Convergence, divergence or mixed-results? A comparison between private and public rules governing lithium mining in Argentina

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About this report

This report is one of the expected outputs of the Project "Accounting for the Extractivist Footprint of EVs: A Comparative Analysis of Local and Transnational ESG Standards Governing Lithium Production."

About this project

"Accounting for the Extractivist Footprint of EVs: A Comparative Analysis of Local and Transnational ESG Standards Governing Lithium Production" is funded by the "Climate Positive Just Energy Transition Grants" of the University of Toronto. The project is led by Teresa Kramarz (University of Toronto) and carried out by researchers from the University of Toronto (Canada), the Foundation for Argentinean Development (Fundar-Argentina) and the Non-Conventional Energy Research Institute (INENCO-Argentina).

Acknowledgements

We would like to thank Antonia Firpo and Zaiboon Azhar, who collaborated by assisting in the survey process of this work. Carlos Freytes made valuable comments for the elaboration of this document.

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Executive summary

Electric vehicle (EV) sales are accelerating in the Global North, in one of the most visible signs of a consumer-led transition from fossil fuels to renewable energy sources. This shift to EVs relies on intensifying global supply chains, beginning with the extraction of critical battery minerals and metals like lithium, which may have environmental and social impacts in the territories where it is extracted, leading to social claims from local communities and indigenous peoples who live in the area. To address such tensions, the corporate supply chain of battery minerals has driven an expanding land-scape of transnational ESG regulations and accountability standards over the last decade to provide environmental and social protections across the world.

The proliferation of industry-driven standards alongside the process of creating new environmental and social standards by lithium producing States raises the question of how these public regulations and private standards interact in the effective regulation of mining activity in producing countries. The extent to which private transnational standards converge or diverge from public regulation is still unknown. Both the number and the type of requirements vary allowing an analysis of their relationship in terms of complementarity or competition.

This report contributes to close that knowledge gap on the emergent ecosystem of ESG standards and regulations on mining by addressing the following questions: 1) which are the accountability sources, targets and substance of public legislation and private transnational standards regarding Environmental Impact Assessment, public participation and Free, Prior and Informed Consultation (FPIC) in lithium mining?; 2) how are private transnational standards and public regulation converging or diverging on those sources, targets and substance? We try to answer these questions by comparing Catamarca's public regulations (a lithium-producing province of Argentina) and the Initiative for Responsible Mining Assurance Standard (IRMA), one of the most comprehensive standards across the world.

The comparative analysis between the IRMA Standard and Catamarca's public regulations shows mixed results: both rules tend to converge regarding substantive requirements on Environmental Impact Assessment procedures, while there are some divergences on public participation. The biggest gap is on Free, Prior and Informed Consultation. The private standard seems to be more comprehensive than the public regulations regarding public participation and -especially- FPIC. However, it does not count with enforcement mechanisms other than denying certification or qualifying companies at lower levels of compliance to actually get compliance. The comprehensiveness is counterbalanced by the lack of strong enforcement mechanisms. On the other hand, the State counts with powerful enforcement mechanisms but has not adopted a comprehensive regulation for FPIC. Our policy recommendation is to broaden public regulations where regulatory gaps remain and to enhance legal enforcement where comprehensive regulations already exist, rather than relying on a substitution of public regulations by private standards.

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The adoption of Electric Vehicles (EVs) is rapidly increasing in the Global North, serving as a prominent indicator of a consumer-led transition from fossil fuels to renewable energy sources. This transition toward EVs hinges on the expansion of global supply chains, which begins with the extraction of essential battery minerals such as lithium. According to the World Bank, the production of lithium must surge by 500 percent by 2050 to meet projected battery storage demands. The pursuit of critical battery minerals presents both a solution to and a significant challenge for an equitable energy transition (Kingsbury, 2022; Kramarz et al., 2021). Given their abundant natural resources, Latin American nations play a pivotal role in this transition. The bulk of the world's lithium reserves are concentrated primarily in two locations: Australia and the Andean salt flats of the countries comprising the "lithium triangle" - Argentina, Bolivia, and Chile. These salt flats host the largest lithium brine reserves globally, with approximately 58% of the world's resources located there (USGS, 2022).

In this scenario, Argentina's role is key: it is the world's second largest producer of lithium from brine (and the fourth largest in the world from any type of extraction). Its reserves are located in the salt flats of the Puna region, in the northwestern Andes, at more than 3,500 m above sea level, distributed across the provinces of Jujuy, Salta and Catamarca (López, Obaya & Pascuini, 2019; MINEM, 2021). However, civil society groups, indigenous peoples, and other pastoralist communities (hereafter 'affected communities') have raised concerns about the environmental and social impacts of mining. In Argentina, attention has predominantly focused on issues related to water consumption in arid regions and the adverse impacts of mining on human well-being and biodiversity (Obaya et al., 2023). Communities affected by these issues have raised concerns about the insufficient involvement of locals in decision-making processes and the inadequate access to current environmental information by national and provincial governments, which are actively promoting the growth of the lithium industry (Dorn & Gundermann, 2022; Escosteguy et al., 2022; Murguía & Bastida, 2023).

To address such tensions, the corporate supply chain of battery minerals has driven an expanding landscape of transnational ESG regulations and accountability standards over the last decade to provide environmental and social protections across the world. The aim of these initiatives is to produce and foster accountability, understood as situations where "some actors have the right to hold other actors to a set of standards, to judge whether they have filled their responsibilities in light of those standards, and to impose sanctions if they determine that those responsibilities have not been met" (Grant & Kohane, 2005:29). For example, the Initiative for Responsible Mining Assurance (IRMA) defines good practices and provides a benchmark for responsible standards that are verified by auditors to mitigate human rights violations and environmental degradation. The Extractive Industry Transparency Initiative (EITI), a multi-stakeholder organization that promotes financial disclosures across the value chain, seeks to mitigate corruption. The International Finance Corporation (IFC) Performance Standards on Environmental and Social Sustainability; the International Council on Mining and Metals (ICMM) Mining Principles; the Organization for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Minerals Supply Chains in Conflict-Affected or High-Risk Areas; the Global Reporting Initiative Standards (GRI) and the Mining Association of Canada's Towards Sustainable Mining (TSM) Initiative are other transnational standards that have emerged in recent times. However, with few exceptions, this ecosystem of transnational standards has its own limitations: it has been pointed out that it is not only fragmented but also largely based on voluntary adherence by corporate actors (Kramarz and Park, 2016). Since requirements overlap, creating a patchwork of basic components of integrated supply value chain management, there is risk of sowing confusion among participating companies and regulators (Heller et al., 2020).

On the other hand, international accountability mechanisms, like Environmental Impact Assessments and the principle of Free, Prior, and Informed Consent, have been legally established in Argentina to ensure civil society and affected communities' participation. This has been done by adopting

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international treaties, such as the Escazu Agreement and ILO Convention 169, and incorporating them into domestic legislation, often in response to processes of social mobilization from below to address the social and environmental impacts of expanded mining activities, and with the goal of capturing a greater share of the economic benefits associated with this expanding industry. Often, these institution-building processes have failed to fully meet their intended objectives.

In the case of Argentina, Arias Mahiques et al. (2022) pointed out that there are gaps in the regulation of public participation at the national and provincial levels. The lack of express provision for early public participation mechanisms is a source of concern due to the fact that early contact with stakeholders is an important input to adjust the design of participatory mechanisms to the local context, in the face of significant asymmetries between the relevant actors. The lack of clear guidelines for FPIC implementation also leads to a high degree of uncertainty regarding the initiation of the FPIC process, its extent and what the expected outcomes are. According to the authors, this led public agencies to develop participatory mechanisms in a discretionary manner, which in many cases affects the credibility of the process. Escosteguy et al. (2022) have analyzed a consultation process on lithium mining in the Argentine province of Catamarca. They concluded that there were several barriers to local participation, and that the consultation did not comply with national laws and international treaties.

In addition to generating mistrust among communities and civil society, weak institutional capacity to uphold international principles become a risk for large investors, which is the underlying reason why transnational standards are incorporating ways to obtain the FPIC and foster public participation in a more effective way. For example, the OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector establishes a series of steps to engage with indigenous peoples when implementing FPIC, while the International Council on Mining and Metals (ICMM) Mining Principles / Performance Expectations has developed a Position Statement that delineates ICMM members' approach to engaging with Indigenous Peoples when pursuing Free, Prior and Informed Consent.

A recent survey of experts explored the challenges and barriers to developing a sustainable and just lithium supply chain (Obaya et al., 2023). The results show that about 25% of respondents (out of a total of 141) believe that regulatory changes in mining countries and lithium consuming countries are key to addressing sustainability challenges, and that regulations should be changed requiring compliance with rigorous environmental standards, external audits and certifications. In addition, more than 50% of respondents said that lithium consuming countries should promote compliance with social and environmental transnational standards to achieve a just supply chain. These results show that for the surveyed experts, transnational standards are a key tool to achieve public participation in decision-making and a sustainable and just lithium supply chain in contexts in which public regulation is perceived as insufficient. However, not all concerns were focused on regulatory changes. In fact, the responses seemed to prioritize policy enforcement rather than policy adoption issues.

The proliferation of industry-driven standards alongside the process of creating new environmental and social standards by lithium producing countries raises the question of **how these public standards¹** (understood as public regulation) and private standards interact in the effective regulation of mining activity in producing countries. A growing literature on the interactions between transnational standards and public policies argues these interactions can be understood in terms of complementarity or competition (Andonova et al., 2017; Eberlein et al., 2014; Hiete et al., 2019; Marques & Eberlein, 2021). However, the extent to which private transnational standards converge or diverge from public legislation is still unknown, not only in terms of the number but also the nature of requirements.

This report contributes to closing that knowledge gap. It examines the emergent ecosystem of ESG standards and regulations governing mining by addressing the following question: How are private

¹ Both terms will be used as synonyms for the purposes of this paper.

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transnational standards and public regulations converging or diverging on sources, targets and substance of accountability regarding Environmental Impact Assessment, public participation and Free, Prior and Informed Consultation in lithium mining? We apply Grant and Kohane's conceptualization of accountability - which defines it as situations where "some actors have the right to hold other actors to a set of standards, to judge whether they have filled their responsibilities in light of those standards, and to impose sanctions if they determine that those responsibilities have not been met" (2005:29). The target of accountability refers to who must respond (who is being held into account). The source of accountability refers to to whom it must respond to (what it is accountable for) (Kramarz and Park, 2016). We also look at the sanctions imposed by both types of rules, that we understand for the purposes of this analysis to the consequences of non complying with the established requirements.

This report focuses on convergences and divergences based on the texts of the standard and the legislation (*de iure* analysis). Future studies will focus on what happens at the enforcement level of the existing legal texts (*de facto* analysis). Since we are interested in which norms and standards take hold on the ground, we tackle these questions by taking as a comparative reference the legal framework of the province of Catamarca. The first project that is going through the IRMA certification process in Argentina, the Fenix lithium project, is located in this province. Therefore, we focus on the IRMA Standard to make the comparative analysis against public regulations.

Our initial point of inquiry was whether public regulations and transnational standards diverge on all the accountability aspects mentioned above, considering that they are driven by different actors (the State in the case of public regulations, the industry and other non-governmental stakeholders in the case of private standards) with different interests and resources. Based on this first approach, the second point of inquiry was whether transnational standards create more comprehensive social and environmental governance requirements. To assess convergence and divergence on the issues described in our conceptual framework we first made a document review of IRMA's rules and public regulations in order to answer those questions and codify the information into inductive and deductive categories. Then, we looked at whether there were qualitative differences between both sets of rules by coding the texts (both the private standard and the public regulations) into many categories that had been constructed from our conceptual framework (such as *source* and *target* of accountability) and also from reading those legal texts (such as the substantive requirements to comply with).

Regarding the substance of accountability, the comparative analysis between the IRMA Standard and Catamarca's public regulations shows mixed results: both sets of rules tend to converge on Environmental Impact Assessment procedures, while there are some divergences on public participation and the biggest gap is on Free, Prior and Informed Consultation. When comparing the targets of accountability, we see that public regulations and transnational standards tend to (partially) converge: both sets of rules regulations require mining companies to account for similar themes in order to operate. As it was expected due to the nature of both types of rules, sources of accountability diverge: when mining companies follow IRMA's rules, they are subject to independent auditors' control, whereas when they follow public rules, they are subject to State's control. Besides, according to the public regulations, some actions must not be done by the company but by public officers, who are accountable to the Judicial Power at the request of citizens empowered with legal rights to claim. These convergences and divergences on targets and sources hold for the three topics under analysis. Finally, and as it was expected due to the voluntary nature of the private standard, there are significant differences regarding sanctions. In the case of IRMA, non complying with EIA and public participation procedures might have a negative impact on scoring, while the consequence imposed ultimately by public rules is the denial of an operating permit.

