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Community Engagement and Participatory Inclusion in Mining: Challenges, Barriers, and Opportunities

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Abstract

The global energy transition will require the successful development and adoption of clean energy technologies that rely on critical minerals including lithium, copper, cobalt, nickel, and graphite, as well as rare earth elements. Extracting these minerals affects local communities who live on or around mineral-rich localities, and though the potential exists for these communities to benefit from the development, they often bear the brunt of negative social and environmental impacts while the economic benefits of mining flow elsewhere. Importantly, effective, equitable, and meaningful engagement with the community could provide a pathway to ensuring that the negative impacts of mining are reduced and provide means to share the benefits of the extraction with local communities. However, this style of engagement is infrequently adopted, due to a number of barriers (including lack of incentives, problematic incentives, lack of governance capacity, and more) that often make this type of engagement difficult or ineffective, frequently leading to severe and sustained conflict at the mines. This report examines participatory inclusion within the setting of mining across the world and explores approaches that can help uphold three core tenets of justice: recognition, distributional, and procedural. We provide systems-level solutions that can create an environment that allows for greater coordination—both internationally and within host countries—and an opportunity for more effective and equitable community engagement to emerge. As our demands for minerals increase over time, the importance of achieving positive equity outcomes through participatory inclusion grows in parallel; this report provides some pathways to help achieve this goal.

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1. Introduction

The global energy transition will require the successful development and adoption of clean energy technologies including electric batteries, solar panels, wind turbines, and more. Although these technologies do not utilize fossil fuels after being manufactured, they are highly mineral intensive. Specifically, clean energy technologies heavily rely on critical minerals including lithium, copper, cobalt, nickel, and graphite, as well as rare earth elements, and the International Energy Agency (IEA) predicts that our mineral demands will double by 2040 to produce the technologies needed for a decarbonized future (IEA, 2021). Importantly, extracting these minerals affects local communities who live on or around mineral-rich localities, which is particularly a social challenge as the majority of mineral reserves are located in close proximity to underserved and under-resourced communities (Owen et al. 2022). Though the potential exists for these communities to benefit from the development, they often bear the brunt of negative social and environmental impacts while the economic benefits of mining flow elsewhere. Indigenous communities also face similar, if not worse, issues because of their historical experiences of marginalization and their deep cultural ties to the land.

However, it is theoretically possible to achieve a different pathway whereby mining extraction benefits local communities while reducing the financial and environmental risks associated with the extraction, and local communities are able to actively participate in decisionmaking around extraction plans. In particular, effective, equitable, and meaningful engagement with the community could provide a pathway for achieving these benefits.

In this paper, we first discuss participatory inclusion in the setting of mineral extraction and demonstrate the multitude of negative outcomes that occur when this style of engagement is not attained. Participatory inclusion in this setting means effective and equitable engagement of the communities who are affected by nearby mining. This type of engagement requires a robust and positive relationship between the community and the company throughout the entirety of the mining process, and it also requires formal agreements that work to reduce the impact of mining and ensure benefit sharing with the community. Importantly, the government plays a major role in upholding and maintaining the terms of these agreements as well as a legal and regulatory environment that works to empower and protect communities. Achieving equitable outcomes around mineral extraction thus requires significant coordination with different stakeholders and an environment that supports participatory inclusion through effective and equitable community engagement. Unfortunately, significant barriers (including lack of incentives, problematic incentives, lack of governance capacity, and more) that exist for all parties (including governments, the mining companies, and the communities themselves) often make this type of engagement difficult or ineffective, frequently leading to severe and sustained conflict at the mines.

To that end, this paper examines participatory inclusion within the setting of mining across the world and explores approaches that can help uphold three core tenets of justice: recognition, distributional, and procedural. We also provide some systems-level solutions that can create an environment that allows for greater coordination and more effective and equitable community engagement to emerge. As our demands for minerals increase over time, the importance of achieving equitable outcomes grows in parallel; this report provides some pathways to help achieve this goal.

2. Definition of Effective/Equitable Community Engagement

Effective, equitable, and meaningful community engagement in mining can be defined as community-led engagement that takes place across all phases of mining, starting from the pre-exploration phase to the post-closure phase. Importantly, this style of engagement also provides the community with accurate and transparent information regarding the environmental and social impacts of mining activities while upholding procedural, recognition, and distributive facets of environmental justice (Natural Resources Canada 2016; Arndt et al. 2017). Such engagement is only achievable if the company invests time, human capital, resources, and money for this process and conducts it in a nontransactional and deliberate manner (Fraser et al. 2019).

The rise of critical mineral demands under the clean energy transition has drawn the world's eyes toward the environmental and social consequences of mining experienced by mining and Indigenous communities for centuries. Despite this, the need to secure critical minerals and meet their global demand has led to calls for hastened government permit approval and an incentive for mining companies to rush their engagement efforts. This rush to move forward with mining can often result in governments and companies ignoring important details regarding the social and environmental impacts of mining, and in turn, increasing community-led lawsuits, protests, grievances, and mass mobilizations in opposition to development (Ciftci et al. 2023; Eke et al. 2024).

However, in recent years, community-led mining and efforts to ensure that local communities approve of or provide consent for mining has taken precedence. In addition to Free, Prior, and Informed Consent (FPIC) from communities (see Appendix A for more description of FPIC), with negotiated terms for community development investments from the company, it is common understanding across the world that mining companies must gain the "Social License to Operate" (SLO). SLO can be defined as a broad nonlegally binding permission given by the local community and the broader public to allow mining companies to carry out relevant mining activities. Importantly, because SLO is not a contract, the SLO can be revoked by the community at any time; thus, it incentivizes the mining company to comply with community needs and demands, even though it is not legally required (Prno et al. 2012).

To that end, maintaining SLO requires an active and positive relationship between the company and the community to be maintained throughout the lifetime of the project. This necessitates effective and equitable community engagement, whereby the community is able to provide input into the project and, crucially, benefit from the development. While it is important to note that there is no one-size-fits-all approach to community engagement in mining, there are multiple resources available for best practices and guidelines that have shown success and can be replicated by mining companies across the world. Below we summarize common and important recommendations as described by Natural Resources Canada (2016), Center for International Policy Studies (2017), Fraser et al. (2019), and Center for American Progress (2023):

1. Community engagement should not be rushed and should focus on building strong long-term relationships between the company and the community.
2. The intention behind community engagement should be to avoid conflict between the company and the community and to be interested in making necessary changes in the mining process upon communities' request.
3. Ensuring that all records regarding engagement efforts and discussions are maintained and are publicly available.
4. Modify the engagement approach based on the stage of mining (or as time progresses).
5. Engage and involve the community through each stage of the mining process; the first stage should be "pre-exploration" and last stage should be "post-closure."
6. Communicate regularly with the entire community, particularly underrepresented groups like women and youth, instead of only communicating with one person from the community or identifying a power leader and working with them.
7. Use a variety of engagement methods such as in-person events, newsletters, public forums, discussion tables, and other approaches consistent with common communication techniques within the community; avoid only leveraging one approach to engagement.
8. Maintain engagement efforts consistently, even after the project has begun implementation.

Best practices also include sharing benefits of the development with the community through the creation of a benefit sharing agreement. While corporate social responsibility (CSR) activities and compensation schemes have long been part of the mining industry practices, benefit sharing agreements have emerged as a shift in strategy to mitigate conflicts between local communities and companies (O'Faircheallaigh 2013; Côté et al. 2024). Benefit sharing agreements is a broad term that encompasses a variety of agreements that exist to ensure benefits flow to the community while also minimizing the impact of the mining to local communities. These agreements, often termed community benefit agreements (CBAs), impact benefit agreements (IBAs) and community development agreements (CDAs), help companies maintain a social license to operate and enable communities to benefit from mining (see Appendix B for a more detailed discussion of benefit sharing agreements).

These benefit sharing agreements often take the form of a legally binding contract between the company and the community, specifying ways in which the company will provide benefits to the community, such as local employment agreements, royalty payments, investments in local infrastructure, training, and more. However, whether these benefit agreements actually result in improved local outcomes depends on a number of different factors, including (but not limited to) how the contract is written (and the strength of commitment as reflected by the language employed), the ability for a broad group of diverse stakeholders within the community to provide input into the terms, and broad governance issues across the country that may hinder enforceability or result in limited accountability. Furthermore, these agreements are often confidential, which has two important implications. First, it provides an opportunity for corruption internally by community members—particularly from those who were involved in the negotiation process. Second, it limits the ability of the community to engage in low-cost, but effective, social "name and shame" campaigns against the company if the terms of the agreement are not upheld (particularly as the cost of litigation against the company in such cases can exceed the financial ability of the community to pay).

