Just Energy Transition and Indigenous Peoples

IWGIA

INDIGENOUS Debates

Indigenous Debates is a digital magazine which aims to address the struggles, achievements and issues of the Indigenous Peoples in a perspective from within the territories and the communities themselves, with academic knowledge and activist engagement. Our vision is to become a communications medium of reference for Indigenous Peoples, as well as an instrument that contributes to the defence of human rights and nature.

IWGIA is a global human rights organization dedicated to promoting, protecting, and defending the rights of Indigenous Peoples. To achieve this, it documents and monitors the situation of Indigenous Peoples worldwide. Its engine of transformation lies in documentation, advocacy, and local work.

Editor-in-Chief: Alejandro Parellada

Special Editors: Rosario Carmona and Rodion Sulyandziga

General Editor: Damián Andrada

Proofreader: Laura Pérez Portela

English Edition: Sidney Suzanne Coles

Portuguese Edition: Matheus dos Santos da Silveira

Cover Photo: Rodion Sulyandziga

Back Cover Photo: Tularam Lama / Choho

Foreword - Rosario Carmona and Rodion Sulyandziga (IWGIA)

The global energy transition is generating profound contradictions that reveal how renewable energy production risks perpetuating the same extractive patterns that promoted the current climate crisis. While the transition to clean energy is essential for planetary survival, its trajectory threatens to intensify pressures on Indigenous Peoples. Indeed, more than half of the world's reserves of critical minerals are located in their territories.

The dominant narrative of the energy transition, centred on technological solutions and market competitiveness, consistently overlooks fundamental questions of justice, sovereignty, and self-determination. From the lithium triangle of South America to the Arctic tundra, from Nepal's river valleys to Indonesia's nickel-rich islands, Indigenous communities face accelerated resource extraction, environmental degradation, and systematic violations of their rights. These are not isolated incidents but symptoms of a deeper structural failure to recognise Indigenous Peoples as rights holders rather than obstacles to development.

Despite these challenges, Indigenous Peoples are active agents of change. They are articulating alternative visions grounded in Indigenous knowledge systems, reciprocal relationships with nature, and genuine sustainability. Their leadership and innovative projects demonstrate that effective climate solutions must address not only carbon emissions but also the colonial structures that perpetuate both environmental destruction and social injustice.

From local to international levels, Indigenous Peoples aim to ensure their voices shape the transition agenda. At the community level, youth-led initiatives are creating culturally rooted solutions that heal both people and land. At international negotiations, Indigenous delegates are demanding direct access to climate finance, full implementation of Free, Prior and Informed Consent, and recognition of their territorial rights as prerequisites for climate justice. Yet significant barriers remain, as Indigenous participation is often reduced to tokenistic gestures rather than meaningful partnership.

Overcoming these structural obstacles requires a fundamental transformation in how we understand the root causes of climate change and conceive and implement climate action. This edition therefore explores pathways towards decolonising climate policy, ensuring Indigenous leadership in governance structures, and recognising Indigenous knowledge systems as essential to planetary survival.

The voices resonating throughout this special edition are unequivocal: a transition that sacrifices Indigenous lands, pollutes sacred waters, and violates fundamental human rights is neither just nor sustainable. It is the continuation of inequity under a new, green banner. Indigenous Peoples remind the world that the true response to our planetary crisis calls not only for new technologies but for new relationships with the Earth, with one another, and with those whose lifeways have nurtured biodiversity for millennia. As we face this pivotal moment, Indigenous voices, knowledge, and leadership must be the foundation of any path forward.

A Just Energy Transition? The Impacts of Lithium Extraction on the Andean Salt Flats of Argentina, Bolivia, and Chile

The rapid extraction of lithium from the high Andean salt flats has caused serious harm to Indigenous Peoples' right to a healthy environment and access to water. It has particularly affected traditional activities such as camelid herding (llamas, guanacos, and vicuñas) and the cultivation of quinoa and maize. Given the central role that lithium now plays globally in the energy transition, and the concentration of its reserves in this region, it is crucial to ask whether the transition is truly just for these peoples and their communities. All the evidence suggests that it is not — and that fundamental changes are urgently needed.

By José Aylwin

Due to the climate crisis caused by the intensive use of fossil fuels and polluting industrial development processes, States have committed to advancing the transition towards renewable energy sources. However, the energy transition — as agreed upon by States through various international agreements — demands the intensive use of natural resources such as copper, cobalt, nickel, manganese, and lithium. This has led to an unprecedented expansion of extraction into pristine territories and ecosystems, many of which have been traditionally inhabited by Indigenous Peoples.

