the sector, civil society groups have long been advocating for the introduction of the Extractive Industries Transparency Initiative (EITI) standard in Georgia. Only very recently, under the Open Government Partnership

22 With the support of the World Bank, the Nation Agency on Mineral Resources redesigned its webpage, and the new webpage displays a mining licenses register; it is not clear whether it is up to date though, or how often it is updated, or if it is updated at all.

23 See *Law on accounting, reporting and audit* (2016) and *reporting portal*.

24 The norms that obliged public authorities to ensure public participation in the decision-making on executive regulations were annulled in 2009.

25 See Gujaraidze, K. (2020), *Labyrinths of Georgian mining sector development planning*, Green Alternative.

process, NAMR and the government committed themselves to conduct a capacity needs assessment and develop an action plan for aligning with the EITI standard during the next two years.[26]

4. Environmental and social issues

In the mid-2000s, in an effort to attract foreign investments to the country, the Georgian government initiated extensive deregulatory reforms and eliminated environmental and social safeguards, including in the mining sector.

In 2007, mining projects were exempt from environmental impact assessments (EIAs) and any type of preliminary environmental assessment. Processing was still subject to EIAs, but the public was deprived of a right to participate in the environmental permitting. Only with the adoption of a new Environmental Assessment Code in 2017 (in force since January 1, 2018) were mining activities again subject to EIAs. Nevertheless, concerns remained, as thresholds were set high enough so that mining projects would not be subject to EIAs. Also, unlike the EU's EIA directive, the quarrying of construction materials was excluded from the list of projects to be subject to EIAs. From January 1, 2023, onward, thresholds for mining projects have been reduced, but an exemption for sand and gravel extraction projects remains in force.[27] This is in light of the fact that more than 90% of mineral mining licenses are awarded for quarrying projects.[28] It should also be noted that reducing thresholds is good, but this does not help with another significant problem in the decision-making on mining projects. The problem is licensing mining projects before the EIA is reviewed and whether or not a decision is made to grant an environmental permit.

Unrestrained urban sprawl and the accelerated development of infrastructure projects (including highways and energy production facilities, where bilateral and multilateral donors are also heavily involved) during the last two decades has dramatically extended the scale of quarrying for sand and gravel extraction. A 2021 study on quarrying practices in Georgia[29] shows that current sand and gravel extraction practices severely affect not only river and coastline habitats, but also communities within the river catchment areas

26 See OGP (2024), *Georgia action plan for 2023-2025*, adopted at the end of December 2023.

27 The April 2022 amendment reduced threshold for the mining projects included in Annex 1 (mandatory EIA) of the Environmental Assessment Code from 25 hectares to 10 hectares. In case of mining projects listed in Annex II (case-by-case EIA through screening decision), for peat extraction the threshold remains the same – 10 hectares, for quarries and open-cast mining the threshold remains, but it was reduced to 5 hectares. Sand and gravel extraction projects are exempt from the Annex 2 list. The April 2022 amendment entered into force on January 1, 2023.

28 See *register of mining licenses* at the web NAMR website.

29 Svanidze, I., and Khvedelidze, M. (2021), საშენი მასალების მოპოვება საქართველოში: პრაქტიკის ანალიზი *[Quarrying of construction material in Georgia: Analysis of practice]*, Green Alternative.

(erosion, loss of land, destroyed infrastructure, and reductions in groundwater volume and quality). The study also revealed that the environmental enforcement and compliance assurance of quarrying projects are very weak. This is partly due to the insufficient legislation and overall weakness of the monitoring and enforcement systems in Georgia. It is also a result of the repeated switching of competencies for mining regulation from one agency to another (see above) that has undermined the mining oversight system. All of this applies to the enforcement and compliance assurance for large-scale mining projects as well.

Two large-scale mining operations are continually in the public eye in Georgia: manganese mining in Chiatura in western Georgia (by Georgian Manganese), and copper and gold mining in Bolnisi in eastern Georgia (by RMG Copper, RMG Gold, RMG Auramine, and Caucasus Mining Group – subsidiaries of the RMG Group). Both of these sites have been operating since Soviet times and been extended since then. The companies are criticized for their poor environmental and social records, while the competent authorities are criticized for the lack of enforcement and compliance assurance measures.

Since 2017, Georgian Manganese has been under special management appointed by the court. A special manager was temporarily appointed with the mission of gradually improving the company's environmental performance.[30] The company claims that it made improvements in the areas it was obliged to, though these improvements cannot be confirmed due to the lack of transparency around the company's operations. In recent years the company's operations have made news headlines several times due to the hunger strikes and protests of local communities and workers.[31] Local communities complain about irreversible environmental damage and the collapse of property and livelihoods,[32],[33] while miners struggle to ensure labor safety measures and adequate remuneration.[34],[35] RMG Group's operations have for a long time been criticized for the toxic waste damaging rivers and soil, thus threatening the health of communities.[36] The company attracted international attention[37] in 2014, when it decided to extend a mining area to what scientists claim was the

30 For more details, see Gujaraidze, N. (2022), *Georgian Manganese: Company profile 2022*, Green Alternative.

31 Global Atlas of Environmental Justice (2022), *Manganese mining in Chiatura, Georgia*.

32 Mtivlishvili, G. (2023), *Chiatura – zone of a disaster [investigation]*.

33 Georgian News (2023), *License for manganese mining in Chiatura appealed for the first time in 17 years*.

34 Parulava, D. (2019), *Speaking up through sewn lips: A wildcat strike in Chiatura*, OC Media.

35 Georgia Fair Labor Platform (2023), *What are the miners demanding in Chiatura and why are their demands fair?*

36 For more details, see Gujaraidze, N. (2022), *Rich Metal Group RMG – company profile 2022*, Green Alternative.

37 Demytrie, R. (2014, May 29), *Georgia's gold mine dilemma*, BBC News.

Bolnisi, Sakrdisi Mine, 2014

Photo: © Oliko Tsiskarishvili

oldest known gold mine in the world. Despite protests[38] and court disputes,[39] the cultural heritage site known as Sakdrisi was blown away using explosives.

Georgia does not have a national policy or law guiding development-induced resettlement, nor are there any institutions addressing this matter. When communities experience severe negative impacts from mining, they actively seek to move away themselves, as the government and companies avoid paying for damages and the costs of moving. Even if compensation is paid, community members are not usually fully compensated for the true amount of their losses.

In 2005, in order to ensure easy access to the land, the eminent domain law[40] was amended to allow for the expropriation of private property by the state if minerals are discovered on private land. Expropriation of the land is a relatively long process. Therefore, when faced with the refusal of owners to leave their land, the government found other means to appropriate land. A recently published article on land-grabbing practices in Georgia[41] shows how the government questions legal ownership rights to the land in order to criminalize owners and then releases them from criminal prosecution if landowners abandon the disputed lands for the benefit of the state. One of the described cases is related to the proposed manganese mining site, which is among 10 prospective deposit and mining areas advertised by NAMR (see above).

