Journal of Socio-Environmental Law
Dossier "Territorialities and Socio-Environmental Conflicts".
jul./dec. 2025

How to cite this article:

COELHO, Tádzio Peters; SANTOS, Alice Grazielle Baru. The legal framework for lithium and strategic minerals in Brazil: between the impositions of the energy market and popular control. **Journal of Socio-Environmental Law - REDIS**, Morrinhos, Brazil, v. 3, n. 02, jul./dec., 2025, p. 18-40.

Submission date: 15/10/2025

Approval date: 06/12/2025

THE LEGAL FRAMEWORK FOR LITHIUM AND STRATEGIC MINERALS IN BRAZIL: BETWEEN THE IMPOSITIONS OF THE ENERGY MARKET AND POPULAR CONTROL

O MARCO LEGAL DO LÍTIO E DOS MINERAIS ESTRATÉGICOS NO BRASIL: ENTRE AS IMPOSIÇÕES DO MERCADO ENERGÉTICO E O CONTROLE POPULAR

EL MARCO LEGAL DEL LITIO Y DE LOS MINERALES ESTRATEGICOS EN BRASIL: ENTRE LAS IMPOSICIONES DEL MERCADO ENERGÉTICO Y EL CONTROL POPULAR

TÁDZIO PETERS COELHO[1]
ALICE GRAZIELLE BARU SANTOS[2]

ABSTRACT

The objective of this research is to analyze the institutional initiatives of Brazilian political representatives - including presidents, federal deputies and senators - regarding lithium mining in Brazil. We seek to understand how these authorities have influenced the extraction and management of this mineral resource. The research also investigates the possible gaps and challenges in the implementation of proposed federal public policies, seeking to understand the obstacles that can compromise the effectiveness of the measures adopted, as well as the guarantee of the preservation of natural assets, the distribution of generated resources and the democratization of decision-making. For this, the present research adopts a mixed qualitative approach, combining elements of documentary and descriptive research. The data collection is carried out on official bases, such as the Official Gazette of the Union and the website of the Chamber of Deputies. The analysis of data is done through documentary analysis techniques, in order to identify patterns and trends in policies, guided by criteria of thematic emphasis related to strategic minerals, focusing on lithium. We conclude that most

[1] Professor in the Department of Social Sciences (DCS) and in the Graduate Program in Geography at the Federal University of Viçosa (UFV). PhD in Social Sciences from the State University of Rio de Janeiro (UERJ). Contact email: tadzio@ufv.br. CV: http://lattes.cnpq.br/8659337287104555. ORCID: https://orcid.org/0000-0001-8770-8893.
[2] Undergraduate student in Social Sciences at the Federal University of Viçosa (UFV). Email: alice.grazielle@ufv.br. CV: http://lattes.cnpq.br/8718287305862658.

initiatives act as an incentive and facilitator of lithium extraction, without effective social control and robust mechanisms for environmental and social protection. In general, the measures adopted prioritize market action in lithium extraction, centralizing decision-making power in mining companies.
Keywords: Lithium. Mining. Legal Framework. Energy Transition.

RESUMO

O objetivo desta pesquisa é analisar as iniciativas institucionais de representantes políticos brasileiros – incluindo Presidentes da República, deputados federais, estaduais e senadores – no que se refere à mineração de lítio no Brasil. Busca-se compreender como essas autoridades têm influenciado a extração e a gestão desse recurso mineral. A pesquisa investiga também as possíveis lacunas e os desafios na implementação das políticas públicas federais propostas, procurando entender os obstáculos que podem comprometer a eficácia das medidas adotadas, bem como a garantia da preservação dos bens naturais, da distribuição dos recursos gerados e da democratização do processo decisório. Para tanto, a presente pesquisa adota uma abordagem qualitativa mista, combinando elementos de pesquisa documental e descritiva. O levantamento de dados é realizado em bases oficiais, como o Diário Oficial da União e o site da Câmara dos Deputados e Senado. A análise dos dados se dá por meio de técnicas de análise documental, com o intuito de identificar padrões e tendências nas políticas, guiada por critérios de ênfase temática relacionados aos minerais estratégicos, com foco no lítio. Concluímos que a maioria das iniciativas funciona como incentivo e facilitadora da extração de lítio, sem um controle social efetivo e mecanismos robustos de proteção ambiental e social. Em geral, as medidas adotadas priorizam a atuação do mercado na extração de lítio, centralizando o poder de decisão nas empresas mineradoras.
Palavras-chave: Lítio. Mineração. Marco Legal. Transição Energética.

RESUMEN

El objetivo de esta investigación es analizar las iniciativas institucionales de representantes políticos brasileños - incluyendo presidentes de la república, diputados federales y senadores - en lo que se refiere a la minería de litio en Brasil. Se busca comprender cómo estas autoridades han influido en la extracción y gestión de este recurso mineral. La investigación investiga también las posibles lagunas y los desafíos en la implementación de las políticas públicas federales propuestas, tratando de entender los obstáculos que pueden comprometer la eficacia de las medidas adoptadas, así como la garantía de la preservación de los bienes naturales, la distribución de los recursos generados y la democratización del proceso decisorio. Para ello, la presente investigación adopta un enfoque cualitativo mixto, combinando elementos de investigación documental y descriptiva. La recogida de datos se realiza en bases oficiales, como el Diario Oficial de la Unión y el sitio de la Cámara de Diputados. El análisis de los datos se realiza mediante técnicas de análisis documental, con el fin de identificar patrones y tendencias en las políticas, guiada por criterios de énfasis temático relacionados con los minerales estratégicos, con enfoque en el litio. Concluimos que la mayoría de las iniciativas funcionan como un incentivo y facilitador de la extracción de litio, sin un control social efectivo y mecanismos robustos de protección ambiental y social. En general, las medidas adoptadas priorizan la actuación del mercado en la extracción de litio, centralizando el poder de decisión en las empresas mineras.
Palabras clave: Litio. Minería. Marco Legal. Transición Energética.

INTRODUCTION

In light of the growing debate on the climate crisis and the urgent need to reduce greenhouse gas emissions, governments, companies, and society have placed the transformation of the energy matrix at the center of public discussion. This transformation is viewed as an essential and innovative solution for renewing energy systems. More than a response to current environmental problems, the energy transition has been associated with a discourse of sustainability and economic development. However, although the shift toward so-called "green" energy sources is often seen as a promising solution to address the climate crisis, it is essential to recognize that these changes are not free from criticism and challenges. The infrastructure associated with the energy transition, as well as the dependence on strategic minerals such as lithium and rare earth elements, has raised concerns about impacts on local communities and the unequal distribution of energy benefits and environmental burdens. The mineral extractive sector, identified as essential to the energy transition, has increasingly proven to exacerbate violence and inequalities.

A study by the Global Environmental Justice Atlas identified 3,479 cases of environmental conflict (as of July 2021), of which at least 323 were related to the extraction of strategic minerals for the energy transition (Grego, 2023). Among these minerals, lithium stands out due to its importance in the manufacture of lithium-ion batteries, which are essential for energy storage and the production of electric vehicles. However, lithium mining can intensify socio-environmental conflicts, cause environmental degradation, and lead to the displacement of local communities, thereby deepening tensions and negative impacts in these regions.