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The main difference on Free, Prior and Informed Consultation is that while IRMA explicitly refers to obtaining indigenous peoples *consent*, domestic legislation refers to carrying out the *consultation*. Also, IRMA explicitly states that the mining company will not get the certification if it does not obtain

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consent, while in the case of the domestic legislation, the consequences for not obtaining a positive pronunciation are not clear. Therefore, the private standar seems to be more comprehensive than the public regulations. However, it does not count with enforcement mechanisms other than denying certification or qualifying companies at lower levels of compliance to actually get compliance. **The comprehensiveness is counterbalanced by the lack of strong enforcement mechanisms.** On the other hand, the State counts with powerful enforcement mechanisms but has not adopted a comprehensive regulation for Free, Prior and Informed Consent. Our policy recommendation is that the **Argentine State should cover this** *regulatory gap*, which implies establishing national processes that define the specific procedures to be followed in order to make an appropriate consultation, as well as the consequences for non fulfilling those procedural conditions and for fulfilling those conditions but not obtaining the indigenous peoples' consent.

Finally, the private standard and the public regulations seem to share similar concerns regarding Environmental Impact Assessment and public participation and have developed similar requirements to address them. If that is so, the main problem with lithium mining governance could come not mainly from *regulatory gaps* but from *enforcement gaps*. Future research may focus on the enforcement aspects of the existing regulations, diving into their actual implementation on the ground.

Methods

Conceptual Framework

In order to better understand the convergences and divergences between private standards and public regulations we collected IRMA guidelines, as well as thirty national and provincial regulations relevant to the lithium sector in Argentina. We use the term "public regulations" to refer to the set of rules that regulates lithium mining in Argentina (including not only the National Mining Code but also the provincial mining regulations and the environmental regulatory frame). We refer to "standard" to include international organization based initiatives that can be voluntary with or without certifications and with or without third party audits.

We compared how standards and regulations applied three international accountability mechanisms designed to mitigate the social and environmental harms that were identified as priorities in a recent survey of stakeholders across industry, government, and civil society (Obaya et al., 2023): Environmental Impact Assessment (EIA), public participation, and Free, Prior and Informed Consent (FPIC).

EIA refers to the process of identifying, predicting, evaluating, and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions and commitments (IAIA, 2009). Being aware that the term has a dual nature (as a *technical tool* for analysis but also as a *legal and institutional procedure* linked to the decision-making process of a planned intervention), this paper focuses on both dimensions. In that sense, we assess the technical aspects required by the Environmental Impact Report - the core technical document of the procedure - and then the institutional dimension of the concept, analyzing the different stages of the EIA procedure that enable the public to participate in the decision making process.

Following the Rio Declaration of 1992, public participation is an international principle in natural resource governance that states environmental issues are best handled with participation of all concerned citizens, at the relevant level, with appropriate access to information, and the opportunity to

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participate in decision-making processes. As outlined by the International Labour (ILO) Organization Convention 169 and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), FPIC refers to the collective right of indigenous peoples to be consulted substantively and in good faith when measures are expected to affect them.

Our comparative reference is Catamarca, where the Fénix mine is located. This is the country's oldest operating lithium project, situated in the high altitude salt flats of the arid Puna ecoregion. This mine provides lithium to major automotive customers including Tesla, BMW, and General Motors and is the first project to initiate an IRMA certification process in the country. Taking this project as a reference allows us to identify the specific public regulations that already apply and make a comparative analysis with the private standard to be certified.

The project is located in the Salar del Hombre Muerto in the northern province of Catamarca, It is owned by the American Livent Corp., and operated through "Minera del Altiplano", the Argentine subsidiary. The project produces lithium carbonate and lithium chloride that is exported to the United States and China (Livent, 2021). In the Salar del Hombre Muerto, lithium is extracted from brines, i.e. from saltwater aquifers, through evaporitic techniques. The area is home to indigenous and pastoralist communities (affected communities hereafter) who have significant concerns about lithium mining and its potential impacts.

Currently, the Fenix project is going through the process of production and expansion, with the development of hydraulic and logistical works³. In 2021 IRMA announced the start of the evaluation process of the Fénix project⁴. According to its sustainability report, with the initiation of the IRMA assessment, Livent became the first company with mining operations in Argentina to become a full member of IRMA. Its self-assessment process started in February 2021, and was followed by an external verification which began in February 2022. The site audit was conducted in December 2022, it included a visit to the project's operations and facilities, and key stakeholders were invited to submit comments.

The company reports that the third party assessment included visits to local communities around Fénix and interviews with more than 80 employees, 40 local community members and 10 contractors, as well as several government representatives⁵. However, two affected communities living near the Salar del Hombre Muerto, "Atacameños del Altiplano" and "Antiofaco" communities, opposed IRMA's certification process for the Fenix Project through a press statement in which they expressed their rejection to the process that had been recently started. They argued that the mining company is far from being responsible and sustainable, and reported environmental damage and the violation of indigenous and human rights in their territories⁶.

Data gathering and analysis

Different methodological strategies were followed for the preparation of this report. First, the authors made available to the project team a series of scientific articles that they considered relevant according to their previous experience on the subject. Among these articles, those dealing with the relationship between mining, private standards and public regulation were selected for further analysis.

Second, having selected the three accountability mechanisms as the focus of this report, we

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³ In 2022, the activities corresponding to the consultation process and public hearing of the phase 2 stage of the exploitation stage were carried out)

⁴ Albemarle's Salar de Atacama became the first lithium mine in the world to complete an independent audit of their performance against the IRMA Standard for Responsible Mining.

⁵ Reimagining possibilities - 2022 Sustainability Report.

⁶ Argentina. IRMA: Certificando internacionalmente la destrucción y el saqueo and Catamarca: Comunicado de la Comunidad Indígena Atacameños Del Altiplano en rechazo al proceso de certificación IRMA para la empresa Livent.

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conducted a literature review to investigate what previous studies have found about the application of EIA, public participation and FPIC in the mining sector. The literature review allowed us to identify some shortcomings of public regulations and private standards in addressing the concerns of affected communities.

Third, we conducted desk research in order to collect public regulations and standards reported by the project selected as the case study. Given the federal character of the country, we collected national and provincial regulations from government official websites. Regarding private standards, we focused on the Initiative for Responsible Mining Assurance (IRMA) due to the ongoing certification process, although we make a brief reference to Towards Sustainable Mining (TSM), a program that is widely promoted by the Argentine Chamber of Mining Companies.

To disaggregate the comparison of the substantive requirements, we constructed many categories in a two-way inductive-deductive process following both sets of rules. First, we analyzed public regulation to see which substantive provisions were requested regarding Environmental Impact Assessment, public participation and Free, Prior and Informed Consultation. As a second step, we analyzed the private standard to see whether there were equivalent requirements and to identify additional ones, which were not covered by public regulation. Then, to avoid potential biases, we came back to public regulation to verify whether those additional requirements identified when analyzing private standards had an equivalency in public regulations and to identify new -additional- requirements that had not been identified in the first round. Finally, we came back to private standards to verify if those "new" requirements identified at analyzing public regulations for the second time had their equivalents. The whole coding process allowed us to identify patterns and duplication, but also gaps, fragmentation and even nuanced differences between public regulations and the selected private standard in Argentina.

Literature review

EIA, FPIC and public participation

As mentioned above, EIAs contain two dimensions that must be taken into account. The first one is connected to the elaboration of a report in which the impacts of development proposals (mining projects in this case) should be described together with the plans to mitigate these impacts. This dimension implies that environmental data should be collected, analyzed and shared in a document that in Argentina is considered public information. This means that civil society and affected communities are supposed to have access to all this information prior to consultation and issuing permit. The second dimension of the EIAs involves public participation before a mining project starts, during the project operation, and in the closure stage. In the mining sector in Argentina, affected communities participate and are consulted under the EIA procedures (Murguía & Bástida, 2023). Participation in the context of the EIA process can range from information exchanges and informative talks to veto power by affected communities and groups (Aspinwall, 2021).

The literature on EIA in the mining sector suggests that involving affected communities in the EIA process has some benefits: ensuring the legitimacy of the project, achieving "social license to operate", and improving the effectiveness of environmental control and of impact management measures (Hyman et al., 2022; Noble & Birk, 2011). On the contrary, poor participation is considered the main factor limiting the effectiveness of the EIA process and creating local opposition to the project (Almeida & Montaño, 2017; Kilajian & Chareonsudjai, 2021).

Several scholars have argued about the importance of public participation at all relevant project stages —and not only before the project is approved (Kilajian & Chareonsudjai, 2021)—. In that sense,

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follow-up activities that usually involve the inclusion of affected populations in monitoring programs contribute to the effectiveness of public participation in the EIA. In Argentina, different monitoring programs have been developed in the lithium mining sector, particularly in the provinces of Jujuy and Catamarca. However, in some cases, affected communities have reported a lack of technical knowledge to understand the basis of the studies conducted during the monitoring, and are often suspicious of monitoring results (Marchegiani et al., 2019; Pareja et al., 2019).

This kind of mistrust on the part of some of the affected peoples could be explained by the power differentials reproduced by the EIA and public participation processes, which create encounters between government authorities, mining companies and affected communities. Participation in EIA often requires a certain level of technical knowledge to understand the information provided by the project developer, economic resources to travel to the places where the meetings take place, and time to both read the reports and attend the meetings, making it difficult for some affected communities to participate in these processes. Affected communities - often marginalized groups - find participatory processes overly legalized, complex, and intimidating (Aspinwall, 2021). In this sense, Bigolin Neto & Mallet (2022) pointed out that in many cases for affected communities the EIAs seem to be a formality to obtain the license to operate. The technical language used in the reports and power imbalances among the actors that participate in these instances limit participation in decision-making. In a more critical tone, Peterson St-Laurent and Le Billion (2015) suggest that the EIAs frequently fail to provide a truly deliberative outcome. They define EIAs as a technology of government designed to facilitate the development of a mining project.

In some cases, affected communities have mobilized strategies to oppose mining or the development of a particular mining project. Among these strategies, some affected communities have submitted formal allegations to EIAs and denounced abuses by companies or the State in provincial or national courts (Walter & Wagner, 2021). In relation to mining conflicts in Argentina, environmental justice actors and groups have demanded access to EIAs, conducted the review of these technical documents, and filed lawsuits and EIA appeals as part of a non-violent strategy.

Often, the environmental information contained in the EIA serves as a starting point for FPIC processes. Access to and understanding of this information is relevant for affected communities to be aware of all aspects of the project that may affect their livelihoods and territories, and therefore to be consulted and provide (or not) their consent (Marchegiani et al., 2019). In recent years, FPIC has become central to the debates around indigenous rights and sustainable development.

The mining industry has embraced FPIC as a way to simultaneously contain business risks and initiate dialogue with indigenous peoples living near extraction sites (Kemp & Owen, 2016; Owen et al., 2022). Initiatives such as IRMA appeared as a way to respond to the growing demand of stakeholders and investors to assure the protection of indigenous rights along the whole mining supply chain (MacInnes et al. 2017; Owen et al., 2022). While the interests of indigenous peoples are increasingly being incorporated into sustainability standards, some communities' concerns remain (Bose, 2023). According to Meadows (2019), this is because Indigenous communities do not participate as equal partners in the design and assessment of sustainability standards, and because FPIC mechanisms are not locally adapted, preventing transparency.

In line with this lack of transparency, the literature review suggests that, when applied, FPIC tends to be defined in terms of a consultation process or to be replaced by mechanisms in which indigenous communities are invited to negotiate with mining companies (Curran 2019; Mahanty & McDermott, 2013; Nagar, 2021). In most cases, FPIC does not function as a means of truly obtaining Free, Prior and Informed Consent, violating the spirit of international law, which is to provide indigenous communities with veto power or "the right to say no" (Etchart, 2022; Lawrence & Moritz 2019). From a critical perspective, Perreault (2015: 16-17) defined consultations carried out in Bolivia as "performances of state power", in which a performance of participation is conducted to reproduce a certain

The Argentine legal framework

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social order, and to obscure uneven relations inherent in resource extraction. Moreover, Owen et al. (2022) argue that FPIC is considered by states and mining companies as a necessary step to provide approval for mining projects, and that little consideration is given to consent in post-approval matters. This creates problematic scenarios since the footprint of mining projects are dynamic and effects (direct and indirect) of extractive activities change over time.