In this context, lithium has become a strategic resource. As an alkaline metal found in both rocks and in marine and continental waters, it possesses properties that make it ideal for energy storage. As a result, lithium has become a key mineral in the production of rechargeable batteries. Demand for lithium has grown exponentially in recent years and is expected to increase eighteenfold by 2030 and sixtyfold by 2050.

The so-called "lithium triangle", encompassing deposits located in the high Andean salt flats of Argentina, Bolivia, and Chile (ABC region), has gained global significance, containing 53% of the world's identified lithium reserves. Production from these brine deposits, combined with hard-rock lithium extraction in Australia, accounted for 75% of global production in 2023. Argentina and Chile alone contributed one-third of the world's total lithium output. Although Bolivia's production is still in its early stages, its salt flats contain the world's largest known lithium reserves.

The Development of Lithium in the High Andean Salt Flats

In Chile, lithium extraction in the Atacama Salt Flat began in the 1980s under state leadership. Sociedad Química y Minera de Chile (SQM) and Albemarle, the companies that now dominate the market, are however controlled by private national and international conglomerates from the United States and China. Chile is currently the world's second-largest lithium producer, after Australia, and has been implementing a National Lithium Strategy since 2023. Meanwhile, the state-owned company CODELCO, the world's leading copper producer, has partnered with SQM to exploit lithium from the Atacama Salt Flat and has acquired a project in the Maricunga Salt Flat, located within the traditional territory of the Colla people. In 2024, the government invited foreign investors to exploit other salt flats, with nearly 50 companies responding.

In Argentina, lithium extraction began in 1997 when the U.S.-based FMC Corporation initiated operations at the Salar del Hombre Muerto in the province of Catamarca. In the 21st century, new projects were launched in Jujuy, Salta, and Catamarca, particularly at the Cauchari-Olaroz and Pastos Grandes salt flats. Argentina is the world's fifth-largest lithium producer, with an 87.5% increase in annual production in 2024. Today, pressure from the industry, along with provincial and federal legislation promoted by the government of Javier Milei, is extending to potential deposits in the Salinas Grandes and Laguna de Guayatayoc basins, further escalating social conflict.

In Bolivia, lithium exploration in the Salar de Uyuni began in the 1970s and, in 1980, the government granted a license to the American company, Lithium Corporation (Lithco), whose presence was however short-lived. In 2008, the government of Evo Morales introduced a policy of state control and established a plan for lithium industrialization: pilot plants were set up, and agreements were signed with foreign companies. Lithium carbonate production, which began in 2013, remains limited due to technological gaps, administrative challenges, and social conflicts. Since 2017, the state-owned company, Yacimientos de Litio Bolivianos (YLB), has been responsible for development and has called on foreign companies to submit proposals for Direct Lithium Extraction (DLE) in Uyuni and six other salt flats. Following processes marked by a lack of transparency, the Russian-based Uranium One Group and the Chinese Hong Kong CBC Investment Limited were selected.

The high Andean salt flats of Argentina, Bolivia, and Chile (ABC) are territories traditionally inhabited by various Indigenous Peoples. For over 13,000 years, these communities have developed an agro-pastoral culture adapted to high-altitude ecosystems ranging from 2,000 to 4,000 meters above sea level. It is estimated that over a dozen Indigenous Peoples live around these areas, such as the Aymara, Quechua, Lipeño, Atacameño, and Colla, descendants of the Tiwanaku and Inca cultures, distributed across more than 200 communities. While these communities have diversified in recent decades, incorporating both small and large-scale mining (such as copper and lithium) and tourism, their economies have traditionally centered around the husbandry of camelids (llamas, guanacos, and vicuñas) and the cultivation of traditional crops such as quinoa and maize, which are vital to their cultures and worldviews.

The Impact on Human Rights

Alongside the violation of property rights over their lands and traditionally occupied territories, which, as they are not recognized or titled in favor of the communities, are taken over by companies exploiting lithium, one of the most affected rights is the right to participation, consultation, and consent. With the exception of a few recent cases in Chile and Argentina, lithium operations have not been properly consulted in good faith with the aim of reaching an agreement or consent with the communities that could be directly affected, as required by ILO Convention No. 169.

In the few cases where lithium operations approved by the states have been consulted, they have suffered from procedural shortcomings, being limited to certain aspects of the projects consulted with a few communities. In none of these consultations regarding development plans or large-scale investments with a significant impact on Indigenous territories has free, prior, and informed consent been obtained. Consequently, the right of these peoples to self-determination, as recognized by the United Nations Declaration and the American Declaration on the Rights of Indigenous Peoples, has been violated.

