

**LATIN AMERICA, CHINA AND A JUST
ENERGY TRANSITION:**
WORKING PAPER SERIES

**What is green about green
developmentalism? Chinese
mining and energy investment
and ESG standards in Peru, Chile,
Colombia, and Argentina**

Roger Merino



Latin America, China and a Just Energy Transition: Working Paper Series

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What is green about green developmentalism?

Chinese mining and energy investment and ESG standards in Peru, Chile, Colombia, and Argentina

Roger Merino¹

Abstract:

The upsurge in projects linked to the energy transition and China's leading role in this phenomenon promise a new form of development: "green developmentalism." Yet this agenda, besides promoting new industries, must heed the social and environmental standards pertaining to foreign investment in terms of both content and implementation. This working paper analyzes the main environmental and social standards in the mining and energy sectors in Peru, Chile, Colombia, and Argentina and, through the analysis of emblematic cases, examines the quality of compliance with these standards among Chinese companies. The study found that social and environmental agencies present deficient levels of autonomy; limited mechanisms for substantial participation throughout EIAs; debatable standards governing consultations to obtain the free, prior, and informed consent of peoples; and labor relations issues. These regulatory and implementation problems broadly concern the drive to ensure stability for all international investment, regardless of source country, to the neglect of any substantive participation for local communities and the adequate distribution of benefits. Chinese companies encounter the sort of problems associated with investment of any national origin, yet they respond to these problems with minimal due diligence or substantive participation practices. All this calls into question the promises of "green developmentalism" contained in critical mineral and energy transition investment. Without either robust social and environmental standards or planning that encourages changes to the energy matrix in commodity-producing countries, the green developmentalism agenda can devolve into mere developmentalism, justified through environmental sustainability discourses.

Keywords: Energy transition, green development, social and environmental standards, China.

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1. Introduction

The soaring demand for critical minerals along with the rise of industries linked to the energy transition represent an opportunity for economic and social development in Latin America. Chile and Peru are global leaders in copper mining, while Chile ranks second and Argentina fourth for international lithium production. Major projects in these fields create local jobs, boost the economy, and, according to many political leaders, could help to promote technology transfer and added value for local industry. Yet this surge in energy transition projects requires a re-evaluation of the social and environmental standards corresponding to foreign investment, as well as the manner in which they are implemented. This is crucial given the role of international actors, especially China, and the tensions and conflicts, both historical and recent, stemming from social and environmental issues related to mining and energy projects.

Chinese investment projects must adhere strictly to the highest environmental, social and governance (ESG) standards, and to applicable national regulations. Thus, in recent years, Chinese government bodies have approved a raft of ESG standards. For example, the 2012 Guide on Social Responsibility for Chinese International Contractors expressly states that companies must “consider the needs of communities” and “actively communicate project-related information.” The 2013 Guidelines for Environmental Protection in Foreign Investment and Cooperation stipulate that companies “fully take into account the impacts of their development and construction as well as production and operation activities on the social environment” (Art. 9). The 2014 Guidelines for Social Responsibility in Outbound Mining Investments incorporates the duty to “directly consult with potentially impacted communities, with the objectives of ensuring that the development of mining projects fosters respect for their rights, culture, and natural resource-based livelihoods” (Art. 3.4.4). In addition, “prior to any mining operations, the free, prior, and informed consent of affected local communities (including indigenous peoples) must be sought.” Finally, the 2022 Due Diligence Guidelines for Responsible Mineral Supply Chains states that the absence of local communities' consent poses comes very close to constituting business malpractice (Art. 5.2.1).

If these guidelines, which are part of the global ESG standards ecosystem, are intended to reduce litigation (Cui et al., 2025), what happens when national regulations are weak, malleable, or ambiguous? What happens when the national bodies responsible for implementation, in their eagerness to attract investment, pare back their compliance oversight practices? The 2021 Chinese Guidelines for Green Development in Foreign Investment and Cooperation state that companies should apply stricter standards than those established by governments, but these recommendations are merely “good practices” rather than binding requirements. For this reason, it is important to understand the applicable environmental and social standards, as well as general business compliance with these standards, in the countries that receive foreign investment.

Through this working paper we analyze the main environmental and social standards in the mining and energy sector in Peru, Chile, Colombia, and Argentina, as well as the level of operational compliance with these standards among Chinese companies. The environmental and social standards analyzed correspond mainly to environmental impact

assessment (EIA) review processes, the transparency and citizen participation mechanisms built into these processes, and prior consultation with Indigenous peoples in these sectors. Labor standards governing union membership and local recruitment are also included.

To analyze compliance with these standards and the performance of Chinese companies, we will examine emblematic cases related to critical minerals and renewable energy industries for the energy transition. These include the Las Bambas copper project developed by MMG in Peru; the Buriticá gold project in Colombia,² developed by Zijin Mining Group; the Ganfeng Lithium Company's Cauchari-Olaroz lithium project in Argentina; and the Rucalhue Hydroelectric Power Plant project operated by China International Water & Electric (CWE), a subsidiary of China Three Gorges Corporation, in Chile.

The analysis of policies, standards, and cases helped us to identify whether there are differences in ESG standards or practices when a company is Chinese; whether there are differences in how national authorities treat Chinese investment or operations; and whether Chinese companies perform any differently in terms of ESG issues when they acquire projects previously operated by other foreign-owned companies, especially Western ones.

We found that the environmental institutions and ESG standards designed and implemented by states present a series of deficiencies, including insufficient autonomy; limited mechanisms for substantial early participation during and after the approval of EIAs; dubious provisions for securing the free, prior, and informed consent of Indigenous peoples; and issues with labor relations and outsourcing. These regulatory and implementation problems broadly stem from the drive to ensure stable conditions for all international investment, regardless of source country, to the neglect of any substantive participation for local communities and the equitable distribution of benefits.

Chinese companies encounter the sort of problems associated with investment of any national origin, yet they respond to these problems with minimal due diligence or substantive participation practices. Without robust social and environmental standards or planning that fosters changes to the energy matrix in commodity-producing countries, the green developmentalism agenda can devolve into mere developmentalism, justified through environmental sustainability discourses.

2. Green developmentalism and ESG standards

With the rise of environmentalism in the 1970s, academics and policymakers began discussing strategies for states to achieve environmental protection alongside economic development goals. A key notion for reconciling these aims is that of “ecological modernization,” consolidated at the end of the 20th century as a framework for explaining the political and economic rationale of environmental reforms and institutions (Mol, 2010). These institutional innovations give shape to the “green state” in which the environmental question is at the core of all objectives. Thus, “green growth” is promoted through market

²Although this project does not pertain to a “critical mineral” we have selected the Buriticá gold mine as a case study because it is the most important Chinese-backed mining project in Colombia (Defelipe, 2025). In addition, Zijin–Continental Gold, a subsidiary of the Chinese conglomerate Zijin Mining Group Co., Ltd., faces similar social circumstances and challenges in other projects in the region that correspond to critical minerals, such as copper (Peru) and lithium (Argentina).

solutions that enable “sustainable development”; that is, a balance between social, economic, and environmental goals (Eckersley, 2004; Lederer et al., 2019).

More recent research has challenged the theoretical coherence, analytical contradictions, and empirical possibilities of ecological modernization and its entire discursive, conceptual, and operational apparatus (Eckersley, 2004; Paterson, 2016; Bailey, 2020). Mechanisms such as carbon credits and payment for ecosystem services, among others, are based on specific market solutions, and often come at the cost of more ambitious economic reforms aimed at transforming the global energy matrix. In this context, the role played by the state has been subject to debate.

The notion of green developmentalism reformulates the old paradigm of developmentalism and its strong state presence in the planning and implementation of development initiatives (Cotula, 2025). Within this framework, the state guides market dynamics amid the energy transition in order to yield environmental benefits at the national and global levels, in addition to political gains and economic returns. Some scholars have traced the origins of this model back to resource management projects that connected nature protection with economic productivity, such as the United States Fish and Wildlife Service in the early 1940s, or those that linked forest management with agricultural ministries (Rea & Frickel, 2023). Others credit the economist Ignacy Sachs who, in the 1970s, proposed a combination of policies oriented toward ecological sustainability, economic endogeneity, and the satisfaction of human needs (Albertone, 2025). Still others, such as Mbeva and Makomere (2025), find the roots of green developmentalism in the Founex Report, prepared by Global South academics for the 1972 UN Conference on the Human Environment in Stockholm. This report promoted the integration of development into environmental governance (Mbeva & Makomere, 2025).

Whatever its origins, the practice of green developmentalism has been crystallized in recent decades through policies implemented in Southwest Asia and China (Thurbon, 2015; Kim et al. 2019; Li & Shapiro 2020). The results have been striking. Electric car manufacturing in Japan and South Korea account for 10% and 4% of global production, respectively. China is the largest global manufacturer and buyer of electric vehicles; nearly half of the world's electric cars can be found on its roads (Li & Shapiro, 2020; Ferrana, 2024). The country has also reduced the international cost of wind and solar generation, contributing to the increased use of renewable energy around the world (Harrell & Haddad, 2021).

However, the contradictions and uneven impacts of this type of developmentalism are a cause of controversy. For example, despite China's leadership in renewable energy and electric vehicles, the country builds more coal-fired power plants than anywhere else (Chen, 2025). Moreover, in producing countries a trade-off process unfolds in which environmental winners and losers are selected and some territories are sacrificed while others are protected (Hong et al., 2019). For example, in Singapore this approach has produced good results in the sphere of environmental infrastructure and green technology projects to the detriment of other environmental objectives such as natural habitat and biodiversity protection (Han, 2017). In China, many green urbanization projects bolster state control while displacing the rural population and ethnic minorities (Rodenbiker 2021). On the other hand, pollution exporting is evident when projects generate profound environmental and social impacts in

countries with inward investment in critical minerals and renewables (Harrell & Haddad, 2021). Finally, it has been argued that green developmentalism, particularly in China, is an “authoritarian environmentalism”: a technocratic and non-participatory model of environmental policy formulation (Han, 2017; Li and Shapiro, 2020; Chen, 2025).

Mineral-rich countries face their own dilemmas when it comes to green developmentalism. This ideology supposes a just energy transition to enable innovation and value-addition ecosystems in the supply chain alongside equitable distribution of benefits rather than mere raw material exportation (UN Secretary-General's Panel on Critical Energy Transition Minerals, 2024). Examples of such development aspirations, which challenge traditional trade patterns, are numerous: export restrictions aimed at promoting domestic nickel processing in Indonesia; special economic zones to develop a cross-border battery supply chain in the Democratic Republic of Congo and Zambia; and policies to encourage domestic lithium processing in Chile (Cotula, 2025). These countries all seek to attract domestic and foreign investment to develop transformative industries, such as refining and processing, with a view to enhancing the economic benefits (Fang, 2024).

However, green developmentalism can bring about a "derisking state" that pursues environmental and energy transition goals through partnership with private capital, ensuring returns for investors through monetary, fiscal, and regulatory interventions (Gabor & Samba 2023). In this context, priority is given to tax credits, risk assumption through public-private partnerships (PPPs), and contractual demand and price guarantees. These constitute soft conditions for investors that center on delivery of the promised product, while the state is compelled to compensate these investors when profit expectations change in tandem with market conditions. Countries that depend financially and technologically on the Global North would not be able to finance megaprojects on their own, so partnerships with foreign investors on these terms offer a pragmatic opportunity; Namibia's green hydrogen industrial strategy, which is dominated by institutional capital, has been justified on this basis (Gabor & Samba, 2023).

Thus, there is a need to unravel just what is “green” about green developmentalism. The literature has stressed the promotion of clean industries and electromobility through projects associated with critical minerals extraction and renewable energy, yet little attention has been paid to the necessary environmental and social protection standards, or to the equitable distribution of benefits in the global transition economy. More than being the mere name of an industry, the green component must encapsulate the aspiration of achieving a just energy transition. According to the UN Panel on Critical Energy Transition Minerals (2024), energy transition, value addition, benefit sharing, environmental sustainability, equity, human rights, and accountability are inseparable processes. But in practice, the emphasis on energy transition measures can create imbalances between different objectives; for instance, policies to promote mineral extraction and processing have not been accompanied by comparable efforts to prevent deforestation or protect land rights (Cotula, 2025).

Energy transition and critical minerals in South America

In recent years, South American countries have formulated several initiatives for promoting renewable energies: the Just Transition Strategy (2021) in Chile, Argentina's National Energy Transition Plan for 2030 (2023), and the Energy Transition Policy (2022) in Colombia. The surging critical minerals market has given rise to a new wave of “strategic” policies aimed at harnessing the global energy transition momentum by linking it to national development. Indeed, mining has historically been conceived as a lever for development in these nations. Peru and Chile are considered “mining countries” for their traditions of copper, gold, and silver exploitation. And while Colombia and Argentina are better known for their oil and agricultural industries, mining has not been overlooked.

Each of these four countries has a well-established Ministry of Energy and Mines and a mature legal framework for the sector. Their concession systems are based on the premise that the state has sovereignty over mineral resources and disposes them through concessions to private parties for exploration and exploitation. In general, these systems are sufficiently flexible to facilitate possession of the necessary titles by private parties, to the point of overriding other territorial rights and classifications.

Within this framework, resources such as lithium and copper are considered critical minerals, although in legal terms, only Chile and Peru classify lithium as strategic at the national level. In the case of Chile, lithium was declared critical by the military regime of Pinochet due to its association with uranium and its weapon manufacturing potential, though the categorization as strategic came more recently amid the international boom and the strong potential for further exploitation. It is only in this country that strategic status has specific implications for state participation in the industry. In addition, Chile's “National Lithium Strategy” (2023) promotes “virtuous public-private partnership” in lithium projects, with state participation from extraction through to the creation of “value added.” Among the strategy's proposals is the creation of a national lithium company; although this enterprise has yet to be constituted, the state maintains a presence in the industry through the Corporación Nacional del Cobre de Chile (Codelco) in Salar de Atacama and Maricunga, and the Empresa Nacional de Minería (Enami), with operations in six other salt flats. In Peru, Law No. 31283 of 2021 affords lithium strategic status, but this has no practical implications beyond expressing the state's interest in promoting investment and scientific study.

In Argentina, the regulation of mining policy is the responsibility of the state, though natural resources are considered the property of the province in which they are found. Thus, although the national regimen promotes investment through tax benefits and does not consider lithium as strategic, lithium-producing provinces such as Catamarca, Jujuy, and Salta have classified it as such. Although the legal denomination of strategic has been argued to be of limited practical effect at the provincial level, in reality, this status justifies state participation in lithium projects through public provincial companies such as Catamarca Minera y Energética Sociedad del Estado (CAMYEN S.E.), Jujuy Energía y Minería Sociedad del Estado (JEMSE), and Recursos Energéticos y Mineros de Salta (REMSA) (González & Trevignani 2025). The involvement does not tend to run counter to the provinces’ economic approach, however. These subnational administrations are

somewhat receptive to private investment in the mining sector: They facilitate administrative procedures for domestic and foreign companies and provide them with financial benefits (Díaz Paz et al., 2022).

Beyond the developmentalist impulses, none of the four countries has introduced any new environmental standards linked to critical minerals and energy transition industries based on robust principles of due diligence and free, prior, and informed consent for Indigenous peoples. Besides fleeting mentions, the numerous strategies and plans for energy transition do not develop ESG standards with any level of consistency. For example, the Alberto Fernández administration in Argentina launched the “Green Productive Development Plan” to plot a course toward decarbonization and ecological transition, linking the development of the hydrogen, lithium, and copper industries—among others—to the production of batteries, electric vehicles, and other products. However, this and other plans do not address the impacts of these extractive activities on local communities (Féliz & Melón, 2023). Only Chile's National Lithium Strategy, whose implementation will be contingent on the next administration, establishes in general terms the obligation to respect local communities, participation, and prior consultation—broad standards that were already present in the national framework.

Next, we present a detailed comparative analysis of the environmental and social standards corresponding to the mining and energy sector in the four countries.

3. Institutions and standards related to environmental impact assessment in mining and energy projects

In each of the four countries, public offices and regulations centered on “natural resources” and conservation areas have been a fixture since the mid-20th century. However, according to the historical analysis of Orihuela (2021), the progression of the green state was slowed in Chile by the neoconservative regime of the 1970s, and in Peru by the economic crisis and internal conflict of the 1980s, followed by the neoconservative regime of the 1990s. Colombia, whose critical mass of lawyers and political entrepreneurs was able to advance environmental reforms starting from the 1970s (Orihuela, 2021), did not run into this kind of problem. Thus, the country was able to respond to the 1972 UN Conference on the Human Environment with the approval of the Code of Renewable Natural Resources and the Environment (1974), one of the first environmental laws to be introduced anywhere (Rodríguez, 2009). In Argentina, the first state environmental agency was created in the early 1970s, after the Stockholm Conference and the country's return to democracy. However, here the creation of state environmental institutions was subject to paralysis and setbacks during the years of political conflict and only regained momentum in the 1990s (Gutiérrez & Isuani, 2014).