In this context, Indigenous peoples have used FPIC as a way to demand their right to say no and to fight for customary governance systems to be respected (Papillon & Rodon, 2019). (Owen & Kemp, 2014; Papillon & Rodon, 2019). Frequently, indigenous communities have started legal actions against the lack of FPIC procedures in international courts which have succeeded in halting mining projects, and this is the case in the global north as much as in the global south. Meanwhile, many communities remain skeptical that transnational standards will advance the protection of their rights, the role of international courts has been relevant for granting indigenous rights (Etchart, 2022; Huizenga, 2019).

The Argentine legal framework

In order to compare and identify convergences and divergences between public regulations and private standards, in this section we describe the national and provincial regulations relevant to the lithium sector in Argentina.

Argentina is a federal State, composed of 24 subnational jurisdictions. In this political configuration, some powers belong exclusively to the provinces, others to the federal government and others are exercised jointly or in a complementary manner. First, setting the mining policy is a power of the national State, since it is the National Congress which has the power to dictate the Mining Code. The general mining regime provided by the national Code is applied and, in turn, it is also regulated by the provinces. They are empowered to grant the exploration permits, collect the royalties and the tenement fees and allocate exploitation concessions. Besides, they are also empowered to regulate the specific procedures to be followed in order to apply the previous aspects. They set the rules that define how the exploration and exploitation concessions are allocated and how the mining royalties and the tenement fees are collected. Lithium falls within this double framework: in the absence of a national regulation that deals specifically with it, the general mining regime provided by the national Mining Code is applied and, at the same time, it is also regulated by the provinces.

On the other hand, according to the National Constitution, the original domain of natural resources belongs to provinces. This implies that most of lithium mining socio-environmental governance corresponds to the subnational governments. However, the national state establishes minimum requirements regarding environmental protection. These requirements must be respected by subnational regulations. Every subnational legal act must at least equal or be above that national threshold. The result is a complex legal framework that integrates both national and subnational regulations. In addition, Argentina has signed international treaties that comprises legal commitments regarding environmental assessment, public participation and Free, Prior and Informed Consent, such the Escazú Agreement and ILO Convention 169. These treaties have been incorporated to the domestic legal framework through approval laws, such as Law No. 24071 (1992) and Law No. 27566 (2020).

For these reasons, the description of EIA, FPIC and public participation procedures considers the legal framework as a whole, integrating both national and Catamarca regulations requirements, while the authorities we mention correspond to the provinces.

The Argentine legal framework

Figure 1

Catamarca's lithium mining regulatory framework. Hierarchical scale

National Constitution and International Treaties empowered with constitutional hierarchy

International Treaties not empowered with constitutional hierarchy

(e.g. Escazu Agreement and ILO Convention169)

National legislation

(.g. the Mining Code and General Environmental Law)

Provincial legislation

(.g. Mining Procedures Code)

Provincial executive regulations

(e.g. Resolution N 74/2010 about environmental impact assessment and Regulatory Provision N 3/2021 about public participation)

The Environmental Impact Assessment

The legal framework of Environmental Impact Assessment of a mining project is the result of a set of laws from different levels of government. Some of the environmental requirements imposed at the national level come from the **General Environmental Law (N° 25.675)**, which mandates that every person or organization who carries out a work or an activity likely to significantly degrade the environment must subject that work or activity to an impact assessment procedure⁷. This duty is reinforced for mining companies by the national **Environmental Protection Law for Mining Activity (N° 24.585)**, which states that every company that carries out mining activities must subject its project to an impact assessment procedure in order to obtain legal permission to start mining exploration and/or exploitation⁸. Additionally, the provincial Undersecretariat of Environment has specifically regulated the Environmental Impact Assessment procedure by **Resolution N° 74/2010**.

This procedure is carried out by provincial public agencies and consists of a series of steps, beginning with the submission of an Environmental Impact Report (EIR) by the company and ending with

⁷ Art. 11 of national Law N° 25.675.

Art. 6 of national Law N° 24.585.

Argentine legal framework the issuance of an Environmental Impact Statement (EIS) by a public authority⁹. Once the company submits the report, a public participation instance is open¹⁰. After this instance, the provincial Mining Secretariat through the Provincial Directorate of Mining Environmental Management (PDMEM) assesses the report, taking into account the concerns and observations made during the hearings, and makes an Environmental Impact Statement (EIS) approving (or not) the project. This sequence is repeated along the mining project life cycle, before and during exploration, exploitation and closure stages. Besides, the EIS must be updated every two years at most¹¹.

This 4-step process is repeated many times along the mining life cycle, since it is mandatory in every stage, from exploration to exploitation. Public participation instances (PPI) must be conducted before acquiring an exploration permit and an exploitation permit, and also *during* the exploration and exploitation stages, given that the Environmental Impact Statement (EIS) must be updated every two years at most. In the closing stage, public participation is not specifically regulated, although consultation is required as an element of the closure plan regarding the community engagement chapter. The way in which those instances are carried out depends on the Closure Plan of each company, which must be approved by the enforcement authority before beginning with the exploitation stage.

Step by step: the Environmental Impact Assessment procedure

#1. Environmental Impact Report (EIR). The project's proponent submits an Environmental Impact Report (EIR) in order to obtain an exploration/exploitation permit. According to the General Environmental Law (No. 25.675), the report must contain, at least: (i) a detailed description of the work or activity project; (ii) an identification of the potential consequences over the environmental and (iii) a series of actions to mitigate the negative effects of the project¹².

According to the national Environmental Protection Law for Mining Activity (N° 24.585) the report must also include: (iv) the location and an environmental description of the area of influence; (v) an identification of potential modifications to soil, water, atmosphere, flora and fauna, relief and socio-cultural environment; (vi) measures for prevention, mitigation, rehabilitation, restoration or recomposition of the altered environment, as appropriate; (vi) methods to be employed along the operations^{13 14}.

Additionally, according to the Resolution N° 74/2010 (Undersecretariat of Environment), the report must include: (vii) baseline data collection; (viii) qualitative and quantitative analysis of the main impacts, considering (a) positive and negative impacts (b) direct and indirect impacts; (c) short, medium and long term effects; (d) concentrated or expanded effects; and (e) cumulative or synergic impacts, among others. It is worth noting that the company must estimate the impacts by specifying types and quantities of wastes and emissions in every mining stage, as well as their management and final destination. Also, the mining company must (ix) propose alternative projects; (x) describe preventive and mitigation actions; and elaborate (xi) contingency plans for risky activities and a (xii) monitoring programme¹⁵.

The Regulatory Provision 3/2021, dictated by the Provincial Directorate of Mining Environmental Management (PDMEM), states that the EIR must include the active participation of the community during the preparation process. Although this participation must include involvement in the work, surveys, monitoring, environmental baselines and other activities carried out by the company, it does

⁹ Art. 7 of national Law N° 24.585 and arts. 19 and 27 of Resolution N° 74/2010 (Undersecretariat of Environment).

¹⁰ Arts. 19 to 21 of national Law N° 25.675.

¹¹ Art. 11 of national Law N° 24.585.

¹² Art. 13 of Law N° 25.675

¹³ Arts. 8 and 17 of Law N° 24.585.

¹⁴ For specific thematic aspects such as protected areas, water resource management, waste, insurance, mine closure, among others, see Catamarca mining legislation on the official website.

¹⁵ The administrative filing requirements are developed in Resolution 81/11 (SEM).

The Argentine legal framework not establish any sanction for not fulfilling this requirement¹⁶. Public participation instances will be described in detail in the next chapter.

Once the company completes its assessment and report, they submit it to the enforcement authority, which is going to assess the report after holding a public hearing.

#2. A public information period. The project progresses to public hearings. Although holding a public hearing is mandatory, its results are non-binding. The process begins with a public consultation call from public officers and lasts 30 days at most. The company must present a summary of the EIR in a simple language, which is shared with the people who are going to participate in the hearing¹⁷. The process includes two main components: (i) the preparatory stage, which includes informative meetings on technical issues, and (ii) the public hearing¹⁸.

The area of influence of a project is divided into three categories: (i) direct area of influence; (ii) primary indirect area of influence; and (iii) secondary indirect area of influence. Each group receives a different approach regarding access to information and ways of participating¹⁹. This will be further developed in the *Public participation* chapter.

#3. The public hearing. Public hearings may be held in person or virtually. That decision depends on the enforcement authority. The agenda to be discussed at the public hearing shall be prepared, notified and added 48 hours prior to the public hearing. The agenda shall contain the proceedings to be carried out during the public hearing and the list and the order in which the registered participants will make their presentations.

All the consultations, doubts, opinions, perceptions, observations and/or contributions collected during the hearing must be recorded, taken into account and analyzed prior to the Environmental Impact Statement by the PDMEM. The hearing will be presided by the head of the PDMEM or whoever is appointed by that authority and conducted by a moderator²⁰.

The ones who have a "direct interest" in the project are eligible to participate in the hearing²¹. It is important to note that these hearings are different from Free, Prior and Informed Consultation (FPIC), which is specifically directed to indigenous peoples. With respect to the indigenous communities, the way in which the FPIC shall be conducted will be the result of a culturally-adapted consensus process²².

- **#4. The Environmental Impact Statement**. After the public hearing, the local enforcement authority makes a decision over the project. The Environmental Impact Statement (EIS) determines whether the project is approved and under which conditions²³. By this statement, the company is committed to implement an environmental management plan in order to address the environmental impacts identified during the assessment procedures²⁴.
- **#5. The Environmental Impact Statement renewal.** The company must get a new Environmental Impact Statement every two years at most, by updating the Environmental Impact Report. The whole process is repeated, including the public hearing²⁵.

¹⁶ Art. 8 of Regulatory Provision 3/2021 (PDMEM)

¹⁷ The EIAR, a summary document of the works to be carried out, and the phases and schedule (place, date and time) of the preparatory or instructive stage must be disseminated by mass media. The EIAR can be also requested through the web. Art. 3 of provincial Provision N° 3/2021 (PDMEM).

¹⁸ Art. 4 of provincial Provision N° 3/2021 (PDMEM).

¹⁹ Art. 2 of provincial Provision N° 3/2021 (PDMEM).

²⁰ Art. 5 of provincial Provision N° 3/2021 (PDMEM).

²¹ Art. 5 of provincial Provision N° 3/2021 (PDMEM).

²² Art. 6 of provincial Provision N° 3/2021 (PDMEM).

²³ Art. 9 of national Law N° 24.585.

²⁴ Art. 13 of national Law N° 24.585

²⁵ Art. 11 of national Law N° 24.585 regarding EIA and art. 1 of provincial Provision N° 3/2021 (PDMEM). regarding public hearings.

The Argentine legal framework

Public participation

As in the case of EIA, the legal framework of public participation in decision-making over a mining project is the result of a set of laws from different levels of government. At the national level, the Escazú Agreement, ratified by Argentina and integrated into its domestic law by Law N° 27.566, establishes many obligations for the signatory party regarding environmental issues. These obligations include guaranteeing public access to environmental information, ensuring public participation in an open and inclusive manner in environmental decision-making processes, and providing assistance to make requests and obtain answers vulnerable groups, as well as ensuring public participation in reviews, reexaminations or updates related to projects and activities, and in other environmental authorization processes that have or may have a significant impact on the environment²⁶. In addition, the national General Environmental Law (N° 25.675) requires that a public consultation process must be guaranteed before approving any project that may produce negative and significant effects on the environment²⁷. This law specially establishes the duty of ensuring civil society participation in environmental assessment procedures²⁸.

At the subnational level, the Resolution N° 330/2016, dictated by the provincial Secretariat of Mining, approved the implementation of participatory monitoring and control, public consultation, discussion spaces, training of environmental inspectors, water monitoring, training and participatory workshops, and public diffusion campaigns²⁹. And it assigned to the PDMEM the power to regulate in more detail and implement those public participation instances³⁰. Then, the PDMEM, by Provision N° 3/2021, established some guidelines to implement public consultation and regulate the participation of citizens in decision-making over environmental issues31. According to this regulation, public consultation must be carried out before Environmental Impact Statement (EIS)³² issuance and also before Mine Closure Plan approval. The enforcement authority is allowed to call for public consultation in any other instance of the mining project when necessary³³.

As far as the provision of information is concerned, the area of influence of the project determines the extent of the efforts to be made by the State. For the area of direct influence, the EIAR must be delivered to the members of the communities; for the area of indirect influence, the EIAR will be made available at the Environmental Mining Control Centres. For the area of secondary indirect influence, a copy of the EIR will be made available for consultation at the offices of the Provincial Directorate of Mining Environmental Management (PDMEM) and through electronic means³⁴.