The deregulation reforms of the mid-2000s also undermined labor protection norms. The abolishment of the Labor Inspectorate left workers without adequate protection. Over the next years, dozens of workplace deaths and a high instance of accidents triggered an interest in labor protection issues in mining activities. Although the Labor Inspectorate was reestablished in 2015, mine safety practices are still not adequately monitored and controlled.

5. Concluding remarks and recommendations

To conclude, although some steps have been taken in recent years to fight aggressive deregulation, the efforts have been too slow and insufficient to stop opportunists from

38 Civi.ge (2014), *Outcry as RMG launches gold mining at Sakdrisi*.

39 The court dispute requesting to cancel the decision on the expansion of the gold mining license into the area of the ancient gold mine that was considered a cultural heritage was initiated by Green Alternative. The dispute in all courts took eight years. The final (Supreme Court) decision was issued in March 2023, while the disputed license was valid till January 1, 2020. See *dispute materials*.

40 *Law of Georgia on the procedure for the expropriation of property for pressing public needs* (1999).

41 Gujaraidze, K. (2024), *The November amnesty: A humane act or a legalization of land grabbing?*, Heinrich Boell Foundation, Tbilisi Office – South Caucasus Region.

taking advantage of deregulation as long as possible. The current policy, regulatory, and oversight systems remain inadequate for addressing the negative impacts of mining on people and the environment.

The quarrying of construction materials has expanded over the last decades, but this trend has not been countered with better regulation of the sector. The results of the barbaric practices of quarrying are evident and they require an urgent response.

- First and foremost, the Georgian government should ensure the strict environmental regulation of the extraction of construction materials, either through the EIA system or general binding rules. In any case, the NAMR – in consultation with the environmental authority and the public – should make an inventory of all potential quarrying areas in the country, draft a strategy for the quarrying of construction materials, and subject it to the SEA.
- Secondly, international financial institutions and donor countries should ensure that – when allocating finances to support infrastructure development projects in Georgia – the construction materials used for the projects are sourced sustainably. They should look at the broader impacts of the projects they support, rather than merely concentrating on the impacts from construction sites and operations.

The EU and Georgia should heed the importance of cooperation in the mining and production of raw materials, thus more attention should be paid to the promotion of transparency and accountability in the sector from both sides. Ensuring public access to information and decision-making in the mining sector, at all levels, should be at the forefront of the cooperation agenda.

Artur Grigoryan and Tehmineh Yenoqyan (chap. 5)

Critical raw materials in Armenia

1. Overview

Armenia is a tiny country located in the South Caucasus and has a very rich and unique biodiversity as well as natural monuments.[1] Much of Armenia is mountainous, with 90% of its territory located at the height of 1,000 meters, and it has seven main types of mountainous ecosystems that are represented across different zones and a very diverse landscape. At the same time, Armenia is ranked as a country with climate-vulnerable mountainous ecosystems. Climate projections indicate that temperatures across the country may rise by 4.7°C by 2100, combined with an 8.3% decline in average annual precipitation and an increase in the frequency and intensity of other impacts. Such changes will influence, for example, all natural and managed systems, water resources, agriculture and food security, human health, settlements, and infrastructure.[2]

At the same time, Armenia is also rich in a variety of solid natural resources, such as iron, copper, molybdenum, lead, zinc, gold, silver, antimony, and aluminum, as well as in scarce and scattered metals enclosed therein, such as rhenium, selenium, tellurium, cadmium, indium, helium, thallium, and bismuth, among others.[3] According to data provided by the Ministry of Territorial Administration and Infrastructure, as of November 30, 2022, there were 961 mines, including 45 metal mines confirmed by the State Cadastre of Mines, Deposits and Occurrences of Minerals of the Republic of Armenia.[4] Curiously, those minerals are located predominantly in the northern and southern regions of the country, which are covered by endemic forests, ground water catchment areas, and climate-vulnerable nature; the ongoing irresponsible practice of mining heavily pollutes and affects them. Although Armenia currently has access to large amounts of freshwater, predictions indicate that the availability of water will be reduced significantly as a consequence of climate

1 World Wildlife Fund Armenia, *https://www.wwf.am/en/about_us/our_story*

2 UNFCCC Republic of Armenia, National Action Program of Adaptation to Climate Change and the list of measures for 2021-2025, *https://unfccc.int/sites/default/files/resource/NAP_Armenia.pdf*

3 The Ministry of Energy Infrastructures and Natural Resources (the Ministry of Territorial Administration and Infrastructures), *http://www.minenergy.am/en/page/472*

4 Extractive Industries Transparency Initiative Armenia (EITI), Report 2020-2021, *https://www.eiti.am/en/annual-reports/2022*

change,[5] and that this will have a severe impact on lakes and reservoirs,[6] with secondary impacts on many economic sectors. Hence, in terms of the climate resilience of the country, it is extremely important to treat water and other climate-sensitive resources responsibly.

Sectoral studies indicate that water security and climate change are the emerging issues, among others, that are likely to influence future mining developments and Armenia's economy, which is regarded as being sensitive to the effects of climate change, which poses high social and health risks to the population.[7] It is indisputable that the extractive sector is one of the main causes of pollutants in the environment in Armenia.[8] Numerous independent reports prepared by well-known and professional academic institutions have proven that the environments of mining-influenced areas are excessively polluted by heavy metals and accompanying chemicals.[9] Current unsustainable practices by the mining industry contaminate water resources via sustainable hazards and heavy metals that are released through acid water drainage (ground waters) and water streams from the tailing dams to the surface water-streams (rivers). The mining industry is also a significant factor in deforestation and loss of arable land.

To sum up, the extraction of minerals in Armenia is often accompanied by disparately high impacts on strategic water resources and the overall environment. The soviet-style, low-tech practice of mining leads to high levels of pollution, deterioration in public health, economic activities that endanger the environment, and regular resistance by local communities against mining.[10] The harmful practice of involving politically exposed persons

5 Ecolur, «Vulnerability of water resources under climate change and gaps in planning climate change adaptability in Armenia,» *https://www.ecolur.org/en/news/climate-change/13126*