The Brazilian State plays a fundamental role in driving demand and structuring production to consolidate the new "green" market, being responsible for creating legislation, incentive policies, limits, and regulatory frameworks. However, this role often unfolds in partnership with the private sector and under pressure from transnational capitalism, which may reflect a dynamic of facilitating corporate interests (Packer, 2012). At the same time, the State is expected to act as a protector of territory and people. In this context, it is essential to analyze government policies related to the energy transition, particularly with regard to lithium mining, in order to understand how political authorities at the federal level have dealt with the exploitation of this mineral in Brazil, as well as the challenges associated with it.

The main objective of this research is to analyze the institutional stance of Brazilian political authorities—including Presidents of the Republic, state and federal deputies, and senators—regarding lithium mining in Brazil. The study seeks to understand how these authorities have influenced the exploitation and management of this mineral resource. It investigates potential gaps and challenges

in the implementation of proposed federal public policies, aiming to identify obstacles that may compromise the effectiveness of adopted measures, as well as the preservation of resources and the fair distribution of generated benefits.

This research adopts a mixed qualitative approach, incorporating elements of documentary and descriptive research, with the aim of understanding the dynamics of lithium mining in Brazil and the relationship between federal political authorities and this activity. This methodological choice allows for an analysis that combines data collection, description, and critical interpretation of relevant documents. Data collection was conducted through the selection of materials from official databases, such as the Federal Official Gazette (*Diário Oficial da União*) and the websites of the Chamber of Deputies and the Federal Senate. The analysis employed documentary analysis techniques to identify patterns and trends in the formulated policies, guided by criteria emphasizing thematic relevance to strategic minerals, with a specific focus on lithium.

1 ENERGY TRANSITION

The energy transition (ET) is a process of transformation of the current energy system aimed at reducing dependence on highly polluting fossil fuels and lowering carbon dioxide (CO_2) emissions. The energy transition therefore seeks to promote a change in the energy matrix by replacing non-renewable fossil fuels—such as coal, oil, and natural gas, mainly associated with industry and transport—with renewable and low-carbon energy sources (such as solar and wind power). In addition, it sustains the discourse of a more sustainable economy, a concept that many authors now consider empty or outdated. As pointed out by Alonso (2018), sustainability within the energy transition lies in the mitigation of negative externalities (Alonso, 2018).

The energy transition should be more than a simple change in energy sources; it should be a collectively driven process in which the role of society outweighs that of corporations. This approach recognizes and takes into account the specific characteristics of productive and social systems in each region, their needs, and the particular capacities of each community (Alonso, 2022). As emphasized by Alonso (2022), it is essential to adapt energy strategies to each reality and context in order to ensure a just transition.

From the political and economic perspective of wealthier and more developed countries, the vision of the energy transition is generally guided by a corporate approach, such as the “Green New Deal” (packages of reforms aimed at decarbonization and job creation, with the goal of achieving net-zero carbon emissions by 2050). In this context, energy is reduced to a market dimension, giving rise to what has been termed “green capitalism.” Under this view, the energy transition is not seen as a

response to the climate crisis, but rather as an opportunity for the expansion of capitalism and its inequalities, in which environmental concern is monetized. For this reason, researchers have denounced this approach as "greenwashing," especially with regard to mining, which has used the energy transition and sustainability discourse to regain credibility lost due to numerous disasters associated with the sector (Campello et al., 2024).

The production of essential technologies used in the energy transition—such as lithium-ion batteries, solar panels, and wind turbines, among others—requires the use of minerals known as strategic (or critical) minerals. These minerals play a fundamental role in enabling the energy systems that drive the energy transition. However, the growing demand for these minerals—such as lithium, cobalt, rare earth elements, and copper—raises serious concerns regarding the environmental and social impacts associated with this transformation.

These concerns become even more evident when considering that, in order to meet the goals of the Paris Agreement, demand over the next two decades is expected to increase by more than 40% for copper and rare earth elements, 60% for nickel, 70% for cobalt, and 90% for lithium (IEA, 2021; Santos, 2022). If the transition is completed by 2050, lithium demand could reach 280% of current global reserves (Aronoff et al., 2020). This sharp increase in lithium demand highlights the strategic importance of this mineral in the process of transitioning energy matrices.

Among more than fifteen strategic elements, lithium stands out as one of the most important minerals for the energy transition due to its potential for energy storage, particularly in lithium-ion batteries. Its application in electric vehicle propulsion has also been crucial in reducing dependence on fossil fuels and, consequently, greenhouse gas emissions in the transport sector. In addition, lithium enables energy storage in households, businesses, and electricity grids (solar and wind).

Lithium is a metal known for its high specific heat, which makes it efficient in heat transfer. It also has high electrochemical potential and high energy density, characteristics that make it especially useful in the manufacture of electric batteries (Borges, 2019). This mineral is not found in its elemental form in nature and generally occurs in chemical compounds. Its main occurrences are in evaporites (sedimentary rocks) and pegmatites (igneous rocks). These two types of deposits account for most available lithium sources, representing 62% and 26%, respectively (Borges, 2019). The lithium-bearing minerals with economic extraction potential include spodumene ($LiAlSi_2O_6$), with a lithium content of approximately 3.7%, and petalite ($LiAlSi_4O_{10}$), with lithium content ranging from 1.6% to 2.27% (British Geological Survey, 2016).

2 CRITERIA FOR THE ANALYSIS OF LEGISLATION

As previously discussed, lithium mining in Brazil is an activity of growing economic and strategic importance, particularly in the context of the energy transition. To assess how Brazilian political authorities have addressed this issue, it is essential to define a set of analytical criteria. In this regard, drawing on the Projeto Brasil Popular (2023), the following criteria are presented for the evaluation of legislative initiatives.

2.1 Common goods

The concept of common goods is central and refers to the guarantee of sovereignty over assets controlled by the population, particularly by traditional communities. These resources and values are assessed according to the benefits they generate for the collective, including air, nature, culture, and language, as well as their preservation. As they are not conditioned by financial returns, they must be used in ways that ensure their collective and long-term use, which requires avoiding intensive exploitation. Common goods must be accessible to all, enabling everyone to enjoy their resources and benefits. Inclusion and equity are therefore essential to ensure that no one is excluded and that all can democratically participate in decisions concerning these goods.

In the mining sector, it is fundamental to establish mechanisms for direct, free, and informed consultation with affected populations prior to the implementation of large-scale mining projects, especially those that significantly interfere with local social structures. As has already occurred in some countries, communities should have the right to say “no.” Brazilian legislation currently lacks legal mechanisms specifically aimed at institutionalizing Mining-Free Territories (Territórios Livres de Mineração – TLM), although there are similar legal categories that impose restrictions—often disregarded in practice—on mining activities, such as Indigenous Lands, National Parks, Extractive Reserves, and Border Areas. Mining-Free Areas would therefore constitute a new legal category.

2.2 Equality and diversity

In Brazil, inequality is historical and structural, manifesting itself in multiple forms of exclusion and discrimination. Equality serves as a guiding principle for policy formulation, particularly because it contributes to combating exclusion by promoting social inclusion and fair distribution. The objective is to overcome conditions of oppression and to establish new relationships among individuals and peoples.