Since that decade, new global agreements and institutions have disseminated environmental policies, influencing the emergence of environmental protection systems in the four countries. No longer were these isolated or sporadic offices and laws, but national structures that cut across the public apparatus. But given the recency of these developments, the network of environmental institutions in these countries is still considered to be in its infancy (Rehner et al., 2025; Merino, 2020).

However, as we will see, these institutions have evolved in different ways in each country with respect to two variables: the level of bureaucratic autonomy (whether the offices are autonomous from extractive industries or higher public offices dedicated to promoting extractive industries) and the level of decentralization (whether the offices are centralized or devolved to the subnational level).

3.1. Environmental institutions

In this section, we will see how external factors (international agreements, accession to international organizations) and internal factors (an administration's political orientation) have influenced the emergence of environmental institutions.

Colombia honored its commitments made at the UN Conference on Environment and Development, held in Rio de Janeiro in 1992 (Rodríguez, 2009), with the promulgation of Law No. 99 of 1993, which created the Ministry of the Environment and the National Environmental System (SINA). This ministry is charged with formulating policies and regulations for the recovery, conservation, management, organization, use, and exploitation of the country's renewable resources. Law 99 also introduced a decentralized environmental management system, introducing 34 regional autonomous corporations (RACs) as regional environmental authorities responsible for environmental management in their jurisdiction (Defelipe, 2025). However, during the conservative administration of Álvaro Uribe between 2002 and 2010 (Rodríguez, 2009), the RACs were stripped of resources and control. Another milestone was the creation of the National Environmental Licensing Authority (ANLA) in 2011 through Decree Law 3573, which is responsible for both environmental certification and the oversight of large-scale projects with major environmental impact.

In 1991, Argentina instituted the Secretariat for Natural Resources and the Human Environment as well as provincial environmental agencies, at a time when preparatory meetings for the Rio Conference were proceeding apace and the government expected to receive multilateral loans and international cooperation funding (Gutiérrez & Isuani, 2014). In 2015, this secretariat was given the status of a ministry. However, this changed in 2023 when the current Javier Milei administration reorganized the executive branch through Decree 8 of 2023, reducing the number of ministries from 18 to 9. This saw the dissolution of the Ministry of Environment and its functions distributed among other offices, including the Subsecretariat for the Environment, which is now part of the Cabinet of Ministers. Environmental certification and auditing powers remain decentralized, however, which means that each province determines the office responsible for these tasks. In those provinces that host critical minerals, the influence of the mining sector is evident in the organization of government. For instance, in Jujuy and Salta the authorities charged with the review and approval of EIAs are the mining and energy secretariats, not the environmental secretariats. In Catamarca, the same is true of the Directorate of Mining Environmental Management, which pertains to the Provincial Ministry of Mining (González & Trevignani, 2025).

In the cases of Peru and Chile, the creation of the ministries of the environment and of autonomous environmental monitoring agencies followed the signing of trade treaties with the United States: in 2003 for Chile, and in 2008 for Peru (Orihuela & Serrano, 2025; Orihuela, 2019). In Chile, these bodies also influenced the OECD accession process in 2010 (Huneus, 2021; Madariaga, 2018; Irarrázaval et al., 2023).

In Peru, the first office responsible for formulating overall environmental policy was the National Environmental Council (CONAM), constituted in 1994 as a lower-ranking body. In 2001 the country introduced the National Environmental Impact Assessment System (SEIA), a set of rules and procedures directed by CONAM applied by sectors with environmental competencies—including the Ministry of Energy and Mines—to mining and energy projects. It was only in 2008 that the Ministry of the Environment was created. This, coupled with the establishment of the Environmental Assessment and Audit Agency (OEFA) that same year and the National Environmental Certification Service for Sustainable Investment (SENACE) in 2012, created the need to consolidate the sector across the entire public apparatus (Merino, 2020).

Similarly, in Chile, the Environmental Framework Law (Law 19300) of 1994 provided for the National Environmental Commission (CONAMA). This office operated until 2010, when Law 20417 constituted the Ministry of the Environment and its affiliated bodies, the Environmental Assessment Service (SEA), and the Superintendency of the Environment. This law also created the environmental courts, but implementation stalled during the conservative government of Sebastián Piñera (2010–2014) (Akchurin, 2021; Silva, 2023). The SEA is responsible for managing the Environmental Impact Assessment System (SEIA) that was overseen by CONAMA. Once the environmental assessment procedure has been completed, the SEA issues the Environmental Qualification Resolution, which certifies project approval. Then, the Superintendency for the Environment oversees compliance with this instrument.

The national environmental impact assessment systems in the four countries have all been subject to similar pressures. In Peru, tensions have arisen due to the transfer of competencies from the extractive sectors to the environmental sector organizations (Merino, 2020). The industry criticizes the excessive delays and red tape involved in the environmental assessment process. Similarly, in Chile, criticism has been levelled at the lengthy durations of procedures and demands considered excessive (Rehner et al., 2025). Similar criticisms have arisen in Colombia with regard to the complexity and duration of the procedures for obtaining environmental licenses, which can hinder the development of projects and, in turn, discourage investment (Bonilla, 2024).

In Argentina, the discourse around obstructive bureaucracy has inspired recent reforms in pursuit of “administrative simplification.” The downgrading of the Ministry of Environment to undersecretariat status reduced the capacity, resources, and standing of the environmental portfolio within the structure of government (Delfino, 2024). Even though environmental regulations in this federal state are based on the legal regimen of “minimum budget”—that is, the provinces must consider national environmental standards when establishing their own legal framework—in practice, the provinces are more interested in attracting investment than in environmental protection (Cinto et al., 2020)

In Peru, criticism of red tape has prompted so-called "environmental packages" – rules that have made environmental review requirements more flexible, such as Supreme Decree 054-2013-PCM, or have weakened environmental oversight, such as Law 30230 of 2014 (Merino, 2020, 2025; Orihuela & Serrano, 2025). Thus, despite new environmental institutions and laws such as the Mine Closure Law (Law 28090) and the Environmental Liabilities Law (Law 28271), which is unique in the region, Peru's environmental state is highly performative with limited bureaucratic autonomy (Orihuela and Serrano, 2025). By contrast, Chile's environmental bodies are more independent (Orihuela, 2021), and, in general, the environmental institutional apparatus is more robust (Rehner et al., 2025). However, as Huneus (2021) has noted, the creation of new environmental institutions in Chile since 2010 has not led to the implementation of more inclusive regulation. Barandiarán (2016) noted that the Chilean SEIA is the product of a technocratic vision that seeks to implement environmental governance without compromising the priority of safeguarding political stability and economic growth.

In general, sectors of civil society, environmentalists, and (some) officials cite the need for stronger and more cross-cutting environmental institutions in the four countries. In Chile, the lack of institutional concentration has drawn criticism for hampering a more integrated and agile vision (Rehner et al., 2025). In Colombia, there have been concerns about so-called "institutional parallelism" – overlapping functions for granting environmental licenses between ANLA and CAR. This sparks confusion within institutions and among citizens when it comes to deciding to which body to turn when exercising one's rights (Defelipe, 2025). In Peru, there are constant demands for the "mainstreaming" of the environmental approach throughout the public apparatus, and for the consolidation of environmental agencies. These debates are framed by historical processes, both internal and external. In the four countries, the ideological orientation of the respective governments has led variously to the strengthening or weakening of environmental institutions, and international actors and mechanisms—such as climate conventions, free trade agreements, and OECD membership—have been decisive in influencing the development of these policies.

Countries	Ministry	Certifying Body	Responsible body
Chile	Ministry of the Environment	Environmental Assessment Service (SEA), 2010	Superintendency of the Environment (SMA)
Peru	Ministry of the Environment, 2008	National Environmental Certification Service for Sustainable Investment (SENACE), 2012	Environmental Assessment and Enforcement Office (OEFA), 2008.
Colombia	Ministry of the Environment, 1993	Regional autonomous corporations (CAR), 1993 National Environmental License Authority (ANLA), 2011	Regional autonomous corporations (CAR), 1993 National Environmental License Authority (ANLA), 2011
Argentina	Secretariat of Natural Resources and the Human Environment, 1991	Provincial Secretariats of Mining and Energy	Provincial Secretariats of Mining and Energy

Source: Compiled by author

3.2. Environmental certification

Environmental certification is, in all four countries, a mandatory prerequisite for starting operations in the mining and energy sector. Certified EIAs are usually categorized according to the project's level of environmental risk. In Peru, an environmental impact statement (EIS) is required for projects adjudged to have a low likelihood of generating significant negative environmental impacts; a “semi-detailed environmental impact assessment” (EIA-sd) is necessary for projects with the potential to cause moderate environmental impacts; and a detailed environmental impact assessment (EIA-d) is called upon for large-scale projects that may result in significant negative environmental impacts.³ Only the EIAs feature citizen participation, and only the EIA-d is processed by SENACE; the EIA-sd and the EISs are overseen by the Ministry of Energy and Mines. Since many environmental management instruments still depend on the Ministry of Energy and Mines, this situation exemplifies how Peru's environmental state is weak by design (Orihuela & Serrano, 2025).

In Chile, there are only two different procedures: the environmental impact statement (EIS) and the environmental impact assessment (EIA), both under the purview of the SEA. As in Peru, the EIS is a simplified procedure without citizen participation that is implemented when a project is not expected to generate significant environmental impacts. The EIA, on the other hand, is employed for projects that generate significant impacts and is a lengthier and more complex procedure (Rehner et al., 2025); the instrument corresponds to a centralized system in which central government authorities have a critical role (Irrázaval et al., 2023).

In Colombia, EIAs are of two types: ordinary, for larger projects with greater potential to cause significant environmental impacts; and simplified, for lower-impact projects, with approval procedures that do not require citizen participation. ANLA is empowered to review the EIAs of national-level projects or those that produce a significant environmental impact at the national level.⁴ The CARs are tasked with reviewing the EIAs of projects developed within their respective territorial jurisdictions (Ministerio de Ambiente de Colombia, 2025).

In Argentina, provincial governments appoint “enforcement authorities” within their jurisdictions to conduct EISs and issue an EIS or a certificate of Environmental Aptitude (CEA), according to the regulations in each province, in which the environmental management instrument is approved or rejected (Gobierno de Argentina, 2025). The 2023

³In 2017, the Environmental Protection Regulations for Mining Exploration Activities created a new instrument of even lower ranking than the DIA: the “environmental data sheet,” for exploration projects of up to 20 drilling rigs.

⁴The Projects of National and Strategic Interest (PINES) came into being with the 2013 Annual Investment Operational Plan (CONPES 3672) implemented by the National Council of Economic and Social Policy, Colombia's highest authority for strategic planning. This Plan established the policy guidelines for the identification and prioritization of infrastructure, hydrocarbons, mining, and energy projects (Simbaqueba Peraza, 2017; Ministerio de Minas y Energía, 2023). These projects are defined as such by the Intersectoral Commission on Infrastructure and Strategic Projects and fall under the responsibility of the National Environmental Licensing Authority (ANLA). PINES projects for which no procedures have been submitted to the regional autonomous corporations (CARs) must be referred to ANLA (Ministerio de Ambiente y Desarrollo Sostenible, 2015). With regard to non-conventional renewable energy sources (FNCER), Decree 0852 of 2024 established that ANLA will be responsible for reviewing environmental impact assessments and monitoring environmental control and management instruments (Toledo & Bocanegra, 2024).

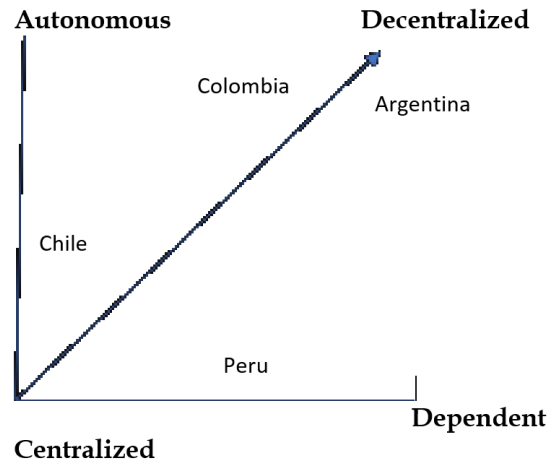
Regulation on Environmental Impact Assessment governs projects carried out in protected natural areas, and defines the difference between three environmental instruments: the EIA for projects that may have a high impact on the environment; the environmental impact report for projects that could have a medium impact on the environment; and the environmental report for small projects with minimal impact on the environment.

In Peru, an EIA amendment entails a special review procedure that incorporates mechanisms for citizen participation and the technical opinions of specialized bodies. The so-called first “environmental package,” Supreme Decree 054-2013-PCM, introduced the “supporting technical report” — an instrument for introducing minor changes expeditiously (the process formally takes 15 days) without the need for citizen participation or technical opinions from specialized bodies. In Chile, amendments to EIAs require the presentation of a new EIS or EIA depending on the scope of the change (Gobierno de Chile [ChileAtiende], 2024). In Colombia, companies seeking to amend an environmental license must submit a “supplement to the environmental impact assessment” that resulted in the original environmental license; that is, a new EIA is not required.⁵

A review of the institutions empowered to review EIAs, in terms of autonomy and decentralization, will shed light on some of the differences between the four countries. Chile and Colombia are highly autonomous because their relevant environmental institutions (SEA in the case of Chile; ANLA and the CARs in the case of Colombia) correspond to the environmental sector. In turn, in Argentina, the sub-national energy and mining offices bear responsibility, while in Peru, the Ministry of Energy and Mines reviews a large proportion of environmental assessments that do not generate “significant impacts.” As to the question of where power lies, Chile and Peru are highly centralized because they have not devolved power to subnational levels for the consideration of EIAs. This stands in contrast with Colombia, where the CARs are entrusted with reviewing projects that have not been declared of “national interest”; and with Argentina, where the provincial governments evaluate all projects.

It might be assumed that greater autonomy and decentralization lend greater independence and legitimacy to EIAs, yet criticism is evident across the board. Ostensibly greater autonomy in Chile and Colombia, and enhanced decentralization in Argentina, have been cast into doubt due to low standards of citizen participation. The same is true in Peru, whose environmental assessment offices are not fully autonomous and not at all decentralized.

⁵Decreto 1076 de 2015 Sector Ambiente y Desarrollo Sostenible, Artículo 2.2.2.3.7.2. *Requisitos para la modificación de la licencia ambiental.*



4. Transparency and citizen participation in the review of EIAs and project implementation

Scholars have discussed how EIAs constitute spaces of political dispute—from below or above, for or against the projects under evaluation— particularly at the participatory stage. At this juncture, initial technical and specific questions can evolve into political demands in opposition to the project (Huneus, 2021; Jaskoski, 2021).

All four countries have standards of transparency and information access applicable to private and public entities alike, within the framework of their environmental review procedures. The authorities make the full project documentation publicly available, and companies must provide full access to the executive summaries and the contents of EIAs. These obligations are facilitated by the dissemination of economic and social information in the mining and energy sector in accordance with the Extractive Industries Transparency Initiative (EITI). Peru joined EITI in May 2005 and achieved “compliant country” status in 2012, but was temporarily suspended in 2022 due to delays in submitting its transparency reports. The country was readmitted in June 2024 (EITI, 2024). Colombia joined EITI in 2014, and was validated in June 2018 (EITI, 2022b). In turn, Argentina joined EITI in 2019 (EITI, 2022a). Chile was the last to accede, in September 2025.

In general, in the countries studied, the review procedures for EIAs must adhere to information dissemination and citizen participation standards. These obligations have been reinforced through the Regional Agreement on Access to Information, Public Participation, and Justice in Environmental Matters in Latin America and the Caribbean, known as the Escazú Agreement. Chile ratified the agreement in 2022, via Decree 209; Argentina did so in 2020 through Law 27566; and Colombia followed suit in August 2024, after its Constitutional Court declared the constitutionality of Law 2273 of 2022. Chile has also approved a National Plan for the Participatory Implementation of the Escazú Agreement, Chile 2024–2030 (Rehner et al., 2025). Peru is the only country in the group that has not signed the agreement.

There are several mechanisms for citizen participation in each country. In Colombia, regulatory standards designate environmental public hearings, the right to petition

(environmental complaints), and prior consultation with Indigenous Peoples as forms of citizen participation (Autoridad Nacional de Licencias Ambientales [ANLA], n.d.). However, Toro et al. (2010) found that Colombia's citizen participation policies contradicted international best practices in environmental impact assessment and control and monitoring mechanisms.