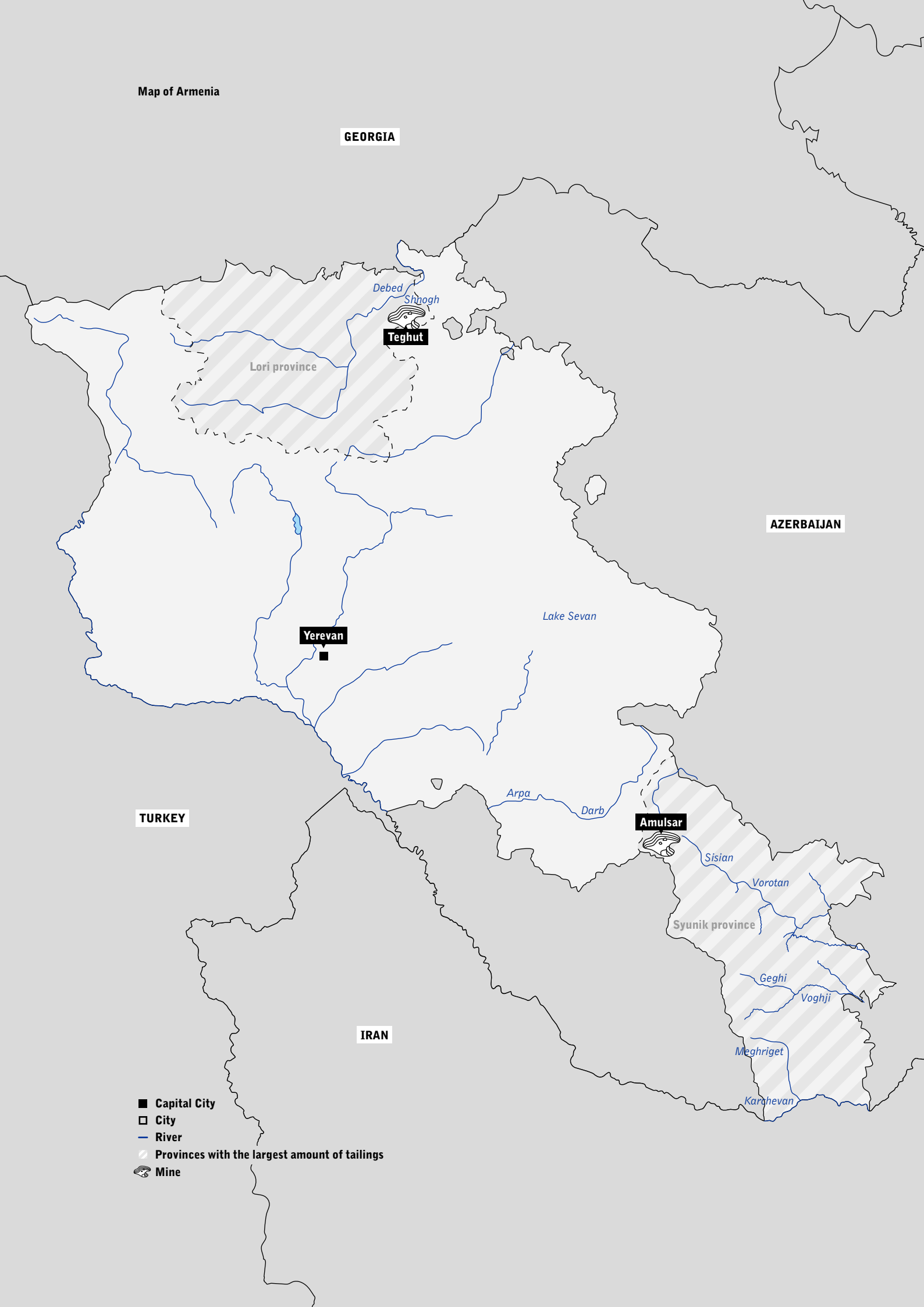
6 UN World Food Programme, «Impacts of climate change in livelihoods and food security in Armenia,» *https://docs.wfp.org/api/documents/WFP-0000147613/download/?_ga=2.82096530.527371043.1679062509-99406571.1664895380*

7 The World Bank (2016), Armenia: Strategic mineral sector sustainability assessment, Swedish Geological AB in association with SLR Consultants Ltd., Avag Solutions Ltd., American University of Armenia Center for Responsible Mining, American University of Armenia – Turpanjian Center for Policy Analysis, *https://www.eiti.am/file_manager/Useful%20materials/StrategicEng.pdf*

8 Increasingly alarmed Czech experts present findings on chemical pollution in Armenian industrial areas, *https://arnika.org/en/news/increasingly-alarming-czech-experts-present-findings-on-chemical-pollution-in-armenian-industrial-areas*; Price of gold: how gold mining affects pollution with heavy metals in Armenia, *https://arnika.org/en/publications/the-price-of-gold-how-gold-mining-affects-pollution-with-heavy-metals-in-armenia*

9 American University of Armenia, Center for Responsible Mining, *https://crm.aua.am/independent-monitoring/reports/*; AUA Newsroom, *https://newsroom.aua.am/2016/12/13/protecting-armenia-from-toxic-pollution-why-independent-monitoring-matters*

10 Civilnet (2018, March 20), «Teghut: Ecological, legal and economic collapse,» investigative documentary, *https://www.civilnet.am/en/news/383453/teghut-ecological-legal-and-economic-collapse*


Map of Armenia
GEORGIA
AZERBAIJAN
TURKEY
IRAN
Debed
Shnogh
Teghut
Lori province
Lake Sevan
Yerevan
Arpa
Darb
Amulsar
Sisian
Vorotan
Syunik province
Geghi
Voghji
Meghriget
Karchevan
Capital City
City
River
Provinces with the largest amount of tailings
Mine

through offshore and shell companies,[11] which have no actual operations and are formed for corrupt practices,[12] as well as high perceptions of corruption in this sector lead to a lack of trust and «social licensing.»[13]

2. Extractive sector: Confirmed deposits and critical raw materials

Metal mining has a long history in Armenia, and it represents the most significant share of the whole mining sector.[14] Significant metal mineral reserves were officially registered in Armenia between 2010 and 2021. The biggest portions of confirmed metal ore reserves are of iron, followed by gold, magnesium, copper, and chromite. Among the confirmed 45 metal mineral deposits, the following number of mines were confirmed:[15]

26 gold and gold-polymetallic, 7 copper-molybdenum, 4 copper, 3 iron, 2 polymetallic, 1 molybdenum, 1 magnesium silicate rock and chromite, 1 nepheline syenite.

Among the registered deposits, copper and magnesium are on the European Commission's list of critical raw materials and are considered to be crucial for the economy of the European Union (EU).[16] At the same time, not all confirmed and registered deposits are currently being exploited. As of November 2023, there were 24 metal mining companies holding mining permits.[17] Copper, zinc, and molybdenum ore concentrate, as well as gold and ferromolybdenum, account for all metal output of the mining and quarrying sector in Armenia. In the meantime, copper ore concentrate is the main output of the extractive

11 Infocom, «Abandoned mines of Syunik,» investigative article, *https://readymag.website/infocom/abandoned-mines-of-syunik/2/?fbclid=IwAR2Zp2ZclR_tvV40UX8wKpzZykN31fH2GvcFT-xoukfj2M-N6a0cHrq0Vvqg_aem_AYh1EaqsdQ_e4eE81QjFWkIhqoMhYofH96eAAIuieyaB0wYrmGj8zP46C-cjUYfQWsgIILvd-6x_XqSqwEKZ2WMBz*

12 Civilnet (2019, November 6), «The secret owners of Armenia's largest enterprise,» investigative article, *https://www.civilnet.am/en/news/382889/the-secret-owners-of-armenias-largest-enterprise*