The impacts on Indigenous rights are compounded by the impacts on the environment and water. In the Atacama Salt Flat, the contamination caused by lithium extraction through the removal of brine and its settling in evaporation pools has been confirmed. In 2024, the University of Chile reported that the Atacama Salt Flat was sinking at a rate of 1 to 2 centimeters per year as a result of brine extractions. The same study also showed that the groundwater levels of the salt flat have fallen by more than 10 meters in the last 15 years. This has led to a significant loss of vegetation cover in areas used for agriculture and grazing, as well as the loss of lagoons.

Similar impacts on water have also been documented in the Salar del Hombre Muerto (Argentina), where companies have been operating for decades using the same intensive methods as in Chile. Compensation has rarely been provided for these environmental and social impacts. Far less have the huge profits that companies derive from lithium extraction been shared. In Chile, SQM reported revenues of 7.5 billion dollars in 2023 and 4.5 billion dollars in 2024.

The Injustice of the Energy Transition

To date, the only compensation for the destruction of Indigenous territories has occurred in Chile: in 2016, an agreement was made between Rockwood Lithium (Albemarle) and the Lickanantay people to include them in the benefits of lithium exploitation. Similarly, in 2018, the Production Development Corporation (CORFO, from Spanish: Corporación de Fomento de la Producción) signed an agreement with Sociedad Química y Minera de Chile: while the state agency authorized the company to extend its operations in the Atacama Salt Flat until 2030, SQM committed to making annual contributions to the Atacama communities. However, since the communities were not consulted, the agreement was challenged by the Atacameño Peoples Council.

Thus far, lithium development in Argentina, Bolivia, and Chile has caused significant violations of the rights of Indigenous Peoples living in the high Andean salt flats, as well as damage to the environment and water resources. Given

lithium's central role in the global energy transition and the increasing importance of the lithium reserves in the Andean salt flats in recent years, it is crucial to ask whether this transition is truly fair to the peoples living in these salt flats. All signs indicate that it is not, and that fundamental changes are needed to ensure that the energy transition is genuinely fair.

As highlighted by the Indigenous Peoples' Rights International (IPRI) report and the report from the Center for Information on Business and Human Rights (CIEDH) on Indigenous Peoples and the Just Transition, for the energy transition to be truly just, both states and companies must ensure respect for Indigenous Peoples' rights, including the right to consent, participation in benefits, and compensation for any damages caused. This is especially crucial when their territories are being impacted by natural resource extraction and processing projects. There is still a long road ahead to ensure that lithium development in the Andean salt flats of Argentina, Bolivia, and Chile is part of the "just energy transition" that states and companies claim to be promoting.

Indigenous communities in Purmamarca (Argentina) opposing the constitutional reform that facilitates lithium extraction. Photo: José Aylwin

José Aylwin is a lawyer at the Observatorio Ciudadano and a member of the Chilean Civil Society Platform on Human Rights and Business.

From Nickel to Lithium: Nornickel, Indigenous Rights, and the Dilemma of a Green Economy in the Arctic

As the world shifts to electric vehicles and renewable energy, the demand for lithium, a key component of batteries, has skyrocketed. The Arctic, rich in untapped lithium reserves, and its Indigenous Peoples are now at the forefront of this "white gold" rush. This article examines Nornickel's dual identity: as a self-proclaimed champion of Russia's green energy future, yet a notorious perpetrator of environmental destruction and Indigenous rights violations in the Arctic. It exposes the hidden costs borne by Arctic indigenous communities and fragile ecosystems, challenging the resource-intensive sustainability narratives.

By Indigenous Debates

The Arctic, a region of striking beauty and extreme vulnerability, has once again become a battleground for resource extraction. Among these resources, Lithium, vital for batteries in electric vehicles and renewable energy storage, has made the region a key player in the global green economy. Yet, the emergence of the Arctic's "lithium frontier" presents a critical dilemma—advancing climate solutions while endangering one of the planet's most fragile ecosystems through environmental degradation and social disruption.

At the heart of this tension lies Polar Lithium, a joint venture between the companies Nornickel and Rosatom, tasked with developing Kolmozerskoye, Russia's largest lithium deposit in the Murmansk Region. While the project promises to bolster the country's strategic position in the global lithium market, it also raises significant concerns for the Indigenous Sámi People whose ancestral lands are directly impacted.

Lithium's Role in the Global Economy and Russia's New Focus

Lithium, coined as the "white gold" and "new oil" of the renewable revolution, is shifting global markets. Currently, battery production accounts for 74% of global lithium demand, and this share is expected to grow dramatically as electric vehicle adoption and renewable energy storage systems expand. By 2030, lithium demand is expected to increase 18-fold compared to 2021, with a staggering 60-fold surge anticipated by 2050. Notably, 80% of global lithium deposits are located on lands historically significant to Indigenous Peoples.