As mentioned before, public hearings and consultations are non-binding. This means **that although it is mandatory to make a public hearing, it is not mandatory to follow its resulting recommendations³⁵.** However, if State authorities adopt a decision that is contrary to the opinions expressed in the public hearing, they must justify their decision in the administrative act they must issue with the decision. Otherwise, such a decision may be contested³⁶. In terms of participation, people who have a direct interest in the project under assessment are eligible to participate³⁷. Public hearings process must be conducted by the provincial local State, who is in charge of making the call to participate, conducting

²⁶ Arts. 5 and 7 of the Escazú Agreement.

²⁷ Arts. 19 and 20 of the National General Environmental Law N° 25.675.

²⁸ Art. 21 of the National General Environmental Law N° 25.675.

²⁹ Art. 1 of provincial Resolution N° 330/2016 (Secretariat of Mining).

³⁰ Art. 2 of provincial Resolution N° 330/2016 (Secretariat of Mining).

³¹ The regulation refers to the "process of Consult and Public Hearing" as one integral procedure. Particularly, it indicates that the call for the opening of the Public Consultation process will end at the Public Hearing. This differs from general regulations, where, in principle, consultation and hearing are different formats that public participation bodies can adopt.

³² The Environmental Impact Statement is the official act whereby the government expresses the decision related to environmental aspects of a proposed project.

³³ Art. 1 of provincial Provision N° 3/2021 (PDMEM).

³⁴ Art. 2 of provincial Provision N° 3/2021 (PDMEM).

³⁵ Art. 2 of provincial Provision N° 3/2021 (PDMEM).

³⁶ Art. 13 of provincial Provision N° 3/2021 (PDMEM).

³⁷ Art. 5 of provincial Provision N° 3/2021 (PDMEM).

The Argentine legal framework the hearings and making a decision about the project³⁸. Regarding the source of accountability, **local** authorities of relevant executive agencies are held accountable by the Judicial Power, the State branch that is in charge of controlling whether administrative legal procedures have been complied.

Challenging lithium licenses - The case of Salinas Grandes and the Supreme Court as an intermediate source of accountability at the request of local communities

The Guayatayoc-Salinas Grandes Basin is a territory located at an altitude of 3,500 meters above sea level, politically divided between the departments of Tumbaya and Cochinoca in Jujuy and La Poma and Los Andes in Salta. In cultural, environmental and social terms, however, this basin constitutes a single territorial unit inhabited by approximately 7,000 people grouped in 33 indigenous communities. These communities make a living through pastoralism and small-scale agriculture. In the last two decades, communities on the Jujuy side of the basin have diversified their income from salt mining and tourism.

The conflict around the projects to be developed in the basin has been characterized as a manifestation of "preventive resistance". The peculiarity of this process is the self-organization of the 33 communities that, after becoming aware of the the mining activities in this territory, promoted an organizational process by means of the formation of a "Board of Indigenous Communities of the Salinas Grandes and Laguna de Guayatayoc Basin for the defense of the territory" (hereafter "Board of Indigenous Communities).

In 2010, the 33 communities filed a lawsuit with the Argentine Supreme Court for non-compliance with the obligation to consult on lithium projects, and demanded the effective implementation of Free, Prior and Informed Consultation³⁹. In 2013, the Supreme Court declared itself incompetent to hear the case and the Board of Indigenous Communities filed the case with the Inter-American Court of Human Rights (ICHR). In addition, the communities prepared a document titled "Kachi Yupi - Footprints of the salt, Free and Informed Prior Consultation Procedure for the Indigenous Communities of the Salinas Grandes and Laguna de Guayatayoc", which is a self developed protocol to be used as an instrument of consultation.

This protocol was never approved by the provincial government, and in 2019, the Kolla and Atacama indigenous communities of the Salinas Grandes and Laguna de Guayatayoc territories and the Environment and Natural Resources Foundation (FARN) filed an action for environmental protection against the provincial governments of Salta and Jujuy and the National government. They claimed "to prevent the serious and irreversible damage that lithium and borate mining would cause in the water system..." shared by the two defendant provinces⁴⁰.

Recently, in March 2023, the National Supreme Court of Justice requested Salta, Jujuy and the National State to provide information on exploration and/or exploitation permits for lithium and borate in the Salinas Grandes and Laguna de Guayatayoc basin, including information on citizen participation and a copy of the environmental environmental aspects of these authorisations. In this request, the Supreme Court highlights the importance of respecting the unity of water basins, as well as the pro natura and pro aqua principles.

After ten years, in November 2023, the ICHR decided to hear the case filed by the Board of Indigenous Communities. This decision comes at a time when projects in the surrounding area have progressed to varying degrees, with the provincial government playing a key role. However, the Board of Indigenous Communities have high expectations that the Court will impose a precautionary measure to stop the new mining pediments.

Box 1

³⁸ Art. 3, 9 and 13 of provincial Provision N° 3/2021 (PDMEM) and art. 1 of provincial Resolution N° 330/2016 (Secretariat of Mining).

^{39 &}lt;u>Lithium in the Salinas Grandes Basin and Laguna de Guayatayoc, Argentina.</u>

⁴⁰ Fundación Ambiente y Recursos Naturales (FARN). Piden a la Corte Suprema que se respete el derecho a un ambiente sano (Accessed 11/22/2023).

The Argentine legal framework The Regulatory Provision No. 3/2021, issued by the Provincial Directorate of Mining Environmental Management (PDMEM), also states that the Environmental Impact Report (EIR) must include the active participation of the community during the preparation process, considering their inclusion in all work, surveys, monitoring, environmental baselines and other activities carried out by the company during the preparation of the report. Community participation is not limited to public hearings *once* the report has been submitted. The previous stage of report preparation also includes an instance of community participation. Nonetheless, unlike the obligation of carrying out public hearings, there isn't any clear sanction for not complying with the obligation to involve the community in the EIR preparation process, nor is it specifically regulated how these mechanisms are to be implemented⁴¹.

Free, Prior and Informed Consultation

Free, Prior and Informed Consultation with indigenous peoples has been established as a legal right by ILO Convention 169, which was approved by the National Congress in 1992 (Law N° 24.071) and then ratified by the Executive Power in 2001. Since that moment, the international agreement has become part of Argentine domestic law, gaining supralegal status, which means that it has a higher hierarchy than ordinary laws. It is a National State obligation to ensure participation of indigenous people in the management of its natural resources, being also a matter of concurrent competences with the provincial authorities, as the National Constitution stands.

ILO Convention 169 establishes the obligation to consult indigenous peoples, through appropriate procedures and particularly through their representative institutions, whenever legislative or administrative measures which may affect them directly are under consideration. This consultation must be free from coercitive pressures (Free) and prior to the decision regarding the State decision (Prior). Besides, indigenous peoples must get enough information about the project to make a decision (Informed). Then, in order to comply with this duty, appropriate means must be established. These means should allow affected communities to participate freely in decision-making, to at least the same extent as other sectors of the population. Argentina has also signed the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in 2007. The UNDRIP establishes the rights of indigenous peoples, including their property rights to cultural and ceremonial expression, identity, language, employment, health, education, and other subjects. In particular, the consultation to indigenous peoples is granted by arts. 19, 30, 32, 36 and 28 of the UNDRIP frame.

Although the decision concerns a specific work or project, usually carried out by a private company, the one in charge of conducting the FPIC process is not the company but the State, who is going to make a decision about that work or project. And, as in the case of civil society participation, Judicial Power is in charge of controlling whether FPIC legal rights have been complied with by local public officers.

However, the enforcement of FPIC in Argentina has not been specifically regulated: since its methodology has not been defined yet, the consequences of carrying out the process and not obtaining consent from communities remain unclear. The Mining Code only refers to the consent of the landowner and, unlike public participation, there are no guidelines to integrate FPIC into the EIA processes, so its implementation varies from one province to another.

Then, although instances of public participation are regulated in detail, the consultation and participation of indigenous communities in particular are not specifically addressed. Legislation often includes vague references, such as "With respect to the indigenous communities, the way in which the FPIC shall be conducted will be the result of a culturally-adapted consensus process" That is the case of Catamarca: although the regulation indicates that it promotes the consensus of a consultation protocol with the communities, it does not give any guideline for its development.

The Initiative for Responsible Mining Assurance

⁴¹ Art. 8 of Regulatory Provision N° 3/2021 (PDMEM).

⁴² Art. 6. of Regulatory Provision 3/2021 (PDMEM).

The Initiative for Responsible Mining Assurance

The Initiative for Responsible Mining Assurance (IRMA) is an international private endeavor established in 2006 by a collaborative alliance comprising global corporations procuring minerals and metals for industrial purposes, non-governmental organizations, mining enterprises, impacted communities, and labor associations. The initiative is overseen by a multi-stakeholder consortium, which governs through a Board of Directors consisting of two representatives from each of six sectors: (i) mining corporations; (ii) manufacturers utilizing mined resources; (iii) NGOs; (iv) affected communities; (v) labor unions; and (vi) investment and financial entities⁴³.

The cornerstone of this private initiative, the IRMA Standard, serves as a comprehensive framework comprising guidelines and optimal procedures to guide corporate conduct. Designed for adoption by companies, it aims for universal applicability across diverse forms of large-scale mining and all mined materials, excluding energy fuels. It uses "independent third-party auditors for credible verification of achievement"⁴⁴.

According to its official website, the Standard for Responsible Mining was developed through a public consultation process with different individuals and organizations. It aims at complying with the ISEAL Code of Good Practice for Setting Social and Environmental Standards. The latest version of the standard - which is currently undergoing a review process - is from 2018 and is intended to support the achievement of four principles: "Business Integrity", "Planning and Managing for Positive Legacies", "Social Responsibility" 'and "Environmental Responsibility".

IRMA Standards structure

Principle 1—Business Integrity	Principle 2—Planning and Managing for Positive Legacies
Legal Compliance Community and Stakeholder Engagement Human Rights Due Diligence Complaints and Grievance Mechanism and Access to Remedy Revenue and Payments Transparency	Environmental and Social Impact Assessment and Management Free, Prior and Informed Consent (FPIC) Obtaining Community Support and Delivering Benefit Resettlement Emergency Preparedness and Response Planning and Financing Reclamation and Closure
Principle 3—Social Responsibility	Principle 4—Environmental Responsibility
	1 Thiopie 4 Environmental Responsibility

Source: Authors' elaboration based on IRMA Standard official website.

Figure 2

⁴³ Source: IRMA (Initiative for Responsible Mining Assurance).

Source: IRMA (Initiative for Responsible Mining Assurance).

The Initiative for Responsible Mining Assurance In terms of its assessment process, IRMA uses a "step-by-step approach": it begins with a company self-assessment and follows with an independent third-party assessment and public reporting. The independent auditing consists of desk review and on-site visits, as well as stakeholder engagement in the assessment process. According to its official website, it is not a dichotomous (pass/fail) certification system: the standard describes 'best practices' and evaluates to what extent those 'best practices' have been met⁴⁵.

There are four achievement levels in the IRMA system (IRMA Transparency, IRMA 50, IRMA 75 and IRMA 100) that reflect different degrees of performance⁴⁶. Independent assessment results are valid for 3 years from the date the audit report is finalized. After that, the assessment cycle begins again.

The Environmental and Social Impact Assessment

Location and Scope

Environmental and Social Impact Assessment is regulated in Chapter 2.1: *Environmental and Social Impact Assessment and Management*, included in the more general chapter "Planning and Managing for Positive Legacies" ⁴⁷. The particular aspects of environmental management ⁴⁸ are regulated in chapter 4 "Environmental Responsibility". In order to get the certification, IRMA commands that the company must conduct an Environmental and Social Impact Assessment. The resulting Environmental and Social Impact Report, which documents the identification of the whole process, is then assessed by independent auditors.

Provisions for Potential Overlap with national laws

IRMA acknowledges that ESIAs are often mandated by host country regulatory agencies. For IRMA's purposes, existing mines that did not carry out an ESIA prior to the mine development will not be expected to subsequently carry out such an assessment. But they will be expected to demonstrate that an environmental and social management plan (or its equivalent) and monitoring programs are in place to detect impacts⁴⁹.

Requirements

According to IRMA, the objective of the EIA is to proactively anticipate and assess environmental and social impacts; manage them in accordance with the mitigation hierarchy; and monitor and adapt environmental and social management systems in a manner that protects affected communities, workers and the environment throughout the entire mine life cycle. The evaluation must include an assessment of environmental and social risks and impacts, and it must be completed "prior to the commencement of any site-disturbing operations associated with the project" The ESIA shall be carried out in accordance with publicly available, documented procedures.

The process consists of a series of steps, starting with a public announcement from the operating company and ending with the implementation of an Environmental and Social Impact Monitoring.

⁴⁵ Source: IRMA's official website.

⁴⁶ For more detailed information and the assessment process and IRMA achievement levels, you can read the <u>Assessment Manual for Mines</u>.