In Chile, formal participation occurs within the timeframes of the EIA review process, and may entail observations or complaints during the stages and procedures established and supervised by the authorities. The problem is that this mechanism occurs at a late stage of the broader review process, when projects are already designed and submitted for review (Irrázaval et al., 2023; Ocampo-Melgar et al., 2019). Thus, the paucity of influence on project design, location, and feasibility renders these procedures an exercise in artifice (Huneeus, 2021). Another mechanism is "early citizen participation," which takes place before a project is submitted to the SEIA review process, but this is undertaken by the company and is merely voluntary (Poder Ambiental, 2025). Although certain megaprojects display a measure of commitment to this form of participation, which is championed by financial institutions such as the International Finance Corporation and the World Bank (Ocampo-Melgar et al., 2019), it is generally considered weak, fails to meet the expectations of civil society (Irrázaval et al., 2023), and does not yield binding results (Rehner et al., 2025). In fact, the environmental movement seeks to exploit the brief window of citizen participation to challenge megaprojects, while business elites and their political allies argue that participation leads to delays, cost overruns, and uncertainty, thus threatening investment (Silva, 2023).

In Argentina, the participation mechanisms that the General Environmental Law (Law No. 25675 of 2002) provides for are public consultations at the project categorization stage, and public hearings at the EIA review stage—both of which are mandatory in all national jurisdictions. However, it is considered good practice to complement these mechanisms with other participation mechanisms from the early stages (Ministerio de Ambiente y Desarrollo Sostenible, 2023). However, the mechanism is undermined by several regulatory shortcomings: a lack of regulation governing participation (Murguía & Marín, 2025); a conception of citizen participation as a momentary and non-binding instrument; a failure to establish institutional remedies for power and information asymmetries; and no promotion of spaces for dialogue outside the EIA system (Murguía & Marín, 2025). For Marchegiani et al. (2019), national legislation should establish more detailed provisions, including socio-cultural impact assessments and benefit sharing, in the early stages of the assessment process. At the Argentine subnational level, only the province of Catamarca has specific regulations on citizen participation prior to the granting of an environmental license: the Guidelines for the implementation of citizen participation: Consultation and Public Hearing, approved in September 2021 (González & Trevignani, 2025). In Jujuy, the Provincial Mining Environmental Management Unit, composed of government, business, and civil society representatives, issues opinions that recommend only approval, clarification, or rejection of an EIA. In the case of Salta, the Ministry of Mining has created a register of "social roundtables" aimed at informing and promoting community participation. In the province of Catamarca, the Directorate of Mining Environmental Management is responsible for public consultation and participation, including that involving Indigenous communities (González and Trevignani, 2025).

In Peru, participation mechanisms associated with the EIA review process include the distribution of informative materials, guided tours of project facilities, participatory workshops, public hearings, and others. Only in the case of mining are roundtables considered a mechanism for citizen participation. In the case of hydrocarbons, there are also rules of participation before concessions are awarded. At this stage, the state-owned petroleum company Petroperú communicates and disseminates information throughout the area of influence about the exploration and/or exploitation tender. In the mining industry, the first rules of participation apply once a concession has been awarded, but these are merely recommended good practices rather than mandatory requirements. The state may coordinate with the company to inform affected populations about the scope of the concession, environmental standards, stages of activity, applicable technologies, or other issues. Before any activity can be started, whether it be mining or hydrocarbons, the company must reach “prior agreement” regarding land owned by community or individual interests (Merino, 2025).

When it comes to citizen participation in the project execution stage, only Peru’s mining industry has applicable regulations in place. Mining companies are advised to establish participatory environmental monitoring and a permanent information office (Regulations for Citizen Participation in the Mining SubSector: Supreme Decree 028-2008-EM). This office provides information on project development and fulfillment of obligations and commitments assumed, besides responding to community observations, complaints, or contributions. This is intended to serve as a voluntary form of “grievance mechanism” on a highly localized scale, and nothing of the kind is suggested for the parent company or the financial institution that supports the project. In turn, the participatory environmental monitoring and surveillance is developed through a committee peopled by representatives of the company as well as local communities and authorities (Merino, 2025).

In Chile, there are no regulations governing formal citizen participation processes subsequent to project approval (Rabí, 2020). Thus, different actors have proposed alternative schemes to overcome the deficiencies of environmental participation, including “territorial development agreements” – voluntary commitments covering local hiring and purchasing, environmental education, and community relations (Rabí, 2020; Chile Sustentable, 2018).

In Argentina, some companies implement community participation programs that go beyond the minimum legal requirements, such as participatory environmental monitoring processes in which community members take charge of environmental control activities related to the quality of water, air, and other natural resources (Ministry of Mining, 2022). However, in response to the high level of conflict related to mining, the Ministry of Mining (2022) created two mechanisms: the Roundtable for Mining Open to the Community, conceived as a plural, federal, and transdisciplinary space to discuss the various aspects of mining activity; and the Mining Activity Information System Open to the Community, a complementary mechanism to improve transparency and access to information.

All four countries have assumed international commitments to promote transparency and participation, and all have introduced standards to regulate these mechanisms in the EIA review process. However, in each of the experiences, there are criticisms about the

effectiveness of participation and its usage by government and companies as mere bureaucratic formalities. Another common concern is the absence of mandatory rules on participation before and during project implementation. For both stages, good practice recommendations or voluntary standards tend to predominate, with the result that project legitimacy and even viability can suffer.

5. Regulation and implementation of prior consultation

In this section, we analyze the institutional design of consultation (the bodies responsible, rules on the timing of consultation, applicable standards) and ways in which it is implemented. We also present information on the number of consultations carried out and common criticisms regarding the processes.

All four countries are home to diverse Indigenous peoples whose community organizations are active in raising observations and questions about mining and energy projects. Moreover, all four states have ratified ILO Convention 169: Colombia did so in 1991 (Law 21), Argentina in 1992 (Law No. 24,071), Peru in 1994 (Legislative Resolution 26253), and Chile in 2008 (Decree 236).

In Peru, the 1920 Constitution recognized Indigenous communities for the first time. These populations were subsequently denominated “campesino communities” and “native communities” by the legislation of the 1970s, and formally recognized as such in the Constitution of 1978 and the current 1993 document. From the 1990s, the energy and mining sector had been supervising the realization of “prior consultation” with Indigenous peoples through information workshops, as part of the EIA approval procedure. However, following sustained Indigenous activism and the Constitutional Court's rejection of these workshops as valid forms of prior consultation, the mechanism as proposed by ILO Convention 169 was formally introduced through Law 29785 of 2011, the Law on the Right to Prior Consultation with Indigenous Peoples (the “Consultation Law”). The region's first general law of prior consultation, it obliges any public body to discharge the procedure when it approves a policy, rule, or resolution that may affect the collective rights of any of the 55 indigenous peoples recognized by the Ministry of Culture (Ministerio de Cultura, 2024).⁶ The procedure takes 120 days and includes the following stages: identification of the affected population; provision of information on the implications of the rule or decision; and internal review. If there is no agreement at this point, a new stage begins: that of intercultural dialogue. The final stage is the decision, which is provided regardless of whether the Indigenous peoples affected agree with the proposed measures.

Chile's process of recognizing its Indigenous Peoples began in 1993 with Law 19253, which created the National Indigenous Development Corporation (updated in 2023 by Law 21606). After the ratification of Agreement 169, the government issued Supreme Decree 66/2013, the Indigenous Consultation Regulations, which established guidelines for the SEIA in compliance with the state's obligation to carry out indigenous consultation (Rehner et al., 2025; Ocampo-Melgar et al., 2019), as well as providing for a different citizen participation

⁶There are 51 Amazonian and 4 Andean indigenous peoples. This population is organized into campesino communities in the Andes and native communities in Amazonia.

standard in the case of Indigenous communities (Irrázaval et al., 2023). In this regulatory framework, consultation is a process of dialogue between the state and Indigenous peoples, the aim of which is to reach agreement or obtain consent about legislative or administrative measures that may directly affect the latter. In accordance with the SEIA, the administrative measure to be consulted is the project Environmental Qualification Resolution (SEA, 2025).

In Colombia, Indigenous rights were recognized in the 1991 Constitution. Subsequently, regulatory rules on prior consultation have been approved, among them Directive 01 of 2010, which establishes in general terms the actions that require prior consultation; and Directive 10 of 2013, which stipulates the order of the procedure and the consultation's stages. However, these presidential directives do not set deadlines and constitute a very general legal framework that has facilitated the development of consultations by companies (Defelipe, 2025). On the other hand, as in Chile, in Colombia prior consultation is part of the environmental assessment procedure. A legal reform in 2020 (Decree 1585) specified that, in order to obtain an environmental license or a change thereto, an applicant must, where appropriate, protocolize prior consultation as part of the procedure. The Directorate of the National Prior Consultation Authority (DANCP), part of the Ministry of the Interior, determines the suitability of prior consultation at the request of the party interested in verifying the environmental feasibility of project execution (ANLA, 2025).

In Argentina, the office responsible for prior consultation is the provincial mining authority (the “enforcement authority”), in conjunction with agencies such as the National Institute of Indigenous Affairs (INAI), the organization that guarantees the exercise of citizenship for Indigenous peoples and communities. However, the country has no specific laws governing consultation procedures (Escosteguy et al., 2022). Therefore, this mechanism has been applied through technical protocols promoted by INAI that seek to standardize consultation processes in different jurisdictions (Ministerio de Energía y Ambiente [Mendoza], 2024). But protocol implementation is subject to the political will and institutional capacity of the provincial governments, and none of the three provinces hosting lithium projects has specific regulations in place. For instance, the province of Catamarca only refers to the consultation of Indigenous peoples and communities as part of citizen participation during the EIA review stage (González & Trevignani, 2025).

Catamarca only refers to the consultation of Indigenous peoples and communities as part of citizen participation during the EIA review stage (González & Trevignani, 2025). For Indigenous organizations, prior consultation incorporates fewer rights than the international standard of “free, prior, and informed consent” enshrined in the 2007 UN Declaration on the Rights of Indigenous Peoples, the rulings of the Inter-American Court of Human Rights, and even private standards such as the Initiative for Responsible Mining Assurance (IRMA). This is because in the four countries consent is only required for cases of displacement and possession of hazardous material in Indigenous territories, not in general terms when state measures can affect a large part of a territory (CIDH, 2012). While Indigenous peoples demand that their consultation decisions be “binding” (Merino, 2025; Murguía & Marín, 2025; Rehner et al., 2025; González & Trevignani, 2025; Defelipe, 2025), the governments argue that consultation does not grant communities the right of veto over their policies.

When it comes to implementation, the countries have recorded numerous consultation processes. In Peru, as at March 2025, the Ministry of Culture cited 40 mining prior consultation processes out of a total of 111 then underway. The rest corresponded to hydrocarbons (14), protected natural areas (14), infrastructure (7), electricity generation (6), national standards (5), and cultural heritage (25).

In Chile there are no precise publicly available figures on the number of previous consultation processes undertaken. However, a study by the Universidad de Chile identified that 89 consultation processes had been completed and another 42 remained pending, across various areas, between the ratification of Convention 169 in 2008 and December 31, 2017. This research showed that the ministries responsible for the highest number of completed consultation processes were those of Public Works, with 32.4% of the cases; and the Environment, with 28.2% (University of Chile, 2020). On the other hand, official sources show that in 2025 there were five ongoing consultation processes related to geothermal concessions (Ministerio de Energía, 2025) and eight related to mining—including the consultation in Salares Altoandinos, in the Atacama region, which was the first to be carried out in Chile as a prerequisite for the award of a special lithium operation contract. Moreover, April 2025 saw the completion of the second Indigenous consultation requested by CODELCO for the amendment of the special lithium operating contract in the Salar de Maricunga (Ministry of Mining, 2025).

In Colombia, the Ministry of the Interior reported that 7,403 prior consultation processes had been carried out with indigenous communities by November 2021 (Ministerio del Interior, 2025b). It was also revealed that an annual average of 2,222 prior consultation certifications have been issued under the current government since 2022, of which approximately 31% correspond to mining and energy (El País, 2023). This large number reflects the way in which the consultation process is administered: In Colombia companies oversee the mechanism themselves, so the process is not subject to the protracted bureaucratic stages or procedures witnessed in Peru and Chile.

In Argentina, there is currently no public statistical compendium that systematizes prior consultation and citizen participation processes linked to the mining and energy sector (Murguía & Marín, 2021). Nonetheless, information from other sources confirms that in July 2025, the Provincial Directorate of Mining in Jujuy initiated two consultation processes for environmental impact reports during the initial exploration stage. The first corresponds to the Jorge Enrique Mine, operated by Lithium S Corporation S.A., whose period of citizen participation ran from July 28 to August 20, 2025. The second involved the La Aguada, Aguadita I, and Mahoma projects, also run by Lithium S Corporation S.A. and subject to the same consultation period (Secretaría de Minería e Hidrocarburos, Gobierno de Jujuy, 2025).

The practices related to consultation procedures have often been problematic. For one thing, some of the flaws in the consultation design have led to implementation problems. In Chile, Argentina, and Colombia there is no national legislation that determines the procedural rules of prior consultation across all sectors. In Argentina's provincial jurisdictions, this has given way to inconsistent interpretations and irregular applications (González & Trevignani, 2025). It has been noted that the lack of clear guidelines for implementation creates uncertainty regarding the start of the process, its scope, and the expected results. This has led public bodies to develop participation mechanisms on a discretionary basis,

which in many cases affects the credibility of the process (Escosteguy et al., 2022; Murguía & Marín, 2025). Legitimacy is little better in Colombia, where the absence of a statutory law means that the project operators, rather than the state, can take charge of consultations (Defelipe, 2025).

Despite its general prior consultation law, in Peru, there are also legal loopholes that can cause implementation problems and ambiguity. For instance, an ongoing debate in the mining industry refers to who must be consulted. As the law stipulates that campesino communities “may be considered” Indigenous peoples, some have argued that the law could potentially exclude communities that may have lost their Indigenous status. There is also debate around what decision or standard should be consulted, and when. Ministry of Energy and Mines regulations establish that mining consultation applies to the resolution authorizing the start of exploration or exploitation operations, not to the granting of concessions or to the resolution approving EIAs. In the case of hydrocarbons, on the other hand, consultation only applies to the proposed concession contract. Although the state has not formulated any technical argument to support these distinctions, a difference is that the hydrocarbon concession contract is the product of a complex bidding procedure and few lots are offered by the state. In turn, mining concessions are awarded through a simplified procedure and can be found throughout the country. In any case, indigenous organizations argue that mining and hydrocarbon consultations should be employed during both the concession and the EIA review stages since both are important for determining the level of influence and impact of a project (Merino, 2025).

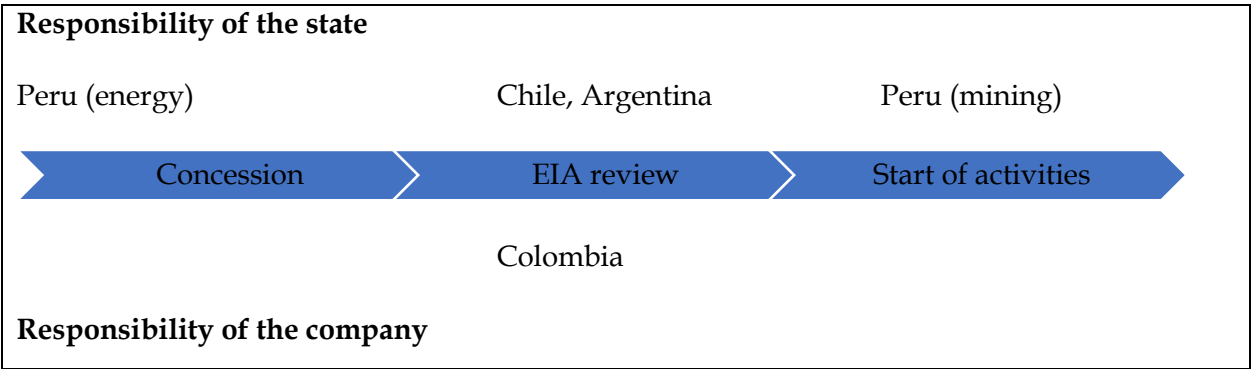
In general, consultation practices are subject to several deficiencies. In Peru, frequently cited shortcomings include the weakness of the Ministry of Culture, the lack of a specialized body representing indigenous peoples, the dearth of monitoring of compliance with agreements, and insufficient technical assistance (references in Merino, 2024). In Chile, criticisms surround the quality of prior consultations and the excessive duration of the process (Rehner et al. 2025). Moreover, there have been several conflicts associated with poor application of prior consultation in lithium projects, precipitating tensions with local communities in Atacama (Irarrázaval & Carrasco, 2023; Rehner et al., 2025). In the case of Argentina, communities in the provinces of Catamarca, Jujuy, and Salta have condemned the lack of adequate consultation for lithium projects and for the Cauchari Solar Park project in Jujuy. The Supreme Court and other courts have intervened in some cases, but without establishing a firm doctrine that assures the uniform application of the right to consultation (González & Trevignani, 2025).