Benefit sharing agreements can result in positive outcomes, such as with the Development and Operating Agreement at the Red Dog Mine in Alaska, which provided local employment and royalty payments to the community (Prno 2013). However, this agreement stands apart from others in part because the Native Corporation (NANA) owns the resources and as such, codeveloped the project with the mining company; thus, these dynamics are far different from those in most other settings. In fact, other CBAs have led to codependency between mining corporations and Indigenous communities (Puschner 2024), limiting the community's ability to hold mining companies accountable (even when damages occur) due to their economic reliance on the companies (Zanini et al. 2023). A notable example is the 2011 Participation Agreement between Rio Tinto (a a British-Australian multinational mining company) and the Puutu Kunti Kurrama and Pinikura (PKKP), which provided financial benefits but also included provisions that restricted the PKKP's ability to oppose actions related to heritage site protection and to publicly criticize the company, with financial penalties for violations (Kemp and Burton 2023). As a result, the PKKP in 2020 was unable to stop or even delay Rio Tinto from using explosives to develop (and effectively destroy) the Juukan Gorge, a 40,000-year-old historical site of significant cultural importance to the community.

As mentioned earlier, apart from sharing benefits with the surrounding community, reducing environmental and social impacts is an equally important part of community engagement. To that end, IBAs in particular incorporate the company's commitment to reducing environmental and social impacts associated with mining development. Solutions do exist to ensure that reducing environmental impacts is not at odds with increasing economic benefits (and that these two benefits are not pitted against each other in negotiations). For example, separating out the negotiations dealing with reducing impacts from negotiations related to improving economic benefits can ensure that these two points are not used as negotiating tools against each other. Community employment can also be created around environmental monitoring and analyses, leading to greater environmental monitoring while also boosting local economic benefits.

Importantly, best practices regarding these benefit sharing agreements do exist and are available widely, including Gibson and O'Faircheallaigh (2015), Cascadden et al. (2021) and Eisenson and Webb (2023). Even though in theory it seems that following these, and many other, best practices would yield fruitful engagement and increased community development in conjunction with more mining, it is common for community engagement to be ineffective and inequitable, or for participatory inclusion to be missing altogether from company practices. This is because a multitude of reasons exist that make it very challenging to implement these practices; for example, mining companies do not have enough incentives to invest beyond what is necessary, the government has broader national priorities, and communities are generally not prepared to negotiate effectively (see Section 5).

3. What Happens If We Don't Have Participatory Inclusion?

Ineffective, rushed, transactional, and nonequitable community engagement can result in years of grievances toward the mining companies, mistrust of new companies, hurdles in permitting processes, and the reversal or withdrawal of the SLO granted by the community. This withdrawal or rejection of SLO can manifest itself in the form of roadblocks, violent protests, mass mobilizations, and lawsuits (Bose 2023; Lindt 2023). An example of this is the Las Bambas mine in Peru, which has a history of protests and mass mobilizations against mining companies that have caused projects to halt or shut down. Antimining projects organized by local communities and human rights defender groups led to road stoppages, transportation hurdles, and even a state of emergency in 2015. Despite this, mining companies operating in the region have not made significant progress in building better relations or compensating effectively, as evidenced by protests and road blockades that continued to persist in 2024, nine years later (BBC 2015; Reuters 2024).

The intensity of these protests can vary based on the set of actors involved and the mine setting. For example, in the case of two nickel-copper mines in the United States located in Minnesota and Idaho, the former has faced larger hurdles in attaining a permit and beginning the mining processes than the latter. Although the underlying issues are the same in both (concerning environmental issues, community identity and legitimacy, politics, and the economy), the influence of urban stakeholders in Minnesota coupled with easier mining permit processes in Idaho has led to different outcomes in each case (Malone et al. 2023).

A case of severe consequences of ineffective community engagement is that of the Barroso lithium mine project in Portugal. The local community filed a lawsuit[1] against the mining company, Savannah Lithium, arguing that the company had encroached on

1 **https://www.reuters.com/world/europe/portuguese-municipality-file-law-suit-stop-lithium-mine-amid-corruption-scandal-2023-11-09/**.

land that should not have been included in the development, given land limits set by the community. The community claimed that the environmental impact assessment did not address their concerns related to environmental damage that could cause a loss of their livelihoods in the region. The investigation regarding this lawsuit highlighted corruption issues associated with the approval of environmental assessments for mining permits, incriminating the Prime Minister, Antonio Costa, who had to step down[2] after his Chief of Staff was detained because of his involvement in lithium and hydrogen projects.

Mining communities frequently have a complex relationship with the mining sector due to the history they hold with land ownership, their local government, and mining companies. In some regions of the world, such as Salar de Atacama in Chile, extensive mining has been taking place for decades and Indigenous communities have associated it as a part of their identity, a profession in which they have participated for years (Lorca et al. 2022). Yet negative experiences with the companies can cause distrust, further exacerbated by ineffective and inequitable community engagement. Sometimes there are conflicts and mass mobilizations even after an agreement is signed because of the community's history with colonialism, such as was the case in Colombia (Arbeláez-Ruiz 2022). The political and cultural history of the community and their experience with mining companies play a significant role in catalyzing conflict.

In some cases, direct financial compensation that mining companies offer as a part of their CSR or environmental, social, and governance (ESG) initiatives, or even through the CBA (particularly if the latter is not created following best practices), can result in negative social outcomes by, for example, straining social cohesion and creating a material dependence on the mining company (Puschner 2024). Even mining-derived resources allocated directly to local governments can strain their capacities and spark conflicts within the community (Arellano-Yanguas 2011). In many cases, poverty rates (Gamu et al. 2015), alcoholism and drug use (Carrington et al. 2011; Shandro et al. 2011; Godfrey 2017), gambling (Widana 2021), sex trafficking (US Department of State 2017), and unemployment within the community can increase due to the boom/bust cycle of mining, and the influx of foreign workers migrating into the community and settling there for the duration of the mining operation can exacerbate many of these problems (Gibson and Klinck 2005; Carrington et al. 2011; Center on Human Trafficking Research and Outreach 2022). This can also cause social restructuring and power imbalances, adding another cause for conflict within the community. Understanding and acknowledging community triggers can be a step toward promoting peace within communities and inspiring them to actively participate in engagements with the company.

An SLO is attainable if the community trusts that a mining company has community interests and development at the center of the project (Cruz et al. 2021; Lehtonen et al. 2022). Recent cases of lawsuits, mass mobilizations, and violent protests have been reflective of the growing mistrust experienced by communities toward mining companies. Disasters at mine sites like the collapse of Mariana and Brumadinho tailings

2 **https://www.reuters.com/world/europe/portuguese-prosecutors-search-government-buildings-lithium-investigation-2023-11-07/**.

dams in Brazil exacerbate conditions and can hinder positive long-term relationships between mining companies and communities (Zanini et al. 2023). Similarly, even positive relationships can crumble if the mining company does not hold itself accountable or handle the aftermath of a disaster in a responsible manner (Reuters 2024).

Importantly, the eruption of conflict within mining communities can halt mining operations and increase costs (in terms of economic losses as a consequence of halted operations) for mining companies, which can be estimated to be around $20 million per week of delayed production for mining companies with capital expenditure between $5 billion and $6 billion (Franks et al. 2014). This is not only harmful for business development, but it can also delay the timeline for achieving global goals set for the energy transition. Thus, to ensure that mining can move forward in a positive manner, it is paramount to understand the root cause of conflicts in mining communities (even as these vary based on a region's historical context), and identify the role mining companies play in exacerbating existing disagreements and tensions.

4. Community Engagement in the Framework of Equity and Justice

Effective and equitable community engagement upholds three core tenets of justice: recognition justice (understanding the historical and cultural context of the communities affected by mining), distributive justice (ensuring equitable sharing of benefits and costs across communities), and procedural justice (ensuring that the community has a say in the actions that affect them and where they live).

