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Securing Indigenous Rights in the Energy Transition: Preventing Harm, Ensuring Consent, and Promoting Equity in Transition Minerals Extraction

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1. Introduction

As the background information rightly notes, the transition to a low-carbon economy, critical for combating climate change, relies on the extraction of essential minerals such as lithium, nickel, copper, and cobalt. Nevertheless, mining brings significant social, environmental, and health costs, disproportionately impacting Indigenous Peoples.

The urgency to address these issues is underscored by the reality that 54% of transition minerals are located on or near Indigenous Peoples' territories. While remedial measures are important for addressing harms from existing mining activities, a holistic approach requires equal emphasis on prevention and mitigation during the upfront and intermediate phases. For new projects, the focus should start with preventing harm upfront, ensuring full respect for Indigenous Peoples' rights from the outset. At the recently held Indigenous Peoples' Just Transition Summit, leaders from all seven socio-cultural regions presented the outcome document Indigenous Peoples Principles and Protocols for Just Transition which denounced mining and renewable energy projects for violating their rights and proceeding without Free Prior and Informed Consent on their territories.

This response emphasizes these priorities, outlining pathways to safeguard Indigenous Peoples' rights, health, and livelihoods across all phases of resource development.

2. Existing Frameworks, Legislative Advances and Voluntary Frameworks

The importance of recognizing Indigenous Peoples' rights in the energy transition is gaining increasing attention globally, reflected in some important advances in legislative and voluntary frameworks.

2.1 Existing Frameworks

Foundational instruments like the <u>United Nations Declaration on the Rights of Indigenous</u>

<u>Peoples (UNDRIP)</u> and the <u>Indigenous and Tribal Peoples Convention (ILO Convention</u>

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Indigenous Peoples' right to Self-determination, the right to Free, Prior and Informed Consent and self-governance are recognized and affirmed in UNDRIP, specifically in articles 3, 4, 10, 11, 18, 19, 27, 28, 32. This recognition ensures that Indigenous Peoples' communities can meaningfully participate in decisions affecting their lands, territories, and resources.

The rights of Indigenous Peoples are also reflected in the core human rights treaties:

- The International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) uphold the right to self-determination (Article 1), enabling Indigenous Peoples to shape their development and identity. The ICCPR additionally protects minority rights to culture, religion, and language (Article 27) and prohibits discrimination, ensuring equitable treatment.
- The International Convention on the Elimination of All Forms of Racial Discrimination
 (ICERD) fights racial discrimination and ensures equality in laws and practices. CERD's
 body of jurisprudence suggests that FPIC is always triggered by extractive projects which
 could affect Indigenous Peoples' rights or interests (CERD 1997).
- The corporate responsibility to respect human rights, as outlined in the <u>UN Guiding</u> <u>Principles on Business and Human Rights (UNGPs)</u> and the <u>OECD Guidelines for</u> <u>Multinational Enterprises on Responsible Business Conduct</u>, includes the obligation to uphold the rights of Indigenous Peoples, particularly the principle of FPIC. Even though these instruments are not legally binding, they are considered morally binding (<u>UNGA 2013</u>, <u>OECD 2023</u>).

2.2 Legislative Advances

Recent legislative initiatives provide a framework for incorporating Indigenous Peoples' rights into critical mineral supply chains.

• EU Corporate Sustainability Due Diligence Directive (CSDDD):

Brings the recognition of FPIC as articulated by UNDRIP and responsible sourcing requirements into supply chain governance, aligning with Articles 29 and 32 of UNDRIP. Text from Recital 33:

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"Depending on the circumstances, companies may need to consider additional standards. For instance, taking account of specific contexts or intersecting factors.... companies should pay special attention to any particular adverse impacts on individuals who may be at heightened risk due to marginalisation, vulnerability or other circumstances, individually or as members of certain groupings or communities, including indigenous peoples, as protected under the UN Declaration on the Rights of Indigenous Peoples, including in relation to free, prior and informed consent (FPIC). In doing so, companies may need to take into consideration, where relevant, international instruments such as the International Convention on the Elimination of All Forms of Racial Discrimination, the Convention on the Elimination of All Forms of Discrimination Against Women, the Convention on the Rights of Persons with Disabilities."