13 Transparency International Anti-Corruption Center, Assessment of corruption risks in mining awards in Armenia, *https://transparency.am/en/publication/114*; Worksheet on corruption risk assessment in mining sector of Armenia, *https://transparency.am/en/media/news/article/2109*

14 Extractive Industries Transparency Initiative Armenia (EITI), Description of the mining sector of Armenia, *https://www.eiti.am/en/description-of-the-mining-sector-of-armenia*

15 Extractive Industries Transparency Initiative Armenia (EITI), Report 2020-2021, *https://www.eiti.am/en/annual-reports/2022*

16 European Commission, *https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials_en*

17 The Ministry of Territorial Administration and Infrastructures (2023, November 23), Information on the activity regarding the extractive of metallic minerals, *https://mtad.am/pages/extractive-industries-transparency-initiative?tab=1&slug=extractive-industries-transparency-initiative*

industry, based on the volume and the monetary value of its production in the region. An important note: Armenia does not process the copper but exports the concentrate (usually 25% of copper concentrate in the exported ore material). According to official data, total copper production yielded 357,966 tons in 2021 (62.5% contributed to the exports of metal products and accounted for 25.9% of total exports from Armenia in 2021).[18] Compared to copper, the amounts of other minerals extracted are significantly smaller. Switzerland accounted for the largest share of exports of copper concentrate from Armenia, followed by China and Bulgaria.

Contribution to GDP and relevant share of exports

The total share of mining in Armenia's overall economy is disputed. Despite official assurances about its importance, the share of the sector in the economy and the labor market is quite modest. Of the 20 presented industries of the Armenian economy, the mining and quarrying sector took 11th place, according to the sector's contribution to gross domestic product (GDP) in recent years. The average contribution of the sector to the GDP of Armenia from 2016 to 2021 was 3.57%. Compared to the three largest sectors of the economy, such as manufacturing, agriculture, and trade, the mining and quarrying sector generated approximately three times less gross value added.[19] The mining industry's presence in the labor market is very modest. According to the RA Statistical Committee, in terms of employment levels in the 21 sectors of the economy, the mining and quarrying sector ranked 16th in 2020 and 2021.[20] Although the mining sector does not provide high levels of employment or contribute significantly to the country's GDP, it ensures a large share of exports and foreign currency inflows for the country. According to United Nations (UN) Comtrade Statistics,[21] the shares of the mining sector in total exports for the years 2020 and 2021 were 41.5% (USD 998 million) and 42.8% (USD 1.23 billion), respectively.

Social and environmental problems of mining practice

Mining is also the most conflict-prone sector of the industry. Due to the lack of social and environmental responsibilities, mining activities are associated with significant pollution, which leads to serious health and economic problems. This, in turn, causes social tensions and even clashes[22] in the communities affected by mining. There are 21 tailing dams in Armenia, of which 13 are active. Almost all tailings are located in the Syunik and Lori

18 Extractive Industries Transparency Initiative Armenia (EITI), Report 2020-2021, *https://www.eiti.am/en/annual-reports/2022*

19 Statistical Committee of the Republic of Armenia, Volume of industrial production by sectors of types of economic activity, *https://www.armstat.am/file/doc/99533583.pdf*

20 Statistical Committee of the Republic of Armenia, Labor market, *https://armstat.am/file/doc/99528083.pdf*

21 UN Comtrade Statistics, *https://comtradeplus.un.org*

22 Bankwatch, Amulsar gold mine, Armenia, *https://www.youtube.com/watch?v=cuFZSDT8o3k*

provinces (north and south of Armenia). The Artsvanik dam is by far the largest of the active dams, comprising almost 75% of the total volume of all tailings in the country. The recently commissioned Teghut dam is also designed for large volumes. Other dams are much smaller.[23]

According to studies conducted by World Bank specialists,[24] none of the tailing ponds conform to international best practices in terms of either design or management. Importantly, all of the large tailing ponds are built using the uplift design. Reportedly, this design is unacceptable in earthquake-prone regions such as Armenia. The collapse of or accidents with existing tailings can have serious impacts and consequences, and they can cause human casualties, as some tailings are located directly above communities and other places where humans are active (e.g., organic agriculture, eco-tourism).

3. What regulatory legislation is in place regarding human rights?

Legislation

Armenia is a signatory of almost all environmental and climate conventions under the UN and the Council of Europe, including the Aarhus Convention,[25] which commits to ensure the provision of environmental information, public participation in environmental decision-making, and access to justice.

Armenia also has a well-developed regulatory framework, covering all areas of climate and environmental impacts.[26] However, implementation of the legislation has been quite weak, with limited capacity at the central and local government levels. In particular, poor quality, limited environmental impact assessments, and inadequate monitoring and inspection practices constitute serious legal and institutional problems, given the environmental impacts from extractive and other environmentally harmful activities. Moreover, there are

23 The World Bank (2016), Armenia: Strategic mineral sector sustainability assessment, Swedish Geological AB in association with SLR Consultants Ltd., Avag Solutions Ltd., American University of Armenia Center for Responsible Mining, American University of Armenia – Turpanjian Center for Policy Analysis, *https://www.eiti.am/file_manager/Useful%20materials/StrategicEng.pdf*

24 Ibid.

25 Convention on Access the Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, *https://unece.org/DAM/env/pp/documents/cep43e.pdf*

26 Mining Code, Laws on environmental impact assessment, flora and fauna, specially protected areas of nature, protection of atmosphere, water code, etc.

lots of loopholes in the legislation that allow mining companies and administrative bodies to avoid lawsuits or effective levels of public participation in decision-making processes.[27]

Participation in international policies

Armenia has been a member of the Extractive Industries Transparency Initiative (EITI) since 2017. The EITI is a global standard to promote the open and accountable management of natural resources and has 57 countries as members (as of May 2023).[28] The EITI Standard[29] requires the dissemination of information about the extractive industry value chain.[30] In particular, this includes regularly updated data on licenses and contracts; the beneficial owners of mining companies; the fiscal regime and legal amendments of mining legislation; the volumes of production, payments, and the allocation of revenues; as well as the contributions to the economy, including employment. This makes official and accurate information about the mining industry more accessible to the public.

It is clear that Armenia has an increasing focus on climate and environmental issues through the signing of the UN Framework Convention on Climate Change and the development of several strategies and plans. However, the level of actual implementation of the green transition of the economy remains insufficient, except for the renewable energy infrastructure and improvements in energy-efficiency systems.