4.1. Recognition Justice

In the setting of mining and community engagement, recognition justice calls for companies to truly understand the cultural and historical context of where they will be mining. This includes actions such as making true efforts to understand the local culture and community desires, recognizing alternative approaches to knowledge and conceptions of the environment and well-being, addressing the communities in their native languages, and ensuring public participation by engaging a diverse array of stakeholders. Furthermore, recognition justice requires companies to acknowledge existing harms and trauma associated with prior negative experiences with mining companies.

Specifically, community engagement can uphold recognition justice if (a) the company approaches negotiations with an understanding of the community's culture and past harms, (b) the company builds positive relationships with the community, (c) the company speaks to a diverse set of community representatives, and (d) the company provides ample opportunity for public participation. However, community engagement cannot support recognition justice if the company only speaks with community leaders

or chosen community representatives, imposes barriers to public participation leading to under-representation, or continues to inflict trauma and harm upon communities with a history of negative mining experiences.

Indigenous communities have expressed how important it is for mining companies to realize that all communities are not monolithic and one standardized approach is unlikely to work for the various communities that they wish to engage with (Yukon First Nations 2022). Deonandan et al. (2024) describe how communities in the Athabasca basin in Saskatchewan, Canada resorted to protests and road blockades despite community engagement events because of the mining company's use of buzzwords that evaded the topics the community was interested in discussing with the company. The study also highlighted the company's problematic use of highly technical language and excessive jargon in explaining the environmental and social impacts of mining on a local community, and how educational and technological differences acted as barriers in effectively communicating relevant information between the company and the community. In this specific setting, the company could have upheld recognition justice by identifying these barriers, respecting and honoring what the community needed without expecting blank-slate approval of any company action, and incorporating the community's cultural communication approaches to host engagement events with higher community participation.

4.2. Distributive Justice

In the setting of mining and community engagement, distributive justice requires an equitable sharing of benefits, which can be achieved through actions such as appropriate, well-designed and transparent benefit sharing agreements, tax/royalty transfers from the federal government back to the community, and appropriate investments in the community's long-term economic development.

Simultaneously, it also requires an equitable sharing of costs (including social, environmental, and economic harms), which is more difficult as these costs and harms are concentrated at the location of the mine but benefits accrue as profits to owners (often multinational companies and/or shareholders in disparate locations) and as taxes, royalties, or as economic development that benefits citizens across the hosting country. Thus, achieving distributive justice in terms of equitable cost sharing requires a reduction in the environmental and social harms inflicted upon the community, and continuous monitoring and mitigation of environmental impacts.

Although royalties and taxes paid by the mining company to the federal government could theoretically benefit the local community, studies have shown that commonly, only a small portion of these funds reach the local community. For example, 80 percent of royalties and taxes collected from mining companies in Ghana go to the central government's consolidated fund and only 10 percent is left for local communities. This 10 percent is further distributed between local administration, council, and chiefs, with little left for direct sources of development (Garvin et al. 2009). In Peru, a larger share of mining funds is redistributed to the communities, though questions remain about the effectiveness of these funds in improving local well-being (Arellano-Yanguas 2021).

Ultimately, there is no common understanding of the optimal percentage of the funds that should reach the community; while more research could be useful here, from a procedural justice perspective, at a minimum the community should have a say in these determinations.

Power imbalances within the community can also hinder the achievement of distributive justice, particularly if a broad, representative group of community stakeholders is not included in the negotiations with the company. This can result in a concentration of benefits for certain community groups, with others being left behind. For example, in Afghanistan, women have very few rights and are traditionally excluded from decisionmaking and benefit-sharing discussions. A study conducted in the Aynak mine in Afghanistan demonstrated how this participatory exclusion of women led to a lack of gender issues being taken into consideration in the development of CBAs. In these settings, the company would need to address these issues to avoid intracommunity conflict and consolidation of benefits within certain community groups (Rickard 2020).

Power imbalances also exist between the company and the community, as companies typically have more resources and power than communities to be able to advocate for themselves. This can reduce not just the distribution of benefits back to the community, but also hinder efforts to limit the environmental damages of the mining activity (Szoke-Burke and Werker 2021).

4.3. Procedural Justice

Upholding procedural justice in the setting of community engagement requires communities to have a voice in the mining setting and be able to influence actions that affect them; this speaks directly to participatory inclusion. This can be achieved if (a) the community's points of view and concerns are incorporated into the approaches identified by the company and solutions to mitigate risk; and (b) the company takes specific actions to mitigate the risks that the community is most concerned about. However, procedural justice would not be upheld if: engagement is only performative (e.g., town halls that merely inform communities without allowing for a robust two-way conversation); if companies provide only limited comment periods or ability to give input; if there is late engagement with the community; and if the documents circulated to the community with information about the mining activities and risks have highly technical language or jargon.

Communities that have faced historic conflicts, like the Prestea community in Ghana, have expressed how the consultation approach to community engagement makes them feel like they have a voice in the mining process and are not helpless (Adonteng-Kissi 2017; Walsh 2017; Devenin 2021). Community-led consultation processes have achieved success in the Chirano mine in Ghana, where Chirano Gold Mine Ltd. hosted consultation engagements across all stages of mining and initiated conflict resolution for issues that emerged from community dissatisfaction of the social and environmental impacts of the mining process (Devonshire Initiative 2022). Success has also been seen in the small-scale development by Socialgold in Central America through a community-led decisionmaking model (Erzurumlu and Erzurumlu 2015).

Procedural justice can also be upheld by ensuring that the community is informed about the engagement events sufficiently in advance such that individuals have the time to comment on the reports and plans submitted by the company and prepare for the engagement. Furthermore, marketing these events in approaches often used by the community rather than those in which the company has experience (e.g., going door to door for sharing the news instead of posting on the website) can help uphold procedural justice by ensuring that the community is aware of engagement opportunities (Deonandan et al. 2024).

5. Why Is It So Hard to Do Effective and Equitable Community Engagement?

Though there is a large body of literature on best practices for community engagement, positive examples of companies having engaged in these practices are few and far between. This implies that companies are likely aware of what they should do to engage effectively and equitably with local communities, yet are unsuccessful in doing so (or simply decide not to). The inability of companies across the world to effectively and equitably engage with communities can be explained by several challenges and lack of positive incentives to improve outcomes. Yet this is not to say that companies are the sole culprit; governments and communities themselves face their own challenges and barriers that impede positive engagement, thus resulting in negative outcomes. In this section, we present these barriers and challenges that each stakeholder faces in more detail.

5.1. Barriers and Challenges for Companies

Even if a mining company is interested in conducting meaningful community engagement and ensuring that the community equitably benefits from mining, it will face hurdles in implementing the good practices for engagement available to them.

To begin, there are few market incentives (apart from maintaining SLO) for companies to keep communities at the center of their project and prioritize their demands in the decisionmaking process (Responsible Mining Webinar 2024; Fikru et al. 2024). Specifically, even if a company is able to incorporate participatory inclusion in their practices, they are currently unlikely to receive a premium in the price of the minerals sold. This reduces the incentive to expend resources in engagement or share benefits with the community, as they will not be able to recover those costs through greater profits. Furthermore, companies can often face long lead times in project development (in the United States, mines frequently take over a decade to develop; see Spiller et al. 2023) due to the time consuming process of exploration and permitting; thus, this reduces the incentive for companies to prioritize effective and equitable community engagement, as it can extend the development of the project even further (Davis and Franks 2014; S&P Global 2024). Finally, involving communities in decisionmaking would require some relinquishing of control over operations and thus potentially expose the company to risk.

Another challenge is that in order for effective and equitable community engagement to emerge, different departments within a mining company will need to work with each other to develop an interdisciplinary team that engages with the community. For example, if the company's HR, technology, and environmental departments collaborate closely, they can ensure that they have a holistic understanding of the impacts of mining activities that would be (or are being) carried out by the company. Though the creation of an interdisciplinary team within the company would be beneficial when communicating with the community, addressing grievances, and effectively explaining how the community is going to be affected by mining activities, mining companies frequently are structured in a way that silos the different departments, making such cross-organization coordination challenging.

Cultural barriers between the company and the community can also act as a hindrance in achieving the expected outcomes of effective community engagement. These cultural barriers include language barriers (local communities speak traditional languages that can be hard to translate, and multiple languages often exist within the community), differences in approaches toward the goals of the project, and contradictory approaches to effective communication (e.g., some groups prefer formal discussions while others like more informal discussions; some groups may prioritize input from community elders while others prioritize youth input, and so on).