Ciftci and Lemaire (2023) have detected an increase in consultations related to lithium projects in Chile and Argentina amid soaring demand for electric vehicles; however, these are beset with irregularities and asymmetric negotiations. For example, in October 2021, the government of Catamarca announced a consultation process corresponding to the entry into service of the lithium mining project in the Salar del Hombre Muerto, operated by the Australian-owned Galaxy Resources Ltd. This consultation process, organized by a provincial government, took four weeks and included discussions about the EIA, technical talks, and a public hearing. However, local participation was restricted given logistical constraints on attending meetings, time limits on giving opinions, the police presence at the

sessions, and company inducements such as job offers prior to project approval (Escosteguy et al., 2022).

In Colombia, it is argued that consultations are not always effective or transparent (Defelipe, 2025). The problems encountered include breaches of the requirement that the consultation be prior, free, and informed; failures to deliver the maps, technical studies, and documents (environmental, social, economic, and cultural cost and impact documents; design documents) on time, in their entirety, or in the expected form, language, and content; disregard of the right of communities and peoples to participate fully in devising intercultural relationship protocols; and an absence of legitimate community representation (González, 2021). Other practices that go against the spirit of prior consultation concern the undue legalization—as part of the consultation—of events held without communities receiving the necessary information or time to prepare, as well as attempts to reach protocolization agreements without prior access to studies on the costs of impacts (Defelipe, 2025). This situation has led to the judicialization of consultations through the remedy of “tutela,” prompting Indigenous communities, in the exercise of their autonomy, to formulate autonomous consultation and consent protocols (Vega-Araújo, et al., 2025; Defelipe, 2025).

Thus, there is evidence that prior consultation is subject to regulatory and implementation problems across all four countries. Peru is the only country in which there are extensive and detailed regulations in place. In Chile, Colombia, and Argentina, the procedural standards and rules present gaps that have precipitated varying degrees of subjectivity in their application; a paradigmatic example is companies in Colombia bearing responsibility for overseeing their own consultations. And despite the greater regulatory development in Peru, there remain gaps and inconsistencies in the timing of consultations in the energy and mining sectors (i.e., whether they should occur before or after the review of EIAs, while in the other three countries, the consultations take place during the environmental assessment processes). In all cases, the consultations are vulnerable to delegitimization due to the exclusion of participants, technical and language restrictions, and, in general, the lack of any binding effect, which means that community decisions regarding project viability can be overlooked.



Source: Compiled by author.

6. The labor question

Green developmentalism promises to link local development to investment in critical minerals and renewable energy. This implies quality labor recruitment, technology transfer, and the development of new value chains underpinned by adequate labor relations. Against this backdrop, this section focuses on the regulation and application of key labor standards, such as the recruitment of foreign workers and trade union rights, in the countries studied.

The private labor regime predominates in the mining and energy sector in these countries, with broad similarities in terms of the rights and obligations for workers and employers and the institutions responsible for supervision and oversight. Except for Colombia, mining and energy have no special labor regulations, formalization is high, and labor benefits are considered good, although certain activities are carried out through subcontracting and outsourcing mechanisms, and fall outside the scope of labor protection.

In Peru, the mining and energy sector, including public companies, pertains to the general labor regime for the private sector, governed by the Labor Productivity and Competitiveness Law (Legislative Decree No. 728). This law recognizes the right to job stability and benefits such as bonuses, compensation for length of service in the event of termination of employment, paid leave, social security, and profit distribution. In Chile, Law-Ranking Decree No.1 of 2002 condenses the labor standards presented in the Employment Code and recognizes the rights of workers, including working hours and collective bargaining (Rehner et al., 2025). In Argentina, Law No. 25877 of March 18, 2004, federal in scope, organizes overall labor relations without making special provisions for the mining or energy sectors.

In Colombia, the Substantive Employment Code, approved by Decree 2663 of August 5, 1950 and subject to multiple amendments, is the fundamental body of labor regulations. The parts of this code relating to medical care and protection at work (Chapters 10 and 11, respectively) contain specific provisions for workers in the mining industry. Law No. 2456 of June 26, 2025 incorporates a labor reform aimed at decent and dignified work; Article 58 stipulates protection measures for workers in the mining sector who are affected by energy transition processes. The law also regulates aspects related to the labor regime, freedom of association in the workplace, and other general measures.

6.1. Local employment

In Peru, the recruitment of foreign workers is regulated by the General Foreign Employment Law (Legislative Decree No.689 of November 5, 1991) and its regulations (Supreme Decree No. 014-92-TR). This legislation stipulates that foreign nationals may not account for more than 20% of the workforce and 30% of overall pay, with renewable fixed-term contracts of up to three years, and is enforced through digital registration and subsequent audits. In the case of mining, special rules stipulate that companies must include, in their concession applications, an affidavit in which they undertake to give precedence to hiring Peruvian nationals (Merino, 2025).

According to the International Organization for Migration (IOM) Peru maintains percentage limits on foreign recruitment; however, there is limited publicly available information broken down by subsector (IOM, 2019; FES, 2025). Moreover, there is scope for companies circumventing these quotas by under-registering foreign nationals or submitting unrepresentative figures that distort the employment relationship. To guard against this situation, there is a need for constant control of percentages and verification of migratory status, with special attention to supply chains (Poder Ejecutivo, 1991; MTPE, 2018; Gestión, 2023; IOM, 2019).

In Chile, the Employment Code sets a maximum proportion of foreign hires per employer, and, in the case of companies with more than 25 employees, 85% of the payroll must be Chilean nationals. However, the figures are calculated in such a way that certain foreign nationals can be counted as Chileans, while specialist technicians are exempt from the requirement (BCN, 2003; Mintrab, 2025). Law 21325 on Migration and Aliens, enacted on April 20, 2021, requires express authorization for the employment of foreign nationals, and non-compliance incurs fines and other sanctions such as administrative expulsion in the case of serious or repeated violations (Diario Oficial de la República de Chile, 2021). According to secondary sources, large mining companies employ among the lowest proportions of foreign nationals, and so are less likely to exceed the legal quotas. This can be explained by the high availability of qualified local employees, as well as the use of exempted specialist technicians (SN2, 2025; Mintrab, 2025). A major risk in the subcontracting chain is of a contractor failing to regularize their visa status in time, resulting in fines for working without authorization (Diario Oficial de la República de Chile, 2021).

Colombia's Law on Formalization and Generation of Employment (Law 1429), enacted by Congress on December 29, 2010, does not place a general limit on foreign workers and did away with the old requirement for proportionality in the Substantive Labor Code (CST) (Congress of the Republic, 2010). However, for activities that require a degree and professional registration in engineering, there is a special limit: No more than 20% of these specialists may be foreign nationals, per Law 842 enacted on October 14, 2003 (Congreso de la República, 2003). In all cases, foreign employees must hold a visa and registration in the Single Registry of Foreign Workers in Colombia (RUTEC), created by Resolution 4386 of the Ministry of Labor, October 9, 2018 (Ministerio del Trabajo, 2018). Failure to register carries administrative sanctions (Ministerio de Relaciones Exteriores, 2022; Ministerio del Trabajo, 2018). However, based on constitutional jurisprudence, the employment rights of even migrants with irregular migratory status are recognized (Constitutional Court, 2007). In addition, major operators in the mining sector tend to comply with visa and registration requirements due to auditing stipulations, and breaches are largely concentrated among contractors and subcontracting chains (Ministerio del Trabajo, 2018; Ministerio de Relaciones Exteriores, 2015).

The only country of the four that does not place any restrictions on foreign employment is Argentina. Employment Law 20744, promulgated by the Argentine Congress on September 27, 1974, prohibits discrimination by nationality (Congreso de la Nación, 1974). Migration Law 25871 of January 21, 2004 only requires qualifying residence and prohibits the employment of people whose status is regular; among the sanctions it provides for as fines

to employers (Congreso de la Nación, 2004; DNM, 2010). However, some have questioned whether there has been adequate compliance with these regulations in the mining and energy sector, given reports of unauthorized migrant recruitment and tensions stemming from the hiring of foreign nationals at the expense of local workers (OCMAL, 2012; El Tribuno, 2024; Vacamuertaonline, 2025; ECLAC, 2005). In the mining industry, complaints have concerned the presence of irregular visas or unauthorized foreign nationals in operations related to lithium, triggering inspections and community claims (OCMAL, 2012; El Tribuno, 2024). In the case of energy, the expansion of the Vaca Muerta oil project has attracted migrant labor due to local skills shortages, prompting accusations of local job displacement (Vacamuertaonline, 2025). Moreover, there is evidence that some contractors or subcontractors turn to personnel without due immigration authorization (Congreso de la Nación, 2004; DNM, 2010; El Tribuno, 2024).

Overall, however, across the four countries the caps on foreign labor facilitates engagement with local actors, mitigating social tensions. However, it would seem that stricter rules are still necessary to compel companies to generate more substantive employment ties with the local workforce. Even with the current general quota regimes, challenges persist in terms of supervision and compliance as well as contractors' responsibilities.

On the other hand, the case of Argentina appears to exemplify the problems that can arise when there are no legal restrictions on hiring foreign nationals. González and Trevignani (2025b) have noted that Argentina's lithium-producing provinces feature a large proportion of Argentine workers in the construction stages, but that the more highly qualified and management roles are still disproportionately occupied by foreign personnel. This appears to contradict the "local purchase" policy operated by these provinces, in which they supposedly promote the recruitment of local workers and the procurement of local goods and services. Indeed, as projects progress, companies often turn to other provinces in pursuit of more skilled human resources (González & Trevignani 2025b). There are also cases, such as that of Minera Exar in the province of Jujuy, where agreements are signed with community members to work at a plant through worker cooperatives. The disadvantage of this arrangement is lower wages than provided for by the labor agreement, short-term contracts, and precarious work (González & Trevignani, 2025a). Another case which exemplifies the difficulties in generating local development is that of Zijin, which operates the Tres Quebradas project in the province of Catamarca. According to González and Trevignani (2025b), the company justifies its foreign hiring practices by citing the lack of locally available local human resources. This issue may reflect the absence of a government strategy for sector-specific human resources training (González & Trevignani, 2025b).

6.2 Freedom of association in the workplace

In Peru, the Political Constitution of 1993 and the consolidated amended text of the Collective Labor Relations Law, approved by Supreme Decree No.010-2003-TR, recognize the right to union membership without prior authorization and with leave for leaders (Executive Power, 2003; MTPE, 2019; MTPE, 2022; SUNAFIL, 2019). Although this legislation extends to the mining and energy sector, several reports attest to high levels of

conflict and uneven compliance, with complaints of anti-union actions and collective bargaining reversals (Salvador, 2024; FES, 2025; Infobae, 2025; Vinatea & Toyama, 2023). And while the neoliberal reforms of the 1990s mean that many mining unions no longer wield the power they once did, some, such as the Shougang Mine Workers Union, remain active; this union has reported retaliatory measures against its leaders and delays in collective bargaining processes (Dolores, et al., 2022).

In Argentina, Law 23551, the Trade Union Associations Law of April 18, 1988, guarantees freedom of association in the workplace and unpaid leave for union duties without loss of position (Congreso de la Nación, 1988). Membership is governed by statutory requirements, without barriers due to national origin; in addition, the model allows for plurality of membership (Congreso de la Nación, 1988; MTEySS, 2001). Denying the reservation or reinstatement of position constitutes a punishable offense (Congreso de la Nación, 1988, Art. 53). However, reports on labor rights describe tensions surrounding the exercise of freedom of association among certain strategic sectors (among them teachers in Tierra del Fuego, sugar producers in Salta and Jujuy, and subway workers in Buenos Aires; CELS, 2018). Moreover, the combination of high turnover, outsourcing, and remote location poses organizational challenges for union action, representation, and leave (Vacamuertaonline, 2025; Congreso de la Nación, 1988; CELS, 2018).

In Chile, Law 20940, published on September 8, 2016, consolidated freedom of association in the workplace and reinforced collective bargaining without establishing special regimes for mining or energy (BCN, 2016). Membership is voluntary and any discrimination based on union activity is prohibited. However, to avoid conflicts of interest during negotiations, restrictions are placed on those who hold general administrative powers, such as managers and deputy managers (Cámara de Diputadas y Diputados, 2014). Union leave also includes minimum weekly hours for directors and, in some cases, the possibility of a full day of facility time (SUSESO, 2025; BCN, 2003). Although these unions are considered weak compared to their counterparts in Europe as well as some Asian and other Latin American countries, those representing copper mining tend to exhibit high levels of organization and extensive collective bargaining coverage. (SN2, 2025; SONAMI, 2016). These organizations often influence the design of contracts and secure pay concessions for their members following strike action. Overall, the mining industry enjoys good working conditions, levels of pay, health standards, and risk prevention, though, to dilute union power, the practice of subcontracting has increased (Rehner et al., 2025).

In Colombia, Law 584 of 2000 and Judgement T-464 of 2010 cover freedom of association and paid union leave, while Decree 720 of 2024 stipulates rules for public servants and places restrictions on board membership for management-level or trusted employees but does not prevent it (República de Colombia, 2025; Congreso de la República, 2000; Corte Constitucional, 2010; Presidencia de la República, 2024). According to reports, the mining and energy sector presents low union density, high levels of outsourcing and conflict, and social dialog compliance gaps (ENS, 2016; ILO, 2021). This hampers the negotiation and full use of permits, particularly in contractor chains (ENS, 2016).

In general terms, the mining and energy sector in all four countries has a legal framework that recognizes fundamental rights for workers, including union membership and union

leave. However, the use of labor outsourcing mechanisms, such as subcontracting, constitutes a risk that may impinge upon the exercise of these rights.

7. The implementation of ESG standards

In this section we present four cases — one per country — that illustrate the problems related to ESG implementation among Chinese companies.

7.1. Peru: Las Bambas under MMG

Las Bambas is a copper and molybdenum mining operation located in the provinces of Cotabambas and Grau, in the department of Apurímac. In August 2004, the Swiss-headquartered Glencore-Xstrata acquired the exploration rights and, in the years that followed, managed to circumvent labor conflicts through ambitious compensation schemes and the successful relocation of the community of Fuerabamba to a new company-built settlement.

In July 2013, when Glencore-Xstrata sought to change its environmental impact assessment, it became the first company to take the route of Peru's new simplified “technical supporting report” mechanism (Schaeffer et al., 2019). This report supported the change of location of two extraction facilities (the molybdenum plant and the filtration site) and the concentrate storage area from the Tintaya/ Antapaccay area (province of Espinar, department of Cusco) to Las Bambas in the department of Apurímac. The simplified mechanism also enabled an increase in the production of concentrates to the tune of 278 tons of minerals per day — something that would otherwise have required a full-scale amendment of the EIA (Schaeffer et al., 2019).

In April 2014, the project was transferred to a consortium led by Minerals and Metals Group (MMG), a subsidiary of the multinational China Minmetals. In March 2014, just before transferring ownership to the Chinese consortium, Glencore-Xstrata submitted a second EIA amendment in order to update its water management system and the environmental and social baselines. This request made no reference to changes in the way in which the minerals were to be transported — despite original community-supported plans for a slurry pipeline. Given this omission, the amendment procedure did not include the technical opinion of the Ministry of Transport and Communications, and the citizen participation stage did not address issues related to mineral transportation. In October 2014, MMG, which had now assumed project control, submitted supplementary information as part of the EIA amendment request to propose a change from the pipeline originally proposed to land transportation. This change reduced the project's area of influence, excluding communities that had been part of the initial plan. Based on this information, the authorities approved the EIA modification in November 2014 (Merino, 2022).

However, MMG failed to consult local communities about these changes, sparking a series of protests from February 2015 until 2016 that claimed the lives of at least four campesinos (El País, 2019). In fact, since 2015, both the government and the company have incriminated campesino leaders for exercising their right to protest, calling for up to 17 years in prison

(CNDDHH, 2019; Merino, 2022). Eventually, in 2025, the 11 leaders charged were acquitted by the Apurímac Superior Court of Justice (La República, 2025).