Text from recital 65:

"In order to conduct meaningful human rights and environmental due diligence, companies should take appropriate measures to carry out effective engagement with stakeholders, for the process of carrying out the due diligence actions.... Meaningful engagement with consulted stakeholders should take due account of barriers to engagement, ensure that stakeholders are free from retaliation and retribution, including by maintaining confidentiality and anonymity, and particular attention should be paid to the needs of vulnerable stakeholders, and to overlapping vulnerabilities and intersecting factors, including by taking into account potentially affected groupings or communities, for example those protected under **the UN Declaration on the Rights of Indigenous People** and those covered in the UN Declaration on Human Rights Defenders...."

• EU Battery Regulation:

Highlights environmental safeguards and responsible sourcing practices essential for ethical mineral extraction, aligning with articles 29 and 32 of UNDRIP.

Text from recital 87:

"As regards the social risk categories, battery due diligence policies should address the risks in relation to the protection of human rights, including human health, community life, including that of **indigenous peoples**, the protection of children and gender equality,

in line with international human rights law. The battery due diligence policies should include information on how the economic operator has contributed to the prevention of human rights abuses and on the instruments in place within the operator's business structure to fight corruption and bribery. The battery due diligence policies should also ensure proper implementation of the rules of fundamental conventions of the ILO as listed in Annex I to the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy".

Annex X: 2. Social and environmental risk categories: (c) community life, including that of **indigenous peoples.**

• EU Critical Raw Materials Act (CRMA):

Includes references to Indigenous Peoples and the UN Declaration on the Rights of Indigenous Peoples in its text, signaling recognition of Indigenous Peoples' rights and emphasizing the importance of ethical sourcing practices that respect the cultural, environmental, and social frameworks of communities affected by critical mineral projects.

Text in recital 17:

"...Projects should also ensure engagement in good faith as well as comprehensive and equitable consultations of relevant stakeholders such as local communities and **indigenous peoples**. Special attention should be paid to the respect for human rights where a project involves potential resettlement"

Text in recital 20:

"Applications relating to projects with the potential to affect **indigenous peoples** should include a plan containing measures dedicated to a meaningful consultation of the **indigenous peoples** affected, the prevention and minimisation of adverse impacts on those **indigenous peoples**, and, where appropriate, fair compensation...."

Text in article 6.1(c):

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"[T]he project would be implemented sustainably, in particular as regards the monitoring, prevention and minimisation of environmental impacts, the prevention and minimisation of socially adverse impacts through the use of socially responsible practices including respect for human rights, **indigenous peoples** and labour rights...."

Text in article 7.1(j):

"for projects with the potential to affect **indigenous peoples**, a plan containing measures dedicated to a meaningful consultation of the affected **indigenous peoples** about the prevention and minimisation of the adverse impacts on **indigenous rights** and, where appropriate, fair compensation for those peoples, as well as measures to address the outcomes of the consultation."

Text in article 37.1(c)(ii):

"whether a cooperation between the Union and a third country could improve a third country's ability to ensure the monitoring, prevention and minimisation of adverse environmental impacts through its regulatory framework and the implementation thereof, the use of socially responsible practices including respect for human and labour rights, in particular on forced and child labour, meaningful engagement with local communities, including **indigenous peoples**, the use of transparent and responsible business practices, the prevention of adverse impacts on the proper functioning of public administration and the rule of law;"

Text in Annex III(5)(d):

"OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector, including where referring to the principles set out in the **United Nations**Declaration on the Rights of Indigenous Peoples;"

Text in Annex IV(2)(b):

"requirements for ensuring socially responsible practices, including respect for human rights and labour rights including the community life of indigenous peoples;"

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2.3 Voluntary Frameworks and Standards

Voluntary standards play a complementary role in advancing Indigenous Peoples' rights, but it is essential that they do not replace legally binding frameworks. Ample evidence, as reported by the scientific community and observed in practice, demonstrates that relying solely on voluntary standards fails to protect Indigenous Peoples' rights effectively.