Furthermore, in locations with a tumultuous or environmentally damaging history of mining, communities may reject mining altogether, hindering the ability of the company to even begin (and much less sustain) positive negotiations and effective/equitable engagement (Arbeláez-Ruiz 2022; Lorca et al. 2022). Even in areas without this damaging history of mining, communities can eye these developments in a negative light, particularly given a broader distrust of extractive industries. In settings where the community is unwilling to participate or negotiate with the company, it begs the question of whether these engagement efforts should be prioritized.

5.2. Barriers and Challenges for Government

The government has a critical role in ensuring that mining is done in an environmentally and socially responsible manner. To achieve this goal, the government must ensure that community engagement requirements are not only enshrined in legal frameworks but also followed by enforcement, dialogue facilitation, and protection of community well-being. However, governments often fail to protect community well-being and ensure community engagement in mining projects due to capacity constraints, strong interests in advancing economic development nationwide, lack of transparency and accountability, corruption, and pressures by investor-state dispute settlements.

Furthermore, coupled with the urgency of the energy transition and projected demand for critical minerals, guidelines on community engagement might be undermined by streamlining or fast-tracking the permitting process to meet the projected demand (Owen et al. 2022). Indeed, the European Union (Alorse et al. 2015), the United States, Canada, Australia, Brazil, and South Africa have all signaled interest in fast-tracking or

streamlining the approach for approving mining permits. In addition, mineral-producing countries hope to capitalize on their mineral wealth during the projected mineral boom. In Latin America, political elites see future economic growth based on extraction despite differences in the expected role of the state in the mining sector (Singh 2021).

Countries may also be more willing to favor economic development over ensuring community benefits. For example, in 2024, the Argentine government passed an investment promotion law[3] (Régimen de Incentivos para Grandes Inversiones, or RIGI) that drastically reduces taxes for foreign investors in mining development (as well as other industries), thereby shrinking the potential for local communities to benefit financially from the development. It is also unclear whether RIGI will help ramp up investments in Argentina, the main objective of the law. In similar efforts, some governments have repressed or criminalized social mobilization and opposition against mining, further weakening community engagement, in efforts to accelerate economic development (Andreucci and Radhuber 2017).

Even when the government makes reform efforts, capacity constraints can (a) limit its ability to facilitate and enforce environmental and social impact assessments and community engagement requirements in existing legal frameworks, (b) limit its ability to regulate the mining sector, and (c) cause the government to fail to adequately distribute mineral wealth into broader development. For example, in Ethiopia, contrary to legal requirements such as public availability of environmental and social impact assessments and community participation, accountability mechanisms are limited due to conflicting roles of government agencies, and monitoring is inadequate (Charles et al. 2022). According to the mining sector diagnostics of selective countries by the World Bank[4], which evaluates gaps in and between the mining legal framework and implementation, countries tend to perform relatively poorly in the areas of revenue distribution, local impact and development, and enforcement of environmental and social impact assessments.

Corruption is another challenge that hinders the ability of the government to create an environment that is amenable to effective and equitable engagement, and the mining industry in particular is prone to corruption because of opportunities and motivation. Individual bureaucrats can have discretionary powers over mineral permits and large sums of money. Without public oversight on governments' resource management activities, points of contact between authorities and operators pose corruption risks (Anticorruption Resource Centre n.d.). Bribery and grand corruption are the most common types of corruption in the extractive sector. In 2022, Glencore admitted that the company paid about US$100 million in bribes to government officials in different countries from 2007 to 2018, including $27.5 million[5] to officials in the Democratic Republic of Congo (BBC 2022).

3 **https://www.pwc.com/us/en/services/tax/library/argentina-adopts-new-promotional-regime-for-large-investments.html**.

4 **https://www.worldbank.org/en/programs/egps/brief/mining-sector-diagnostic-msd**.

5 **https://www.transparency.org/en/press/drc-accountability-glencore**.

With the expected mineral boom and fast-tracked permitting or contract negotiation, corruption risks increase, and even the anticipation of a commodity boom can lead to corruption (Natural Resource Governance Institute 2022). An investigation in 2023 found that the lithium rush in Africa was linked with corruption and other ESG issues (Global Witness 2023). In Namibia, the Chinese firm Xinfeng Investments allegedly acquired the Uis lithium mine through bribery and exploited permits meant for small-scale miners, avoiding environmental assessments and neglecting commitments to build local processing facilities (Business and Human Rights Resource Centre 2022). In the DRC, the development of the Manono lithium deposit has been marred by corruption, with a senior official in President Felix Tshisekedi's political party reportedly receiving $1.6 million from Zijin Mining and the state-owned mining company being accused by DRC's anti-corruption agency of selling lithium rights at a lower price (Global Witness 2023). Corruption undermines the integrity of community engagement by eroding trust, enabling poor compliance with standards, excluding community voices, misallocating resources, and increasing conflict (Natural Resource Governance Institute 2022).

Lastly, investor-state dispute settlements (ISDS) can be barriers for government in ensuring meaningful community engagement. ISDS is a mechanism through which an investor can bring arbitrations against a host country where it has invested (Robinson 2021). Many international agreements, including multilateral and bilateral trade agreements, include ISDS provisions. These provisions are frequently put in place due to the high economic potential of the extraction and the frequent location of these projects in politically unstable countries; the idea is to protect the company in the face of political risks such as changes to the regime and/or expropriation. ISDS are adopted to boost investor confidence and increase foreign investment, especially in developing countries where the domestic legal framework is considered not robust enough to support secure economic development. Nevertheless, ISDS provisions are criticized as barriers to the just energy transition because host governments are pressured to favor foreign investments rather than protect local communities, even in the case of poor environmental compliance or local opposition due to concerns about fiscal and legal repercussion (Songy and Brauch 2024; Surma and Kusnetz 2024). Current ISDS proceedings create a power imbalance between investors and government, particularly because these lawsuits can only be initiated by companies.

Case Study: Bear Creek versus Peru

Bear Creek versus Peru is a clear example that highlights how ISDS can limit government's ability to reject a mining project despite local opposition efforts due to fear of lawsuits seeking millions of dollars. It also demonstrates how ISDS provisions can be contradictory with international laws such as the United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP) and FPIC (both of which are supposed to provide a voice for Indigenous communities, refer to Appendix A) or local laws/precedents that require community support for permit approval.

Bear Creek, a Canadian mining company, developed Santa Ana, a silver mine in Peru. The permit for development was granted in 2007 in the Indigenous Aymara territories. The mine is located in Santa Ana near Lake Titicaca, which is South America's largest freshwater lake. The project had received community opposition due to environmental concerns of the project, including potential pollution in waterways, and social impacts, as the Indigenous communities rely on Lake Titicaca for their livelihoods.

While community engagement did take place, the engagement was deemed inadequate and even found to be against international good practices. Financial compensation was inconsistent, being offered to some communities but not others. Furthermore, the consultation procedures employed[6] did not consider cultural aspects of the Aymara communities, such as language barriers and mode of communication, by requiring submission of concerns in writing (the Aymara people are not Spanish speakers, and their culture is mostly oral).

In 2011, the Aymarazo movement took place, resulting in massive protests and blockades[7] to the mine entrance, subsequently leading the government to terminate Bear Creek's mining permit. In response, Bear Creek initiated a lawsuit[8] under the Canada-Peru Free Trade Agreement, claiming permit revocation violated the trade agreement regarding expropriation and fair and equitable treatment, seeking approximately $522 million. The tribunal decided in favor of the investor, ordering Peru to pay the company $30.4 million, including legal fees.

6 **https://insideclimatenews.org/news/07062024/international-system-pits-foreign-investors-against-indigenous-communities/**.

7 **https://www.aljazeera.com/economy/2011/5/28/demonstrators-paralyse-peruvian-border-town**.

8 **https://gtwaction.org/egregious-isds-cases/**.

5.3. Barriers and Challenges for the Community

5.3.1. Power Imbalances

Communities are in a disadvantaged position to advocate for themselves on mining projects compared to companies, given their comparatively reduced resources and capacity. While civil society organizations and activists have incentives to improve community engagement in the mining sector, they frequently lack necessary resources and capacity and, more importantly, put themselves at risk of bodily harm or arrest.