The promotion of equality must be central to the formulation of public policies, creating conditions that ensure access to opportunities and resources for all, while guaranteeing respect for diversity. In this sense, mineral extraction policies should seek to address and reduce economic, regional, racial, and gender inequalities.

2.3 Democracy, participation, and autonomy

These concepts are fundamental to the construction of a State that goes beyond the role of a mere service provider. The State should primarily act as a guarantor of rights, committed to the self-determination of peoples and to the construction of an egalitarian society.

Democracy is understood as a process of popular participation in which citizens have an active voice in decisions that affect their lives and communities. To this end, in addition to civil society participation, mechanisms of transparency and social control are required. Autonomy, in turn, refers to the capacity of individuals and communities to exercise decision-making power. This implies the decentralization of power and the strengthening of local governance structures, while respecting cultural and social diversity.

3 REGULATORY MEASURES

Government regulation should responsibly guide mining activities, especially at this moment of intense strategic mineral exploration. Decrees, bills, and other regulatory measures shape the scenario, directly affecting the socioeconomic and environmental contexts of the involved regions. Therefore, this section will examine the main decrees, legislations, and other measures adopted by political authorities at the federal level related to lithium mining in Brazil. We will analyze their scope, efficiency, and potential implications for the energy transition, as well as their effects on local populations and communities, according to the presented criteria.

For the analysis of regulatory measures related to lithium mining in Brazil, it is essential to classify the measures adopted. This process aims to categorize the different regulatory approaches regarding sector development, providing a foundation to better understand the authorities' actions. By classifying and identifying these measures, it will be possible to evaluate their effectiveness in regulating lithium mining, in accordance with the criteria and principles of the Projeto Brasil Popular.

3.1 Legislative proposal no. 1,992/2020

This legislative proposal is under consideration in the Legislative Assembly of the State of Minas Gerais. However, because it directly addresses lithium mining, it has been included in the present analysis. Drafted by State Deputy Jean Freire (PT–MG) and currently awaiting committee review, the proposal calls for the creation of a Lithium Mining and Industrial Hub in the Jequitinhonha and Mucuri Valleys, encompassing the municipalities of Araçuaí, Capelinha, Coronel Murta, Itaobim, Itinga, Malacacheta, Medina, Minas Novas, Pedra Azul, Rubelita, Salinas, Virgem da Lapa, Teófilo Otoni, and Turmalina.

The proposed Hub aims to: strengthen the lithium mining and industrial production chain; encourage the extraction, processing, and commercialization of lithium-derived products; promote the development and dissemination of technologies for the lithium mining and industrial sector; contribute to job creation and income growth (in accordance with the principles of sustainable development); and create infrastructure for the extraction, processing, and industrialization of lithium-based products. One of the measures established is the requirement that any legal entity engaged in lithium extraction activities in the municipalities of the Jequitinhonha and Mucuri Valleys carry out processing and production within the same regional municipalities, with the objective of fostering regional development.

Regarding governmental actions, the proposal provides for the promotion of research, development, and dissemination of new techniques related to lithium-based products; the allocation of specific resources for research and development aimed at establishing local manufacturing facilities; the development of professional training initiatives in the fields of geology, mineralogy, chemistry, and physics, as well as in management and commercialization; and the implementation of a market information system linking public entities, companies, cooperatives, and producers' associations, in order to support decision-making processes by stakeholders involved in the sector. The proposal also suggests the creation of credit lines in official banking institutions to finance industrial activities.

Actions related to the implementation of the Hub are to be carried out with the participation of representatives from municipalities, mining companies, business actors, small-scale miners, and private entities linked to the extraction, processing, production, and commercialization of products manufactured within the municipalities that comprise the Hub.

The proposal seeks to strengthen national industry by encouraging lithium extraction and processing within Brazilian territory. By requiring that lithium production and beneficiation take place in the municipalities where extraction occurs, the proposal attempts to ensure that a significant

portion of mineral revenue remains within the region. Nevertheless, in light of past experiences with productive chaining and vertical integration in Brazilian mining, it is essential to ensure that these processes are conducted responsibly, so as to avoid socio-environmental harm in mining regions. The literature highlights environmentally and socially damaging effects associated with mining-related productive chains, such as those observed in the Carajás Railway and pig iron production hubs (Coelho, 2016), as well as in the Companhia Siderúrgica Nacional (CSN) (Lopes, 2006).

The proposal also incorporates a more inclusive approach by involving a range of representatives, including municipal authorities, mining actors, business representatives, and private entities. Such inclusion is essential to promote greater democratization in decision-making related to the mining hub. However, it is crucial to ensure that local communities and vulnerable groups are effectively represented, so as to prevent corporate interests from prevailing. Effective community participation may be achieved through public consultations, hearings, and ongoing accountability and advisory mechanisms.

The proposal mentions the creation of a market information system interconnected with public entities, companies, cooperatives, and associations. This initiative may enhance transparency in operations, enabling improved monitoring and oversight by civil society and public authorities. However, for the system to be effective, it must be accessible, provide information in a clear and comprehensible manner, and ensure that data production is carried out by independent agents.

Finally, the allocation of resources for the economic diversification of these municipalities is fundamental to avoiding the trap of mineral dependency (Coelho, 2018). Initiatives that support sectors such as family farming, tourism, and other activities strengthen the local economy and generate employment and income beyond mining.

In summary, the proposal contains important elements when assessed against the adopted evaluation criteria. Nevertheless, it prioritizes productive chaining of lithium and the addition of value to raw materials, while overlooking documented experiences of environmental degradation and social harm caused by mining-related productive verticalization.

3.2 Decree 11,120/2022

The decree promulgated by Jair Messias Bolsonaro allows foreign trade operations of strategic minerals, including lithium, as well as organic and inorganic lithium-based chemical products and derivatives. It authorizes export and import operations without imposing criteria,

restrictions, limits, or conditions of any kind, except those provided by law or acts issued by the Foreign Trade Chamber (Camex).

This decree meets the demands of the private lithium extractive sector and other strategic minerals, facilitating the export of minerals extracted by multinational mining companies. Allowing foreign trade operations of lithium minerals and ores without criteria or conditions may compromise the country's control over its mineral resources. The lack of specific regulation could result in uncontrolled exploitation of these resources without adequately considering the population's long-term interests. Moreover, it limits civil society participation and involvement.

The absence of criteria and conditions could contribute to concentrating economic benefits in certain sectors or groups, to the detriment of others, worsening socioeconomic inequalities. Exploitation of natural resources should be conducted so that benefits are fairly distributed, promoting regional and national development rather than serving only specific economic interests.

The lack of public consultation and transparency in decision-making can undermine democratic governance principles. Policies related to the exploitation and commercialization of natural resources must include public participation mechanisms, ensuring affected communities and society in general have a voice in decisions that directly impact their lives and territories, including the possibility to reject mining projects in their territories through prior, free, and informed consultation processes.

Finally, regulatory gaps could result in significant environmental impacts without appropriate mitigation and compensation measures to restore degraded areas. Without these measures, the country risks severely compromising its environmental heritage, affecting not only current but also future generations, and increasingly contributing to the climate crisis that the energy transition supposedly seeks to address.