2.3.1 Certification schemes

While international frameworks have made significant progress in recognising Indigenous Peoples' Rights, their implementation often struggles due to a lack of advances in legally binding measures. This gap has led to a reliance on voluntary mechanisms such as certification schemes, which have gained popularity in industries like forestry, mining, and agriculture as tools to promote responsible practices. These schemes aim to raise awareness and encourage companies to adhere to social and environmental standards. However, their voluntary nature limits their effectiveness in providing consistent and enforceable protections for Indigenous Peoples' Rights (Franken and Schütte, 2022). Certification schemes operate on a "we encourage" basis, often relying on corporate goodwill rather than imposing binding obligations. Even though these schemes may support incremental improvements, they cannot substitute for legally binding frameworks that hold companies accountable (Kemp et al., 2020; Murguia & Bastida, 2024).

Of particular concern is the emergence of industry-led certification schemes and standards that promote high Environmental, Social, and Governance (ESG) rhetoric while failing to propose or enforce measures that ensure the respect of Indigenous Peoples' rights. Many of these frameworks, such as the ICMM statement on Indigenous Peoples, remain at an aspirational level, using language like "we encourage" without committing to binding requirements or mechanisms to ensure compliance. This weakens the overall protection of Indigenous Peoples' rights and creates a misleading impression of accountability.

Nevertheless, there are encouraging examples of progress in both voluntary standards and industry-led initiatives that demonstrate the potential for stronger due diligence. For instance:

• The **Initiative for Responsible Mining Assurance (IRMA)** is revising its standards to strengthen respect for Indigenous Peoples, including robust FPIC protocols. IRMA sets

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benchmarks for industry best practices by integrating cultural preservation, ecological sustainability, and Indigenous leadership in its criteria.

2.3.2. Downstream companies' policies

In the downstream sector, automakers and battery manufacturers have taken steps to integrate FPIC into their supply chain due diligence:

- The <u>Global Battery Alliance</u> advocates for responsible sourcing and explicitly supports FPIC.
- Tesla has adopted a new <u>Indigenous Peoples' rights policy</u> that states: "Raw material extraction has historically had an adverse impact on the rights of indigenous peoples and communities in the areas in which they operate. For all raw material extraction and processing used in Tesla products, we expect our suppliers to engage with legitimate representatives of indigenous communities and respect their right to grant or withhold free, prior, and informed consent for their operations."
- Ford also has a new Indigenous Peoples' rights policy, as part of their responsible materials sourcing policy, that states: "Suppliers are also required to respect the rights of Indigenous Peoples in accordance with the United Nations Declaration on the Rights of Indigenous Peoples (UN-DRIP). In accordance with Supplier Code of Conduct, suppliers directly sourcing raw materials must not engage in any acts constituting or aiding unlawful eviction or unlawful taking of land, forests, or waters securing the livelihood of human beings. Suppliers must also ensure Free, Prior and Informed Consent (FPIC) of communities is pursued and obtained prior to project or activities that may affect their lands, resources and rights." (April 25, 2024)
- Stellantis adopted a Free, Prior and Informed Consent Policy that endorses UNDRIP, recognizes Indigenous Peoples' self-identification according to UN-DRIP principles, and includes a detailed implementation methodology. Stellantis extends its policy to Tier 1 suppliers (August 1, 2024).
- Mercedes-Benz has committed to strict sourcing standards that include recognition of Indigenous Peoples' rights and compliance with FPIC in supply chain assessments.

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o **BMW** has introduced measures to enhance transparency and ensure respect for human and Indigenous Peoples' rights in raw material sourcing.

2.3.3 UN Secretary General's Panel on Critical Energy Transition Minerals

The UN Secretary General's Panel on Critical Energy Transition Minerals produced a set of recommendations for governments and Industry to guide the global Energy Transition. The recommendations document includes seven guiding principles and five actionable recommendations that are designed to promote fairness and justice throughout critical energy transition mineral value chains toward achieving net-zero emissions. While the panel's process only spanned five months from April to September 2024, which raised concerns about the extent of consultation, the panel's recommendations, thanks to the diligent work of the UNPFII and the support of Civil Society allies, managed to include key elements addressing Indigenous Peoples' rights.