Importantly, the Comprehensive and Enhanced Partnership Agreement (CEPA) was signed between Armenia and the EU in 2017 and brought into force in 2021. CEPA is a clear sign of Armenia's orientation toward the EU and will significantly increase political and economic collaboration.[31] European integration requires the approximation of policies and legislation to European standards. In some sense, this may also apply to EU legislation and policy regarding the Critical Raw Materials Act and Due Diligence policy[32] during the

27 United Nations Economic Council for Europe, Aarhus Convention Compliance Committee, compliance of Armenia with the Convention, *https://unece.org/env/pp/cc/accc.c.2009.43_armenia*; *https://unece.org/env/pp/cc/accc.c.2011.62_armenia*; *https://unece.org/env/pp/cc/accc.c.2016.138_armenia*

28 Extractive Industries Transparency Initiative Armenia (EITI), What is EITI?, *https://www.eiti.am/en/what-is-eiti*

29 The Standard of the Extractive Industries Transparency Initiative, *https://eiti.org/eiti-requirements-2019?fbclid=IwAR2yhKC0Y5oeHLVIWiaJIZKxjyjygDHBWWnbNVIfc2mjL4ia68e0a8F-hXN8*

30 Government Decree N 666 of June 8, 2018 on the procedure, terms and forms of submitting the public report related to mining, *https://www.arlis.am/DocumentView.aspx?DocID=132674*

31 Comprehensive and Enhanced Partnership Agreement (CEPA), *https://www.mfa.am/filemanager/eu/CEPA_ENG_1.pdf*

32 European Commission, Establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020, *https://eur-lex.europa.eu/resource.html?uri=cellar:903d35cc-c4a2-11ed-a05c-01aa75ed71a1.0001.02/DOC_2&format=PDF*

Photo: © Tehmine Yenokyan

trade of raw materials, contributing to somewhat socially and environmentally responsible extraction.

It is essential to point out the role of international financial institutions in the policy and legal developments of Armenia as well. However, the recently developed Mineral Sector Development Strategy of Armenia (financed by the World Bank) does not really address these objectives, which are thoroughly analysed in the report of the Heinrich Böll Foundation regarding gaps in the Armenian mining strategy.[33]

4. Challenges for implementation in the given authoritative context

The way mining operations are currently practiced in Armenia presents a classic dilemma between the prioritization of environmental issues, climate change, and social impacts and actual financial interests. The extractive industry is an important part of the Armenian economy, and the Armenian government is keen to attract foreign investments in the sector, which is seen as part of the reason behind the extensive of environmental impacts from the extractive industry[34] and the lack of public participation in decision-making.

In line with environmentally sound economic activity, health issues are the main «victims» of pollution due to large mining operations. The absence of sufficient efforts and political will to carry out the monitoring and assessment of health impacts due to mining is a significant obstacle for tackling environmental issues, which negatively impact public health and trigger large public protests against mining. Instead, different non-state academic institutions[35] carried out a study and developed a protocol for a thorough risk assessment in the contaminated regions of Armenia. It was found that the levels of arsenic were high in all samples, and the levels of lead, chromium, and cadmium were high in most of the

33 Heinrich Böll Foundation, Fundamental gaps and legal inconsistencies of the mineral sector development strategy of Armenia, *https://ge.boell.org/en/2024/03/25/fundamental-gaps-and-legal-inconsistencies-mineral-sector-development-strategy-armenia?fbclid=IwAR2gfPhGMop8fb7doo-q4y1y3SSp5lXBb4tKqIB0GAgm79H0JJD9GgAPr0RU_aem_AU9e75__6u5VoEbQ3NRySdUrm6lQ-C5YpS9rtviUl7aod2FfQ1qzB9zaXA798UZ7IiiruJgNPlgTPFVQgyVeMI0-Q*

34 European Union action to fight environmental crime, environmental crime in Armenia, *https://www.ecologic.eu/sites/default/files/presentation/2015/stefes-15-efface_environmental_crime_in_armenia_1.pdf*

35 American University of Armenia, School of Public Health, Center for Health Services Research and Development (2014), Akhtala pilot project on community empowerment, final report, Armenia, *https://www.ecolur.org/files/uploads/pdf/akhtalaeng.pdf*

samples.[36] Similar findings were made by other specialized institutions,[37] with special emphasis on the potential negative impacts of the Critical Raw Materials Act on the mining industry of Armenia. It is worth mentioning that the negative consequences resulting from the irresponsible social and environmental governance of mining influences women and children the most. This is due to health concerns and the lack of environmentally sound economic activity, resulting in environmental pollution in the area. The absence of proper legislation and deficiencies in the monitoring of health impacts are among the most serious human rights problems related to mining in Armenia.

In a nutshell, Armenia faces significant challenges relating to climate change and environmental issues. There is a need for urgent and competent actions to further develop approaches toward a green transition that go beyond mere strategy development, the adoption of legislation, or selling ore concentrate. Irrespective of some climate adaptation measures, such as the transition toward renewable energy, the main environmental and climate concerns have, up until now, not been adequately addressed. Among them are the negative and hazardous environmental impacts from the extractive sector due to outdated and poor technologies;[38] continuing deforestation, air pollution, and irresponsible management of water resources; and lastly a lack of proper public participation in decision-making and limited access to justice, despite the requirements of the Aarhus Convention.

Among the main problems to be addressed are the low levels of professional competence in central and local government bodies; systemic problems and lack of competence during environmental impact assessments and the issuing of mining licensing; combined with endemic and high levels of corruption in the mining sector.[39] Although climate adaptation and mitigation measures are integrated into national development policies and country-implementation reports, there is no system for assessing the effectiveness of different

36 AUA's experts assessed blood lead levels among children four to six years old and concluded that the health risks related to blood lead levels in children are much higher in mining-contaminated areas compared to others. Heavy metals in urine samples of residents living near the contaminated areas have also been determined by other international surveys, *https://arnika.org/en/publications/heavy-metals-in-urine-samples-from-residents-of-the-akhtala-amalgamated-community-located-in-the-mining-region-of-lori-province-armenia*

37 Armenia: Opportunity at the expense of a sustainable future?, *https://arnika.org/en/news/mineral-extraction-in-armenia-opportunity-at-the-expense-of-a-sustainable-future-part-one*

38 The World Bank (2016), Armenia: Strategic mineral sector sustainability assessment, Swedish Geological AB in association with SLR Consultants Ltd., Avag Solutions Ltd., American University of Armenia Center for Responsible Mining, American University of Armenia – Turpanjian Center for Policy Analysis, *https://www.eiti.am/file_manager/Useful%20materials/StrategicEng.pdf*

39 Transparency International (2017), Combating corruption in mining approvals – assessing the risks of 18 resource-rich countries, *https://images.transparencycdn.org/images/2017_CombattingCorruption-InMiningApprovals_EN.pdf*; Transparency International Anti-Corruption Center (2017), Assessment of corruption risks in Armenia, *https://transparency.am/en/publication/114*

measures undertaken by the government toward the green transition of the economy, nor are there criteria to estimate the negative impacts of mining practice on climate resilience.