The decree reduces control over lithium exports without social or environmental conditions, favoring the private sector and diminishing the State's role in the process.

3.3 Legislative proposal No. 2,809/2023

The proposal introduced by federal deputies Adriana Ventura (NOVO–SP), Evair de Melo (PP–ES), Coronel Chrisóstomo (PL–RO), Kim Kataguiri (UNIÃO–SP), Flávia Morais (PDT–GO), Dagoberto Nogueira (PSDB–MS), Lebrão (UNIÃO–RO), and José Medeiros (PL–MT)—currently awaiting referral by the plenary of the Federal Senate and processed under an urgent legislative procedure—addresses the voluntary certification of "Green Lithium." Its stated objective is to

promote and enhance Brazil's potential in producing lithium with lower carbon intensity. The proposal initially sets out definitions for the terms "Green Lithium," "Certification," and "Carbon Intensity." It establishes that projects and enterprises certified as voluntary producers of Green Lithium may use the certification in their commercial, marketing, and communication strategies to promote and add value to lithium produced with lower carbon intensity.

The proposal sets forth the conditions and procedures for Green Lithium certification. It defines specific criteria, including: the adoption of measures to compensate for, mitigate, or neutralize greenhouse gas emissions; the predominant use of renewable energy sources in the lithium production process; the implementation of best practices in lithium mining and processing; and the adoption of procedures and technologies to increase energy efficiency in mining and processing activities.

The term "Green Lithium" refers to the production and extraction of lithium under a purportedly sustainable approach, aimed at reducing the environmental impacts associated with its exploitation. This implies, throughout the lithium life cycle — from extraction to the final product — the adoption of practices intended to minimize environmental damage, preserve sensitive ecosystems, reduce water and energy consumption, and ensure proper waste management.

Despite its "green" promise, the term has been the target of criticism due to its association with so-called *greenwashing*. Greenwashing — also referred to as "green makeup" or "green laundering" — describes practices whereby companies, industries, NGOs, and even governments promote their products and actions as sustainable in order to attract investment and construct an environmentally responsible public image. Similarly, criticism of the concept of "Green Lithium" focuses primarily on its practical application and its effectiveness in delivering on what is promised. Frequently, the "green" label is used as a marketing strategy to convey a positive image of mining companies without corresponding substantive changes in operational practices. In this sense, voluntary Green Lithium certification may serve as a strategic discourse deployed in affected communities to secure social legitimacy and access to territories.

The environmental impacts of mining as currently organized in Brazil are substantial, and lithium extraction is no exception. Because it is carried out under the same set of practices, social relations, institutional arrangements, and technological choices, lithium mining can produce impacts like those associated with other minerals, such as contamination of drinking water sources, degradation of natural landscapes, and biodiversity loss. Moreover, as a key component of rechargeable batteries, lithium raises additional concerns regarding its life cycle — not only at the extraction stage, but also in relation to improper disposal, which poses serious environmental and public health risks.

The proposal further provides that certification may be issued either per project or per productive enterprise of Green Lithium, indicating the carbon intensity of the lithium produced. The regulation may establish different indicative ranges of carbon intensity for Green Lithium production. In addition, certified companies would be required to keep data related to certification and certified lithium production publicly available and regularly updated online, as defined by the regulation.

Finally, the proposal authorizes the Executive Branch to extend the voluntary certification provided for in the law to the exploration and processing of other minerals used in the manufacture of electrical energy storage systems. However, permitting foreign trade operations involving lithium minerals and ores without the imposition of criteria or conditions may undermine national control over natural assets. This lack of control may lead to the rapid depletion of lithium reserves, compromising the country's capacity to use these strategic resources in the future. Furthermore, the absence of criteria and restrictions on exports and imports limits civil society participation and engagement. The lack of public consultation and transparency in decision-making processes undermines democratic and participatory standards.

Overall, the proposal reflects a discourse aimed at minimizing State intervention in the economy, manifested in the absence of specific regulation and in the prioritization of private sector interests in lithium exploitation and commercialization. This approach employs a sustainability narrative while allowing certification to function primarily as a market instrument, without ensuring effective mechanisms of public oversight or social control.

3.4 Legislative proposal No. 4,367/2023

The initiative, authored by federal deputy Dandara (PT-MG), currently awaits the opinion of the Mining and Energy Committee rapporteur, after the five-session period for submitting amendments expired with none presented. This bill amends Law No. 8,001 of March 13, 1990, which defines the CFEM (Financial Compensation for the Exploitation of Mineral Resources) for lithium. It increases the CFEM rate for lithium exploitation to 4% and authorizes the creation of the Lithium Social Fund. Additionally, it stipulates that a decree issued by the President, within ninety days of the law's enactment, will define criteria for the regulatory entity of the mining sector to reduce the iron CFEM from 3.5% to 2% for deposits with low performance and profitability due to low iron content. Expenses related to installing industrial plants that produce high-value industrial goods may be deducted from the CFEM for lithium, up to a limit of 25% of the amount owed by the legal entity.

A critical observation concerns the proposed CFEM rate compared to international standards of mineral taxation. Since CFEM is Brazil's closest equivalent to mining royalties, in many countries, royalty rates for this mineral are considerably higher than those proposed in the bill (COELHO, 2016). For example, in Ontario, Canada, mining royalties can reach 15% of gross revenue, whereas in Brazil, CFEM is limited to 3.5% of net revenue (applied after taxes on commercialization).

Thus, the proposed 4% CFEM rate remains relatively low, raising questions about the fairness of lithium mineral revenue distribution. More problematic is the reduction of the iron CFEM for low-grade deposits, representing an undue advantage to mines that might otherwise be unviable.

The bill also establishes the Lithium Social Fund, intended to provide resources for social development in regions where lithium is mined, supporting projects in education, culture, sports, public health, science and technology, environment, climate change mitigation and adaptation, and actions benefiting traditional communities.

Fund sources include an additional 1% CFEM on lithium, financial returns on fund assets, and other legally allocated resources. At least 50% of the fund must be invested in education and 10% in research and scientific development.

The proposed CFEM increase and the creation of the fund reflect concern for more equitable distribution of mineral income to public entities, potentially benefiting local populations. However, the bill does not directly address democratization of decision-making in the mining sector. Mineral revenue allocation would still largely disregard society's demands, particularly those of affected communities. Fund criteria and sources are established but not detailed; it is essential that resources are equitably distributed and that local communities have an active voice in defining priorities and implementing actions, ensuring local needs are addressed.

PL 4,367/2023 reflects a developmentalist approach, seeking greater State presence in controlling mineral revenue, which could generate economic and social mechanisms benefiting affected communities. Nevertheless, additional instruments are needed to ensure that communities can manage these resources and determine the use of mineral revenue themselves.

3.5 Lithium Valley Project

In May 2023, the Governor of Minas Gerais, Romeu Zema, launched the "Lithium Valley Brazil" project at the Nasdaq stock exchange in New York. The project aims to transform the northern and northeastern regions of Minas Gerais — specifically the Jequitinhonha and Mucuri Valleys — into lithium extraction hubs, attracting multinational corporations (Cáritas MG, 2023). The initiative

is a joint effort between the Government of the State of Minas Gerais and the Ministry of Mines and Energy (MME).