The document makes a strong call to all actors to "uphold the rights of Indigenous Peoples, on whose lands much of the global reserves of critical energy transition minerals are located. Only by cooperating in good faith with Indigenous Peoples, treating them as equal partners in development, acknowledging their indispensable role in biodiversity protection, and respecting all of their rights, including as articulated in the UN Declaration on the Rights of Indigenous Peoples, and to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, will it be possible to resource the energy transition successfully, and with equity and justice." (Conclusion, Para 67)

The panel's recommendations rightly acknowledge the individual and collective rights of Indigenous Peoples, stating that "States shall consult and cooperate in good faith with the Indigenous Peoples concerned, through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources" (Principle 1, Para 17). This aligns with Article 19 of UNDRIP, and we commend this alignment.

The panel's recognition that "specific measures should be implemented to ensure that Indigenous Peoples are recognized as equal partners and benefit equitably from these opportunities, with benefit-sharing schemes aligned with their right to self-determination" (Principle 4, Para 38). This recognition is crucial, as self-determination is at the core of Indigenous Peoples' rights.

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The need to protect environmental and human rights defenders is also recognized (Principle 1, Para 7), which is particularly important for Indigenous defenders who are often targeted for protecting their lands.

The critical role Indigenous Peoples play in protecting biodiversity, which is vital for preserving global ecosystems, is also well acknowledged (Principle 2, Para 21 and Actionable Recommendation 1, Para 56).

3. Recognizing Risks

The extraction of critical minerals poses significant risks that threaten the rights, health, and environments of Indigenous Peoples. Addressing these risks requires a comprehensive understanding of their scope and impact, as the background information highlights.

The <u>Transition Minerals Tracker</u>, developed by the Business & Human Rights Resource Centre, monitors human rights allegations linked to the extraction of minerals essential for renewable energy technologies and electric vehicles. As of 2024, the tracker has documented **630** allegations of human rights abuses from 2010 to 2023, associated with the mining of seven key minerals: bauxite, cobalt, copper, lithium, manganese, nickel, and zinc.

Approximately 39% of the companies tracked by the Business & Human Rights Resource Centre's Transition Minerals Tracker have at least one human rights allegation, with issues ranging from environmental degradation and land rights violations to labor abuses, attacks on human rights defenders, and adverse impacts on Indigenous communities. Many cases highlight land dispossession, environmental harm, and the lack of Free, Prior, and Informed Consent (FPIC) for Indigenous Peoples. These allegations span continents, with notable instances in Africa, Latin America, and Asia.

3.1 Human Rights Violations

Mining operations frequently take place in Indigenous territories, where the rights of Indigenous Peoples are systematically undermined. A critical violation is the absence of Free, Prior, and Informed Consent (FPIC), which is essential to respecting their rights. Mining companies often bypass FPIC, engaging in practices that displace communities, violate sacred lands, and perpetuate violence.

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For example, in Indonesia's nickel industry, mining expansions have proceeded without seeking consultation with Indigenous communities. Reports document the use of intimidation tactics, including weapons, to silence opposition and forcibly displace Indigenous Peoples from their ancestral lands. The industry's impact is far-reaching, with mining activities causing environmental harm such as air and water pollution, biodiversity destruction, and resource depletion. Despite these grave violations, Indigenous communities persist in fighting for their rights and seeking a voice in decision-making (Bravo and Morse, 2024 and CRI, 2024; Stambaugh and Jamaluddin, 2023).

Similarly, in <u>Ha'Kamwe</u>, Arizona, a lithium mining operation has proceeded without FPIC, involving drilling near sacred springs in violation of both local and federal laws. The federal government failed to ensure necessary environmental impact assessments before mining began, further marginalizing Indigenous communities and disregarding their traditional ecological knowledge.

In <u>Thacker Pass - lithium mining by Lithium Americas</u>, an open-pit lithium mine by Lithium Americas threatens sacred burial sites and local wildlife. The project advanced without FPIC, violating the cultural and land rights of the local Indigenous population. This case reflects a broader trend of companies disregarding Indigenous consent, resulting in the loss of sacred sites and the depletion of resources on their lands.

In another case, <u>South Dakota's Black Hills</u> have experienced a recent mining boom involving gold, uranium, and lithium extraction, marked by a disregard for FPIC. Indigenous communities in the region face displacement, while mining operations have caused land and water pollution, air quality degradation, and excessive waste generation. This situation exemplifies the broader pattern of mining projects advancing at the expense of Indigenous Peoples' rights and livelihoods.