⁴⁷ Source: IRMA's official website.

⁴⁸ Such as waste and materials management, water management, air quality, noise and vibration, greenhouse gas emissions, biodiversity, ecosystem services and protected areas.

⁴⁹ Source: IRMA's official website.

⁵⁰ Requirement 2.1.1.1.

The Initiative for Responsible Mining Assurance **1# Provision of Preliminary Information.** Prior to the implementation of the ESIA process the operating company shall ensure that there has been a wide public announcement of the project proposal and the associated ESIA process, and that reasonable and culturally appropriate efforts have been made to inform potentially affected and interested stakeholders about the proposed project⁵¹.

The report must include: (i) a general description of the proposed project (including details on the proposed location, and nature and duration of the project and related activities); (ii) the preliminary identification of potential significant environmental and social impacts, and proposed actions to mitigate any negative impacts and (iii) a description of the main steps of the ESIA process that will be carried out, the estimated timeline and the range of opportunities for stakeholder participation in the process⁵².

2# Scoping. The company must carry out a scoping process to identify all potentially significant social and environmental impacts of the mining project to be assessed in the ESIA, including (i) social impacts and environmental impacts during all stages of the project life cycle, from pre-construction through post-closure; (ii) direct, indirect and cumulative impacts; and (iii) potential impacts of extreme events. During scoping, the operating company shall identify stakeholders and rights holders who may be interested in and/or affected by the proposed project⁵³.

3# ESIA Data Collection. Baseline data describing the prevailing environmental, social, economic and political environment shall be collected at an appropriate level of detail to allow the assessment of the potential impacts of the proposed mining project⁵⁴.

4# ESIA Impact Analysis. The operating company must: a) predict in greater detail the characteristics of the potentially significant environmental and social impacts identified during scoping; b) determine the significance of the predicted impacts; c) evaluate options to mitigate predicted significant adverse impacts in line with the mitigation hierarchy, prioritizing the avoidance of impacts through consideration of alternative project designs; and d) determine the relative importance of residual impacts (i.e., impacts that can not be mitigated) and whether significant residual adverse impacts can be addressed to the satisfaction of affected or relevant stakeholders⁵⁵.

5# ESIA Report. The operating company shall prepare an ESIA report that includes, at minimum: (i) a description of the proposed mining project; (ii) detailed description of the direct, indirect and cumulative impacts likely to result from the project, and identification of significant adverse impacts; (iii) a description of the alternatives considered to avoid and mitigate significant adverse impacts in line with the mitigation hierarchy, and the recommended measures to avoid or mitigate those impacts; and (iv) a review of the public consultation process, the views and concerns expressed by stakeholders and how the concerns were taken into account⁵⁶.

6# Environmental and Social Management System (ESMS). The operating company must develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine. The plan must, at minimum: (i) outline the specific mitigation actions that will be carried out to address significant environmental and social impacts identified during and subsequent to the ESIA process; (ii) assign personnel responsible for implementation of various elements of the plan; and (iii) include estimates for the resources needed to implement the plan. It shall be implemented, and revised or updated as necessary based on monitoring results or other information⁵⁷.

⁵¹ Requirement 2.1.2.1.

⁵² Requirement 2.1.2.2.

⁵³ Requirements 2.1.3.1 to 2.1.3.4.

⁵⁴ Requirement 2.1.4.1.

⁵⁵ Requirement 2.5.1.1.

⁵⁶ Requirement 2.1.6.1.

⁵⁷ Requirements 2.1.7.1 to 2.1.7.3.

The Initiative for Responsible Mining Assurance **7# Environmental and Social Impact Monitoring.** As part of the ESMS, the company must establish a program to monitor: the environmental and social impacts identified during or after the ESIA process and the effectiveness of mitigation measures implemented to address environmental and social impacts. If requested by relevant stakeholders, the company must facilitate the independent monitoring of key impact indicators "where this would not interfere with the safe operation of the project" ⁵⁸.

Community and stakeholder engagement

Location and scope

Community engagement59 is regulated in Chapter 1.2: **Community and stakeholder engagement,** included in the more general chapter "Business Integrity". New mines applying for IRMA certification must meet this chapter requirements. Existing mines seeking certification will be required to meet all requirements in Chapter 1.2, with the exception of the requirement in 1.2.2.1⁶⁰ that engagement begins prior to or early in the development phase of the mining project. For some existing mines, this may not have occurred. Those mines will have to demonstrate that they currently engage with stakeholders on an ongoing basis.

The stakeholder consultation is also treated on Chapter 2.1: **Environmental and Social Impact Assessment and Management** in the context of Consultation and Participation in ESIA and Environmental and Social Monitoring⁶¹.

Overlap with national laws

There is no reference in the standards to the potential overlap of these engagement processes and the ones taking place in the context of state public participation instances.

Requirements

1# Planning and Designing Stakeholder Engagement Processes. First, the operating company must plan and design stakeholder engagement processes. This includes identification and analysis of the range of groups and individuals, including community members, rights holders and others (hereafter collectively referred to as "stakeholders") who may be affected by or interested in the company's mining-related activities⁶².

2# Engagement Processes. Stakeholder engagement must begin prior to or during mine planning, and be ongoing throughout the life of the mine63. The operating company must foster two-way dialogue and meaningful engagement with stakeholders by providing relevant information to stakeholders in a timely manner; including participation by site management and subject-matter experts when addressing concerns of significance to stakeholders; engaging in a manner that is respectful, and free from manipulation, interference, coercion or intimidation; soliciting feedback from stakeholders on issues relevant to them; and providing stakeholders with feedback on how the company has taken their input into account⁶⁴.

⁵⁸ Requirements 2.1.8.1 to 2.1.8.3.

⁵⁹ See Conceptual framework note.

⁶⁰ Requirement 1.2.1.1. stands that the operating company shall undertake identification and analysis of the range of groups and individuals, including community members, rights holders and others (hereafter collectively referred to as "stakeholders") who may be affected by or interested in the company's mining-related activities.

⁶¹ Requirement 2.1.9

⁶² Requirement 1.2.1.1.

⁶³ Requirement 1.2.2.1.

⁶⁴ Requirement 1.2.2.2.

The Initiative for Responsible Mining Assurance When stakeholder engagement processes depend substantially on community representatives, the operating company must demonstrate that efforts have been made to confirm whether or not such persons represent the views and interests of affected community members and can be relied upon to faithfully communicate relevant information to them. If this is not the case, the operating company shall undertake additional engagement processes to enable more meaningful participation by and information sharing with the broader community⁶⁵. The operating company must document the engagement processes, including, at minimum, names of participants, and input received from and company feedback provided to stakeholders⁶⁶.

To provide stakeholder oversight, the operating company must collaborate with stakeholders, including representatives from affected communities, to design and form stakeholder engagement mechanism(s) such as a permanent advisory committee or committees dedicated to specific issues⁶⁷.

3# Strengthening Capacity. Regarding the actual capacities to participate, the company must offer to collaborate with stakeholders from affected communities to assess their capacity to effectively engage in consultations, studies, assessments, and the development of mitigation, monitoring and community development strategies. Where capacity gaps are identified, the company must offer appropriate assistance to facilitate effective stakeholder engagement.

4# Communications and Access to Information. The information that relates to the mine's performance against the IRMA Standard must be made available to relevant stakeholders upon request. Communications must be carried out and information must be provided to stakeholders in a timely manner, and must be in formats and languages that are culturally appropriate and accessible to affected communities and stakeholders. If requests for information are not met in full, or in a timely manner, the company must provide stakeholders with a written justification for why it has withheld information.

Free, Prior and Informed Consent

Location and scope

Free, Prior and Informed Consent is regulated in Chapter 2.2: **Free, Prior and Informed Consent**, which is into the more general chapter "Planning and Managing for Positive Legacies".

As regards when and to whom this chapter requirements are applicable, the standard states that the company may provide evidence that this chapter is not relevant if it can prove that there are no indigenous peoples whose legal or customary rights or interests may be affected by the company's exploration or mining activities, or potential mine expansions. At existing mines, where FPIC was not obtained in the past, operating companies will be expected to demonstrate that they are operating in a manner that seeks to achieve the objectives of this chapter⁶⁸. It also dictates that both new and existing mines must obtain the free, prior and informed consent of indigenous peoples if there are proposed changes to a company's plans or activities that may significantly change the nature or degree of an existing impact, or result in additional impacts on indigenous peoples' rights, lands, territories, resources, properties, livelihoods, cultures or religions.

⁶⁵ Requirement 1.2.2.5.

⁶⁶ Requirement 1.2.2.6.

⁶⁷ Requirement 1.2.2.3.

⁶⁸ For example, companies may demonstrate that they have the free, informed consent of indigenous peoples for current operations by providing evidence of signed or otherwise verified agreements, or, in the absence of agreements, demonstrate that they have a process in place to respond to past and present community concerns and to remedy and/or compensate for past impacts on indigenous peoples' rights and interests. In alignment with this chapter, such processes should have been agreed to by indigenous peoples and evidence should be provided that agreements are being fully implemented by the companies.

The Initiative for Responsible Mining Assurance

Provisions for Potential Overlap with national laws

IRMA foresees possible overlappings between the standard and public regulations, stating that the State "always holds the primary duty to protect indigenous peoples' rights" but pointing out that in the absence of national laws, or in the exercise of their right to self-determination, some indigenous peoples "may wish to engage with companies without State involvement".

According to the standard, if national FPIC laws exist, companies must abide by those laws. Where a host government has established an existing legislative framework that requires or enables agreements between mining companies and indigenous communities, it may not be necessary for companies to run a parallel FPIC process based on the requirements of this chapter. It would, however, be necessary for companies to demonstrate to IRMA auditors that the process whereby the agreement was reached conformed with or exceeded IRMA FPIC requirements and met the general intent of this chapter.

Requirements

1# Verify official consultation process. The first requirement for the company is to verify whether the host government has conducted an adequate consultation process aimed at obtaining indigenous peoples' informed consent prior to granting access to mineral resources. **If that did not happen, the company must elaborate a justification for proceeding with a project if the State failed to fulfill its consultation and/or consent duties⁶⁹.**

2# Design and carry out the consultation. The company must obtain the free, prior and informed **consent** in order to get IRMA certification. This implies that carrying out the consultation is not enough. The result of that consultation is just as important. New mines shall not be certified by IRMA unless they have obtained the free, prior and informed consent (FPIC) of potentially affected indigenous peoples⁷⁰.

3# FPIC Scoping. Regarding **consultation process design**, the standard says that the company must (a) identify indigenous peoples that own, occupy or otherwise use land, territories or resources that may be affected by the mining project and (b) disclose to indigenous peoples, in a culturally appropriate manner, the preliminary project concepts and/or proposed activities, and the indigenous peoples' right to FPIC⁷¹.

Then, among other things, it must identify the appropriate means of engagement for each group of indigenous peoples (e.g., tribe, nation, population) and if there are capacity issues that may prevent full and informed participation of indigenous peoples. In this case, the company shall provide funding or facilitate other means to enable indigenous peoples to address capacity issues in their preferred manner⁷².

4# Determine FPIC processes. If the potentially affected indigenous peoples have an **FPIC protocol** in place or under development, the operating company shall abide by it unless changes are agreed to by the indigenous peoples' group(s). Otherwise, the operating company shall jointly develop and document, in a manner agreed to by indigenous peoples' representatives, the FPIC process or processes to be followed⁷³.

⁶⁹ Requirement 2.2.2.1.

⁷⁰ Requirement 2.2.2.2. According to the requirement 2.2.2.4, "if indigenous peoples' representatives clearly communicate, at any point during engagement with the operating company, that they do not wish to proceed with FPIC-related discussions, the company shall recognize that it does not have consent, and shall cease to pursue any proposed activities affecting the rights or interests of the indigenous peoples. The company may approach indigenous peoples to renew discussions only if agreed to by the indigenous peoples' representatives".

⁷¹ Requirement 2.2.3.1.

⁷² Requirement 2.2.3.2.

⁷³ Requirement 2.2.4.2.

Ine Initiative for Responsible Mining Assurance **5# Implement the FPIC process.** Besides, the company must document in a manner agreed upon by the indigenous peoples, the FPIC process that was followed. Then, it shall publicly report, in a manner agreed to by the indigenous peoples, on the FPIC process that was followed and its outcome 74. In case of obtaining the consent of the indigenous peoples, an agreement outlining the terms and conditions shall be signed or otherwise validated by the operating company and the representative(s) of the indigenous peoples. In case of failure to obtain the consent, the company does not get IRMA certification 75.