During the launch and subsequent missions, project representatives promoted Minas Gerais' competitive advantages to foreign investors, including: the largest lithium reserves in Brazil; allegedly low-impact extraction (supposedly without the use of polluting chemicals); and the possibility, advocated by the Governor of Minas Gerais, of altering state regulations to attract investment. In November 2023, during an official mission to China, the project was presented to representatives of Ganfeng Lithium, China's largest producer of lithium salts and the third largest globally (SEDE-MG, 2023).

The approach adopted by Governor Zema aligns closely with the interests of mining companies and shareholders. This strong linkage with foreign capital raises concerns regarding control over the mineral, limiting Brazil's capacity to decide on the use of lithium and to ensure that potential benefits are retained within the country. Moreover, the absence of public consultation and of effective community participation in decisions related to the project violates fundamental principles of justice and human rights.

The concentration of decision-making at the state — and especially international — level, coupled with the lack of effective cooperation with municipalities, indicates that the primary interests served by this proposal are those of mining corporations and financial markets. The lack of transparency and access to information prevents civil society from monitoring and influencing decision-making processes.

The initiative promoted by Governor Romeu Zema does not take the form of a formal decree or legislative bill; however, it has played a significant role in mobilizing and attracting investments for lithium extraction. Although it lacks the legal force of official legislation, the project has created a favorable environment for private interests. By signaling governmental support, its influence on investment dynamics and on the promotion of lithium mining is undeniable.

3.6 Legislative proposal No. 2,780/2024

Authored by federal deputies Zé Silva (Solidariedade/MG), Keniston Braga (MDB/PA), Duda Ramos (MDB/PR), Laura Carneiro (PSD/RJ), Zé Vitor (PL/MG), and Raimundo Santos (PSD/PA), this bill seeks to establish the National Policy on Critical and Strategic Minerals (PNMCE) and the Critical and Strategic Minerals Committee (CMCE), among other initiatives. In September 2025, its urgency regime was approved.

The bill defines critical minerals as those whose availability is at risk due to supply chain limitations and that are essential for the economy, energy transition (ET), and national security. Strategic minerals are those of high importance due to their comparative advantage and essential role in the economy. The PNMCE principles are based on the valorization and sustainable use of critical and strategic minerals, preservation of national interests, sustainable development, recognition of their relevance to ET, increasing their availability for associated technologies, and promotion of investment and competitiveness.

The Critical and Strategic Minerals Committee (CMCE), linked to the National Council of Mineral Policy, will be responsible for defining and biennially reviewing the classification of minerals as critical or strategic in Brazil. The committee will also establish priorities for the PNMCE, create working groups, conduct studies on dependency, supply risk, and the country's potential in research, extraction, and processing of these minerals, and analyze demand, with a review every three years. Other activities include developing monitoring programs for local mining development, supporting environmental licensing of PNMCE projects, and promoting partnerships to ensure supply of these resources.

The Ministry of Mines and Energy (MME) and the National Mining Agency (ANM), together with other federal public administration bodies, will prioritize analyzing projects classified under the Strategic Minerals Policy or by the CMCE. The Executive Branch will encourage credit lines for research and technological development in mineral exploration.

Large companies must allocate at least 0.40% of their gross revenue to research and technological development initiatives. Additionally, no income tax will be levied on revenues paid or credited to foreign-based companies for the use of trademarks, patents, or technology licenses applied in the transformation of these strategic minerals in Brazil.

The bill amends Law No. 11,196/2005[3], extending the tax benefits of Articles 17–21 to legal entities involved in research and extraction projects of critical and strategic minerals. The Special Incentives Regime for Infrastructure Development (Reidi) will also be applied to the mineral sector, incentivizing extraction, processing, and the production chain. Law No. 11,488/2007[4] will be amended to include Reidi beneficiaries as legal entities with approved projects for infrastructure

[3] Signed by President Luiz Inácio, establishing the Special Taxation Regime for the Export Platform of Information Technology Services, the Special Regime for the Acquisition of Capital Goods by Exporting Companies, the Digital Inclusion Program, and providing tax incentives for technological innovation, as well as amending certain decrees.
[4] Signed by President Luiz Inácio, establishing the Special Incentive Regime for Infrastructure Development (REIDI), and reducing the minimum period for the use of credits from the Contribution to PIS/Pasep and the Contribution for the Financing of Social Security.

works in specific sectors. The bill establishes a special customs regime for exporting and importing goods destined for research, extraction, and processing of these minerals. The Executive Branch will have 90 days to regulate the law's provisions after its publication.

Bill 2780/2024 states that the valorization and rational use of critical and strategic minerals should maximize their social, environmental, and economic benefits. However, it does not provide specific measures to ensure equitable distribution of benefits among regions and communities, nor how such maximization will occur. The absence of clear policies to combat inequality could perpetuate existing exclusions and prevent society and territories from receiving the promised benefits.

Although the bill mentions sustainability, it does not specify how it intends to ensure that mineral extraction is conducted responsibly with proper prior consultation. The bill states that critical minerals are important for food security, but this relationship is controversial. Mining generally involves clearing large land areas, which may destroy or expropriate farmland, in addition to vegetation removal for mines and dams, potentially altering local climate (water availability and temperature). Soil and water contamination often occurs due to chemicals and pollutants from extraction and processing or from waste piles and tailings dams. Economically, regions solely dependent on mining often neglect investment and support for agriculture. This demonstrates that mining, regardless of whether it involves critical minerals, can compromise food security.

3.7 Provisional Measure No. 1,308 of 2025

This Provisional Measure establishes the possibility of a special environmental licensing regime aimed at enabling projects deemed strategic by the federal government.

Projects shall be classified as strategic based on a biennial proposal by the Council of Government, which will designate a technical team permanently assigned to this function. The licensing authority, as well as public entities and agencies at all levels of the federation, shall give priority to these projects.

The procedures required to obtain the Environmental Installation License (EIL) follow a sequence of regulatory steps. Initially, the licensing authority is responsible for defining the scope and preparing the respective Terms of Reference (item I). Subsequently, the project proponent must submit the license application, accompanied by the relevant documentation, technical designs, implementation schedule, and required environmental studies, in addition to any other applicable licenses, authorizations, and concessions (item II).

Thereafter, opinions from the authorities involved in the process are issued, according to the nature and scope of the project (item III). The licensing authority then conducts a technical review of the submitted documents and studies and may hold a public hearing and, if necessary, request additional or supplementary information, noting that such a request may be made only once (item IV). Upon completion of these stages, a conclusive technical opinion is prepared (item V), which will inform the final administrative decision, resulting in either the granting or denial of the Environmental Installation License – EIL (item VI). The special environmental licensing process must observe a maximum period of twelve months for review and final decision.

Considering the standard licensing framework under Brazilian law, it becomes evident that there are no substantial changes. The main differences are the establishment of a maximum one-year deadline for the conclusion of the process and the prioritization of special licensing by the competent authorities. As such, the Provisional Measure reproduces all the shortcomings of the existing licensing system, including the near-total inability of affected stakeholders and groups to influence decision-making, limited transparency, and the absence of effective public oversight in the deliberative process, while further restricting the timeframe for its completion. Consequently, projects licensed under the special regime are likely to override the interests of traditional communities and affected groups even more rapidly, resulting in increased environmental harm.