Another stark example, <u>Espinar Province</u>, <u>Peru - copper mine by Glencore</u>, where Glencore's copper mining activities have caused devastating harm to Indigenous communities, including the Quechua and K'ana peoples. The mining company ignored FPIC and used coercive tactics to pressure communities into selling their land. Additionally, the company's operations have led to heavy metal contamination, severely impacting health and quality of life.

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Finally, in Russia's Nornickel mining operations, Indigenous communities have faced police raids for resisting corporate pressure to deny the environmental damage caused by a 2020 fuel spill. The spill devastated local fisheries and killed fish, yet the company attempted to minimize the incident's impact by offering bribes in exchange for silence, further eroding trust and undermining the rights of Indigenous Peoples.

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3.2 Environmental Impacts

As seen in the previous examples, violations of Indigenous Peoples' rights are deeply intertwined with environmental harm. Environmental degradation caused by mining operations frequently stems from the disregard for Indigenous Peoples' rights and territories. This widespread harm includes pollution of air, water, and soil, habitat destruction, and excessive resource extraction. These impacts not only threaten ecosystems but also undermine the livelihoods of Indigenous Peoples who depend on their lands and natural resources for survival.

Water resources are among the most critically impacted by mining activities. The excessive consumption and contamination of water threaten ecosystems and the livelihoods of Indigenous communities (Earthworks, 2023). In Chile's Atacama Desert, lithium extraction has drastically depleted rivers and aquifers, endangering the region's fragile ecosystems and directly impacting Indigenous Peoples who depend on these water sources for agriculture, livestock, and daily life. Mining operations also discharge heated water into nearby rivers or lakes, causing thermal pollution that disrupts aquatic ecosystems. This alteration in water temperature and oxygen levels harms fish and other organisms, compounding the stress on water systems. In many regions, toxic substances like arsenic, mercury, and heavy metals released during mining contaminate water supplies. For example, in Espinar, Peru, and South Dakota's Black Hills, these pollutants have poisoned essential water sources, causing severe health and ecological consequences.

Mining also causes significant soil degradation. In regions like <u>in Nepal</u>, limestone extraction has severely affected land and soil quality, leading to erosion and reduced fertility. This degradation disrupts Indigenous communities' agricultural practices, compounding the loss of livelihood and cultural connection to their land. Additionally, the stripping of topsoil during mining processes leaves behind unproductive landscapes, further reducing the land's productivity and increasing the risk of desertification. Beyond this, overburden—the enormous volume of excavated earth

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and rock removed during mining—creates unstable areas prone to landslides and drainage pattern disruptions.

Air quality degradation is another major consequence of mining operations. Heavy machinery, dust emissions, and the burning of fossil fuels contribute to poor air quality in mining regions (Morrill et al., 2022). For example, in Imperial Valley, intensive mining activities release pollutants that lead to respiratory diseases among Indigenous populations. These conditions are further aggravated by broader climate impacts, which mining activities intensify through greenhouse gas emissions. Airborne pollutants also increase the risk of cardiovascular diseases, such as hypertension and stroke, further compounding health risks.

The destruction of forests and habitats further compounds the ecological damage caused by mining. In Indonesia, nickel mining has resulted in widespread deforestation, threatening biodiversity and accelerating the climate crisis. Forest ecosystems, often sacred to Indigenous Peoples, are integral to their cultural identity and ecological balance. Similarly, in Nepal, limestone mining has displaced Indigenous communities like the Chepang, destroying their connection to the land and causing significant habitat loss for local species. Noise pollution from mining operations also disrupts wildlife, interfering with communication, navigation, and reproduction for many species. This hidden impact exacerbates biodiversity loss in areas already under pressure from habitat destruction.

Finally, tailings dumping remains one of the most damaging practices associated with mining. Every year, over 220 million metric tons of mine waste are discharged into water bodies, leading to widespread contamination. These tailings destroy coral reefs, riverbeds, and seabed floors, severely affecting aquatic ecosystems. People living in the area suffer as drinking water sources are polluted with toxic substances, with no feasible technology currently available to remediate the damage once these pollutants enter the environment. Combined with other mining waste, such as overburden and chemical residues, tailings dumping leaves ecosystems and communities struggling with the long-term legacy of mining (Morrill et al., 2023).