6# Implementation and ongoing engagement. Once the agreement is celebrated, the company must collaborate with indigenous peoples to monitor its implementation, and document the status of the commitments made in the agreement. IRMA requires that the engagement with indigenous peoples continues throughout all stages of the mining project⁷⁶.

Towards Sustainable Mining - Socializing standards from Canada to Argentina

Towards Sustainable Mining (TSM) is a sustainability program established in 2004. TSM's performance protocols focus on three core areas: Communities and People, Environmental Stewardship and Energy Efficiency. Each protocol is made up of a set of indicators that help mining facilities measure and publicly report on the quality of their management systems and their performance in key areas of mining activity.

TSM includes ongoing consultation with national Community of Interest (COI) Advisory Panels, independent, multi stakeholder groups of 12 to 15 individuals from Indigenous groups, communities where the industry is active, environmental and social NGOs, and labor and financial organizations. The advisory body is responsible for advising on all aspects of the TSM program, including reviews of all TSM protocols and requirements and plays an important role in the external verification of companies' TSM performance.

Each year, facilities must assess and publish their performance against the performance indicators outlined in the TSM Protocols. These results are externally verified every three years, and accompanied by a letter of assurance from the company's CEO. All of these reports and documents are published on the websites of participating members who are actively reporting on the program. The TMS programme establishes an external verification process from the fourth year of implementation for each programme⁷⁷.

Mining association in Canada has their TSM Performance reports publicly available and the Argentine Mining Chamber has also joined the programme. Within this framework, the Association signed agreements with CEMA (Chamber of Environmental Entrepreneurs), AIDIS (Argentinean Association of Sanitary Engineering and Environmental Sciences), CIMA (Centre for Applied Municipal Research) and drafted and reviewed best practice guidelines on biodiversity, water management and mine closure. Reports on five projects, including one lithium project - Centenario Ratones, owned by Eramine Sudamerica S.A - , are currently available.

Box 2

Comparing public regulation and transnational standards: how are IRMA and public regulation converging or diverging on sources, targets and substance of accountability?

⁷⁴ Requirements 2.2.5.1 and 2.2.5.3.

⁷⁵ Requirement 2.2.6.1.

⁷⁶ Requirements 2.2.7.1 and 2.2.7.2.

⁷⁷ Source: TSM official website.

Comparing public regulation and transnational standards: how are IRMA and public regulation converging or diverging on sources, targets and substance of accountability?

Environmental Impact Assessment

When comparing the Initiative for a Responsible Mining Assurance with Catamarca's law, we see both convergences and divergences, contingent upon the aspect of accountability under scrutiny. The target of accountability pertains to who is responsible and being held accountable, while the source of accountability denotes to whom this responsibility is owed and who holds others accountable. Meanwhile, the substance of accountability delves into what exactly is being accounted for and what obligations are in place (Kramarz and Park, 2019), and the sanctions refer to the consequences of non complying with the established requirements.

When comparing the *targets* of accountability, we see that public regulations and the private standards tend to (partially) converge: both sets of rules require mining companies to account for similar themes in order to operate. As it was expected due to the nature of both types of rules, *sources* of accountability diverge: when mining companies follow IRMA's rules, they are subject to independent auditors' control, whereas when they follow public rules, they are subject to State's control. Besides, according to the public regulations, some actions must not be done by the company but by public officers, who are accountable to the Judicial Power.

Therefore, while both sets of rules(private and public) converge on the actor in charge of drafting the Environmental Impact Report, they diverge on the actor in charge of assessing the report. They both establish a double-check system, foreseeing complaints mechanisms, although -as expected-they differ on the actor in charge of solving the complaint. Regarding public regulations, the local State assesses the EIR submitted by the mining company and, then, the Judicial Power, in a case of a judicial claim, controls whether all the procedural conditions have been met, setting "an assessment of the assessment". IRMA Standard establishes a stakeholder complaints process, where the IRMA Secretariat is the first instance in charge of solving the complaints. Finally, private and public regulations differ on their ultimate source of accountability: public regulations are intended to make mining companies accountable to the citizens, while private regulations are intended to make mining companies accountable to the shareholders.

Table 1

Comparison of sources and targets of accountability regulating Environmental Impact Assessment⁷⁸: IRMA Standard and public regulations.

Accountability dimension	IRMA Standard	Public regulations
Elaboration of the report	The mining company	The mining company
Assessment of the report	Independent auditors	The local State (PDMEM)
Intervention in case of complaints	IRMA Secretariat	Judicial Power
Ultimate source of accountability	Shareholders	Citizens

Sources: Authors own elaboration based on (1) National Law Number 25.675; (2) National Law Number 24.585; (3) Provincial Resolution Number 74/2010; (4) IRMA (Chapter 1.1 Legal Compliance and Chapter 2.1: Environmental and Social Impact Assessment and Management)

Regarding the substance of accountability, both sets of rules tend to converge in general terms.

Essentially, transnational standards and public regulations establish the same requirements in order for a mining company to operate, despite some specific differences. The mining company must submit an Environmental Impact Report identifying significant environmental and social impacts and measures to mitigate them. Both sets of rulesdictates that the Environmental Impact Report must include (i) a general description of the proposed project, including details on the proposed location, and nature and duration of the project and related activities; (ii) the identification of potential significant environmental impacts and (iii) proposed actions to mitigate any negative impacts. They also both mandate the establishment of an environmental management system or plan that emerges from EIA results, as well as the establishment of a monitoring plan, which implies an ongoing assessment of the environmental impacts identified previously⁷⁹. And both command to consider indirect and cumulative impacts -besides direct ones- and social impacts.

In terms of the call to participate in the EIA process, both request a public announcement and a screening process to call stakeholders and local communities from the area to participate. Then, they combine an *active* accountability standard (that requires going out to look for and promote stakeholders involvement), on one side, and a *passive* accountability standard (which implies making a public announcement so that stakeholders "come on their own"), on the other side.

Nevertheless, there seems to be some nuanced differences in some points. For instance, IRMA refers to social impacts, while public regulation refers to *socio-cultural* and *socio-economic impacts*⁸⁰. It can be interpreted that *socio-cultural* and *socio-economic impacts* are just one part of the more general category "social impacts", although they are also more precise concepts. On the other hand, public regulations explicitly request to consider positive and long term effects, besides negative and short or medium term ones. These are not explicitly requested by IRMA, although they are addressed with a different focus in Chapter 2.3. *Obtaining Community Support and* Delivering Benefits.

Regarding transparency and access to information about EIA, whereas IRMA requires that the report must be submitted "before any site-disturbing activity", public regulation dictates that it must be submitted before the beginning of each step of the mining process and during the development of each

⁷⁸ Requirements stated in all tables apply to new mines. Existing mines are subject to a different application of the IRMA Standard.

⁷⁹ In the case of public regulation, the content of the management plan comes from the Environmental Impact Statement proposed by the proponent but issued and reviewed by the public authority, while in the case of IRMA it comes from a company initiative.

⁸⁰ Resolution N° 998/14, dictated by the Secretariat of Mining.

Comparing public regulation and transnational standards: how are IRMA and public regulation converging or diverging on sources, targets and substance of accountability?

step, every two years at most. It might be interpreted that "before any site-disturbing activity" is more comprehensive than "before the beginning of each step". However, it is also a more vague expression: who decides what is a "site-disturbing activity"? Conversely, public regulation establishes objective criteria: companies must submit an EIR in order to get exploration and exploration permits and they must update it every two years at most.

Finally, as it was expected due to the nature of both types of rules, the consequences for non fulfilling the requirements are quite different. The IRMA's sanction for non fulfilling the EIA procedure is a bad qualification on IRMA scoring for the project, while the sanction established by the public regulations is much more serious for the company, given that it does not get an operating permit if the environmental impact statement is not obtained.

Comparison of provisions regulating Environmental Impact Assessment⁸¹: IRMA Standard and public regulations.

Application stages	Provisions		IRMA Standard	Public regulations
Entry point	Time and conditions of application		"Before any site-dis- turbing activity associ- ated with the project" (5)	Before each mining stage begins. It must be updated every two years at most (2)
	Description of the project		Required (5)	Required (1)
	Identification of envi-	Direct	Required (5)	Required (1) (3)
		Indirect	Required (5)	Required (4) (3)
		Cumulative	Required (5)	Required (4) (3)
	Identification of social impacts		Social (broadly conceived) (5)	Specifies socio-eco- nomic (4) and socio-cultural impacts (2)
Implementation actions	Propose actions to avoid/prevent/mitigate any negative impact		Required (5)	Required (1) (3)
	Propose actions to rehabilitate, restore or recomposed the altered environment		Required(5)	Required (2)
	Alternative project design to avoid impacts		Required (5)	Required (4)
	Identify potential for hazardous events		Required (5)	Required (4)
	Monitoring program		Required (5)	Required (4) (3)
Monitoring compliance and sanctions	Sanctions for not fulfilling EIA procedure		Impact on company scoring (5)	The company does not get operating permit (1)
	Sanctions for noncompliance with EIA requirements		Impact on company scoring (5)	Fines/Penalties (4)

Table 2

Source: Kramarz et al. (forthcoming). References: (1) National Law Number 25.675 (2002); (2) National Law Number 24.585 (1995); National Law Number 27.566 (Escazú Agreement ratification) (2020) (4) Provincial Resolution Number 74/2010; (5) IRMA (Chapter 1.1 Legal Compliance and Chapter 2.1: Environmental and Social Impact Assessment and Management)

⁸¹ Requirements stated in all tables apply to new mines. Existing mines are subject to a different application of the IRMA Standard.

Comparing public regulation and transnational standards: how are IRMA and public regulation converging or diverging on sources, targets and substance of accountability?

Public participation

In relation to public participation, there are some differences in **targets** and **sources**, as well as in the **substance** of accountability. Unlike IRMA, for public regulation it is not the company, but the State, the one in charge of guaranteeing civil society participation in decision-making processes about mining projects. Regarding the source of accountability, clear differences appear: the one in charge of verifying compliance with legal requirements by public officers is the Judicial Power (at the request of citizens), while in the case of IRMA, independent auditors assess compliance to certify the mining project.

Regarding the **substance of the accountability** (what the company or the State is accountable for), there are also some important differences. First of all, while public regulations refer to "public participation instances", IRMA refers to "community and stakeholder engagement". This is not just a terminology difference but a conceptual one: public regulation conceives participatory mechanisms as an opportunity for civil society (in general) to engage in decision-making, whereas IRMA conceives them as an opportunity for local communities and stakeholders (in particular) to engage in decision-making. This is a relevant difference regarding the "subjective scope" of both types of participation.

However, as Kramarz et al. (forthcoming) point out, the primary focus of the domestic law seems to be on *consultation*, while the primary focus of the IRMA Standard is on *engagement*". Despite the vagueness of these concepts without explicit definitions, "engagement" might imply a more demanding provision than "consultation" in the hierarchy of public participation⁸². Additionally, it is worth noting that "open" instances to participate provided by national and international legislation (Law N° 27.566 and Escazú Agreement) end up being restricted by the subnational legislation, which states that only people with a "direct interest" are eligible to participate in the hearings (Provision N° 3/2021). Besides, unlike the public regulations, IRMA orders an engagement plan. Therefore, the larger subjective scope of the national domestic law seems to be offset by less strong commitments than IRMA regarding the substantive grade of engagement and by restricting subnational regulations.

Regarding communities or civil society concerns, IRMA states that the company must (i) record the observations and (ii) give feedback to the stakeholders explaining how those observations were taken into account. This differs from public regulation, which dictates that the opinions expressed in the hearings are not mandatory for the State, although it must justify its decision if this is contrary to the observations made in the hearings. Despite the differences, these are both *micro accountability procedures* embedded in a broader accountability process: the company (or the State) must explain to stakeholders (or community actors) how their concerns were taken into account (or why they have not). In this case, the source of the accountability are stakeholders (in the case of IRMA) or civil society and community actors (in the case of the law) who have engaged in the mining project or taken part in the hearings, respectively. At the same time, both the company and the State must prove -either to independent auditors or ultimately, to the Judicial Power, that they have carried out these procedures in an appropriate manner.

Table 3

Comparison of sources and targets of accountability regulating public participation⁸³: IRMA Standard and public regulations

Accountability dimension	IRMA Standard	Public regulations
Ensuring public participation	The mining company	The local State (PDMEM)
Control over procedural conditions	Independent auditors	The local State (PDMEM)
Intervention in case of complaints	IRMA Secretariat	Judicial Power
Ultimate source of accountability	Shareholders	Citizens

Sources: Authors own elaboration based on (1) National Law Number 25.675; (2) National Law Number 24.585; (3) Provincial Provision Number 3/2021; (4) IRMA (Chapter 1.2: Community and stakeholder engagement)

On the other hand, there is some convergence too. They both dictate that engagement must be early and ongoing, ordering the company to establish monitoring committees to control social and environmental performance. The public regulation states engagement must begin at the EIR elaboration, whereas IRMA states that it must begin at the mine planning stage. They also both mention several options to promote engagement, such as participatory committees and workshops and discussion tables, although these are optional mechanisms the company or the enforcement authority can take. Public regulation establishes just one instance of public participation as mandatory, which can take the form of a public hearing or a public consultation. While for IRMA, monitoring committees are the only mandatory mechanism.