3.8 Legislative proposal No. 3,699/2025

Legislative Proposal No. 3,699/2025, authored by Patrus Ananias (PT/MG), establishes guidelines for the policy on research and utilization of minerals considered critical or strategic. The minerals classified as critical or strategic include lithium, niobium, rare earth elements, copper, manganese, cobalt, and graphite, which are deemed to be of significant collective interest to Brazilian society and, therefore, subject to national priorities and the guidelines of a mineral sovereignty policy.

The proposal establishes, as a condition for the approval of projects related to the aforementioned minerals, prior authorization by the National Council for Mineral Policy. This Council must include, at a minimum, one representative from the states and the Federal District, one representative from producing and affected municipalities, three representatives from civil society, and one representative from higher education institutions, all of whom must be unaffiliated with mining companies.

The proposal introduces an important innovation related to the agenda of Mining-Free Territories by conditioning the approval of mining projects on the consent of potentially affected

traditional communities, which must be consulted in a free, prior, and informed manner, under penalty of nullity of the authorization procedure.

It is also noteworthy that the participation of foreign companies, or companies under foreign control, is expressly prohibited in activities related to research, extraction, processing, exploitation, or utilization of critical or strategic minerals.

In summary, the proposal presents significant advances in the democratization and control of mineral resources. However, it relies on vague notions such as national priorities, collective interest, and mineral sovereignty, which may be easily manipulated by the interests of mining companies and their political representatives within public authorities. As such, the precise meaning and scope of these notions—frequently invoked to justify projects driven by the private interests of large corporations and their shareholders—remain to be clearly defined.

Finally, a table has been prepared summarizing each legislative initiative and the respective analytical assessments.

Table 1. Summary of Legislative Initiatives

LEGAL FRAMEWORK	AUTHORSHIP	MAIN POINTS	CRITICISMS
Bill No. 1,992/2020	State Deputy Jean Freire	Proposes the creation of the Lithium Mining and Industrial Hub in the Jequitinhonha and Mucuri Valleys. Aims to strengthen the lithium value chain, promote technological development, and generate employment in the region. Establishes measures for local lithium processing, investments in research and development, the creation of credit lines, and the participation of local representatives in the hub's implementation. Pending before the Legislative Assembly of Minas Gerais.	The bill's main objective is the development of the lithium value chain and the addition of value to the raw material, while disregarding prior experiences of environmental violations and impacts on local populations caused by vertical integration in mining. Furthermore, it is unclear whether the allocation of resources for economic diversification in these municipalities will benefit sectors such as family farming, tourism, or others that strengthen the local economy and provide jobs and income beyond mining.
Decree No. 11,120/2022, of July 5, 2022	President Jair Messias Bolsonaro	Allows foreign trade operations involving lithium minerals and ores without imposing specific criteria, limits, or conditions, except as provided by law.	This decree facilitates the export of minerals extracted by multinational mining companies without imposing specific criteria or conditions. The lack of regulation may lead to uncontrolled exploitation of these resources, without adequately considering the long-term interests of the population. Additionally, it restricts public participation and civil society engagement, due to the absence of

			public consultation and transparency in decision-making processes.
Bill No. 2,809/2023	Federal Deputies: Adriana Ventura (NOVO-SP), Evair de Melo (PP-ES), Coronel Chrisóstomo (PL-RO), Kim Kataguiri (UNIÃO-SP), Flávia Morais (PDT-GO), Dagoberto Nogueira (PSDB-MS), Lebrão (UNIÃO-RO), and José Medeiros (PL-MT)	Promotes the voluntary certification of "Green Lithium." Proposes the creation of a Lithium Mining and Industrial Hub in the Jequitinhonha and Mucuri Valleys to strengthen the mining and industrial lithium value chain and foster regional development; establishes criteria for "Green Lithium" certification. Ready for Plenary agenda and under an urgent legislative procedure.	Allowing foreign trade operations involving lithium minerals and ores without criteria or conditions may undermine the country's control over its own natural resources. This lack of oversight could lead to the rapid depletion of lithium reserves, jeopardizing the country's ability to use these strategic resources in the future. Moreover, the absence of export and import restrictions further limits public participation and civil society involvement.
Bill No. 4,367/2023	Federal Deputy Dandara (PT-MG)	Proposes increasing the CFEM royalty rate on lithium extraction to 4.0% and creating a Lithium Social Fund aimed at promoting social development in regions affected by lithium mining. Establishes criteria for fund use and prioritizes allocation to education, research and scientific development, poverty reduction, and socioeconomic development in mined areas. Awaiting the rapporteur's opinion in the Committee on Mines and Energy.	The proposal to increase the CFEM royalty rate on lithium extraction and create the Lithium Social Fund suggests concern for ensuring that mineral revenues are more equitably distributed among public entities, which could theoretically benefit the population. However, the bill does not directly address issues related to democratizing decision-making in the mining sector. As such, the allocation of mineral revenues would continue to have little influence from societal demands, particularly those of affected communities.
Lithium Valley Project	Governor Romeu Zema	Aims to transform northern and northeastern Minas Gerais into lithium extraction hubs by attracting companies with international capital.	Lack of public consultation, effective community participation in project-related decisions, and insufficient cooperation with municipalities.
Bill No. 2,780/2024	Federal Deputies: Zé Silva (Solidariedade/MG), Keniston Braga (MDB/PA), Duda Ramos (MDB/PR), Laura Carneiro (PSD/RJ), Zé Vitor (PL/MG), and Raimundo Santos (PSD/PA)	Seeks to establish the National Policy on Critical and Strategic Minerals (PNMCE), the Committee on Critical and Strategic Minerals (CMCE), and other initiatives for strategic and ecological industrial development. Under urgent legislative procedure.	No specific measures are included to ensure equitable distribution of benefits among different regions and communities.
Provisional Measure No. 1,308/2025	President Luiz Inácio Lula da Silva	Creates the possibility of a special environmental licensing regime for	The main changes compared to standard licensing are the maximum one-year timeframe for process

		projects deemed strategic by the federal government.	completion and the prioritization of special licensing within competent authorities. Therefore, the Provisional Measure carries all the existing challenges of the current licensing system, such as the near-impossibility of affected groups influencing decision-making, low transparency, and lack of public oversight, while further shortening the time allowed for completion. Consequently, projects licensed under special procedures are likely to proceed even more quickly, overriding the interests of traditional communities and affected groups and causing greater environmental damage.
Bill No. 3,699/2025	Patrus Ananias (PT-MG)	Establishes the policy for research and exploitation of minerals considered critical or strategic.	It brings important advances in democratization, control over mineral resources, and recognition of Mining-Free Territories. However, it deals with vague notions of national priorities, collective interest, and mineral sovereignty, which can easily be manipulated by mining companies and their political representatives. Therefore, it remains unclear what these notions entail, as they are often used to justify projects serving private interests of large corporations and their shareholders.

Source: Authors (2025).