In addition, in 2017, MMG presented a new ITS to SENACE (by then in operation) approving the expansion of the concentrator plant from 140 to 145 thousand tons per day and the alteration of five components related to the project mining and expansion plan. By 2022, the Las Bambas mining project had 20 approved environmental management instruments – five of which were modifications to the exploration EIA, three altered the exploitation EIA, and seven corresponded to the ITS (OEFA, 2022). Schaeffer et al. (2019) have argued that these developments exemplify the abuse of EIA amendment mechanisms.

What is more, the case evinces minimal application of due diligence and citizen participation. Had MMG displayed greater knowledge of or commitment to local aspirations and the social context, it would have understood the importance the proposed pipeline project for local communities. In addition, both Glencore-Xstrata and MMG could have done more to keep the local community informed about EIA changes (Merino, 2022). These issues have deepened mistrust and, in large part, are what lay behind the current climate of discontent. Communities inside the project's area of influence have raised both environmental (dust generated by continuous transportation of minerals) and social concerns (adequate financial compensation and potential direct benefits through subcontracting schemes). These dynamics have sparked new problems, such as the emergence of illegal mining in neighboring areas.

Both before and since the influx of Chinese capital, the government's role has been similar. First, promoting investment, and then conferring “national road” status on the routes traversed by mining trucks so as to avoid compensation claims by communities. Finally, applying and strictly enforcing emergency decrees to deploy the armed forces as a way of ensuring the transportation of minerals. These means of supporting mining projects is highly problematic and compounds distrust.

7.2. Chile: Rucalhue hydroelectric power plant

Critical minerals, renewable industries, and hydroelectric power plants are usually included within the energy transition as they are the basis of a system that does not depend on fossil fuels. Therefore, considering the significant Chinese investment in hydroelectric plants in Chile, we have selected the case of the Rucalhue hydroelectric plant: the country's largest, located in the Biobío region between the municipalities of Quilaco and Santa Bárbara (CICDHA, n.d.). Originally led by the Brazilian-headquartered Atiaia Energía SpA, the project was acquired in May 2018 by Rucalhue Energía SpA, operated by China International Water & Electric (CWE) – a subsidiary of the state-owned transnational China Three Gorges Corporation (OLCA, 2020). The Rucalhue plant is CWE's first in Chile and marks a milestone in the internationalization of Chinese energy investment (Ríos et al., 2023). It also corresponds to the Biobío Industrial Strengthening Plan promoted by the Chilean government after the closure of the Huachipato steel plant in 2024 (Lieberherr,

2025). Its objective is to create jobs in industries such as energy, gas, mining, and monoculture forestry.

In April 2016 project execution was authorized through an environmental qualification resolution (OLCA, 2020), but construction could not begin due to the presence of plant species categorized as vulnerable by the National Forestry Corporation (CONAF) and located in a protected native conservation forest (OHCHR, 2023; Ministerio del Medio Ambiente, 2016). Pursuant to Article 19 of Law 20283, CONAF has the power to grant exceptional intervention within native forestland if a project is judged to be in the national interest. Thus, CWE petitioned CONAF for such exceptional status in order to intervene in the area and build the hydroelectric plant (Arroyo, 2023). Finally, and despite a challenge that reached the Court of Appeals of Santiago (OHCHR, 2023), CONAF declared the project to be “of national interest” in 2023 and, a year later, approved the management plans, enabling the start of the works and authorizing the felling of species with conservation status (Lieberherr, 2025; Arroyo, 2024).

Although the business sector has argued that the project is environmentally efficient and socially accepted (Zapata, 2025), the Mapuche-Pehuenche communities, inhabitants of Rucalhue, and environmentalists have all opposed developments in the environmentally sensitive Biobío and Quilme basins, where native conservation forests are located (CICDHA, n.d.; Ríos et al, 2023). Since 2019 these groups have complained to the Superintendency of the Environment about the alteration of the minimum residual flow, affecting flora, fauna, and communities in the area of influence (Ríos et al, 2023). In 2021, local organizations – with the support of the municipality of Santa Barbara, which provides the project with water and sanitation services, and environmental activists (such as the Santa Barbara Self-Organized Movement) – blocked access to project land in order to disrupt plant construction (Ríos et al., 2023). This opposition has been compounded by the flooding of more than 130 hectares of land for the reservoir, the impact on protected species, and the project's national interest status (Lieberherr, 2025).

Moreover, the criticisms expressed by these organizations lay bare the lack of broad citizen consultation or adequate prior consultation, in contravention of international commitments such as ILO Convention 169 and the Escazú Agreement (Lieberherr, 2025). In 2016 an indigenous consultation process was carried out in the communities of Santa Barbara and Quilaco as part of the project EIA review (SEA, 2016), but this process drew charges of manipulation in favor of the company, prompting several local organizations to call for a fresh environmental review process (Lieberherr, 2025). In June 2025 the Supreme Court of Chile rejected an appeal filed by Mapuche-Pewenche authorities and denied a new indigenous consultation, thus ratifying the continuation of the Central Rucalhue hydroelectric project. In response, the company stated: *"with this ruling, the Rucalhue hydroelectric power plant project has once again confirmed its legal and environmental validity through the courts of justice, having faced and overcome more than eight judicial and administrative appeals in the last four years [...] filed since 2021 by individuals and NGOs, among others, linked to environmental causes against different permits and authorizations granted to the project"* (Bionoticias, 2025).

In recent times, the opposition has spilled over into violence. On April 20, 2025 an armed group set fire to more than 50 vehicles and machinery on the plant construction site, injuring two security guards in the process (San Martín, 2025; T13, 2025) . This event was classified as the most serious attack in the so-called Southern Macrozone – which includes the regions of Biobío, La Araucanía, Los Ríos, and Los Lagos—in three decades, provoking condemnation from the Chinese Embassy in Chile, which urged the Gabriel Boric administration to guarantee the security of investment projects (Ex-Ante, 2025a; Ex-Ante, 2025b).

According to a report by the Collective on Chinese Financing and Investment, Human Rights, and the Environment (CICDHA, 2022), the Rucalhue plant has reproduced conflicts witnessed at other hydroelectric projects in Biobío, such as Pangué, Ralco, and Angostura. Since the 1990s, these projects, supported by multilateral organizations such as the International Finance Corporation-IFC (Nelson, 2013), have altered ecosystems, fragmented communities, and precipitated forced displacements (Lieberherr, 2025). In this context, local communities and activists have pointed out that the Rucalhue project violates the Friendly Agreement signed before the Inter-American Court of Human Rights in response to the Ralco case, which involved the displacement of the Pehuenche community (Pacheco, 2019). This agreement prohibited future hydroelectric megaprojects in the Indigenous territories of Alto Biobío (Ríos et al., 2023). For the communities, the Rucalhue Power Plant is another – the fourth – dam that perpetuates territorial and cultural dispossession (Pacheco, 2019) as well as environmental violation, reinforcing the perception that national energy benefits come at the cost of human rights, biodiversity, and the community fabric in Biobío (Zapata, 2025).

Thus, the project has long been entangled in socio-environmental conflict, and the arrival of the Chinese company did not offer a substantive change to how the situation was addressed. Although, according to independent analyses, CWE sought to project an image of social responsibility, the company did not implement any significant measures that might have met the historical demands of the communities – nor did it substantially modify the design of the project to introduce substantive consultation and participation processes (Ríos et al., 2023; Parisi, 2025). Positive changes have been limited to the incorporation of limited reforestation and environmental compensation plans, but the effectiveness of these ostensibly favorable measures continues to be called into question by local communities and organizations (Ríos et al., 2023; Lieberherr 2025). Although Chile has opted to diversify its energy matrix, cases such as Rucalhue show that the promotion of clean generation projects counts for little if these plants reproduce patterns of displacement, environmental degradation, and social conflict.

7.3 Argentina: Cauchari-Olaroz

The Cauchari-Olaroz project is located in the Salar Cauchari-Olaroz, in the province of Jujuy, Argentina, at an altitude of 3,900 meters above sea level (Secretaría de Minería, n.d.). Considered one of the largest lithium-producing salt flats in the world, this deposit contains an estimated 24.58 million tons of lithium carbonate equivalent. The exploitation method consists of pumping and evaporation (Secretaría de Minería, n.d.), with the aim of

producing an annual total of 40,000 tons of battery-quality lithium carbonate for the electric vehicle industry (Exar, 2023).

The project is operated by Minera Exar, a joint venture between the Canadian-owned Lithium Americas and the Chinese Jiangxi Ganfeng Lithium, each of which has a 45.75% holding, and the state-operated Jujuy Energía y Minería Sociedad del Estado (JEMSE), with 8.5% (Bellato, 2022). Through this partnership Ganfeng has invested close to \$641 million, which is expected to create more than 2,100 jobs, both directly and indirectly, in Jujuy (Bellato, 2022). Ganfeng's involvement also ensured sufficient investment to complete project construction and move into the production stage (Hinostroza, 2023). In addition, the company has fostered agreements with communities and undertaken local infrastructure works such as roads and school equipment (Exar, 2023). These initiatives, however, have done little to address the social tensions linked to a lack of effective prior consultation and environmental impacts on local ecosystems.

The history of the project dates back to 2009–2011, when Exar acquired mining and exploration permits for vast areas of the Cauchari and Olaroz salt flats. Over this period, the company signed rights-of-way, occupation, and water agreements with the Atacama communities of Pastos Chicos, Puesto Sey, Catua, and Huancar (Exar, 2023). Between 2012 and 2014 a pilot plant was built, the first feasibility study was prepared, and the environmental impact report for the exploitation stage was approved. The 2015–2017 period saw the submission of a new environmental impact report, the start of camp construction, and a new estimation of reserves. In 2018, brine wells were established and construction of the pumping field began. Then, in 2021, JEMSE formally joined the project (Exar, 2023). In June 2023, the Cauchari-Olaroz pre-commercial production stage began (Dorn, 2024).

Conflicts have arisen within the project's area of influence. During the construction phase, agricultural producers from Susques, Jujuy, organized through the collective La Apacheta, took legal action against Exar for failing to honor the right to prior consultation of the native communities of Susques, Jama, Coranzulí, Catua, Pastos Chicos, Puesto Sey, Olaroz Chico, El Toro, San Juan de Quillaques, and Huancar (OCMAL, n.d.). The substance of the 2018 complaints was that the consultation processes carried out to validate the EIA were illegitimate, since they only drew on the minority of the population that expressed their support for the companies, with their direct impact on the water and ecosystems of Olaroz-Cauchari (OCMAL, 2018; Puente & Argento, 2015). That same year the group presented environmental writs of amparo to secure the suspension of operations until water studies were carried out, warning that the project consumed more than two million liters of water per day, causing shortages (Revista El Federal, 2018), wetland affectations, and the death of animal species (OCMAL, n.d.). Despite these concerns, once Exar initiated the pre-commercial production stage, local opposition focused on redistributive demands since most communities in the area of influence saw lithium mining as necessary to ensure the retention of young people in the area (Dorn, 2024).

Given the differences in how local communities responded, it is interesting to compare the evolution of the conflict around Olaroz–Cauchari with the neighboring project of Salinas Grandes. The Salinas Grandes basin spans the provinces of Salta (in the departments of La Poma and Los Andes) and Jujuy (in the departments of Tumbaya and Cochinoca) (Argento

& Zícarí, 2018). Lithium exploration in this area has been the subject of litigation since 2010, when a group of 38 Indigenous communities organized protests and roadblocks besides initiating administrative and judicial proceedings against several projects, slowing their progression in Salinas Grandes. Communities have reacted to warnings from environmental scientists and organizations about possible environmental repercussions, including the potential risks posed to the freshwater supply, animals, crops, and other economic activities such as local tourism and the extraction of salt for human consumption (Delfino, 2024). Although some local communities have been somewhat favorably disposed to certain companies operating in the area—among them the Argentine-owned Lition Energy—most have expressed outright opposition to the Salinas Grandes project (Dorn, 2024). A reform to the Constitution of Jujuy in June 2023 aggravated the situation, provoking massive protests from Indigenous communities, particularly those in the Salinas Grandes–Laguna Guayatayoc region (Grieco, 2023), with protesters claiming that the reform favored lithium mining by prohibiting different forms of social mobilization. In addition, the protestors argued that the constitutional reform process largely overlooked prior consultation, Indigenous self-determination, and the intrinsic relationship between the communities and their territory (FIDH, 2023; Dorn, 2024).

Comparing the cases of Olaroz–Cauchari and Salinas Grandes, one observes that despite similar issues—such as the lack of prior consultation, excessive water usage, and regressive constitutional reforms, among others—the general community reactions to mining activity differ based on its effects on their way of life. In Salinas Grandes the mine is associated with irreparable damage to the territory and to water resources (Banchón, 2025), whereas the communities around the Olaroz–Cauchari project regard the presence of lithium mining as necessary for local development and employment (Dorn, 2024).

For Dorn (2024), these reactions have also been conditioned by the manner in which mining began in each basin, as well as the distinct historical processes undergone by the populations. Lithium mining companies opened discussions with the Olaroz–Cauchari communities over the 2009–2011 period, which was quite unlike the experience of their Salinas Grandes counterparts. In addition, the Olaroz–Cauchari communities had coexisted with borate mining companies since the 1940s (OCMAL, n.d.). There, it had become a tradition for men to go off in search of work in other provinces since there were no job or educational opportunities in their own communities, which disrupted the local organizational structure (Dorn, 2024). Thus, the presence of lithium mining projects is accepted in the community in the absence of any meaningful state presence; unlike borate extraction before it, lithium mining has served to meet the immediate material needs of the communities, even if this generates long-term dependence (Dorn, 2024; Pragier, 2019).

As in the previous examples, this case also shows the importance of familiarization with the social context in which projects unfold, and of establishing early relationships with the community. Chinese investment in Olaroz–Cauchari came into a situation of social and historical complexity—but this did not represent an insurmountable obstacle given the population's prior experience of mining and because the company had already embarked upon community relations processes.

7.4. Colombia: The Buriticá mine under Zijin Mining Group

Although not centered on a “critical mineral,” the Buriticá gold mine is the largest Chinese-backed mining project in Colombia with an estimated output of 8.3 tons of gold in 2023 (Defelipe, 2025). The project is developed by Zijin Continental Gold, which is a subsidiary of the Chinese conglomerate Zijin Mining Group Co., Ltd. —a state-owned multinational overseen by the State Council's State-owned Assets Supervision and Administration Commission (SASACs). Zijin Mining operates critical minerals projects in Peru and Argentina (copper and lithium, respectively) —and in Colombia the social conditions and challenges are similar.

To break the deadlock vis-a-vis the Regional Autonomous Corporation of the Center of Antioquia (COR-ANTIOQUIA), the Buriticá project was declared of national interest. Thus, public oversight of the project passed from the Antioquia municipality to ANLA. In 2016, Continental Gold, the Canadian company that operated the mine at that time, obtained an environmental license from ANLA. However, the Buriticá communities had misgivings about the project due to its anticipated environmental impact and effects on the territory., Artisanal miners also asserted that the company's mining title overlapped with the areas in which they worked (Veiga et al., 2022). The tensions were heightened by the presence of opposing illegal armed groups that had taken root in the area during the conflict with the central government: on the one side, the guerrillas of the Revolutionary Armed Forces of Colombia (FARC) and on the other, the United Self-Defense Forces of Colombia (AUC) paramilitary group. The influence of these and other illegal organizations, such as Clan del Golfo and Los Urabeños, which inherited power structures left behind following the demobilization of the AUC in 2004, was enough to co-opt the company and the territory (Defelipe, 2025).

In 2020 Zijin Mining acquired a 69.28% stake in Continental Gold, handing it control of Buriticá. However, Zijin arrived without any real familiarity with the territory or the background, precipitating what has been termed an “abrupt” and “forced” transition away from Canadian ownership (Defelipe, 2025) and, in turn, breeding distrust. Local communities have complained that the transfer to Chinese ownership proceeded abruptly, without the company ensuring receipt of sufficient or adequate information about the socio-environmental impacts.

Since Zijin's takeover, there have been three blockades of access roads to the mine: in March 2020, October 2021, and February 2022. On the other hand, there have been reports of illegal groups co-opting some communities in order to pass themselves off as informal or artisanal miners and justify their protest actions as a form of territorial defense (Defelipe, 2025). As a result, 70% of the concession has now been invaded, which could equate to the illegal extraction of 1.5 to 2 tons of gold per year, at a value of more than US\$100 million. Zijin claims to have lost control of 60% of its excavations, totaling 82 kilometers of tunnels, to Clan del Golfo since 2023 (Jonkman, 2022; Defelipe, 2025). What Bonilla (2022) has observed is not competition for absolute power over the area but a form of shared governance: a coexistence in which state and non-state actors seek economic returns by controlling political and social activity while exploiting state absences, weaknesses, and disparities.