Finally, as in the case of EIA and as it was expected due to the nature of both types of rules, the consequences for non fulfilling the requirements are quite different. The IRMA's sanction for non fulfilling the stakeholder engagement procedures is a negative impact on scoring for the project, while the sanction established by the public regulations is much more serious for the company, given that ultimately if public participation is not fulfilled, the environmental impact statement is not obtained, therefore, the permit can not be retrieved.

Table 4

Comparison of provisions regulating public participation: IRMA Standard and public regulations

Application stages	Provisions	IRMA Standard	Public regulations
Entry point	Time and conditions of application	"Prior to or during the mine planning" (4)	When the EIA report is being prepared (1)
	Ensure early engagement	Required (4)	Required (3)
Implementation actions	Develop engagement plan	Required (3)	Not required
	Record of public comments	Required (4)	Required (3)
	Assistance to vulnerable groups	Required (4)	Required (2)
	Provide information prior to participation	Required (4)	Required (2) (3)
	Report back to community on issues of concern	Required (4)	Required (2) (3)
Monitoring compliance and sanctions	Ongoing engagement plan	Required (4)	Required (3)
	Sanctions for non compliance with Public Participation	The company does not get IRMA's certification (4)	Decision making process invalid (1)

Source: Kramarz et al. (forthcoming). References: (1) National Law Number 25.675 (2002); (2) National Law Number 27.566 (Escazú Agreement ratification) (2020); (3) Provincial Provision Number 3/2021; (4) IRMA(Chapter 1.2: Community and stakeholder engagement).

Free, Prior and Informed Consultation

In relation to FPIC, there are some differences in **targets** and **sources**, as well as in the **substance** of the accountability. For the public regulations it is not the company but the State the one in charge of carrying out the consultation to indigenous peoples. In the case of IRMA, the State also holds the primary duty of conducting the process but the mining company has the duty either to abide by the existing public regulations or to conduct an FPIC process in the event that there are no such regulations or they are not sufficient⁸⁴. Regarding the source of accountability, clear differences appear: the one in charge of verifying compliance with legal requirements by public officers is the Judicial Power (at the request of citizens), while in the case of IRMA, independent auditors assess compliance to certify the mining project.

Comparison of sources and targets of accountability regulating Free, Prior and Informed Consultation⁸⁵: IRMA Standard and public regulations

Accountability dimension	IRMA Standard	Public regulations
Carrying out the FPIC	The local State The mining company (subsidiarily)	The local State
Control over procedural conditions	Independent auditors	The local State
Intervention in case of complaints	IRMA Secretariat	Judicial Power
Ultimate source of accountability	Shareholders	Citizens

Sources: Authors own elaboration based on (1) National Law Number 24.071; (2) IRMA (Chapter 2.2: Free, Prior and Informed Consent).

⁸⁴ See "Overlap with national laws" when analyzing Free, Prior and Informed Consent in the chapter describing IRMA's provisions.

⁸⁵ Requirements stated in all tables apply to new mines. Existing mines are subject to a different application of the IRMA Standard.

Free, Prior and Informed Consent is perhaps the topic in which the transnational standard and the domestic law diverge the most regarding the substance of accountability. The main difference is that while IRMA explicitly refers to obtaining indigenous peoples consent, domestic legislation refers to carrying out the consultation. This conceptual difference has important procedural consequences. Also, IRMA explicitly states that the mining company will not get the certification if it does not obtain consent, while in the case of the domestic legislation, the consequences for not obtaining a positive pronunciation are not clear. As we said, FPIC has not been regulated in detail by the domestic public law yet. This absence does not only imply uncertainty about the consequences of not obtaining the consent but also about the specific procedures to be followed in order to carry out the consultation.

IRMA also requires the company to (i) identify potentially affected indigenous peoples, (ii) identify appropriate means to make the consultation and (iii) describe the project in a culturally appropriate manner. These are domestic law requirements as well. However, it is not clear at all that the State should also comply with other requirements that IRMA requests to the mining company, such as (iv) identifying capacity gaps that may interfere with an effective participation by the indigenous peoples; (v) strengthening capacities to address those gaps; (vi) documenting the process in an agreed manner agreed upon by the indigenous peoples; (vii) engaging indigenous peoples to jointly monitoring the agreement; and (viii) promoting ongoing engagement all along the mine life cycle.

Comparison of provisions regulating Free, Prior and Informed Consent (FPIC): IRMA Standard and public regulations

Application stages	Provisions	IRMA Standard	Public regulations
Entry point	Time and conditions of application	When indigenous peoples' rights or interests may be affected by the company's activities (2)	When measures which may directly affect indigenous peoples are under consideration (1)
	Interpretation of FPIC	Free Prior and Informed Consent (2)	Free Prior and Informed Consultation (1)
	Identify appropriate means to make the consultation	Required (2)	Required (1)
Implementation actions	Provide adequate information /description of the project	Required (2)	Required (1)
implementation actions	Identify capacity gaps	Required (2)	Not required
	Strengthen capacity to participate in FPIC	Required (2)	Not required
	Document process in mutu- ally agreed manner	Required (2)	Not required
	Engage indigenous peoples in monitoring the agreement	Required (2)	Not required
	Promote ongoing engagement	Required (2)	Not required
Monitoring compliance and sanctions	Repeat FPIC process if there are significant changes to the mining project	Required (2)	Not required
	Sanctions for noncompliance with FPIC conditions	The company does not get IRMA's certification (2)	Not specified
	Sanction for failure to obtain indigenous peoples' consent	The company does not get IRMA's certification (2)	Not specified

Table 6

Key findings and policy recommendations

Key findings and policy recommendations

The IRMA Standard is not much more comprehensive than public regulations on EIA and public participation, although it is clearly more comprehensive on Free, Prior and Informed Consent. Therefore, it cannot be said that one regulatory framework -either private or public- is more comprehensive as it depends on the specific accountability mechanism we look at.

Establishing areas of convergence and divergence between public rules and private standards depends on the topic and the aspect of accountability we pay attention to. The first thing to notice when comparing both sets of rules is that targets of accountability tend to (partially) converge, while sources of accountability tend to diverge. Both sets of rules require mining companies to account for similar actions in order to operate. However, as it was expected due to the nature of the private standard, when mining companies follow IRMA's rules, they are subject to independent auditors' control, whereas when they follow public rules, they are subject to State's control. Besides, according to the public regulations, some actions must not be done by the company but by public officers, who are ultimately accountable to the Judicial Power at the request of the citizens empowered with legal rights to claim. These convergences and divergences on targets and sources hold for the three topics under analysis.

Regarding the substance of accountability, conclusions vary depending on the accountability mechanism. Both sets of rules tend to converge on EIA procedures and they share similar EIA requirements in order for a mining company to operate, despite some specific differences. However, there are some divergences on public participation: public regulation establishes mandatory specific participation instances, such as public hearings before issuing any mining permit, whereas IRMA suggests different participatory mechanisms. Nevertheless, the IRMA Standard establishes a much more comprehensive plan of public participation, by requiring engagement with affected communities all along the mining process. However, the sanctions for non complying with public participation procedures are quite different. The IRMA's sanction for non fulfilling the stakeholder engagement procedures is a negative impact on IRMA scoring for the project, while the sanction established by the public regulations is much more serious for the company, given that it does not get an operating permit.

IRMA certifies to which extent the company has complied with many of the requirements. However, it does not count with enforcement mechanisms -other than denying certification or qualifying companies at lower levels of compliance- to shape the company's environmental plan. Conversely, when the State assesses the Environmental Impact Report, it is empowered to require changes in the company's environmental plan, since the State is in charge of approving (or not) the mining project. And if the EIA report of the mining project is not approved, the company does not get an operating permit. This is a powerful tool to shape the company's environmental plan and a great difference compared to IRMA.

The biggest gap between public regulation and the standard is on Free, Prior and Informed Consultation. The main difference is that while IRMA explicitly requires indigenous peoples consent, the domestic legislation requires only a consultation. Also, IRMA explicitly states that the mining company will not get the certification if it does not obtain consent, while in the case of the public regulations the consequences of not carrying out the consultation, as well as of carrying out the consultation but not obtaining consent, are unclear. While the IRMA Standard states specific requirements to be taken into account when consulting indigenous peoples, the public regulation lacks FPIC specific provisions. This absence does not only imply uncertainty about the specific procedures to be followed in order to carry out the consultation but also about the consequences of failing to obtain a positive pronunciation from the indigenous people.

As previous articles have shown, community participation in Argentina (through EIA, public participation or FPIC) can not be taken for granted. Tensions and conflicts have emerged to denounce the

Key findings and policy recommendations absence of local participation in decision-making. Therefore, some policy guidelines stand out from these results that can serve as an input for addressing these tensions. First, the Argentine State should cover the *regulatory gaps*. It is critical to regulate the Free, Prior and Informed Consultation, granted by the ILO Convention 169, since the country has never fully regulated this accountability mechanism. Regulating the FPIC implies establishing national processes that define the specific procedures to be followed in order to make an appropriate consultation, as well as the consequences for non fulfilling those procedural conditions and for fulfilling those conditions but not obtaining the indigenous peoples' consent. Public regulations could emulate private regulations in this regard, taking some provisions such as the requirement of strengthening community capacities by providing them technical services. This gap may even be addressed by drafting a public regulation that establishes procedural provisions as a framework for the protocols on how to develop FPIC for each mining project.

Regarding public participation, the country could take initiatives from private regulations to make public participation more comprehensive. The Argentine law already establishes meaningful instances of public participation, given that public hearings must be held in order for a mining company to obtain an operating permit. However, these instances end up being restricted by eligibility criteria for people to participate. We believe that public hearings should be wider, exceeding the accreditation of a direct interest. Not only the extent of participants is relevant but also the opportunity. Early public participation allows different perspectives and concerns to be raised in a stage that can influence future decisions as well as provide legitimacy to the decisions taken and reduce potential conflict. In that regard, the Argentine State could establish as a mandatory requirement the elaboration of an engagement plan in early stages in order to give certainty about the development of participation all along the mining process. Finally, the country should cover *enforcement gaps* where comprehensive legal frameworks already exist but which do not seem to be fully enforced, such as the Environmental Impact Assessment procedures. Although the enforcement aspects were beyond the scope of this document, there is evidence to suspect that part of the problem lies in the actual enforcement of the existing regulation (Escosteguy et al., 2022).

Considering the fact that IRMA requires compliance with public legislation, the implementation of these recommendations could be additionally reinforced by the company goal of fulfilling the verification, resulting in a complementary relationship between the two frameworks.

This report contributes to current debates on just energy transition and lithium mining governance by identifying a not so obvious reality: mining countries from the Global South have developed regulations -not without a series of steps forwards and backwards- to address particular claims that tend to converge, in terms of substance, with the private standards. They seem to share similar concerns and develop similar requirements to address them. If that is so, the main problem with lithium mining governance could come not mainly from *regulatory gaps* but from *enforcement gaps*. Future research may focus on the enforcement aspects of the existing regulations, diving into their actual implementation on the ground.

Nevertheless, serious consideration must be given to Free, Prior and Informed Consultation legal frameworks. The comprehensiveness of the IRMA Standard is counterbalanced by its lack of strong enforcement mechanisms. On the other hand, the State counts with powerful enforcement mechanisms but has not adopted a comprehensive regulation for Free, Prior and Informed Consent. Ensuring the FPIC can not rely exclusively on transnational standards that lack implementation mechanisms, nor on public regulations that have such mechanisms but suffer serious regulatory gaps. The vagueness of the terms and procedures of the public regulation undermine the decision-making process on lithium projects and threaten representativeness of decisions to be taken on that issue. Public policy efforts must be oriented towards addressing this critical gap.