5. Access to justice for environmental defenders and strategic lawsuits against public participation – SLAPP cases

As mentioned above, Armenia joined the Aarhus Convention in 2001. However, all three pillars of the Convention are not yet being duly respected. There is a long history of fighting against illegal mining practice, corruption, and the lack of proper state monitoring and inspection of mining activities in Armenia.[40] However, civil society organizations and community members have not been successful in their struggles because of a highly ineffective judicial system and «her majesty» corruption. Despite strong evidence of outrageous legal infringements during the permitting process of mining operations or in the operational stages, in a variety of cases courts fail to prove the case of environmental organizations, and even the affected community members do not have a legal standing to file a lawsuit. It took many years of judicial proceedings and appeals for environmental organizations to even gain the right to access justice, which was later suspended due to a change in the Law on Non-Governmental Organizations.[41]

Armenian civil society organizations launched multiple applications to the Aarhus Convention Compliance Committee,[42] arguing for violations of the convention, including the right to access to justice. However, in practice the findings and recommendations of this UN body perceived to be a «soft law» that did not have the instruments to coerce the implementation of recommendations and did not lead to substantial changes in practice.

The campaign[43] failed, as did multiple lawsuits of environmental organizations and activists arguing for the legality of permitting for the exploitation of Teghut copper-molybdenum

40 Amirkhanyan, A. (2018, June 1), State governance failures in mining lessons and Armenia's future, *https://evnreport.com/raw-unfiltered/state-governance-failures-in-mining-and-lessons-for-armenias-future*

41 Mining Legislation Reform Initiative, Analysis of court cases related to mining and environmental issues, *https://crm.aua.am/files/2019/05/Court_Case_Analysis_Eng.pdf*

42 UN Economic Commission for Europe, Aarhus Convention Compliance Committee, Findings and recommendations for Armenia, *https://unece.org/env/pp/cc/accc.c.2009.43_armenia*; *https://unece.org/env/pp/cc/accc.c.2011.62_armenia*; *https://unece.org/env/pp/cc/accc.c.2016.138_armenia*

43 Civilnet (2014, September 26), Teghut: A contentious Danish investment in Armenia, *https://www.civilnet.am/en/news/390858/teghout-a-contentious-danish-investment-in-armenia*

mine[44] in the northern part of Armenia. The court found that environmental organizations do not have legal standing to file a lawsuit.[45] Consequently, socially and environmentally irresponsible exploitation led to irreversible damage to the population and the entire area.[46]

Another judicial process with regard to the Amulsar gold mine in central Armenia has been underway since April 2015.[47] Members of local communities and environmental organizations disputed the legality of the permit in court. The mining operation will have serious long-standing negative impacts on strategic water resources, the economic activities of communities, as well as the Emerald Network sites, which are protected by the Bern Convention on the Conservation of European Wildlife and Natural Habitats.[48] Despite the judicial process, the government is pushing the project involving Russian state funding[49] for the operation of the Amulsar mine.[50] There has been no hesitation about the possibility of an unfavorable finding by the court. This indicates that, even after fighting for the right to access justice, judicial practices are not effective. The mining company, in turn, files strategic lawsuits against public participation (SLAPP), with about 20 lawsuits having been filed against community members, journalists, and activists.[51] The largest mining company, Zangezour Copper Molybdenum Combine, also joined the «club» to launch the SLAPP lawsuits against activists. As stated by the Coalition for Human Rights in Development with regard to the pursuits of environmentalists and activists, «dozens of local activists have been harassed, smeared, threatened.»[52]

44 Civilnet, Ecological, legal and economic collapse, *https://www.civilnet.am/en/news/383453/teghut-ecological-legal-and-economic-collapse*

45 American University of Armenia, Center for Responsible Mining (2016, December), Analysis of court cases related to mining and environmental issues, *https://crm.aua.am/files/2019/05/Court_Case_Analysis_Eng.pdf*

46 Hetq Investigative Journalists (2017, October 18), The environmental disaster in Teghut no longer possible to cover up: Denmark pulls out from the mine, *https://hetq.am/en/article/82763*

47 Green Armenia NGO, Amulsar court cases, *https://green-armenia.org/en/news/Amulsar%20court%20cases*

48 Council of Europe, the Amulsar gold mine project and its impacts on Emerald Network sites, *https://www.coe.int/en/web/bern-convention/-/the-amulsar-gold-mine-project-and-its-impacts-on-emerald-network-sites*

49 Hetq Investigative Journalists (2024, January 18), Armenia approves deal to restart controversial Amulsar gold mine project, *https://hetq.am/en/article/163621*

50 Open Democracy, The UK spent years lobbying for this Armenian goldmine. Now Russia is funding it, *https://www.opendemocracy.net/en/odr/armenia-amulsar-lydian-gold-mine-uk-russia-edb-bank*

51 Civil Society Institute Armenia, Amulsar gold mine: A test for Armenian democracy, a human and environmental failure for development banks, *https://www.csi.am/hy/node/22464*

52 Coalition for Human Right in Development, Wearing blinders: How development banks are ignoring reprisal risks, *https://rightsindevelopment.org/wp-content/uploads/securepdfs/Wearing-blinders-v6.pdf*

6. Conclusions and recommendations

There are systemic gaps in the legal and institutional systems of Armenia regarding the proper implementation of environmental and social assessments of mining projects. Even though Armenia has been party to the Aarhus Convention for several decades, there is a lack of access to environmental information, a lack of public participation in decision-making for environmentally sound projects, and a lack of access to justice. In contrast, the recently adopted mining strategy, which reportedly should address the environmental and social challenges, significantly failed to resolve them and even worsened existing challenges. As a consequence, socially and environmentally irresponsible practices in mining create permanent intercommunity conflicts between the residents of affected communities[53] and human rights infringements in the affected communities. In regard to this, the Government of Armenia shall conduct legal and institutional reforms to ensure:

- Enrichment of the mining industry with technological standards that are in line with EU standards.
- Integration into the legal and political system of the EU, and the establishment of similar social and environmental requirements for the mining industry.
- Both direct and non-direct suppliers shall be controlled under the EU's due diligence criteria in accordance with the Critical Raw Materials Act and corresponding policy. In other words, the social and environmental standards of «resource countries» in the Eastern Neighborhood shall be compatible with the EU's policy requirements.
- Effective engagement of all stakeholders, including environmental organizations; the affected communities shall partake in decision-making processes when granting mining licenses, as well as the inspection and monitoring processes of mining operations. This can improve the environmental and social sustainability of mining projects, enhance the social licensing of projects, and mitigate conflicts.

53 Bankwatch, Amulsar gold mine, Armenia, *https://www.youtube.com/watch?v=cuFZSDT8o3k&t=1s*

Agarak, Hovit 1 tailings dump

Photo: © Tehmine Yenokyan

Johanna Sydow and Annette Kraus

The global race for resources – a closer look at the policies of the EU

The demand for raw materials is already immense, but it has seen a massive increase in recent years. According to *2021 data from the International Energy Agency*, by 2040 the global demand for rare earths is expected to grow sevenfold, and for lithium more than 40-fold. Forecasts on the demand for other raw materials, such as copper and cobalt, also show dramatic increases. Key drivers are growing economies, the mobility sector, the building sector, and also the energy transition.