Community members and activists face legal challenges by both government and companies. Some governments leverage oppressive laws to suppress environmental activism against mining. For example, the 2020 amendment to Indonesia's Mining Law introduced Article 162, which penalizes anyone who hinders or disturbs mining activities by permit holders who have met the requirements. Article 162 has been used repeatedly by the Indonesian government to target and persecute[9] local oppositions through lawsuits, detentions, and arrests (Sarmiento 2022). In the Philippines, which incorporated FPIC in the 1997 Indigenous Peoples Rights Act, government sometimes uses red tagging[10], the accusation of being affiliated with the Communist party of the Philippines, to forego FPIC requirements (Human Rights Watch 2023a).

Moreover, companies can file Strategic Lawsuits Against Public Participation (SLAPP) cases to intimidate and silence critics. Even when activists are not persecuted, SLAPP cases can still cause financial loss, humiliation, and trauma. The mining sector is notorious for utilizing SLAPP cases. The Transition Minerals Tracker by Business and Human Rights Resource Center shows that mining companies have filed 53 SLAPP cases against community organizations or activists since 2015. Because public debate plays a crucial role in natural resource governance, detrimental effects that SLAPP cases have on freedom of expression can also hinder good governance of the mining sector. The increase in SLAPP cases is not limited to countries with restricted freedom of expression. In the United States, there are currently seven mining-related SLAPP cases.

Power imbalances between communities and mining companies also occur at the international level. ISDS provisions, which are designed to protect foreign investment, are at odds with Indigenous rights, and can conflict with international laws protecting Indigenous rights. While UNDRIP and FPIC are celebrated as milestones for Indigenous peoples (see Appendix A for more information on these international frameworks), ISDS can directly undermine the ability of countries to uphold these protections (Camarillo 2024). Furthermore, ISDS arbitrations are neither transparent nor inclusive of affected communities, eliminating the opportunity for communities to advocate for themselves in these cases (Robinson 2021).

9 **https://news.mongabay.com/2022/02/in-indonesia-a-devious-policy-silences-opposition-to-mining-activists-say/**.

10 **https://www.hrw.org/news/2023/01/26/philippines-officials-red-tagging-indigenous-leaders-activists**.

Even in the case of a major environmental accident, communities can be in a disadvantaged position in seeking compensation and accessing justice both in their home countries and in the international arena. For example, following the 2015 Fundão dam failure in Brazil[11], 46 municipalities filed a lawsuit in the UK to hold the mining parent company BHP accountable, citing dissatisfaction with the progress of the case in Brazil. Subsequently, in June 2024, Brazil's Mining Institute, a Brazilian industry association, filed a lawsuit with the Supreme Court to prevent municipalities from pursuing legal action in foreign courts, claiming it undermines Brazilian sovereignty (Rodrigues 2024).

5.3.2. Differing Points of View/Objectives Within the Community

Voices within communities are not uniform; some may want mining projects for economic benefit and job opportunities while others may oppose them due to environmental and social impacts. Even in mining projects rejected for potential major environmental impacts, community interests still vary. For example, two Alaskan Indigenous groups sued EPA over rejection of the Pebble Mine (which was rejected due to issues around potential water contamination) saying EPA overstepped its authority and those who oppose the project can provide very few alternatives for the local economy (Downing 2024). The various (nonmining) livelihoods communities depend on can also be differentially vulnerable to mining's impacts. For example, in one setting in Peru, fishing was perceived to be at risk from mining water pollution while local agriculture coexisted more easily with mining (Malone et al. 2021).

Moreover, division within communities may arise with time. For example, some Indigenous opposition to the Tampakan mine, a large deposit of copper and gold in the Philippines, has changed due to pro-mining stance in Manila and decades-long conflicts that have split families and clans (Sarmiento 2022). Some activists fear that their continuous antimining campaign will withhold lease money owed to their relatives and other Tribal members. Though differing viewpoints within communities is not a weakness, not having a uniform voice to use in negotiations can weaken the community position while also making any negotiation with the company much harder, particularly as companies can utilize the internal division to "divide and conquer, consulting with the people they find easiest to deal with and ignoring and isolating the tougher ones" (Gibson and O'Faircheallaigh 2015, 12).

5.3.3. Lack of Negotiation Training

Though the inclusion of community perspectives and needs in the negotiations process for benefits-sharing can be beneficial for the community (White 1995), companies are much more equipped to come to the negotiation table with a stronger position (due to both power imbalances and greater resources). This means that communities need to be sufficiently prepared for negotiations in order to have their demands be heard and acted upon. A lack of preparation for these negotiations can

11 **https://iucn.org/story/202212/fundao-dam-failure**.

result in unanticipated outcomes or cries from within the community, further harming them; and many communities lack resources to hire negotiation trainers or legal support. This was observed in Central Sulawesi, Indonesia, where communal fights ensued during negotiations between the company and the community. The purpose of these fights was to garner the company's attention and have higher power in demanding appropriate compensation (Hudayana and Widyanta 2020). Furthermore, there is a gap in our understanding and knowledge about how communities can be prepared to negotiate because there is limited information on the kinds of struggles mining communities face in structuring themselves for negotiations.

5.3.4. Limited Funds to Pay for Technical/Legal Advice and Limited Technology

Institutional factors including limited access to technology (Deonandan et al. 2024) and legal resources also act as a hurdle for communities to stand up for their rights and take definitive action. Engaging with lawyers and filing lawsuits against companies can exceed community budgets, even as lawsuits against mining companies have increased[12] in recent years. Furthermore, having skilled negotiators, lawyers, and community organizers at the negotiating table can help communities achieve more favorable CBAs; however, the costs of hiring these individuals can be excessive and exceed available budgets, and access to skilled community organizers can be limited in practice.

6. Solutions

As can be seen by frequent conflict in mines across the world, it is clear that participatory inclusion through effective and equitable community engagement is hard to do, and is rarely done well. This suggests that relying upon individual companies to voluntarily adjust their engagement strategies based on published best practices is unlikely to result in positive outcomes. Fundamentally, creating an environment where this type of community engagement, benefits sharing, and positive outcomes can flourish will be the necessary building block to achieve widespread effective and equitable community engagement. To that end, in this section, we discuss systems-level solutions that create an environment that fosters participatory inclusion. These solutions include tackling corruption, improving revenue transfers to communities, improving governance, funding technological innovation, reforming ISDS, providing transparency around community engagement for end-consumers, and preparing communities to advocate for themselves.

12 **https://www.business-humanrights.org/en/from-us/media-centre/minerals-essential-to-energy-transition-linked-to-human-rights-abuses/**.

6.1. Tackling Corruption and Improving Transparency

Promoting transparency and accountability to improve mining governance is a long-standing struggle, as governments, communities, civil society organizations, and companies have long recognized the need for public oversight on how resources are managed. The common use of confidentiality clauses in benefit sharing agreements is an area that could be improved to reduce corruption and improve oversight. Confidentiality clauses in CBAs challenge the ability of all community members to understand what they are due by the company. Ensuring that CBAs are publicly available increases the ability for communities to identify whether the funds and investments they were promised were delivered, reduces opportunities for corruption within the community itself, and also expands access to enforcement and monitoring. Furthermore, it provides information for other communities (and companies) to understand whether the offer is reasonable and generous, and whether the terms are fair; understanding the bounds of what an acceptable CBA should look like can be hard if there is a lack of information about similar cases.

Being able to "follow the money" also applies to transfers of funds from the federal to the local government. The recent launch of a data tool in the Philippines[13], which aims to inform communities about their benefits under the law, whether they received what is due to them in the right amount, and most importantly, where the benefits are being allocated, is an innovative tool to narrow the gap between transparency efforts at the national and local levels.

International initiatives such as the 2002 birth of Publish What You Pay, a transborder civil society alliance, and Extractive Industries Transparency Initiative (EITI) are part of the ongoing efforts to address corruption in the mining sector. Since its inception in 2003, EITI has evolved from a revenue transparency tool to one focused on transparency across the value chain—from permitting to contract disclosure to beneficial ownership to revenue allocation—and currently has about 50 implementing countries. While initiatives such as EITI have made progress in advancing transparency and catalyzing public debate at the national level, transparency at a project level is also crucial. Aggregate data derived from the EITI process may have limited use to local communities, who are more concerned with specific information such as local employment data, linkages that support the local economy, and whether they are receiving benefits that the company promised. EITI has much to offer in multistakeholder dialogue, building trust and enhancing transparency across the mineral value chain.

13 **https://eiti.org/blog-post/engaging-philippine-communities-energy-transition-through-data-driven-solutions**.