Despite the creation of several legislative initiatives in recent years, the Brazilian regulatory framework appears to lag the urgency of regulating strategic minerals, imposed by growing global demand. In general, the measures adopted prioritize market-driven extraction of lithium, centralizing decision-making power in mining companies. The four evaluative pillars—democratization, popular participation, transparency, and socio-environmental justice—receive little or no attention in these initiatives, evidencing the limited possibility for affected communities to participate in the proposed decisions and measures. Democratization, popular participation, and transparency are notably undermined both in the current legal framework and in proposals for its revision.

Among the proposed measures, advances in mineral rent capture (through an increase in the CFEM for lithium), the creation of a Social Fund, and productive chaining stand out. However, each of these points presents specific limitations and contradictions. Increasing the CFEM rate is necessary because, in comparative international terms, the rate remains low even after the adjustment (Coelho et al., 2023). Nevertheless, raising the rate does not ensure that resources will be directed toward

improving the population's quality of life, especially that of affected communities (Oliveira et al., 2024).

From the perspective developed in this article, the Social Fund is a positive measure. However, in the absence of clearer specifications, there remains uncertainty as to whether the Fund will function as a mechanism of popular control or whether it will reproduce the tendency of Funds and Councils controlled by corporate interests in the sector (Oliveira; Zucarelli, 2020).

Finally, productive chaining — aimed at retaining a larger share of resources in the country where extraction occurs — also appears to be a promising measure. However, if there are no mechanisms for democratization and popular control over this productive structure, it tends to become rights-violating and environmentally predatory, as indicated by Brazilian experiences with productive chaining involving Companhia Siderúrgica Nacional (CSN) and the Carajás Railway (EFC) (Coelho, 2016).

Although some progress has been observed regarding the mineral rent appropriated by the State and the creation of councils, sectoral governance remains focused on serving the interests of mining companies. Most initiatives operate as incentives and facilitators for lithium extraction, without effective social control or robust mechanisms for environmental and social protection. The result is a scenario in which the effects generated by the current mining structure tend to be reproduced in the extraction of strategic minerals, with the additional risk that these effects may be exacerbated by the irresponsible incentives embedded in the prevailing mining model.

4 FINAL CONSIDERATIONS

This study analyzed institutional initiatives by Brazilian political representatives related to lithium mining in Brazil, seeking to understand how these authorities have influenced the extraction and management of this mineral resource. The relevance of this debate is evidenced by the significant number of proposals submitted in the last three years. Given the uncertainty surrounding the approval of these measures, it is difficult to precisely define the characteristics of the future regulatory framework.

As highlighted in this article, democratization, popular participation, transparency, and socio-environmental justice are little or not addressed by these initiatives. Consequently, there is a tendency to reproduce the current mining model, which perpetuates and intensifies socioeconomic inequalities, harms local communities, and generates significant environmental impacts.

As a final consideration, it is worth noting that the progressive field is essentially divided into two major positions, which are not necessarily opposed. The first position opposes mining a priori, regardless of how the activity is regulated. The second position favors mining that is regulated according to the principles of this progressive approach. This is not an analysis that we aim to deepen at this stage, but rather a highlight of the need for dialogue between the two positions on certain points and the identification of areas where convergence is not possible. The observation is noted.

REFERENCES

AEPET – Associação dos Engenheiros da Petrobras. **Onde fica a maior reserva de lítio do Brasil? Saiba como o país deve explorar e ampliar sua produção**: entre os elementos fundamentais para tornar o Brasil uma das lideranças na transição energética está o lítio. 2023. Disponível em: https://aepet.org.br/noticia/onde-fica-a-maior-reserva-de-litio-do-brasil-saiba-como-o-pais-deve-explorar-e-ampliar-sua-producao/. Acesso em: 24 ago. 2024.

AGÊNCIA SENADO. **Governo**: dependência externa de fertilizantes vai continuar nos próximos anos. 2022. Disponível em: https://www12.senado.leg.br/noticias/materias/2022/05/24/governo-dependencia-externa-de-fertilizantes-vai-continuar-nos-proximos-anos. Acesso em: 24 ago. 2024.

ALONSO, Aleida Azamar. El mito de la transición energética y la importancia del litio. In: ALONSO, Aleida Azamar (org.). **Litio en América Latina**: demanda global contra daño socioambiental. Ciudad de México: Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT); Universidad Autónoma Metropolitana (UAM), 2022. p. 23–43.

ARONOFF, Kate; BATTISTONI, Alyssa; COHEN, Daniel Aldana; RIOFRANCOS, Thea. **Um planeta a conquistar**: a urgência de um Green New Deal. São Paulo: Autonomia Literária, 2020.

ASSEMBLEIA LEGISLATIVA DE MINAS GERAIS. Projeto de Lei n. 1.992/2020, de 27 de junho de 2020. **Diário do Legislativo**, Brasil, 27 jun. 2020. Disponível em: https://www.almg.gov.br/projetos-de-lei/PL/1992/2020. Acesso em: 24 ago. 2024.

BLOOMBERG LÍNEA. **Lítio**: após queda de 80% este ano, analistas preveem cenário nebuloso em 2024. 2023. Disponível em: https://www.bloomberglinea.com.br/mercados/litio-apos-queda-de-80-este-ano-analistas-preveem-cenario-nebuloso-em-2024/. Acesso em: 24 ago. 2024.

BRITISH GEOLOGICAL SURVEY. **Lithium**: definitions, mineralogy and deposits. 2016. Disponível em: https://nora.nerc.ac.uk/id/eprint/534440/1/lithium_profile.pdf. Acesso em: 24 ago. 2024.

BRASIL. Senado Federal. **Projeto de Lei n. 2.159/2021**. Disponível em: https://www25.senado.leg.br/web/atividade/materias/-/materia/148785. Acesso em: 1 out. 2025.

CÂMARA DOS DEPUTADOS. Decreto-Lei n. 227, de 28 de fevereiro de 1967. **Diário Oficial da União**, Brasília, 28 fev. 1967. Disponível em: https://www2.camara.leg.br/legin/fed/declei/1960-1969/decreto-lei-227-28-fevereiro-1967-376017-publicacaooriginal-1-pe.html. Acesso em: 24 ago. 2024.

CÂMARA DOS DEPUTADOS. Decreto n. 2.413, de 4 de dezembro de 1997. **Diário Oficial da União**, Brasília, 4 dez. 1997. Disponível em: https://www2.camara.leg.br/legin/fed/decret/1997/decreto-2413-4-dezembro-1997-400728-publicacaooriginal-1-pe.html. Acesso em: 24 ago. 2024.

CÂMARA DOS DEPUTADOS. Decreto n. 10.577, de 14 de dezembro de 2020. **Diário Oficial da União**, Brasília, 2020. Disponível em: https://www2.camara.leg.br/legin/fed/decret/2020/decreto-10577-14-dezembro-2020-790909-norma-pe.html. Acesso em: 24 ago. 2024.

CÂMARA DOS DEPUTADOS. Decreto n. 11.120, de 5 de julho de 2022. **Diário Oficial da União**, Brasília, 5 jul. 2022. Disponível em: https://www2.camara.leg.br/legin/fed/decret/2022/decreto-11120-5-julho-2022-792939-norma-pe.html. Acesso em: 24 ago. 2024.

CÂMARA DOS DEPUTADOS. **Projeto de Lei n. 2.809/2023**. 2023. Disponível em: https://www.camara.leg.br/proposicoesWeb/fichadetramitacao?idProposicao=2365362. Acesso em: 24 ago. 2024.