This rising demand is being taken up at the political level. The topic of raw materials has been steadily moved up the political agenda at the same time that approaches to secure supply have drastically changed. Since the start of Russia's war of aggression against Ukraine, the main aim of many industrialized countries has been to become less dependent on Russia and China and to diversify their sources of supply, having now learned the lesson about being too dependent on one state. The striving for more independence from China implies massive geopolitical consequences as countries – as well as the European Union (EU) – look for new partners to secure their supply and new measures are developed and implemented. This has implications for Eastern Europe but also for Latin America and Africa.[1]

Many new initiatives have emerged at the global and national levels, and industrialized countries are try to make their claim on raw materials outside of China. With the slogan «the race is on,» European Commissioner Ursula von der Leyen announced the Critical Raw Materials Act (CRMA) on March 16, 2023. The new law is designed to improve Europe's access to critical metals and minerals by diversifying supply. It was launched together with the *EU NET Zero Industry Act* and can be seen as a European answer to the US Inflation Reduction Act. In the context of the US Inflation Reduction Act, the Minerals Security Partnership was also created. The Partnership includes many different countries that are looking to secure their access to raw materials, and it uses different kinds of tools and types of cooperation frameworks. Many more initiatives and legislations could be mentioned here. The sheer number of initiatives gives an impression of the intensity of the competition to obtain these mineral and metal resources, while oftentimes turning a blind eye to the impacts and challenges created by resource extraction in resource-rich countries.

1 For example, it is hard to miss how many delegation trips the German government has made to Latin America in the past year up to now. Latin America is not the only focus of interest, however: The EU has also begun to conclude partnerships with Namibia, Ukraine, Chile, Argentina, and Serbia among, others.

As the countries and impacts of extraction showcased in this report are in the neighborhood of the EU – and, with the exception of Armenia, in various stages of the EU accession process – we take a closer look at the relevant EU policies.

The EU Critical Raw Materials Act – the first EU law to strengthen security of supply for the EU

The CRMA was first presented on March 16, 2023, by the European Commission and entered into force on May 23, 2024 – an astoundingly short period for an EU regulation.

The Act aims at diversifying the supply of specific raw materials for the EU, namely critical raw materials. Economically, these are the most important raw materials, whose supply is at high risk, in addition to being strategic raw materials because they are indispensable for many key EU projects geared toward the economy and society. Although the first category – though contentious and defined differently by the EU and the United States – has existed for many years within EU policy, the latter category was introduced only in the context of the CRMA. «Strategic» raw materials are defined as raw materials that are in high demand and often used in strategic industries. By now 17 raw materials have been named in this category and include: a) bauxite/alumina/aluminum, (b) bismuth, (c) boron — metallurgy grade, (d) cobalt, (e) copper, (f) gallium, (g) germanium, (h) lithium — battery grade, (i) magnesium metal, (j) manganese — battery grade, (k) graphite — battery grade, (l) nickel — battery grade, (m) platinum group metals, (n) rare earth elements for permanent magnets, (o) silicon metal, (p) titanium metal, and (q) tungsten.

In the context of the general diversification of supply, the CRMA also strives to increase the EU's capacity. It formulates the following benchmarks for 2030: 1) At least 10% of the EU's annual consumption for extraction shall be mined in the EU, 2) at least 40% of the EU's annual consumption shall be processed in the EU, 3) at least 25% of the EU's annual consumption shall come from recycled materials that are recycled in the EU. Moreover, no more than 65% of the EU's annual consumption shall come from a single third-country. Summing up, it aims at strengthening mining, processing, and recycling within and outside of the EU to secure its supply and become more independent from China. International trade is key to supporting global production and ensuring the diversification of supply.

The main two instruments to diversify the supply of strategic and critical raw minerals are strategic projects and strategic partnerships. Moreover, a *European Critical Raw Materials*

Board will be composed of EU countries and the Commission to advise and coordinate the implementation and measures set out by the Act, among other EU strategic partnerships.[2]

What are strategic partnerships and what do they mean for the South Caucasus and the Western Balkans?

Strategic partnerships are non-binding instruments. They are defined in *Article 2.62* as follows: «‹Strategic Partnership› means a commitment between the Union and a third country, or Overseas Countries and Territories (OCT) to increase cooperation related to the raw materials value chain that is established through a non-binding instrument setting out concrete actions of mutual interest, which facilitate beneficial outcomes for both partners.» These partnerships are not a new instrument but are now defined more clearly in the CRMA and integrated into an overall strategy. The first step of each strategic partnership is a Memorandum of Understanding, followed by a joint Road Map. As of July 2024, partnerships have been formed with Argentina, Australia, Canada, Chile, the Democratic Republic of the Congo, Greenland, Kazakhstan, Namibia, Norway, Rwanda, Ukraine, and Zambia, and the EU has signed a Memorandum of Understanding with Serbia. There have been concerns that the process of defining the content of the partnerships is not transparent and that civil society is not adequately consulted.

Partnerships can play different roles. They can shape the path for strategic projects in the partner countries for the EU and enable closer cooperation on different levels, such as through capacity-building, value creation, etc. Even if the CRMA highlights the importance of mutual interests and of value addition in partner countries in general, *a report* drawing on cases in South Africa, Namibia, and Chile, among others, and findings by IRENA have found that the concept of value addition is very vague, and negotiating partners might have different perspectives on this. In this context, it remains important to say that mere processing at the place of extraction might not always be lucrative and can also result in severe impacts.

What are strategic projects and how are they selected?

Strategic projects are a key element of the *EU Critical Raw Materials Regulation*. Companies can apply for their planned project in the context of extraction, processing, or recycling to obtain the status of a strategic project. Within the EU, these projects will be treated with priority, and the CRMA defines timelines to accelerate the approval process.

2 The board also entails different working groups, into which external actors such as civil society can be included.

Projects outside of the EU are also eligible. In this context, the Commission intends to assist projects in «coordinating the finance,» including the possibility of support through the European Investment Bank group or the European Bank for Reconstruction and Development.

After companies have applied to obtain strategic project status, the European Critical Raw Materials Board – composed of representatives of all member states – will assess the applications and make a recommendation to the Commission. The assessment will take place on the basis of the *United Nations Framework Classification of Resources*. The framework establishes three main criteria for assessment: socio-economic viability, technical feasibility, and degree of confidence (the degree to which the quantity and quality of the resource are known and verified). There are concerns that the criteria may neutralize each other in the overall evaluation, for instance leading to the equal rating of a project with expected high financial gains and low environmental feasibility with a project that has lower expected profits but higher environmental feasibility.

The first batch of applications will be submitted in August 2024. It remains to be seen what projects will be selected and how the implementation will be taken forward.

Does the Critical Raw Materials Act strengthen human rights and environmental standards?

Unfortunately, the CRMA includes only weak provisions to ensure human rights and environmental protection. However, within the EU, all EU regulations need to be followed.