Major producing countries including Chile[14] have expressed their intention to join EITI, and an industry association in Namibia[15] has urged the government to join EITI. Preparation is required to set up the multistakeholder group and designate a national secretariat. EITI implementation can be costly, although in recent years EITI has required countries to integrate the EITI process into public financial management. International development funding could be directed toward countries implementing EITI and those preparing to join, to help lower the transactions cost of participating. Multilateral funding[16] support is crucial to help these countries navigate the preparation and implementation phases required by the initiative.

6.2. Improving Revenue Transfers from Central Government to Local Communities

Central or regional governments receive benefits from mining through tax revenues, royalties, and lease payments. These funds add to the overall tax base of the government and are thus generally used for broad investments, rather than targeted investments in any given location. The communities surrounding mines thus will not be the sole intended recipient of these funds, unless negotiations occur to ensure that a portion of the revenues flow back to the community.

In Canada, for example, Resource Revenue Sharing Agreements (RRSAs) are developed by the regional governments and Indigenous communities, to legally require a portion of these revenues to flow back to First Nations where extractive activities occur. However, because the regional governments significantly rely upon these revenues, any funds flowing back to the Indigenous communities through the RRSAs can be fiscally problematic for the government; thus, the government has an incentive to reduce the percentage allowed through the RRSA. RRSAs could also be used to claw back other benefits or funds provided to First Nations by the government. Furthermore, RRSAs could also be seen as an implicit approval of the mining project, even if a CBA or IBA is not agreed upon by the Indigenous communities in question.

Particularly when these RRSAs pose a direct threat to the tax base of the federal government, alternative approaches to strategically utilizing the funds could be leveraged. For example, the government could fund innovations in technology to reduce the impacts of mining; these benefits would have broad implications above and beyond the Indigenous communities. Alternatively, the funds could also be used for environmental monitoring and enforcement at the mine. Because environmental monitoring and enforcement is generally a cost incurred by the company itself, this type of spending would thus reduce the company's financial burdens of engagement and provide greater opportunities for benefit transfer to the community.

14 **https://eiti.org/news/chile-confirms-its-intention-join-eiti**.

15 **https://energychamber.org/now-is-the-time-for-namibia-to-join-eiti/**.

16 **https://www.worldbank.org/en/programs/egps#1**.

Importantly, to ensure transparency and reduce corruption risk, the revenue payments to the government should be made publicly available, such that communities can easily access the information and ensure that the amounts promised in any RRSA are being upheld. This is particularly important because mining revenues can fluctuate over time, resulting in varying payments to the community; this transparency can help the community understand whether this fluctuation is due to reduced revenues collected by the government or a failure by the government to deliver on its contract.

6.3. Leverage Multilateral Organizations to Improve Governance

Though transparency is a positive first step to reducing corruption and ensuring accountability, the ability of the citizenry to benefit from such transparency depends in large part on the quality of governance in the country. For example, in countries with a history of state abuse and laws limiting free speech, the public sector will have less ability to hold the government accountable even if transparency has demonstrated a renege on signed contracts or widespread corruption (Desai and Jarvis 2012).

To that end, improving governance within the host country is an important step to accountability and ensuring that communities can benefit from the mining activities. International organizations can provide the framework and support for improving governance. For example, international development organizations, such as World Bank and USAID could provide the funds for improved governance through supporting civil society's capacity to hold the government accountable. These funds can also be used to support legal, policy and regulatory reform, such as through funding consultants to review mining laws[17]. International funding organizations can also increase government capacity through cross-agency training to support government activities around taxation and financial crimes (DeJong 2019).

International organizations (such as the Mineral Security Partnership, or MSP), and certifications or standards provided by international organizations (such as The Responsible Mining Standard by the Initiative for Responsible Mining Assurance, or IRMA) can also help improve the environmental accountability of mining activities, though adjustments to these will be needed to ensure best outcomes.

6.3.1. Minerals Security Partnership

MSP is a US-led 14-country (and the European Union) partnership on critical minerals that was launched in 2022 in Toronto, Canada. The objective of the MSP is to "promote responsible growth across the critical minerals sector via a shared commitment to high environmental, social, and governance (ESG) standards; sustainability; [and] shared prosperity" (MSP Principles for Responsible Critical Minerals Supply Chains,

17 The World Bank and the African Development Bank's Legal Support Facility provide funds for these activities.

n.d.) Although the MSP clearly expresses the prioritization of environmental and social protection using international standards, their framework does not discuss the execution of such standards, nor does it address the challenges associated with its implementation. The framework does not specifically focus on community engagement or shed light on whether the SLO needs to be achieved before undertaking any mining project. By doing so, the MSP provides a very generic framework for environmental and social compliance, which cannot facilitate a successful implementation. Additionally, because the MSP is not a legally binding agreement or coalition, no legal action can be taken in case of noncompliance.

The intention behind this partnership is to join resources and increase public and private sector investments to meet the growing global critical mineral demand. Furthering this intention, the most recent MSP gathering, held in March 2024, resulted in two successful partnerships: the EcoGraf Epanko Graphite Project and the GECAMINES–JOGMEC MoU (US Department of State 2024). The Epanko Graphite Project is based in Tanzania, will be funded by the German-based KfW IPEX Bank, and is expected to produce $73,000 worth of graphite every year. The bank is setting up a senior debt facility of up to $150 million to fund this project, but this loan is still waiting for due diligence and credit approval. Even though this is expected to be a well-funded project, there has been no mention of community approval or engagement in this phase of the loan approval process. Furthermore, the MSP announcement mentions that the mining company's strong ESG frameworks played a key role in the inclusion of the project with the MSP but provides no additional information on what these frameworks look like or what kind of action would be taken by the company to ensure that the community benefits from mining activities. This partnership serves as another example of how community engagement in mining is treated as a part of their CSR initiatives or ESG obligations—and not as an opportunity for community development.

6.3.2. Initiative for Responsible Mining Assurance (IRMA)

In 2018, IRMA developed its Responsible Mining Standard, which is a certification provided at the mine level for compliance with best practices around social and environmental impacts of mining. IRMA is unique in that its governing board includes two representatives from six sectors: communities, labor unions, NGOs, mining companies, purchasing companies, and investors. A voluntary certification standard, IRMA provides audits at the mine (paid for by the company) to ensure that the mine upholds the standard. Though community engagement is required for a mine to pass the audit, for mines that were already developed without FPIC, it is not possible to retroactively impose FPIC; however, this does not prevent the mine from passing the audit (IRMA 2018). Furthermore, concerns remain about the potential for company-funded audits to create conflicts of interest. To that end, the Human Rights Campaign (a board member of IRMA), stated that "IRMA still needs significant improvement … to safeguard the independence of its audits and to tackle actual or perceived conflicts of interests between audit firms and mining companies. IRMA should also work to more effectively push mining companies to correct and remedy harms identified during audits" (Human Rights Watch 2023b).

Indeed, examples emerge whereby local communities do not feel that the audit accurately identified the point of view of the community. For example, an IRMA audit of the Sociedad Química y Minera de Chile, a company extracting lithium from brines in the Salar de Atacama, Chile, received a high score (75/100). However, a regional NGO (Observatory of Andean Salt Flats, or Opsal) claimed that the audit did not adequately consult local communities, interviewing only eight individuals during a single site visit, without including a broader set of affected communities. Opsal, concerned about the environmental impact the Sociedad Química y Minera de Chile is having on the environment, believes[18] that the IRMA audit represents a style of greenwashing[19]. Thus, though voluntary initiatives with certification can help shed light on practices and incentivize better behavior from companies in terms of facilitating effective and equitable community engagement, relying solely on these certifications is not a silver bullet for achieving equitable outcomes.

6.4. Funding R&D and Technological Innovation to Reduce Mining Impacts

Due to the localized nature of mining, reducing the impacts to communities from the mining activities themselves is needed to create a better environment for community engagement, as it can improve the relationship between mining companies and the community, lower conflict, and improve distributional equity. However, improving mining footprints with respect to land use, air and water pollution, and water consumption requires significant investments in technological innovation. For example, direct lithium extraction, an approach to lithium extraction that has the potential to reduce the land use impacts of mining, can use up to 10 times more fresh water than brine mining (Blair et al. 2024). Thus, technological innovation will play a significant role in reducing these tradeoffs in terms of negative environmental impact. However, significant challenges exist to achieving commercializable technologies that improve upon mining impacts (see Htun et al. 2024). As mentioned earlier, revenues collected by the government from royalties, leases, and taxes could be leveraged to advance technological innovation through R&D subsidies, thereby producing positive impacts across multiple mining sites across the country.