This governance is contentious and complex due to the lack of a legal distinction between artisanal mining and illegal/criminal mining. To compound the situation, Law 685 of 2001 does not provide for effective formalization mechanisms. Thus, there are blurred boundaries between informal miners that were active long before the formal commencement of operations in the area, and criminal groups that have recently expanded locally (Veiga et al., 2022). There is also some ambiguity in relation to the question of jurisdiction (Defelipe, 2025). Before Zijin, CORANTIOQUIA had supervisory authority; but when the project became of “national interest” under the auspices of ANLA, project supervisory responsibilities were diluted. ANLA's surveillance measures are technical, inaccessible for communities that privilege legibility over substance, and, therefore, do not cover all aspects of the operation's impact (Defelipe, 2025). There is no single entity that coordinates all aspects of the project—socio-environmental issues along with matters related to formalization and legality—with competencies distributed across different ministries such as the Interior and Defense as well as the National Prosecutor's Office. More specifically, on the socio-environmental front, no prior consultations or public discussions have been held since the buyout by Zijin. Thus, the company and the mayor's office are accused of applying purely “compensatory” mechanisms such as infrastructure, sponsorships, teams, and social events that do little to acknowledge the social significance of the territory (Defelipe, 2025).

According to Defelipe (2025), Zijin's performance has been negative for two reasons: First, the company acts as a para-state that implements a technocratic model of ESG in which it displaces, complements, or even rivals the functions of local authorities, ignoring how the governance logics of the territories are based on a diversity of ways of life rooted in person–community–natural environment relationships. Second, Zijin has failed to raise reasonable expectations of shared prosperity. The company has been unable to present itself as a transformative productive partner of a common economy, capable of leadership in a mutually beneficial manner. On the contrary, it has disputed the use of natural resources and any share in the economic benefits for local interest groups.

This case—a project acquired in a context of serious social conflict without sufficient information or contingency measures—presents serious due diligence failings. The situation is aggravated by the absence of state regulatory capacity or state control with which to define territorial limits, assign mining holdings, and exercise effective oversight—all of which lends itself to a context of competition between large mining, artisanal mining, and illegal mining. Also notable is how the government's promotion of the project—through the declaration of national interest—has facilitated a disconnect between socio-environmental governance and the problems in the territory, thereby exacerbating the problem.

8. Discussion and conclusions

For the four countries studied, international investment in critical minerals and energy transition industries represents an opportunity for development that bridges social gaps, promotes industrialization, and contributes to sustainability. However, beyond the strategies, plans, or statements that evoke “green developmentalism,” such investment

must be accompanied by appropriate social and environmental standards that ensure sustainability at the local level.

In recent decades, the four countries have developed social and environmental standards but have not strengthened the agencies and institutions responsible for reviewing EIAs, citizen participation, and prior consultation. This is due to issues with widely contentious institutional design and implementation, with advances during progressive governments but setbacks during conservative governments, and with disputes between civil society organizations and industry over the establishment of mechanisms that promote or limit extractive activities. Thus, for instance, in all four countries, the business and pro-market sectors are critical of unwieldy procedures and red tape, and, in the cases of Peru and Argentina, the repercussions are felt through a reduction in standards and institutional corrosion.

Thus, these debates have an impact on the level of bureaucratic autonomy and on the decentralization of social and environmental governance. With regard to the review of EIAs, Chile and Peru are cases of highly centralized environmental institutions in which subnational governments have no involvement in environmental review processes. In Colombia, save for projects of national interest, the CARs review most EIAs, whereas in Argentina the provincial governments review all projects. The level of autonomy varies from country to country. Environmental review in Chile and Colombia falls to specialized environmental entities: at the national level in the former and the subnational in the latter. Meanwhile, in Peru, EIAs corresponding to projects considered not at risk of generating “significant” impacts are reviewed by the Ministry of Energy and Mines. In Argentina all projects—at least in those provinces with lithium projects—are reviewed by provincial agencies specialized in mining.

Despite these differences, the four countries are subject to similar criticisms regarding transparency and citizen participation. In general, civil society and local communities often dismiss participatory instruments as mere bureaucratic procedures that do not engender trust or legitimacy. This state of affairs is compounded by institutional designs in which community participation in the early stages of projects, from concession and design, is not mandatory but merely “good practice.” The execution stage, following the EIA, is no different; only in the case of Peru's mining industry are specific mechanisms, such as complaints offices and participatory monitoring, suggested—but, again, these are merely voluntary.

Prior consultation with Indigenous peoples is also fraught with regulatory and implementation issues. In Argentina, Chile, and Colombia, the lack of a comprehensive legal framework on prior consultation creates scope for uncertainty and subjectivity, leading many participants to question the procedures. In Colombia, the scant detailed regulation has legitimized the development of consultation by companies, without due government supervision. Peru may have a more comprehensive legal framework, but the country is not exempt from criticism: sectoral rules have set inauspicious timings for the consultations, omitting any requirement for the process to be carried out during the EIA review stage despite this being the international norm. So too is implementation problematic. In all cases there are multiple barriers to consultation being a substantial process, from the absence of

intercultural approaches to the exclusion of community decisions in opposition to the projects.

Even though the labor question is important for the development of mining and energy projects, in none of the countries are there differentiated regulations for this sector. With the exception of Argentina, there are limits on the hiring of foreign nationals to promote local employment. However, given the social and economic expectations around these projects, governments ought to formulate rules and strategies that establish or facilitate the hiring commitments to which companies are bound. The countries have similar provisions for recognizing the rights to union membership and leave, but outsourcing and subcontracting can be used as a mechanism for circumventing these entitlements.

As seen in the country reports on Peru, Chile, Colombia, and Argentina, the prevailing regulatory and implementation deficiencies span all companies, whether local or foreign, regardless of the origins of their investment or management. However, it is important to draw particular attention to the challenges associated with Chinese investment given the country's leadership of the energy transition and its continued expansion in the region. Moreover, through its “ecological civilization” policies, plans, and discourses, China disseminates a form of development in which economic growth and green industries are closely linked.

In this context, through analysis of the design and implementation problems encountered by Chinese companies, the cases studied illustrate the challenges of green developmentalism in the field. In the case of Las Bambas, the flexibility afforded to the modification of environmental management instruments—an innovation originally approved by the Ministry of Energy and Mines—and the conferral of “national road” status to avoid negotiating community rights of way all speaks to scarce bureaucratic autonomy and an institutional design that prioritizes investment over participatory rights. There are similar phenomena at play in the cases of Rucalhue in Chile and Buricatá in Colombia, which have been declared “of national interest” in an attempt to catalyze investment, excluding the voices of local communities and subnational government.

In all cases, local communities have high expectations or interest regarding project governance. In the cases of Las Bambas and Buricatá, community expectations are environmental but also remunerative, with many communities seeking to establish an economic relationship with the companies. This gives rise to complex negotiation scenarios and, at worst, the emergence of informal and illegal economies. When the state fails to address the structural socio-economic limitations in these territories, it exposes the projects to situations of social conflict. The situation is exacerbated by the state's inability to order the territory and assign appropriate uses and exploitation rights based on robust criteria of sustainable development, and to conduct supervisory activities to ensure the due realization of the economic activities.

Another issue that cuts across the cases is that of due diligence. Each of the projects is beset by complex social unrest that is either long-standing and unresolved or, in some cases, only

just emerging. The only possible exception is the case of Olaroz-Cauchari, in which the Chinese operator benefited from historical coexistence with mining and early negotiations with the community. The Chinese companies may not have been responsible for causing or aggravating problems that predated their arrival, but they have done little to alter the course of conflict, reproducing questionable practices that are protected by permissive institutional frameworks. This suggests a lack of due diligence and timely corrective action. While governments fail to expressly regulate these mechanisms, Chinese companies are committed by their social responsibility standards to do so, even when national standards are weak or non-existent (Merino, 2022).

Policies to promote investment in renewable energies and critical minerals are formulated under discourses of green developmentalism, promises of added value, industrialization, and participation in sustainable industries, yet the establishment of adequate social and environmental standards to develop these projects is overlooked. In the absence of these standards, green developmentalism only reproduces the old developmentalist patterns of extraction, exclusion, and violence at the levels of both design and implementation.

9. Recommendations

In this section we present the recommendations stemming from our analysis and conclusions so that governments, companies, and investors can move towards a just energy transition.

9.1 For governments

- Promote greater autonomy for and consolidation of environmental institutions. Governments must ensure the technical and political independence of the institutions responsible for environmental auditing and reviewing EIAs. Autonomy is more important than decentralization because the subnational levels are sometimes organized through offices that prioritize investment over sustainability.
- Strengthen environmental management instruments under technical and non-political criteria based on “red tape” discourses. When these discourses are put into practice, environmental institutions end up weakened and standards relaxed. It is important to recall that administrative simplification should not equate to deregulation or institutional weakening.
- Regulate citizen participation mechanisms during the early project stages. Beyond the mere dissemination of “good practices,” there is a need for more detailed regulation that encourages companies to engage in participatory mechanisms from the concession award and project design stages.
- Regulate citizen participation mechanisms at the project execution stage. Governments should regulate specific, mandatory citizen participation mechanisms, such as participatory monitoring and complaints offices, during project execution.
- Ensure citizen participation is not reduced to a bureaucratic process. It can no longer be treated a stage within the system of granting environmental licenses and

exploitation rights. Rather, it must correspond to dialogue channels implemented throughout the project cycle.

- Ensure that consultation with Indigenous peoples is a clearly regulated responsibility of the state. There must be more specific regulation of the procedure, steps, and standards of prior consultation. Commit to understanding and responding to the interests and aspirations of Indigenous peoples and to assuming clear, measurable, and monitored commitments as part of these processes.
- Incorporate due diligence guidelines that are binding on companies. These guidelines must follow the international standards of the OECD and IRMA (among others) by establishing adequate risk assessment procedures and contingency measures. Accordingly, governments should be obligated to provide clear, timely, and truthful information about the history of social conflicts in the areas in which there is an interest in investment.
- Establish obligations or, at the very least, guidelines for local recruitment and procurement. Foreign investment must include a commitment to local development through employment contracts and purchases from local companies, in addition to training local staff who can assume positions of greater responsibility, rather than being solely operational, in the short and medium term.
- Develop participatory territorial planning processes that clarify the uses of the territory before the companies arrive so as to prevent overlapping rights. Many conflicts stem from the ambiguous allocation of rights related to biodiversity conservation, Indigenous land rights, mining concessions, and energy concessions, among other areas. It is vital that governments organize and plan their territory prior to the development of projects.
- Include strict environmental and social standards in energy transition strategies or policies, such as mechanisms for substantive citizen participation, prior consultation with Indigenous Peoples, and local development.

9.2 For Chinese companies

- Apply high standards of due diligence in their projects. This must involve compiling information from reliable public and private sources to ascertain the social and cultural context, development gaps, and the history of social conflict.
- Ensure the due diligence standard includes the analysis of legal and institutional gaps. If national legislation is less rigorous than or has no equivalent to the corresponding international peremptory norms, companies must go beyond this legal framework and apply the international standards.
- Apply mechanisms for early citizen participation. To do so, companies must engage with the communities in the area of influence from the project concession and design stage.
- Establish dialogue and participation channels such as such as complaints offices and participatory monitoring throughout the project cycle, from concession to execution.
- Support governments in the application of prior consultation in accordance with the strictest international standards, respecting the community decision and understanding local aspirations and interests.

- Establish local hiring schemes for workers and entrepreneurs to promote economic development in the areas of influence. Implement training programs to transition local workers into positions of greater responsibility.
- Forge partnerships with public bodies, universities, and public or private companies operating nationally or regionally to transfer knowledge about the development of the critical minerals industry, energy transition, and value chains.

9.3 For Chinese banks and investors

- Approve guidelines, rules, or directives related to ESG standards in critical minerals and energy transition industries.
- Apply strict due diligence standards before approving loans to critical minerals and energy transition companies.
- Conduct periodic monitoring, follow-up, and review of business performance in complying with ESG standards.
- Establish a complaints office to receive the direct concerns of local actors regarding the performance of companies financially supported by the banks.
- Put corrective mechanisms in place for complaints stemming from financed projects.
- Establish financial support schemes for projects that guarantee local development and transfer of capabilities while respecting the rights of local communities and the highest social and environmental standards.

References

- ACNUDH (Oficina del Alto Comisionado de las Naciones Unidas para los Derechos Humanos). (2023). *Actividades empresariales chinas y derechos humanos en América Latina: Anexo II. Resumen de los casos de actividades empresariales chinas en América Latina*. Naciones Unidas.
- Akchurin, M. (2021, May). *Environmental justice at the environmental courts in Chile?* Paper presented at the Latin American Studies Association (LASA) Congress.
- Albertone, B. (2025). Lost principles of a "sustainable developmentalism." *Review of International Political Economy*, 32(3), 766–789.
<https://doi.org/10.1080/09692290.2024.2447735>
- Asociación de Empresas Chinas en el Perú (AECPP). (2025). *Rio Blanco Copper*.
<https://asociacionchina.net/rio-blanco-copper/>
- Autoridad Nacional de Licencias Ambientales (ANLA). (n.d.). *Mecanismos de participación ciudadana ambiental – ¿cómo vamos?*
https://www.anla.gov.co/01_anla/ciudadania/participacion-ciudadana/200-mecanismos-de-participacion-ciudadana-ambiental
- Bailey, D. (2020). Re-thinking the fiscal and monetary political economy of the green state. *New Political Economy*, 25(1), 5–17. <https://doi.org/10.1080/13563467.2019.1639146>
- Barandiarán, J. (2016). The authority of rules in Chile's contentious environmental politics. *Environmental Politics*, 25(6), 1013–1033. <https://doi.org/10.1080/09644016.2016.1218156>
- Bellato, R. (2022, July 26). *Cuáles son los ocho proyectos de litio que ingresarán en etapa de producción comercial en los próximos tres años*. EconoJournal.
<https://econojournal.com.ar/2022/07/cuales-son-los-ocho-proyectos-de-litio-que-ingresaran-en-etapa-de-produccion-comercial-en-los-proximos-tres-anos/>
- Biblioteca del Congreso Nacional de Chile. (2003). DFL 1/2002 que fija el texto refundido del Código del Trabajo (publicado el 16 de enero de 2003).
<https://www.bcn.cl/leychile/navegar?idNorma=6991>
- Biblioteca del Congreso Nacional de Chile. (2016). Ley 20940 que moderniza el sistema de relaciones laborales (published September 8, 2016).
<https://www.bcn.cl/leychile/navegar?idNorma=1094436>
- Bionoticias (2025). Corte Suprema ratifica validez de permiso sectorial para Central Hidroeléctrica Rucalhue otorgada por CONAF en mayo de 2024. June 25 2025:
<https://bionoticias.cl/corte-suprema-ratifica-validez-de-permiso-sectorial-para-central-hidroelectrica-rucalhue-otorgada-por-conaf-en-mayo-de-2024/>
- Bonilla, M. C.(2024, January 24). *Las dudas que dejan los retrasos de proyectos renovables en Colombia*. Climate Tracker. <https://climatetrackerlatam.org/historias/las-dudas-que-dejan-los-retrasos-de-proyectos-renovables-en-colombia/#:~:text=Los%20%C3%ADos%20con%20la%20licencia%20ambiental%20Uno,han%20retrasado%20el%20desarrollo%20de%20proyectos%20renovables>
- Cámara de Diputadas y Diputados de Chile. (2025). Documento de comisión sobre trabajadores de confianza [Gerentes y Subgerentes].
<https://www.camara.cl/verDoc.aspx?prmID=26600&prmTIPO=DOCUMENTOCOMISION>
- CEPAL. (2005). Situación y perspectivas de la minería metálica en Argentina (Serie Recursos Naturales e Infraestructura, No. 91).
<https://repositorio.cepal.org/server/api/core/bitstreams/63612c86-571b-4e63-a3b7-c327e2bcfce8/content#:~:text=,tratado%20de%20integraci%C3%B3n%20y%20complementaci%C3%B3n>