Outside the EU, the Guidelines for Multinational Enterprises issued by the Organisation for Economic Co-operation and Development and the United Nations Guiding Principle apply as global norms as well as the EU Batteries Regulation and the Corporate Due Diligence Regulation when EU companies source these minerals or import them directly or via products. Yet, the minimum sustainability criteria for a strategic project outside of the EU, apart from the local regulations of the project country, can already be reached by a company by committing that the project is certified or will be certified. Although the CRMA mentions some minimum fitness criteria for these certification schemes that have to be accredited by the EU, this was critiqued strongly by civil society. NGOs see a huge risk in this overreliance on certification schemes, highlighting their individual and structural shortcomings.[3]

3 *https://www.germanwatch.org/en/85063* and *Limiting environmental damage, human rights abuses and Indigenous Peoples' rights violations: Civil society guidelines for the implementation of the EU Critical Raw Materials Regulation – EU Raw Materials Coalition (eurmc.org)*

Are there any other relevant EU instruments to be used to prevent human rights abuses and environmental destruction when the EU imports the minerals?

The *EU Corporate Sustainability Due Diligence Directive (CSDDD)*, which was adopted in May 2024, obliges member states to form legislation for corporate responsibility for human rights and environmental impacts along their supply chains. This obliges companies to conduct human rights and environmental due diligence along the entire supply chain. It includes a risk assessment – up to and including the mine – and mitigation measures if human rights and environmental risks are found and, as a last resort, requires exiting a project. Even if the directive, which has to be transposed by member states into national legislation, has lost some critical elements in the process, companies will have to be held responsible for their business activities to some extent. The finance sector, which would have had significant leverage, was mainly left out of the regulation, and it only applies to companies that have more than 1,000 employees on average and a net worldwide turnover exceeding EUR 450,000,000. The coming years will show how helpful more corporate accountability can be in this sector. Undoubtedly, weak rule of law poses huge challenges, also with regard to requirements.

A regulation that is receiving much less attention but that can be relevant for the extractive sector is the EU Batteries Regulation. It poses environmental and social due diligence requirements for cobalt, lithium graphite, and nickel for batteries imported into the EU market. If these requirements are not adhered to, the product shall not be allowed to enter the EU *market*. These requirements deserve much more visibility, as it can be assumed that some of the emerging projects might not be in compliance with the standards, leading to obstacles for accessing the European market. Provided with the necessary information, civil society can point out these requirements. The final implementation guideline of this regulation is still in the making.

What is the way forward?

The amount of critical and strategic raw materials needed for the socio-ecological transition, digitalization, as well as the transport and buildings sectors is vast. These materials are therefore highly sought after by competing industrialized countries. It is therefore crucial that the consumption of primary metals and minerals be reduced wherever possible. Mining is, by definition, not sustainable. Any increase in mining tends to come with an increase in impacts on the environment and human rights.

The recycling benchmark of at least 25% of the EU's annual consumption is one way toward this goal. In Germany, the draft National Circular Economy Strategy proposes a per capita/ year reduction of consumption to 8 tons (raw material consumption) by 2045

from about 16 tons today. Obviously, this can only be reached if political capital is invested. For this, smart measures – such as the expansion of public transport systems and smaller and fewer cars – have to be put forward. This will help to reduce the demand in one of the most demanding sectors for raw materials consumption in Germany: the transport sector, alongside the building sector.

Moreover, there are areas where no mining should take place. Spatial planning is required, and the population needs to be involved. There must be regions – such as the unexplored deep sea, headwater regions, and particularly biodiverse areas – that are protected from mining activities.

For the primary metals and minerals that will be sourced, the first and foremost principle should be that the rule of law is held up by all actors concerned. This may mean that countries with weak governance and rule of law cannot be seen to be fit as potential partners.

The EU and its member states have a responsibility to achieve decarbonization, and at the same time to respect and foster human and social rights as well as protect the environment and climate.

Authors

Katja Giebel works at the Heinrich Böll Foundation Berlin as senior program manager for the Western Balkans, division of East and South East Europe. In recent years, her work has focused on political advocacy for EU enlargement of the WB6 and strengthening of progressive actors in the region. Previously she had worked on South Caucasus and feminist programs. She holds a Master's degree in Eastern European Studies, Sociology and Literature.

Artur Grigoryan is a researcher and chair of ethics committee of the Transparency International Anticorruption Centre. He is also the president and programme coordinator at EcoRight Armenia, an NGO that works to hold the mining companies working in Armenia accountable for the negative impacts their activity has on the society, public health and biodiversity.

Kety Gujaraidze has worked for over 20 year for environmental protection in Georgia. She has experience in non-governmental work at Green Alternative Georgia as well as governmental work in the office of the Parliamentary Committee on Environmental Protection and Natural Resources as well as the Environmental Policy Department of the Ministry of Environmental Protection and Natural Resources of Georgia. She holds MSc degrees of the Tblisi State University and the Lund University (Sweden).

Majda Ibraković holds a Bachelor in geography and is currently a master's student in Degrowth: Ecology, Economy and Policy at the Universidad Autónoma in Barcelona. She was a coal phase-out campaigner and an advocate of a clean energy transition. Presently she coordinates 40 network members at Eko Forum Zenica, Bosnia and Hercegovina.

Annette Kraus works at the International Environmental and Climate Policy Division at the Heinrich Böll Foundation. She holds an M.A. in Linguistics and has worked in Hungary and Bosnia and Herzegovina. Her work focus has been on international resource governance and politics for more than ten years.

Predrag Momčilović holds a degree in spatial planning (University of Belgrade) and is currently working on his PhD on political and social ecology. Since 2014 he has been a journalist for the Mašina online portal and the executive director of the Centre for Green Politics (Serbia) since 2022.

Ratko Pilipović is a graduate of the Faculty of Law in Banja Luka and has worked in various legal fields such as refugee issues and labor rights. For the last 12 years he has dedicated himself to environmental protection and is a co-founder of the Aarhus Centre Banja Luka, which regularly monitors the implementation of environmental protection regulations.

Johanna Sydow heads the International Environmental and Climate Policy Division at the Heinrich Böll Foundation. Her fieldwork on mining in Ghana, Peru and Ecuador (2009-2013) turned her into an advocate for the reduction of raw materials consumption and for binding rules for companies. From 2014 to 2022, she was Senior Advisor for Resource Policy at Germanwatch.

Tehmineh Yenoqyan is an independent journalist, co-founder and president of the NGO Green Armenia, active in environmental education. She has made several documentary films on operational tailing dams in Armenia.

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Concept and contact: Katja Giebel, East and South East Europe Divison **E** giebel@boell.de
Johanna Sydow, International Environmental and Climate Policy Division **E** sydow@boell.de
Reviews: Jasminka Bjelavac, Tibor Moldvai, Tako Antidze, Mkrtich Dallatyan, Annette Kraus, Katja Giebel, Johanna Sydow
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