6.5. Eliminate or Improve ISDS

As discussed earlier, ISDS create a challenge for governments to revoke permits in the case of lost SLO or environmental harm from the company, given the risk of multimillion-dollar penalties the tribunal can impose when a company sues due to permit revocation. The ISDS tribunals, often arbitrated by pro-development lawyers

18 **https://www.investigate-europe.eu/posts/greenwashing-fears-mining-audit-industry**.

19 Even though it faces criticism, IRMA is regarded as one of the strongest voluntary performance standards (given characteristics such as its emphasis on multistakeholder governance), particularly in comparison to industry-led standards such as Copper Mark and the International Council on Mining & Metals (Lead the Charge 2024).

with conflicts of interest, take place behind closed doors. Furthermore, they provide communities with limited opportunity to rebut or advocate for themselves other than by filing amicus briefs, which often are limited in allowed scope and their inclusion in arbitration depends on the discretion of the arbiter (Perrone 2019).

One solution is for governments to terminate investment treaties or remove ISDS provisions from them. Though this could reduce foreign investor confidence in the country, evidence shows that the existence of bilateral investment treaties does not affect the rate of foreign direct investment (Poulsen 2010; Brada et al. 2021). This approach has become more common recently, with 250 investment treaties having been terminated since 2018[20]. Alternatively, governments could exclude ISDS provisions from individual mining concession contracts (Songy and Brauch 2024).

Another solution is to improve the transparency of the ISDS process and provide a greater opportunity for affected communities to have a true voice in the tribunal process. This would require an expansion of scope related to the terms of arbitration, to allow for environmental and social concerns to influence decisionmaking.

6.6. Tracking Information on Conflict and Community Engagement for End-Consumer Transparency

The concept of a Digital Battery Passport (DBP) was introduced by the Global Battery Alliance (GBA) (Global Battery Alliance, 2023). The pilot passport proposed by the GBA includes information regarding several aspects of the battery's technology and supply chain, and its ESG (Global Battery Alliance, Passport Pilot, Accessed 2024). Currently, the information on the battery's ESG does not specify whether the community where the mineral/material was mined provided an SLO, whether a CBA was developed and the terms included, and whether profits were shared with the community. Furthermore, the DBP is a relatively new concept in the clean energy market and governments are yet to adopt it more systematically. As new pilot passport designs are released by the GBA, it is becoming increasingly clear that the passport is expected to serve as a tracking and traceability mechanism and provide detailed information about battery supply chains.

GBA is working in alliance with IRMA to develop an approach for tracing information at the mine level and conducting third-party verification assessments on that level, too. Because of this, the inclusion of the community's SLO and publicly available CBA would be a valuable and attainable approach to communicate local perceptions of the mine and hold companies accountable for participating in meaningful engagement. Furthermore, providing information on community engagement and conflict (or lack thereof) at the mine could provide the opportunity for mining companies to acquire

20 See **Investor-State Dispute Settlement (ISDS) Mechanisms and the Right to a Clean, Healthy, and Sustainable Environment: Joint Submission from CIEL, IISD, and ClientEarth on the Call for Inputs from the Special Rapporteur on Human Rights and the Environment**.

a premium in the price of their minerals, if they are demonstrated to have been socially and environmentally equitable. It would also allow countries to develop rules about imports based on the trackable ESG information provided in the DBP; these import restrictions or preferences would result in more informed and appropriate decisionmaking than rules limiting imports, such as "friend-shoring" or importing from countries with free trade agreements (which is the approach currently being taken by the US government).

During the summer of 2024, GBA released an Indigenous Peoples' Rights Rulebook as part of their Interim Draft for Battery Passport Pilots that included a list of indicators around Indigenous Peoples' rights, including

- identification of actual and potential negative as well as positive impacts;
- advancement of meaningful consultation and consent to the process, building trustful relationships and respecting FPIC for projects;
- mitigation of negative impacts and realization of positive impacts; and
- access to remedy (p. 13).

If GBA is able to implement these indicators as part of its DBP, the passport could allow the battery's price to increase, providing upstream premiums and thus an incentive to engage equitably and effectively with the community. At minimum, this transparency can incentivize better action by the mines to avoid social ostracization.

6.7. Prepare Communities to Negotiate on Behalf of Themselves

Along with local governments and mining companies, communities are also responsible for ensuring that the engagement process is smooth and yields favorable outcomes. In such cases, it becomes necessary for the community to prepare themselves for the engagement process including having a decisionmaking structure (processes for managing disagreements, power imbalance, equitable representation of disadvantaged groups, and so on), a process for accepting compensation, a clear goal for negotiation, and a strong understanding of non-negotiable priorities and needs of the community. There are limited resources and discussions around how communities can be better prepared to participate in agreement negotiation processes or engagement. The only resources that are available are either posted online on the Indigenous community's website like the Yukon First Nations website or as reports developed Indigenous leaders and members of the community. There could be several reasons for the lack of resource availability, including the lack of information record-keeping, use of different languages, or differences in cultural methods of record-keeping. But most often it is the lack of sufficient funds to get assistance in dealing with numerous permit applications and proposals, along with constraints in hiring experts and experienced members of the community who can provide consultation and guidance as necessary (Yukon First Nations 2024).

Although different communities have different needs and levels of preparedness with regard to engagement protocols, once the community has enough resources to develop a consultation process/structure for their people, the community can

develop a decisionmaking process and identify what their FPIC would look like. It is then important to obtain legal and technical support to understand and learn about the environmental impacts identified by the mining company while ensuring that the company is in compliance with any agreement signed between the community and the company. Once the SLO has been granted, it becomes their responsibility to ensure that promises and commitments are followed through and successfully implemented throughout the time of the mining project (Klein et al. 2023).

7. Conclusion

Participatory inclusion through effective and equitable community engagement is a fundamental aspect to ensuring that mining for EV battery minerals will usher in a sustainable transition to a decarbonized future. Participatory inclusion allows communities to advocate for their needs and can lead to reduced environmental impacts of extraction and increased economic development where no groups are left behind. However, in practice, company efforts to engage with communities rarely succeed in avoiding conflicts or opposition, regardless of the location of the mine or the nationality of the mining company, due to a lack of meaningful participatory inclusion.

The ability of companies to engage in this manner with local communities is hampered by a number of challenges and barriers at the company, community, and government level. For example, there is a lack of incentives for the company and the national government to prioritize the well-being and economic development of the communities at the location of the mines. There are international barriers to effective and equitable engagement, such as the ISDS and lack of transparency. Issues such as corruption and limited capacity to govern can challenge even a well-meaning government when supporting the local communities above the mining companies. Given the major power imbalances between the company and the community, all these aforementioned factors (and more, as discussed in Section 5) combined means that the community will struggle to achieve positive outcomes from mining, and human rights defenders and local advocates often face the risk of bodily harm or arrest when trying to advocate for themselves in this setting.

This implies that merely counting upon companies to do the right thing and follow published best practices for effective and equitable community engagement will be unlikely to result in positive outcomes. To that end, we argue in this paper that efforts may be better placed in creating an environment that supports effective and equitable community engagement. Many of these efforts will require multinational cooperation, including the development of international agreements and initiatives, creation of market approaches that place a premium on minerals emerging from ethical mining practices, cross-country funding and governance capacity support, efforts to increase transparency of supply chains and movement of funds, and rethinking of international laws and trade policies. Achieving an equitable and sustainable transition to a decarbonized transportation sector is possible but will require a fundamental rethinking of how we govern and engage in resource extraction on a global scale.

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Appendix

A.1. Frameworks for Incorporating Community Engagement in Mining

There are two international frameworks established by the United Nations to give voice to Indigenous communities and Tribal peoples affected by new projects on their land or in their surrounding areas. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) was published in 2007 to recognize the rights of Indigenous peoples (Davis 2007; Côté et al. 2025). According to the UNDRIP Implementation Project that oversees its education and advocacy, "The Declaration recognizes universal human rights in the Indigenous Peoples' context, including rights to self-determination, equality, property, culture, religious freedom, health and economic well-being, among many others." (quote from The Implementation Project webpage[21]). In the case of mining, UNDRIP provides international recognition to Indigenous communities and makes it mandatory for companies to recognize and disclose effects of their projects on the communities.