CÂMARA DOS DEPUTADOS. **Projeto de Lei n. 4.367/2023**. 2023. Disponível em: https://www.camara.leg.br/propostas-legislativas/2386210. Acesso em: 24 ago. 2024.

CAMPELLO, Cecília; MALERBA, Julianna; TUPINAMBÁ, Soraya. **Da transição energética à transição ecológica**: a contribuição da justiça ambiental e um convite ao debate. Rio de Janeiro: FASE, 2024.

CANAL ENERGIA. **Lula pede retirada de duas indicações de Bolsonaro à autoridade nuclear**. 2023. Disponível em: https://www.canalenergia.com.br/noticias/53237236/lula-pede-retirada-de-duas-indicacoes-de-bolsonaro-a-autoridade-nuclear. Acesso em: 24 ago. 2024.

CÁRITAS MG – Regional de Minas Gerais. **Projeto Vale do Lítio transformará o Jequitinhonha em polo de exploração para benefício externo**. 2023. Disponível em: https://mg.caritas.org.br/noticias/projeto-vale-do-litio-transformara-o-jequitinhonha-em-polo-de-exploracao-para-beneficio-externo. Acesso em: 24 ago. 2024.

COELHO, Tádzio. **Noventa por cento de ferro nas calçadas: mineração e (sub)desenvolvimento em municípios minerados pela Vale S.A.** 2016. Tese (Doutorado em Ciências Sociais) – Universidade do Estado do Rio de Janeiro, Rio de Janeiro, 2016. Disponível em: http://www.bdtd.uerj.br/handle/1/17722. Acesso em: 24 ago. 2024.

COELHO, Tádzio. Minério-dependência em Brumadinho e Mariana. **Lutas Sociais**, v. 22, n. 41, p. 252–267, 2018.

COELHO, Tádzio *et al.* **O paraíso fiscal da Vale e seus efeitos nos municípios minerados: preços de transferência, CFEM e a Vale S.A.** São Luís: JnT, 2023.

COMISSÃO NACIONAL DE ENERGIA NUCLEAR (CNEN). **Composição do Conselho Deliberativo**. *Memória CNEN*. Disponível em: https://memoria.cnen.gov.br/memoria/buscacomposicaoCd.asp. Acesso em: 24 ago. 2024.

COMISSÃO NACIONAL DE ENERGIA NUCLEAR (CNEN). **Presidentes da CNEN**. Disponível em: https://memoria.cnen.gov.br/memoria/Presidentes.asp. Acesso em: 24 ago. 2024.

FÁVERO, Claudenir; MONTEIRO, Fernanda Testa. Disputas territoriais no Vale do Jequitinhonha: uma leitura pelas transformações nas paisagens. **Agriculturas**, v. 11, n. 3, 2014.

GREGO, Marcela. **A transição energética global e os impactos ambientais para a América Latina:** análise do conceito de "justiça climática" através dos conflitos ambientais marcados pelo EJAtlas 2023. 2023. Dissertação (Mestrado em Governança Global e Formulação de Políticas Internacionais) – Pontifícia Universidade Católica de São Paulo, São Paulo, 2023.

INTERNATIONAL ENERGY AGENCY (IEA). **The role of critical minerals in clean energy transitions**. Paris: IEA, 2021.

LOPES, José Sérgio Leite. Sobre processos de "ambientalização" dos conflitos e sobre dilemas da participação. **Horizontes Antropológicos**, v. 12, n. 25, p. 31–64, 2006.

NEXO JORNAL. **O retrocesso do PL do Licenciamento, para um constituinte**. 2025. Disponível em: https://www.nexojornal.com.br/externo/2025/07/16/pl-do-licenciamento-ambiental-devastacao-constituinte. Acesso em: 1 out. 2025.

OLIVEIRA, Raquel; ZUCARELLI, Marcos. A gestão dos conflitos e seus efeitos políticos: apontamentos de pesquisa sobre mineração no Espinhaço, Minas Gerais. **Revista Contemporânea de Antropologia**, n. 49, 2020.

OLIVEIRA, Antônia *et al.* **Para onde vai a CFEM? Uma avaliação das receitas e despesas dos municípios do estado do Pará e Minas Gerais (2022–2023)**. 2024. Disponível em: https://deolhonacfem.org/nota-tecnica-11-para-onde-vai-a-cfem/. Acesso em: 1 dez. 2024.

PACKER, Larissa. **Como funciona o capitalismo "verde": mecanismos jurídicos e financeiros preparam o Brasil para um novo modelo de acumulação**. 2012. Disponível em: https://terradedireitos.org.br/wp-content/uploads/2012/07/regula%C3%A7%C3%A3o-nacional-para-nova-fase-de-acumula%C3%A7%C3%A3o-papel-do-estado-1.pdf. Acesso em: 24 ago. 2024.

PROJETO BRASIL POPULAR. **Projeto Brasil Popular**. 2023. Disponível em: https://projetobrasilpopular.org. Acesso em: 24 ago. 2024.

SANTOS, Elaine. **Debates y enfrentamientos: historia y políticas de la explotación del litio en Brasil**. In: ALONSO, Aleida Azamar (org.). **Litio en América Latina: demanda global contra daño socioambiental**. Ciudad de México: SEMARNAT; UAM, 2022. p. 161–187.

SEDE-MG – Secretaria de Desenvolvimento Econômico de Minas Gerais. **Governo de Minas apresenta o Vale do Lítio para empresa líder mundial na cadeia do mineral, em Xangai, na China**. 2023. Disponível em: https://www.desenvolvimento.mg.gov.br/inicio/noticias/noticia/2266/governo-de-minas-apresenta-o-vale-do-litio-para-empresa-lider-mundial-na-cadeia-do-mineral,-em-xangai,-na-china. Acesso em: 24 ago. 2024.

SERVIÇO GEOLÓGICO DO BRASIL (SGB). **Lítio no Brasil**. 2024. Disponível em: http://www.mcter.cprm.gov.br/litio/nobrasil.html. Acesso em: 24 ago. 2024.

SILVA, Cássio Alexandre da *et al.* Relações étnico-raciais, territorialidades e segregação socioespacial: conflitos identitários nos Gerais do Sertão Mineiro. **Boletim Alfenense de Geografia**, v. 2, n. 4, p. 3–18, 2022.

SULZBACHER, Aline; FERNANDES, Leonardo Cesar; ALMEIDA, Clebson Souza de. "Nas minas, a terra vale ouro": questão agrária e mineração no Vale do Jequitinhonha (Minas Gerais, Brasil). **Revista NERA**, v. 24, n. 59, p. 393–414, 2021.

TRADING ECONOMICS. **Commodities: lithium**. 2024. Disponível em: https://tradingeconomics.com/commodity/lithium. Acesso em: 24 ago. 2024.

This version was originally presented in Portuguese and translated into Spanish with the assistance of Artificial Intelligence.

Editors:
Liliane Pereira Amorim;
Karla Karoline Rodrigues Silva;
Isabel Christina Gonçalves Oliveira;
Giovana Nobre Carvalho.

Editor-in-Chief: Thiago Henrique Costa Silva.