- Colectivo sobre financiamiento e inversiones chinos, derechos humanos y ambiente (CICDHA). (n.d.). *Central Hidroeléctrica Rucalhue: Información del proyecto*. <https://cicdha.org/proyectos/central-hidroelectrica-rucalhue/>
- Ciftci, M.M., & Lemaire, X. (2023). Deciphering the impacts of ‘green’ energy transition on socio-environmental lithium conflicts: Evidence from Argentina and Chile. *The Extractive Industries and Society*, 16, 101373. <https://doi.org/10.1016/j.exis.2023.101373>
- Cinto, J.P., Torresin, J.A., & Fuentes, J.L. (2020). *Desarrollo de Presupuestos Mínimos de Protección Ambiental y Normas Técnicas de Estandarización destinada a la Certificación de Sistemas de Gestión de Áreas Naturales Protegidas en la República Argentina*. Progress report. <https://hdl.handle.net/20.500.12219/5050>
- Chile Sustentable. (2018, December 28). *Firman inédito acuerdo de desarrollo territorial entre comunidad y mineras de Sierra Gorda*. <https://chilesustentable.net/2018/12/firman-inedito-acuerdo-de-desarrollo-territorial-entre-comunidad-y-mineras-de-sierra-gorda/>
- Chen, D. (2025). China’s eco-civilisation, climate Leviathan, and Hobbesian energy transition. *Antipode*. Advance online publication. <https://doi.org/10.1111/anti.13399>
- Comisión Chilena del Cobre (COCHILCO). (2024). *Iniciativa EITI Chile*. <https://www.cochilco.cl/web/iniciativa-eiti-chile/>
- Congreso de la Nación. (1974). Ley 20744. Ley de Contrato de Trabajo (codified by D. 390/76). Ley, 27-09-1974; TO 21-05-1976. <https://www.argentina.gob.ar/normativa/nacional/ley-20744-25552/texto#:~:text=Art.pol%C3%ADticos%2C%20gremiales%20o%20de%20edad>
- Congreso de la Nación. (1988). Ley 23.551 de Asociaciones Sindicales (updated text). Ley, 18-04-1988.
- Congreso de la Nación. (2004). Ley 25.871 de Migraciones (updated text). Ley, 21-01-2004. <https://www.argentina.gob.ar/normativa/nacional/92016/actualizacion#:~:text=ARTICULO%2053,dependencia%20o%20en%20forma%20independiente>
- Congreso de la República. (2003). Ley 842 de 2003. Law, October 14, 2003. https://www.secretariassenado.gov.co/senado/basedoc/ley_0842_2003.html
- Congreso de la República. (2010). Ley 1429 de 2010. Ley, December 29, 2010. <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=39430>
- Corte Constitucional. (2007). Sentencia C-834 de 2007. Pronouncement, October 16, 2007. <https://www.corteconstitucional.gov.co/relatoria/2007/C-834-07.htm>
- Corte Constitucional. (2010). Sentencia T-464 de 2010. Pronouncement, June 17, 2010. <https://www.corteconstitucional.gov.co/relatoria/2010/T-464-10.htm>
- Cotula, L. (2025). “Green developmentalism” and the role of international law in negotiating the energy transition. *Global Policy*. Advance online publication. <https://doi.org/10.1111/1758-5899.70043>
- Cui, F., Tan, Y., & Lu, B. (2025). How the Belt and Road Initiative transforms corporate ESG performance: Insights from China’s experience. *Sustainability*, 17(8), 3700. <https://doi.org/10.3390/su17083700>
- Defelipe, C. (2025, May 25). *Políticas de gobernanza socioambiental y brechas de implementación en Colombia: Análisis de casos de inversiones chinas en minería*.
- Delfino, E. (December 16, 2024). *Balance ambiental de Argentina 2024: el primer año de gobierno de un presidente negacionista que sostiene que la economía está por encima de la naturaleza*. Mongabay. <https://es.mongabay.com/2024/12/balance-ambiental-argentina-2024-presidente-negacionista-sostiene-que-economia-esta-por-encima-de-naturaleza/>
- Diario Oficial de la República de Chile. (2021, April 21). Ley 21.325 de Migración y Extranjería. Copy on NATLEX/OIT:

- <https://natlex.ilo.org/dyn/natlex2/natlex2/files/download/112781/1%2021325%20chi.pdf>
- Díaz Paz, W.F., Escosteguy, M., Clavijo, A., Hufty, M., & Seghezze, L. (2022). “We are not allowed to speak”: Some thoughts about a consultation process around lithium mining in Northern Argentina. *The Extractive Industries and Society*, 11, 101134. <https://doi.org/10.1016/j.exis.2022.101134>
 - Dirección Nacional de Migraciones (DNM). (2010). Disposición 2201/2010. Administrative disposition, November 19, 2010. <https://www.argentina.gob.ar/normativa/nacional/disposici%C3%B3n-2201-2010-175293/texto#:~:text=Que%20el%20art%C3%ADculo%2059%20de,y%20m%C3%B3vil%20por%20cada%20extranjero>
 - Dolores, J., Manky, O., & Sousa, E. (2022). *Relaciones laborales, obligaciones extraterritoriales y derechos humanos en inversiones chinas en el Perú*. Centro de Políticas Públicas y Derechos Humanos – Perú Equidad.
 - Dorn, F.M. (2024, February). *¿Por qué algunas comunidades resisten y otras no? Minería de litio y territorialidad en Salinas Grandes y Salar de Olaroz-Cauchari, Argentina* [Crónicas de la Bifurcación]. ResearchGate. <https://www.researchgate.net/publication/378208006>
 - Eckersley, R. (2004). *The green state: Rethinking democracy and sovereignty*. MIT Press. <https://doi.org/10.7551/mitpress/3364.001.0001>
 - El País. (2023). *El 31 % de las consultas previas en el país son del sector minero*. <https://www.elpais.com.co/economia/el-31-de-las-consultas-previas-en-el-pais-son-del-sector-minero.html>
 - El Tribuno. (2024, April 11). Solicitan nuevas inspecciones en la minera Posco por emplear a extranjeros ilegales. https://www.eltribuno.com/salta/2024-4-11-16-28-0-solicitan-nuevas-inspecciones-en-la-minera-posco-por-emplear-a-extranjeros-ilegales?srsId=AfmBOoo_qxrWdU4gRfNhTr5ouq4RangZahVcER3ViADfduCl2TAqVPQ4
 - Escuela Nacional Sindical - ENS (2016). Sector minero-energético colombiano: comportamiento empresarial y diagnóstico laboral y sindical. ENS. https://www.ens.org.co/wp-content/uploads/2016/11/DOCUMENTOS-DE-LA-ESCUELA_105-Sector-minero-energ%C3%A9tico-colombiano-Comportamiento-empresarial-y-diagn%C3%B3stico-laboral-y-sindical-2016.pdf
 - Escosteguy, M., Clavijo, A., Díaz Paz, W.F., Hufty, M., & Seghezze, L. (2022). “We are not allowed to speak”: Some thoughts about a consultation process around lithium mining in Northern Argentina. *The Extractive Industries and Society*, 11, 101134. <https://doi.org/10.1016/j.exis.2022.101134>
 - Exar. (2023). *Informe de sostenibilidad 2023*. <https://www.exar.com.ar/wp-content/uploads/2024/11/IS23.pdf>
 - Ex-Ante. (2025a). *Quién es el gigante chino que está detrás de la hidroeléctrica atacada en el Biobío*. T13. <https://www.t13.cl/noticia/ex-ante/negocios/quien-gigante-chino-esta-detras-hidroelectrica-atacada-biobio-22-4-2025>
 - Ex-Ante. (2025b). *Los mensajes que antecedieron el atentado contra hidroeléctrica china (y lo que dejó la protesta de Beijing)*. T13. <https://www.t13.cl/noticia/ex-ante/nacional/los-mensajes-antecedieron-atentado-contra-hidroelectrica-china-lo-dejo-protesta-22-4-2025>
 - Extractive Industries Transparency Initiative (EITI) (2022a). *Overview and role of the EITI: Argentina*. <https://eiti.org/countries/argentina>
 - Extractive Industries Transparency Initiative (EITI). (2022b). *Validación EITI Colombia 2022: Petición de opiniones acerca del progreso de la implementación EITI en Colombia*. <https://eiti.org/es/offers/validacion-eiti-colombia-2022-peticion-de-opiniones-acerca-del>

[progreso#:~:text=Colombia%20se%20uni%C3%B3%20al%20EITI%20en%202014.,comenzar%C3%A1%20el%201%20de%20octubre%20de%202022](#)

- Extractive Industries Transparency Initiative (EITI). (2024). *Validación EITI 2024 Perú: Petición de opiniones acerca del progreso de la implementación EITI en Perú*.
<https://eiti.org/es/offers/validacion-eiti-2024-peru-peticion-de-opiniones-acerca-del-progreso-de-la-implementacion#:~:text=Antecedentes,2019%20y%20octubre%20de%202024>
- Fang, M. M. (2024). Climbing up the critical mineral value chains: The Global South and green industrialization in an era of disruption. *Vanderbilt Journal of Transnational Law*, 57(3), 1–43. City University of Hong Kong School of Law, Legal Studies Research Paper No. 2024(1)-007.
- Federación Internacional por los Derechos Humanos (FIDH). (2023, July 6). *Argentina: Organizaciones rechazan reforma constitucional en el Jujuy y llaman al cese de la represión*.
- Félix, M., & Melón, D.E. (2023). Beyond the green new deal? Dependency, racial capitalism and struggles for a radical ecological transition in Argentina and Latin America. *Geoforum*, 145, 103653. <https://doi.org/10.1016/j.geoforum.2023.103653>
- Ferrana, K. (2024). *Why the world needs China: Development, environmentalism, conflict resolution & common prosperity*. Clarity Press, Inc.
- Gabor, D., & Sylla, N.S. (2023). Derisking developmentalism: A tale of green hydrogen. *Development and Change*, 54(5), 1169–1196. <https://doi.org/10.1111/dech.12779>
- Gestión. (2023, May 31). *Contratación de extranjeros: la normativa laboral y migratoria en el Perú*. <https://gestion.pe/mix/vida-laboral/contratacion-de-extranjeros-la-normativa-laboral-y-migratoria-en-el-peru-sunafil-migrantes-migraciones-ministerio-de-trabajo-y-promocion-del-empleo-noticia/>
- Gobierno de Argentina. (2025). *Evaluación ambiental*.
<https://www.argentina.gob.ar/interior/ambiente/evaluación-y-control-ambiental/evaluacion-ambiental>
- Gobierno de Chile (ChileAtiende). (2024, March 25). *Estudio de Impacto Ambiental (EIA) y Declaración de Impacto Ambiental (DIA)*. <https://www.chileatiende.gob.cl/fichas/2638-estudio-de-impacto-ambiental-eia-y-declaracion-de-impacto-ambiental-dia>
- González Posso, C. (2021, April 12). ¿Por qué quieren acabar con el derecho fundamental a la consulta para el consentimiento previo de los pueblos indígenas y negros? INDEPAZ. Bogotá D.C. <https://www.indepaz.org.co>
- González Jáuregui, J., & Trevignani, M. (2025). *Proyecto JET – Caso Argentina: Reporte 1. Principales políticas de gobernanza socioambiental y brechas de implementación: Análisis de sectores ligados a la transición energética con presencia de empresas chinas [technical report]*. FLACSO-CONICET; UNL-CONICET.
- Grieco, G. (2023, February 28). *Litio: La gran controversia del oro blanco*. UNSAM Noticias. <https://noticias.unsam.edu.ar/2023/02/28/litio-la-gran-controversia-del-oro-blanco/>
- Gutiérrez, R. A., & Isuani, F. J. (2014). La emergencia del ambientalismo estatal y social en Argentina. *Revista de Administração Pública*, 48(2), 295–322. <https://doi.org/10.1590/0034-76121371>
- Haddad, M.A., & Harrell, S. (2021). La evolución del Estado eco-desarrollista del este asiático. *Volume 19, Issue 6, Number 1*, March 15, 2021.
- Han, H. (2017). Singapore, a garden city: Authoritarian environmentalism in a developmental state. *Journal of Environment & Development*, 26(1), 1–22.
- Hinostroza, K. (2023, May 30). *Mina de litio Cauchari-Olaroz iniciará producción en junio de este año*. Observatorio de Conflictos Mineros de América Latina (OCMAL).

- <https://www.ocmal.org/mina-de-litio-cauchari-olaroz-iniciara-produccion-en-junio-de-este-ano/>
- Hong, D.-L., Chien, S.-S., & Liao, Y.-K. (2019). Green developmentalism and trade-offs between natural preservation and environmental exploitation in China. *Environment and Planning E: Nature and Space*, 0(0), 1–18. <https://doi.org/10.1177/2514848619875279>
 - Huneus, S., Toro, S., Luna, J.P., Sazo, D., Cruz, A., Alcatruz, D., Castillo, B., Bertranou, C., & Cisterna, J. (2021). Delayed and approved: A quantitative study of conflicts and the environmental impact assessments of energy projects in Chile 2012–2017. *Sustainability*, 13(13), 6986. <https://doi.org/10.3390/su13136986>
 - Instituto Internacional de Derecho y Sociedad (IIDS). (2024, July). *Caso Río Blanco: Inicia proceso de nulidad de concesiones mineras por falta de consulta previa*. <https://www.derechoysociedad.org/rio-blanco-inicia-proceso-de-nulidad-de-concesiones-mineras-por-falta-de-consulta-previa/>
 - Irrarrázaval, F., Stamm, C., Madariaga, A., Maillet, A., & Franetovic, G. (2023). Examining the effects of social protest on the environmental impact assessment process in Chile. *Environmental Impact Assessment Review*, 99, 107044. <https://doi.org/10.1016/j.eiar.2022.107044>
 - Jaskoski, M. (2021). Conflicto y estrategia social en la minería y los hidrocarburos peruanos: Los usos variados de la participación en la evaluación de impacto ambiental. *Revista de Ciencia Política (Santiago)*, 41(3), 587–609. <https://doi.org/10.4067/S0718-090X2021005000123>
 - Kim, S.-Y., Thurbon, E., Mathews, J., & Tan, H. (2019, May 28). *China succeeds in greening its economy not because but in spite of its authoritarian government*. The Conversation. <https://theconversation.com/china-succeeds-in-greening-its-economy-not-because-but-in-spite-of-its-authoritarian-government-115568>
 - Lederer, M., Wallbott, L., & Urban, F. (2019). Green transformations and state bureaucracy in the Global South. In: I. Scoones, P. Newell, & M. Leach (Eds.), *The politics of green transformations* (pp. 404–424). Edward Elgar Publishing. <https://doi.org/10.4337/9781788110686.00026>
 - Li, Y., & Shapiro, J. (2020). *China goes green: Coercive environmentalism for a troubled planet*. Polity Press.
 - Lieberherr Pacheco, M. (2025, February 4). *Rucalhue, la hidroeléctrica en Chile que el gobierno impulsa y comunidades resisten*. Dialogue Earth. <https://dialogue.earth/es/justicia/rucalhue-la-hidroelectrica-en-chile-que-el-gobierno-impulsa-y-comunidades-resisten/>
 - Marchegiani, P., Hellgren, J.H., & Gómez, L. (2019). *Lithium extraction in Argentina: A case study on the social and environmental impacts* (p. 50). Environmental Justice Atlas (EJAtlas) / Fundación Ambiente y Recursos Naturales (FARN).
 - Marcos-Sánchez Zegarra, J., & Balbín Torres, E. (2025). *Diagnóstico sobre libertad sindical en Perú: Limitaciones legales y prácticas para el ejercicio de un derecho fundamental*. Fundación Friedrich Ebert; Confederación General de Trabajadores del Perú (CGTP); Central Unitaria de Trabajadores del Perú (CUT Perú); Central Autónoma de Trabajadores del Perú (CATP). <https://library.fes.de/pdf-files/bueros/peru/22107.pdf>
 - Mbeva, K., & Makomere, R. (2025). “Embedded developmentalism”: Normative and institutional responses to the global catastrophic risk of underdevelopment. *Development in Practice*. Advance online publication. <https://doi.org/10.1080/09614524.2025.2505737>
 - Merino, R. (2025). *Reporte de Política Nacional 1 – Perú: Estándares ESG en minería y energía: Retos de su implementación frente al auge de las inversiones chinas en el Perú*.