References

- Almeida, M.R.R., Montaño, M., 2017. The effectiveness of environmental impact assessment systems in São Paulo and Minas Gerais states. Ambiente Soc. XX (2), 77–104. https:// doi.org/10.1590/1809-4422ASOC235R2V2022017
- Andonova, L.B., Hale, T.N., Roger, C.B., 2017. National Policy and Transnational Governance of Climate Change: Substitutes or Complements? International Studies Quarterly (2017) 61, 253–268. https://doi.org/10.1093/isq/sqx014
- Arias Mahiques, M.V, Galuccio, M., Freytes, C., 2022. Gobernanza socioambiental de la minería de litio: instituciones, acceso a la información y participación pública en Argentina. Buenos Aires: Fundar.
- Aspinwall, M., 2021. Bringing rights to life: How civil society organizations help guarantee participation rights in developing countries. The Extractive Industries and Society, 8, 100923. https://doi.org/10.1016/j.exis.2021.100923
- Ba. D.G., Jaquet, J.B., 2022. Local content policies in West Africa's mining sector: Assessment and roadmap to success. The Extractive Industries and Society, 9, 101030. https://doi.org/10.1016/j.exis.2021.101030
- Bigolin Neto, Mallett, A., 2023. Public participation in environmental impact assessment processes through various channels Can you listen to us now? Lessons from a Brazilian mining case. The Extractive Industries and Society, 13, 101186. https://doi.org/10.1016/j.exis.2022.101186
- Bose, P., 2023. Equitable land-use policy? Indigenous peoples' resistance to mining-induced deforestation. Land Use Policy, 129, https://doi.org/10.1016/j.landuse-pol.2023.106648
- Curran, D., 2019. Indigenous Processes of Consent: Repoliticizing Water Governance through Legal Pluralism. Water, 11(3), 571. https://doi.org/10.3390/w11030571
- Dorn, F.M.,Gundermann, H., 2022. Mining companies, indigenous communities, and the state: the political ecology of lithium in Chile (Salar de Atacama) and Argentina (Salar de Olaroz-Cauchari). Journal of Political Ecology, 29(1). https://doi.org/10.2458/jpe.5014
- Eberlein, B., Abbott, K.W., Black, J., Meidinger, E., Wood, S., 2014. Transnational business governance interactions: Conceptualization and framework for analysis. Regulation & Governance 8, 1–21. https://doi.org/10.1111/rego.12030
- Elkind, E.N., Heller, P.R.P., Lamm, T., 2020. Sustainable drive, sustainable supply. Priorities to Improve the Electric Vehicle Battery Supply Chain. Center for Law, Energy & the Environment and the Natural Resource Governance Institute. https://www.law.berkeley.edu/wp-content/uploads/2020/07/Sustainable-Drive-Sustainable-Supply-July-2020.pdf (accesses 24 November 2023).
- Escosteguy, M., Clavijo, A., Paz, W.F.D., Hufty, M., Seghezzo, 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), 101134. https://doi.org/10.1016/j.exis.2022.101134
- Etchart, L., 2022. Indigenous Peoples and International Law in the Ecuadorian Amazon. Laws 11: 55. https://doi.org/10.3390/laws11040055
- · Food and Agriculture Organization of the United Nations,

- 2016. Free Prior and Informed Consent. An indigenous peoples' right and a good practice for local communities. Manual for project practitioners. https://www.fao.org/3/i6190e/i6190e.pdf
- Franken, G., Turley, L., Kicklera, K., 2020. Voluntary sustainability initiatives: An approach to make mining more responsible? In: Alena Bleicher and Alexandra Pehlken (eds.), The Material Basis of Energy Transitions. Academic Press. https://doi.org/10.1016/B978-0-12-819534-5.00011-8
- Hiete, M., Sauer, P.C., Drempetic, S., Tröster, R., 2019. The role of voluntary sustainability standards in governing the supply of mineral raw materials. GAIA Ecol. Perspect. Sci. Soc., 28, 218–225. https://doi.org/10.14512/gaia.28.S1.8c
- Hyman, J., Stewart R.A., Sahin, O., Clarke, M., Clark, M.R., 2022. Visioning a framework for effective environmental management of deep-sea polymetallic nodule mining: Drivers, barriers, and enablers. Journal of Cleaner Production, 337, 130487. https://doi.org/10.1016/j.jclepro.2022.130487
- Initiative for Responsible Mining Assurance (IRMA), 2018.
 Chapter 1.1 Legal Compliance. https://responsiblemining.net/wp-content/uploads/2018/08/Chapter_1.1_Legal_Compliance.pdf
- Initiative for Responsible Mining Assurance (IRMA), 2018. Chapter 1.2: Community and stakeholder engagement. https://responsiblemining.net/wp-content/uploads/2018/07/IRMA_STANDARD_v.1.0_FINAL_2018-1.pdf
- Initiative for Responsible Mining Assurance (IRMA), 2018.
 Chapter 2.2: Free, Prior and Informed Consent. https://responsiblemining.net/wp-content/uploads/2018/08/Chapter_2.2 FPIC.pdf
- International Association for Impact Assessment (IAIA), 2009. What Is Impact Assessment? https://www.iaia.org/pdf/special-publications/What%20is%20IA web.pdf
- Kemp, D, Owen J.R., 2016. Corporate Readiness and the Human Rights Risks of Applying FPIC in the Global Mining Industry. Business and Human Rights Journal, 2(1), 163 169. https://doi.org/10.1017/bhj.2016.28
- Kingsbury, D.V., 2022. Lithium's buzz: extractivism between booms in Bolivia, Argentina, and Chile. Cultural Studies, 1–25. https://doi.org/10.1080/09502386.2022.2034909
- Kilajian, A., Chareonsudjai, P., 2021. Conflict resolution and community engagement in post-audit EIA environmental management: Lessons learned from a mining community in Thailand. Environmental Challenges, 5, 100253. https://doi.org/10.1016/j.envc.2021.100253
- Kramarz, T., Arias Mahiques, M. V., Allan, T., Escosteguy, M., Kingsbury, D., and Seghezzo, L., forthcoming. Redundancies, Layers, and Dilemmas: Comparing private Standards and public regulations in lithium mining. The Extractive Industries and Society.
- Kramarz, Teresa, and Susan Park, 2016.. Accountability in global environmental governance: A meaningful tool for action?. *Global Environmental Politics* 16.2 (2016): 1-21.
- Kramarz, Teresa, 2022 The green energy transition has an extractivism problem. World Politics Review November Issue. www.worldpoliticsreview.com/environmental-impact-mi-

ning-extractivism-green-energy-transition/?share-code=97JQqEH84baZ

- Lawrence, R., Moritz, S., 2019. Mining industry perspectives on indigenous rights: Corporate complacency and political uncertainty. The Extractive Industries and Society, 6, 41–49. https://doi.org/10.1016/j.exis.2018.05.008
- MacInnes, A., Colchester, M., Whitmore, A., 2017. Free, prior and informed consent: how to rectify the devastating consequences of harmful mining for indigenous peoples'. Perspectives in Ecology and Conservation, 15, 152–160. http://dx.doi.org/10.1016/j.pecon.2017.05.007
- Mahantya, S., McDermott, C.I., 2013. How does 'Free, Prior and Informed Consent' (FPIC) impact social equity? Lessons from mining and forestry and their implications for REDD+. Land Use Policy. 35, 406–416. http://dx.doi.org/10.1016/j. landusepol.2013.06.014
- Marchegiani, P., Morgera, E. y Parks, L., 2019. Indigenous peoples' rights to natural resources in Argentina: the challenges of impact assessment, consent and fair and equitable benefit-sharing in cases of lithium mining. The International Journal of Human Rights. 24(2-3), 224-240. https://doi.org/1 0.1080/13642987.2019.1677617
- Marques, J.C., Eberlein, B., 2021. Grounding transnational business governance: A political-strategic perspective on government responses in the Global South. Regulation & Governance, 15 (4), 1209-1229. https://doi.org/10.1111/reqo.12356
- Meadows, J., Annandale, M., Ota, L., 2019. Indigenous Peoples' participation in sustainability standards for extractives. Land Use Policy 88, 104118. https://doi.org/10.1016/j.landusepol.2019.104118
- Meadownoble, B., Birk, J. 2011. Comfort monitoring? Environmental assessment follow-up under community-industry negotiated environmental agreements. Environmental Impact Assessment Review 31, 17–24. https://doi.org/10.1016/j.eiar.2010.05.002
- Murguía, D., Bastida, A. E., 2023. Critical and energy transition minerals in Argentina: mineral potential and challenges for strengthening public institutions. In: Smelror, M., Hanghøj, K. and Schiellerup, H. (eds) The Green Stone Age: Exploration and Exploitation of Minerals for Green Technologies. Geological Society, London, Special Publications, 526. https://doi.org/10.1144/SP526-2022-172
- Murguía, D., Bastida, E., 2023. Una cadena de valor de baterías de litio justa y sostenible. Executive Report, Green Dealings Project, Buenos Aires. https://fund.ar/wp-content/uploads/2023/06/Fundar GreenDealings Informe_2022-1.pdf
- Nagar, A., 2021. The Juukan Gorge Incident: Key Lessons on Free, Prior and Informed Consent. Business and Human Rights Journal, 6(2) 377 383. https://doi.org/10.1017/bhj.2021.18
- National Law Number 24.071. Argentine Congress, 1992. https://www.argentina.gob.ar/normativa/nacional/ley-24071-470/texto
- National Law Number 24.585, Argentine Congress, 1995. https://www.argentina.gob.ar/normativa/nacional/ley-24585-30096

- National Law Number 25.675. Argentine Congress, 2002. https://www.argentina.gob.ar/normativa/nacional/ley-25675-79980/texto
- Noble, B., Birk, J. 2011. Comfort monitoring? Environmental assessment follow-up under community-industry negotiated environmental agreements. Environmental Impact Assessment Review 31, 17–24. https://doi.org/10.1016/j.eiar.2010.05.002
- Obaya, M.; Murguía, D.; Freytes, C. and Allan, T., (2023). A just and sustainable lithium battery value chain. Delphi Survey Executive Report. Green Dealings Project, Centre for International Studies, Geneva Graduate Institute (IHEID), Genève, Switzerland. https://green-dealings_Ingles_Cod-Barras.pdf
- Owen, J.R., Kemp, D., 2014. 'Free prior and informed consent', social complexity and the mining industry: Establishing a knowledge base. Resources Policy, 41, 91–100. http://dx.doi.org/10.1016/j.resourpol.2014.03.006
- Owen, J.R., Kemp, D., Harris, J., Lechner, A.M., Lébre, E., 2022. Fast track to failure? Energy transition minerals and the future of consultation and consent. Energy Research & Social Science, 89, 102665. https://doi.org/10.1016/j.erss.2022.102665
- Papillon, M., Rodon, T., 2020. The Transformative Potential of Indigenous-Driven Approaches to Implementing Free, Prior and Informed Consent: Lessons from Two Canadian Cases. International Journal on Minority and Group Rights, 27(2), 314-335. https://doi.org/10.1163/15718115-02702009
- Pareja, C., Xavier, A., Daitch, S., 2019. Participatory Environmental Monitoring Committees in Mining Contexts: Lessons from Nine Case Studies in Four Latin American Countries. United Nations Development Programme: New York.
- Parker, P., Hoffman, A., Park, S., Kramarz, T., 2021. Governing the dark side of renewable energy: A typology of global displacements. Energy Research & Social Science, 74(101902), 101902. https://doi.org/10.1016/j.erss.2020.101902
- Perreault, T., 2015. Performing Participation: Mining, Power, and the Limits of Public Consultation in Bolivia. The Journal of Latin American and Caribbean Anthropology, 20(3), 433–451. https://doi.org/10.1111/jlca.12185
- Peterson St-Laurent, G., Le Billion, F. 2015. Staking claims and shaking hands: Impact and benefit agreements as a technology of government in the mining sector. The Extractive Industries and Society, 2, 590–602. http://dx.doi.org/10.1016/j.exis.2015.06.001
- Provincial Resolution Number 74/2010. Environment Secretariat of Catamarca, 2010. <a href="https://www.magyp.gob.ar/sitio/areas/producciones_sostenibles/legislacion/provincial/archivos//000005-Legislaci%C3%B3n%20Ambiental%20General/000003-Catamarca/007410-DISPOSICION%2074-10%20EIA.doc
- Provincial Resolution Number 330/2016. Secretariat of Mining of Catamarca, 2016. https://legislacionminera.catamarca.gob.ar/legislacion/consulta/74
- Regulatory Provision N 3/2021. Provincial Directorate of Mining Environmental Management, 2021. https://portal.ca-tamarca.gob.ar/paginas/resoluciones-y-disposiciones-minera-del-altiplano-sa-254

- United Nations Environment Programme, 2023. Environmental Rule of Law: Tracking Progress and Charting Future Directions. Nairobi. https://doi.org/10.59117/20.500.11822/43943.
- Walter, M, Wagner, L., 2021. Mining struggles in Argentina. The keys of a successful story of mobilization. The Extractive Industries and Society. 8 (4), 100940. https://doi.org/10.1016/j.exis.2021.100940

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