The cumulative impacts of these environmental harms are particularly alarming. When multiple mining operations exist in the same region, their overlapping effects—such as competition for water resources, amplified pollution, and ecosystem degradation—create resource scarcity and accelerate ecological collapse.

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3.3 Health Risks

The health risks associated with mining are among the most immediate and visible consequences for Indigenous Peoples living near extraction sites. These risks are closely tied to environmental degradation and human rights violations, including exposure to toxic chemicals, contaminated water, and air pollution.

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Starting with direct impacts, toxic exposure from mining activities is a leading cause of chronic illnesses. Heavy metals such as mercury, arsenic, and lead, commonly used in mining, are highly toxic to human health. Their presence in the environment can lead to respiratory diseases, cancers, and neurological disorders, including developmental delays in children and memory loss in adults. In Espinar, Peru, heavy metal contamination from copper mining has caused widespread health problems, including respiratory issues, kidney failure, and cancer. Similarly, in South Dakota's Black Hills, mining operations have released harmful chemicals into the environment, exacerbating the risks of respiratory and neurological illnesses for local Indigenous communities.

Expanding beyond chemical exposure, the spread of diseases is another significant concern. Mining operations often involve the influx of workers from different regions, increasing the risk of infectious diseases such as tuberculosis, malaria, and sexually transmitted infections. This is especially dangerous for Indigenous Peoples in voluntary isolation and initial contact or those with limited access to healthcare.

Shifting the focus to air quality, mining operations in many regions lead to significant air pollution from dust, machinery emissions, and the combustion of fossil fuels. These conditions are aggravated by broader climate impacts, which mining activities intensify through greenhouse gas emissions. Airborne pollutants also increase the risk of cardiovascular diseases, such as hypertension and stroke, further compounding health risks.

Turning to water-related health impacts, mining often leads to severe water pollution. Untreated mine waste releases heavy metals, contaminating drinking water sources. This exposure has been linked to gastrointestinal illnesses, chronic kidney diseases, and skin disorders such as dermatitis and rashes. In regions such as Espinar, Peru, and Indonesia, this contamination has poisoned local water supplies and accumulated in the food chain, causing long-term health problems for communities reliant on natural water sources and aquatic life for sustenance. Reproductive health

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issues, including infertility and higher rates of miscarriages, are also associated with exposure to these toxic substances.

Mining-related social and environmental disruptions often result in mental health challenges for affected communities. The displacement of Indigenous Peoples, the destruction of cultural ties to their land, and the loss of livelihoods contribute to high levels of stress, anxiety, and depression. In some cases, the trauma of violent displacement and ongoing marginalization intensifies these mental health issues, leaving communities with limited resources for support.

Finally, the cumulative effects of toxic exposure, air and water pollution, disease spread, and mental health challenges significantly undermine the well-being of Indigenous Peoples living near mining sites. These health impacts often extend over generations, with increased risks of cancer and chronic diseases such as kidney failure and neurological decline. Addressing these risks requires urgent action, including stronger environmental protections, adherence to Indigenous rights, and robust health interventions to mitigate the long-term effects of mining activities.

3.4 Economic Inequity

While resource extraction generates substantial global revenues, Indigenous Peoples communities often do not see the benefits, contrary to Article 21 of UNDRIP, which emphasizes economic improvement. For example, the Grasberg mine in West Papua has generated immense wealth but at a devastating cost to Indigenous Peoples. Since its inception, the mine has brought poverty, environmental destruction, and human rights abuses to the Amungme and Kamoro communities. Indigenous land was taken without consent, and compensation efforts have been inadequate. Environmental degradation, including massive tailings pollution, has destroyed rivers and traditional livelihoods, while migration policies have marginalized Indigenous populations. Health crises, such as an HIV epidemic, and exploitative industries further exacerbate inequities. Despite calls for justice and self-determination, systemic oppression and exploitation persist, leaving many questioning if recovery is possible.