- Merino, R. (2020). The cynical state: Forging extractivism, neoliberalism, and development in governmental spaces. *Third World Quarterly*, 41(1), 58–76.
<https://doi.org/10.1080/01436597.2019.1668264>
- Merino, R. (2022). The Politics of Localizing Human Rights: Chinese Policies and Corporate Practices in Latin America. *Business and Human Rights Journal*, 7(3), 439–460.
doi:10.1017/bhj.2022.11
- Ministerio de Ambiente de Colombia. (2025). *Licenciamiento ambiental: contexto general*.
<https://www.minambiente.gov.co/asuntos-ambientales-sectorial-y%20urbana/licenciamiento-ambiental/#:~:text=Autoridades%20competentes%20para%20otorgar%20o,las%20competencias%20de%20estas%20autoridades>
- Ministerio de Cultura. (2024). *Lista de pueblos indígenas u originarios*. Base de Datos de Pueblos Indígenas u Originarios (BDPI). <https://bdpi.cultura.gob.pe/pueblos-indigenas>
- Ministerio de Energía y Ambiente, Subsecretaría de Energía y Ambiente, Dirección General de Minería. (2024). *Resolución N°130: Elaboración de protocolo consulta previa Art. 54 Ley 9529* (Expediente EX-2024-06027898-GDEMZA-Minería). Dirección de Minería.
- Ministerio del Interior de Colombia. (2025). *La DANCP: Una estructura fortalecida para la consulta previa en Colombia*. <https://www.mininterior.gov.co/micrositios/direccion-de-autoridad-nacional-y-consulta-previa/la-dancp-una-estructura-fortalecida-para-la-consulta-previa-en-colombia/>
- Ministerio del Medio Ambiente, Chile. (2016, January 12). *Acta sesión No. 06: Duodécimo proceso de clasificación* [Comité Clasificación de Especies Silvestres].
https://clasificacionespecies.mma.gob.cl/wp-content/uploads/2019/10/Acta_RCE_6_DUODECIMO_Proc_12_enero_2016.pdf
- Ministerio de Minería de Chile. (2025, May). *Cuenta pública participativa 2025*.
<https://cuentapublica.minmineria.gob.cl/doctos/Cuenta-publica-min-mineri%CC%81a-2025-Mayo.pdf>
- Ministerio de Relaciones Exteriores. (2022). Resolución 5477 de 2022. Resolution, July 22, 2022. [https://www.cancilleria.gov.co/sites/default/files/2022-12/5477%20del%2022%20de%20julio%20de%202022%20\(1\).pdf](https://www.cancilleria.gov.co/sites/default/files/2022-12/5477%20del%2022%20de%20julio%20de%202022%20(1).pdf)
- Ministerio del Trabajo. (2018). Resolución 4386 de 2018 (RUTEC). Resolution, October 09, 2018.
[https://sidn.ramajudicial.gov.co/SIDN/NORMATIVA/TEXTOS_COMPLETOS/11_CIRCULARES_RESOLUCIONES_Y_OTRAS/RESOLUCIONES/2018/Resoluci%C3%B3n%204386%20de%202018%20\(MinTrabajo\).pdf](https://sidn.ramajudicial.gov.co/SIDN/NORMATIVA/TEXTOS_COMPLETOS/11_CIRCULARES_RESOLUCIONES_Y_OTRAS/RESOLUCIONES/2018/Resoluci%C3%B3n%204386%20de%202018%20(MinTrabajo).pdf)
- Ministerio del Trabajo y Previsión Social. (2025). Contratación de extranjeros para trabajar en Chile. <https://www.mintrab.gob.cl/contratacion-de-extranjeros-para-trabajar-en-chile/>
- Mol, A. (2010). Ecological modernization as a social theory of environmental reform. In: M.R. Redclift & G. Woodgate (Eds.), *The international handbook of environmental sociology* (2da ed.). Edward Elgar.
- MTPE. (2018, September 13). *Decreto Supremo N°008-2018-TR: Modifica el Reglamento de la Ley de contratación de trabajadores extranjeros*.
<https://busquedas.elperuano.pe/normaslegales/decreto-supremo-que-modifica-el-reglamento-de-la-ley-de-contrata-decreto-supremo-n-008-2018-tr-1691028-1/>
- MTPE. (2019, February 7). *Ministerio de Trabajo publicó norma que regula las licencias sindicales de federaciones y confederaciones*. <https://www.gob.pe/institucion/mtpe/noticias/25469-ministerio-de-trabajo-publico-norma-que-regula-las-licencias-sindicales-de-federaciones-y-confederaciones>

- MTPE. (2022, July 24). *Decreto Supremo N°014-2022-TR: Modifica el Reglamento de la LRCT* [PDF]. <https://img.lpderecho.pe/wp-content/uploads/2022/07/Decreto-Supremo-014-2022-TR-LPDerecho.pdf>
- Murguía, D., & Marín, A. (2025). *Minería metalífera y participación ciudadana en Argentina: Claves para avanzar hacia un enfoque colaborativo*. Serie Documentos de Trabajo de CENIT, (2). CENIT.
- Nelson, M. 2013. Viewpoint - Fifty years of hydroelectric development in Chile: A history of unlearned lessons. *Water Alternatives* 6(2): 195-206.
- Observatorio de Conflictos Mineros de América Latina. (2025). *Conflictos mineros en América Latina*. Retrieved from: http://mapa.conflictosmineros.net/ocmal_db-v2/buscar
- Observatorio de Conflictos Mineros de América Latina (OCMAL). (2018). *Conflictos mineros en América Latina: extracción, saqueo y agresión. Estado de situación en 2017*. Equipo OCMAL. https://www.ocmal.org/wp-content/uploads/2018/04/Informe_2017-2.pdf
- Observatorio Latinoamericano de Conflictos Ambientales (OLCA). (2020, November 12). *Gigante chino "Three Gorges Corporation" construirá central hidroeléctrica Rucalhue en el río Bío Bío*. <https://olca.cl/articulo/nota.php?id=108223>
- Ocampo-Melgar, A., Sagaris, L., & Gironás, J. (2019). Experiences of voluntary early participation in Environmental Impact Assessments in Chilean mining. *Environmental Impact Assessment Review*, 74, 43–53. <https://doi.org/10.1016/j.eiar.2018.10.002>
- OCMAL. (2012, August 4). *Minera Triton toma trabajadores extranjeros sin habilitación legal*. <https://www.ocmal.org/minera-triton-toma-trabajadores-extranjeros-sin-habilitacion-legal/#:~:text=Se%20trata%20de%20la%20contrataci%C3%B3n,un%20trabajador%20de%20Santa%20Cruz>
- Organismo de Evaluación y Fiscalización Ambiental (OEFA). (2022). *Reporte N°00015-2022-OEFA/DEAM-STEAC (Reporte No. 2022-I01-025385)*. OEFA. <https://repositorio.oefa.gob.pe/server/api/core/bitstreams/017e1dce-7001-4984-81c0-9344739268ae/content>
- Organización Internacional del Trabajo. (2021). *Colombia – Observaciones sobre libertad sindical (NORMLEX/CAS)*. OIT. https://normlex.ilo.org/dyn/nrmlx_en/f?p=1000:13100:0::NO:13100:P13100_COMMENT_ID,P13100_COUNTRY_ID:2555695,102595
- Organización Internacional para las Migraciones (OIM). (2019). *Indicadores de Gobernanza de la Migración: Perú*. <https://publications.iom.int/system/files/pdf/mgi-peru-2019-es.pdf>
- Orihuela, J.C. (2021). The environmentalization of mining in Colombia, Chile, and Peru: A comparative analysis of green state formation. *The Extractive Industries and Society*, 8, 100829. <https://doi.org/10.1016/j.exis.2020.09.013>
- Orihuela, J.C. (2019). The political economy of the developmental state in Latin America. En *Oxford encyclopedia of Latin American politics*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190228637.013.1660>
- Orihuela, J.C., & Serrano, S. (2025). Megaprojects observed: The extractivist hiding hand at resource peripheries. *The Journal of Environment & Development*, 0(0), 1–23. <https://doi.org/10.1177/10704965251313154>
- Pacheco, J.R. (2019). *Newen Mapu: Historia de una relocalización forzada*. Revista CUHSO, 13(1). Instituto Nacional de Derechos Humanos – INDH. (April 2–5, 2019). *Informe de misión de observación: Comuna de Alto Biobío*. [Informe]. In: Pressenza. <https://www.pressenza.com/es/2021/03/paralizada-nueva-central-delbiobio-rucalhue-resiste/>

- Parisi, M. (2025, April 21). *Ataque a central hidroeléctrica Rucalhue deja 50 vehículos incendiados*. Reporte Minero. <https://www.reporteminero.cl/noticia/noticias/2025/04/ataque-a-central-hidroelectrica-rucalhue-deja-50-vehiculos-incendiados>
- Paterson, M. (2016). Political economy of the greening of the state. In: T. Gabrielson, C. Hall, J.M. Meyer, & D. Schlosberg (Eds.), *The Oxford handbook of environmental political theory* (pp. 1-17). Oxford University Press.
- Poder Ambiental. (2025). *Participación ciudadana en el SEIA: todo lo que necesitas saber*. <https://consultas.poderambiental.cl/article/87-participacion-ciudadana-en-el-seia#:~:text=Participaci%C3%B3n%20ciudadana%20temprana,que%20se%20presentan%20al%20SEIA>
- Poder Ejecutivo. (1991, November 5). *Decreto Legislativo N°689: Ley de Contratación de Trabajadores Extranjeros* [PDF]. [https://www2.congreso.gob.pe/sicr/cendocbib/con4_uibd.nsf/FDAA0F74CC525DF505257E28005A5797/\\$FILE/1_DECRETO_LEGISLATIVO_689_05_11_1991.pdf](https://www2.congreso.gob.pe/sicr/cendocbib/con4_uibd.nsf/FDAA0F74CC525DF505257E28005A5797/$FILE/1_DECRETO_LEGISLATIVO_689_05_11_1991.pdf)
- Pragier, D. (2019). Comunidades indígenas frente a la explotación de litio en sus territorios: contextos similares, respuestas distintas. *Nuevas formas de politización, coaliciones y agencia indígena en América Latina. Lente de Aproximación*, (52).
- Presidencia de la República. (2024). Decreto 720 de 2024. Decree, May 08, 2024. <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=241076>
- Puente, A.F., & Argento, M. (2015). *Disputas territoriales en la Puna de Atacama: reactivación de los conflictos a la llegada del litio*. XI Jornadas de Sociología, Facultad de Ciencias Sociales, Universidad de Buenos Aires, Buenos Aires, Argentina.
- Rabí, V., Valenzuela, M., Damonte, G., Glave, M., & Heredia, O. (2020). *Hallazgos y recomendaciones para mejorar la calidad de la participación en territorios con minería a gran escala: Un estudio comparado entre Chile y Perú*. Lima, Perú: Grupo de Análisis para el Desarrollo (GRADE) y Espacio Público.
- Radio Cutivalú. (2024, April 4). *Ayabaca: rondas campesinas alistan protesta contra proyecto minero Río Blanco*. <https://www.cutivalu.pe/ayabaca-rondas-campesinas-alistan-protesta-contra-proyecto-minero-rio-blanco/>
- Rea, C.M., & Frickel, S. (2023). The environmental state: Nature and the politics of environmental protection. *Sociological Theory*, 41(3), 1-xx. Advance online publication. <https://doi.org/10.1177/07352751231184462>
- Rehner, J., Lorie, A., Freitas, A., & Atienza, M. (2025, April 30). *National Policy Report #1: Gobernanza ambiental y social – Chile*. Instituto de Ciencia, Legislación y Ambiente de Chile (ICLAC).
- Revista El Federal. (2018, June11). *Jujuy: piden detener explotación de litio por no consultar a comunidades originarias*. Observatorio de Conflictos Mineros de América Latina (OCMAL). <https://www.ocmal.org/ujuy-piden-detener-explotacion-de-litio-por-no-consultar-a-comunidades-originarias/>
- Ríos, M.E., Figueroa Ayala, J., & Freitas, A. (2023). *Central Hidroeléctrica Rucalhue, Región del Biobío* (Versión v1). Núcleo Milenio Impactos de China en América Latina y el Caribe (ICLAC).
- Rodenbiker, J. (2021). Making ecology developmental: China's environmental sciences and green modernization in global context. *Annals of the American Association of Geographers*, 111(3), 667-681. <https://doi.org/10.1080/24694452.2020.1863766>
- Rodríguez Becerra, M. (2009). ¿Hacer más verde al Estado colombiano? *Revista de Estudios Sociales*, (32), 18-33. <https://doi.org/10.7440/res32.2009.02>

- Sanborn, C., Pareja, A., & Quispe, D. (2024). *De Marcona a Chancay: La presencia económica y empresarial china en el Perú, 1992-2023*. Universidad del Pacífico.
- Sanborn, C.A., & Chonn, V. (2016). *La inversión china en la industria minera peruana: ¿bendición o maldición?* In: R. Ray, K.P. Gallagher, A. López, & C. Sanborn (Eds.), *China en América Latina: lecciones para la cooperación Sur-Sur y el desarrollo sostenible* (1ª ed., pp. 217-269). <http://hdl.handle.net/11354/2216>
- Schaeffer, V., Leyva, A., Lang Carrillo, S., Wiener, L., & Zegarra, G. (2019). *Flexibilización ambiental en el Perú: El abuso del ITS en el sector minero*. <https://catalogo.oefa.gob.pe/cgi-bin/koha/opac-detail.pl?biblionumber=487>
- Secretaría de Minería, Ministerio de Desarrollo Productivo de la Nación. (n.d.). *Catálogo de proyectos avanzados de litio en Argentina*. https://www.argentina.gob.ar/sites/default/files/catalogo_de_proyectos_avanzados_de_litio-espanol.pdf
- Secretaría de Minería e Hidrocarburos, Gobierno de Jujuy. (2025). *Consulta pública de informes de Impacto Ambiental (IIA)*. : <https://www.mineriajujuy.gob.ar/consulta-publica-ia/publicacion-ia.php#:~:text=Informe%20de%20Impacto%20Ambiental%20de%20MINA%20JORGE%20ENRIQUE>
- Servicio de Evaluación Ambiental. (2025). *Proceso de Consulta a Pueblos Indígenas (PCPI)*. : <https://www.sea.gob.cl/portal-de-participacion-ciudadana-y-consulta-indigena/proceso-de-consulta-pueblos-indigenas-pcpi-0#:~:text=Es%20un%20proceso%20de%20di%C3%A1logo,Vigencia%20desde%20el%20a%C3%B1o%202009>
- Silva, E. (2023). The politics of policy implementation and reform: Chile's environmental impact assessment system. *The Extractive Industries and Society*, 15, 101321. <https://doi.org/10.1016/j.exis.2023.101321>
- SN2. (2025). *Empresas de la gran minería son las que menos trabajadores extranjeros tienen en Chile*. <https://sn2.cl/empresas-de-la-gran-mineria-son-las-que-menos-trabajadores-extranjeros-tienen-en-chile/>
- SONAMI. (2016). *Proyecto de ley que moderniza el sistema de relaciones laborales*. <https://www.sonami.cl/v2/wp-content/uploads/2016/04/Proyecto-de-Ley-que-moderniza-el-sistema-de-relaciones-laborales.pdf>
- SUNAFIL. (2019, July 24). *Resolución de Superintendencia N°237-2019-SUNAFIL* [PDF]. <https://img.lpderecho.pe/wp-content/uploads/2021/02/RS-237-2019-SUNAFIL-criterio-licencia-sindical-LP.pdf>
- Superintendencia de Seguridad Social. (2025). *Código del Trabajo, artículo 249: permisos sindicales*. <https://www.suseso.cl/612/w3-propertyvalue-70155.html>
- Timaná, L. (2025, January 31). *Río Blanco anuncia consulta popular y ronderos salen a marchar en rechazo al proyecto minero*. Correo. <https://diariocorreio.pe/edicion/piura/rio-blanco-anuncia-consulta-popular-y-ronderos-salen-a-marcha-en-rechazo-al-proyecto-minero-noticia/>
- Thurbon, E. (2016). *Developmental mindset: Revival of financial activism in South Korea*. Cornell University Press.
- Universidad de Chile. (2020, January 6). *Estudio realiza una radiografía a los procesos de consulta previa a pueblos indígenas*. <https://uchile.cl/noticias/160591/realizan-radiografia-a-procesos-de-consulta-previa-a-pueblos-indigenas>
- Vacamuertaonline. (2025, February 17). *Vaca Muerta atrae a miles de extranjeros*. <https://vacamuertaonline.com.ar/articulo/vaca-muerta-atrae-a-miles-de-extranjeros.php>

- Vega-Araújo, J., Muñoz Cabré, M., & Gil, M.P. (2025, April). *Energía solar, eólica y comunidades energéticas en Colombia: Panorama 2025*. Stockholm Environment Institute (SEI). <https://doi.org/10.51414/sei2025.019>
- Vinatea & Toyama. (2023). *Las claves de las relaciones laborales en el sector minero*. <https://www.vinateatoyama.com/las-claves-de-las-relaciones-laborales-en-el-sector-minero/>
- Zapata, J. (2025, January 28). *Pese a las denuncias y su impacto ambiental, continúa la construcción de la Central Rucalhue*. Diario y Radio Universidad de Chile. <https://radio.uchile.cl/2025/01/28/pese-a-las-denuncias-y-su-impacto-ambiental-continua-la-construccion-de-la-central-rucalhue/>