Another international legal tool that works in coherence with UNDRIP is Free, Prior, and Informed Consent (FPIC), also adopted by United Nations in 2007 as a requirement for companies to obtain consent before executing any project (EarthWorks 2024). The International Finance Corporation and the World Bank Group require their clients and project managers to obtain FPIC for any associated projects. FPIC can be defined as consent that is given freely without any coercion, manipulation, or bribes, is obtained before starting any operations, while informing the community of all positive and negative impacts of the project, with full disclosure (regarding all aspects) in a manner that is accessible and understandable to the community. Although these frameworks have the capacity to give power to the community and reduce the power parity that currently exists between mining companies and communities, these frameworks are voluntary and not a part of international law. For example, the United States does not endorse UNDRIP[22], whereas Sierra Leonne requires community consent for the approval of any project in their legislation[23].

Though incorporating community approval in national legislation generally differs across countries, a common approach is to include a step for community approval in the existing permit process. For example, EIAs—mandatory assessments undertaken by companies or agencies interested in developing land use projects—often require communities to be informed about the project and provide them opportunity to give input, approve, or reject the proposal.

21 **The Implementation Project – Achieving the Aims of the UN Declaration on the Rights of Indigenous Peoples (narf.org)**, accessed August 2024.

22 **https://www.usaid.gov/indigenous-peoples-0**.

23 **https://sierralii.gov.sl/akn/sl/act/2023/16/eng@2023-05-12**.

The history and process of gaining an EIA clearance differs across the world. In the United States, for example, the National Environmental Protection Act (NEPA) in 1970 made EIAs a mandatory process of permit approval[24]. Specifically, NEPA requires all federal agencies to conduct EIAs and submit an Environmental Impact Statement (EIS). These assessments include identifying the environmental impact of a proposed project across all sectors included in the regulation and applies to private companies when receiving grants, funding, permits, or other resources to carry out their projects. NEPA requires conducting stakeholder engagement or public participation events to provide transparency regarding the environmental impacts they have identified and to give interested parties an opportunity to comment. To make public participation more equitable and to reach all groups of people, NEPA encourages sending public notices to different groups individually, in a form or language that is accessible to them.

However, the requirement to provide information on environmental impacts to the community does not necessitate active community engagement and is not sufficient to reduce or further abate the social impacts of a given project on the community. This is especially the case in mining, as the social consequences of the projects often extend beyond environmental impacts (e.g., in-migration, job impacts, and so on). Additionally, the environmental impact associated with mining can be large enough to create negative economic impacts within the community, yet these social impacts are not included in the EIS. Ignoring these community impacts in the assessments prior to the mine being developed can lead to the loss of the SLO as negative effects emerge during development and operation. This has the potential to not only lead to the shutdown of mining activities in the region but could also have large-scale political consequences, as observed in the case of the mining company Savannah Lithium in Portugal[25].

To that end, a solution to avoid these negative impacts can be through incorporating the social impacts of the mining project in the EIS. This would not only increase the transparency of the project but would also allow community input to help shape the project in such a way as to reduce or mitigate its environmental and social impacts. Thus, a positive relationship between the company and the community could be maintained, resulting in lower impacts and sustained SLO. Environmental and social impact assessments are tools that can be used to identify and assess environmental and social risks and benefits of a project during the planning phase itself, providing opportunities for the company to incorporate risk mitigation measures in the project design and implementation phase (UNCTAD and World Bank 2018).

24 However, the approach varies even within the country, and California has its own EIA process: the **California Environmental Quality Act** (which is different from NEPA).

25 **https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/metals/110723-lithium-mine-developer-savannah-resources-says-cooperating-with-portuguese-investigators-follows-pms-resignation**.

A2. Benefit Sharing Arrangements

The mining sector can play an instrumental role in national economies[26] and has potential to contribute to different goals under sustainable development goals (Mvile and Bishoge 2024). However, without robust policies and strong governance, mineral producing countries face challenges in transforming mineral wealth into long-term development. Although some large-scale mining projects have yielded national benefits[27], the distribution of these benefits at the local level can be challenging, as environmental and social impacts are primarily localized near the mining site. In addition, Indigenous peoples are often disproportionately impacted by mining given their marginalized social and economic positions and their ties to the land (Grant et al. 2014; Horowitz et al. 2018).

While CSR activities and compensation schemes have long been part of the mining industry practices, benefit sharing agreements have emerged as a shift in strategy to mitigate conflicts between local communities and companies (O'Faircheallaigh 2013). Benefit sharing agreements are also known as community benefit agreements (CBAs), impact benefit agreements (IBA), and community development agreements (CDA). This report uses the term CBAs. CBAs are different from local content policies, which are broader and enshrined in national mining legal frameworks, and from corporate social responsibility activities, which are mostly voluntary. Countries are increasingly incorporating community development requirements, including local content policies and CBAs, into their mining laws to ensure local communities receive benefits from mining operations. Since the mid-1980s, over 32 countries have adopted such measures and, more recently, so have Sierra Leone and Ghana in 2022 and 2023 respectively (Dupuy 2014; Business and Human Rights Resource Centre 2024). CBAs have become standard practice, and introducing a legally binding element could shift them from voluntary, philanthropic benefit sharing schemes to power-sharing models, emphasizing greater transparency and accountability (Resources for the Future 2024).

Outcomes of CBAs have been mixed (Gunton and Markey 2021). On the one hand, CBAs have helped a company maintain an SLO and enabled communities to benefit from mining through local employment and royalty payments, as seen with the Development and Operating Agreement at the Red Dog Mine in Alaska (Prno 2013). On the other hand, some CBAs have led to codependency between mining corporations and Indigenous communities (Puschner 2024), limiting the community's ability to hold mining companies accountable post-accident due to their economic reliance on the companies (Zanini et al. 2023). A notable example is the 2011 Participation Agreement between Rio Tinto and the Puutu Kunti Kurrama and Pinikura (PKKP), which provided financial benefits but also included provisions that restricted the PKKP's ability to oppose actions related to heritage site protection and to publicly criticize the company, with financial penalties for violations (Kemp et al. 2023). As a result, the PKKP was not able to stop or even delay Rio Tinto when the company was loading explosives to blow up the Juukan Gorge in 2020.

26 **https://www.icmm.com/website/publications/pdfs/social-performance/2022/research_mci-6-ed.pdf**.

27 **https://www.tni.org/en/article/water-predators-the-industry-behind-green-energy**.

In addition, the gender dimension of CBAs remains under-researched (Keenan et al. 2016). Female participation in agreement negotiation is a product of existing gender dynamics in the local context and culture of the organizations involved, both company and community. Moreover, intersectional factors such as socioeconomic status (Keenan and Kemp 2014) and colonial history (Horowitz 2017) can lead to exclusion of women in agreement processes. It is also important to note that representations and warranties clauses in agreements can be considered unimportant if participation of Indigenous women are not addressed properly (Graben et al. 2020). Despite recognizing the potential benefits of greater female involvement, practitioners stress that gender equality alone cannot resolve broader issues affecting agreement outcomes, such as power disparities, resource allocation, and governance deficiencies within the mining industry (Keenan and Kemp 2014). However, more research around the impact of gender inclusion in the negotiations process would be a beneficial addition to the literature.

Several guidelines have been developed by government, multilateral and nongovernmental organizations (NGOs) to ensure that CBA negotiations support both companies and communities (Gunton et al. 2020; Cascadden et al. 2021; Business and Human Rights Resource Centre 2024). However, the implementation of CBAs remains challenging for several reasons.

First, CBA negotiations are highly context specific. Best practices in one setting cannot be easily replicated elsewhere. Moreover, communities often do not have resources to prepare for CBA negotiation. Negotiations require different types of expertise such as legal, mining, social and environmental issues, and long-term staff who support representatives at the negotiation table (Resources for the Future 2024). Preparations within a community can also lead to political mobilization, which is critical for the outcome of CBAs. O'Faircheallaigh (2021) shows that outcomes of CBAs depend on political mobilization within a community rather than any inherent flaws in the mechanisms of CBAs or differences in legal regimes. Another challenge is governance within a community to manage revenue streams of CBAs (Resources for the Future 2024). Lastly, measuring CBA outcomes is hard due to lack of monitoring and evaluation, unclear roles and responsibilities, and lack of resources (O'Faircheallaigh 2020; Hira and Busumtwi-Sam 2021).

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