4. Prevention and Mitigation Over Remedial Action and Related Recommendations

While remedial measures are crucial for addressing harms caused by existing mining projects, a holistic approach must prioritize prevention and mitigation during the **upfront** and **intermediate**

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phases. These phases offer opportunities to safeguard Indigenous Peoples' rights, minimize harm, and align resource extraction with sustainable practices. For new projects, the focus should start with prevention, ensuring risks are addressed before they materialize.

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Human Rights and Indigenous Peoples' Rights:

- Upfront Phase: Full respect of human rights and Indigenous Peoples' rights and especially the right to FPIC as prescribed by the UNDRIP. During the consultation period, aligned with principles of FPIC, engage with Indigenous Peoples communities without coercion and manipulation through designated representatives of the traditional authorities and governance systems, involve with communities well before any decision is made about their lands, resources or people, and provide a full spectrum of information including investor reports, feasibility studies and results of the environmental impact assessment review. Consultation does not equate to consent, and Indigenous Peoples communities retain the right to grant and withhold consent. If new information about a project surfaces, FPIC needs to be sought on an iterative basis.
- Intermediate Phase: Establish a robust monitoring system to detect and address human rights and Indigenous Peoples' rights violations. This system should include a dedicated hotline for community members to report violations, a clear process for prompt action and resolution, and specified penalties for non-compliance. Additionally, it should outline alternative measures, such as litigation, to ensure accountability in cases of inaction.
- **Remedial Phase:** Ensure the full respect of human rights and Indigenous Peoples' rights in the remedial phases of projects, maintaining the monitoring systems

Economic Benefits and Just Transition

Upfront Phase: Implement policies and protocols with Indigenous Peoples to define
whether and how extraction should proceed as aligned with their self-determined
priorities (Article 3, UNDRIP). In the case the project proceeds, with Indigenous
Peoples' community FPIC, establish legally binding revenue-sharing agreements and
benefit-sharing schemes to fund Indigenous-led self-determined projects in, for example,
education, healthcare, and infrastructure in affected communities.

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 Intermediate and Remedial Phases: Support the development of Indigenous-owned enterprises and hybrid economic models that foster financial sovereignty while preserving cultural heritage.

Health Impacts and Mitigation

- Upfront Phase: Conduct comprehensive health baseline studies to evaluate risks to
 Indigenous Peoples communities before project approval, share the results of the study
 with communities and their official representatives, and provide a detailed plan for
 mitigating health risks.
- **Intermediate Phase**: Establish Indigenous-led health monitoring systems during mining operations to address emerging risks promptly.
- **Remedial Phase**: Ensure long-term healthcare infrastructure and resources for affected communities, addressing chronic and cumulative health impacts.

Environmental Degradation and Land Stewardship

- Upfront Phase: Support Indigenous-led land-use plans prioritizing conservation and nomining zones in ecologically and culturally significant areas (Articles 25 and 29, UNDRIP).
- **Intermediate Phase**: Develop co-management frameworks with Indigenous Peoples permanent oversight to prevent environmental degradation during operations.
- **Remedial Phase**: Fund Indigenous-led restoration programs, including soil reclamation, reforestation, water purification, and sustainable land management.

Protection and Autonomy for Indigenous Peoples in Voluntary Isolation and Initial Contact

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International standards recognize that Indigenous Peoples in Voluntary Isolation and Initial Contact are not able to provide Free, Prior, and Informed Consent. As a result, no mining should occur on lands with Indigenous Peoples in Voluntary Isolation and Initial Contact.

Indigenous Peoples in Voluntary Isolation and Initial Contact are particularly vulnerable to potential health impacts from incursions into their traditional territories by outside mining company employees or contractors, who can bring disease.

- **Upfront Phase**: Territories of Indigenous Peoples in Isolation and Initial Contact should be protected as permanent "no-go zones" that are not open to critical mineral extraction. Legally protect territories of Indigenous Peoples in Isolation and Initial Contact as permanently no-mining zones.
- Intermediate Phase: Co-design safeguards and monitoring systems with appropriate national agencies and Indigenous representatives to ensure the integrity of these territories and the enforcement of protections.
- Remedial Phase: Create transparent mechanisms to repair harm caused by previous violations, ensuring accountability and restitution.

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