Recognizing that the growing demand for raw materials like lithium will, in turn, reshape and possibly shift the focus of geopolitical power, Russia has urgently prioritized developing its domestic lithium capacity to reduce reliance on imports. The country has large lithium ore reserves,

accounting for 10% of global reserves (in addition to two of Ukraine's four lithium deposits, which Russia seized control of since its invasion in 2022). Deposits previously abandoned due to non-viability are now seen as critical for strengthening the country's domestic supply chain. Accordingly, Russia is rapidly advancing lithium ore mining projects at the Zavitinskoye, Polmostundrovskoye, Kovyktinskoye, Yaraktinskoye and Kolmozerskoye deposits with accelerated development planned between 2023 and 2030 to meet most of the growing domestic demand.

In February 2023, Polar Lithium, a collaboration between Nornickel and Rosatom, was awarded the exclusive right to exploit Kolmozerskoye, Russia's largest lithium deposit. The project, located in the Murmansk Region, aligns with broader plans to reduce the country's dependence on imported lithium and battery components and is expected to produce 45,000 tonnes of lithium carbonate and hydroxide (key materials for battery production) annually. Awarded through an auction by Russia's Federal Agency for Subsoil Resources Management, the project has a 20-year subsoil use license with a starting bid of 19 million USD.

Extensive exploration drilling—184 wells totaling over 40 km—was completed in 2023 and 2024, signaling Nornickel's potential pivot to lithium mining as part of its broader strategy. Rosatom is also constructing a battery factory in Kaliningrad, which is set to produce batteries for 50,000 electric vehicles annually starting in 2025. Another facility is planned, though its location remains undisclosed.

Russia advances with lithium exploitation in Murmansk. Photo: Konstantin Mednikov

Impacts of Lithium Extraction & Indigenous Communities

Nornickel is the foremost producer of nickel, palladium, and platinum globally, and is also the leading mining and metals enterprise in Russia. Today, driven by global market trends and geopolitical pressures, this global mining giant, with a controversial history of environmental and social harm, is rapidly positioning itself as a major player in Arctic lithium extraction.

Whereas the company's dominance in Arctic mining and its established infrastructure position Nornickel as a leader in the new frontier, its history casts a long shadow. Past incidents, such as the catastrophic 2020 diesel spill in Norilsk, have underscored its environmental negligence. The company is also responsible for the emission of heavy metals into the atmosphere and the discharge of chemical wastewater into nearby rivers. The potential for similar harm in lithium mining raises questions about whether Nornickel's green energy agenda is a genuine step toward sustainability or merely another platform for resource exploitation.

Bystrinsky mining and processing plant, part of the Nornickel Group. Photo: ViProzherina

Although the project promises economic benefits, it poses severe risks to Arctic ecosystems and Indigenous communities. In particular, the construction of extractive facilities posed a growing challenge to Indigenous nomadic communities. The presence of Nornickel in the region has resulted in a significant reduction in hunting, fishing, and reindeer grounds. While Nornickel has adopted the language of Environmental, Social, and Governance (ESG) principles, portraying itself as a steward of sustainability, its track record suggests otherwise. Investments in emissions reduction have been criticized as superficial, failing to address systemic environmental harm. Similarly, Kolmozerskoye promises economic and strategic gains. Nevertheless, it risks perpetuating cycles of social injustice.

The expansion into lithium mining also represents a potential new pathway for environmental harm, threatening Arctic ecosystems already under strain from climate change and industrial activity. Open-pit mining, the planned extraction method, is one of the most environmentally destructive techniques. It involves removing vast amounts of vegetation, topsoil, and rock, contaminating air and water sources, while causing significant biodiversity loss. Moreover, mining operations could accelerate permafrost degradation, releasing trapped greenhouse gases and further destabilizing the climate.

Indigenous Rights and the Illusion of Consent

Arctic Indigenous communities whose livelihoods depend on reindeer herding, fishing, and hunting are particularly vulnerable. The Kolmozerskoye project threatens their cultural and economic practices, exacerbating the already significant pressures from climate change and industrial encroachment. In fact, lithium mining has already worsened these challenges, displacing communities and eroding cultural practices tied to the land. The Kolmozero region, once home to reindeer herding camps and a meteorological station vital to the Sámi and Komi Peoples, has been deeply affected. When it was announced that lithium extraction would take place in the area, the Indigenous communities chose to leave their ancestral lands. The reindeer herding enterprise "Tundra," managing 20,000 reindeer, faces potential collapse due to habitat destruction and pollution.

The superficial engagement of Indigenous communities further exacerbates the lingering distrust of industrial projects. All decisions concerning the extractive industry generally occur behind closed doors without much consultation with the people affected about their needs or interests. Despite Nornickel's assurances and the project's narrative of fostering a "cleaner world" and engaging with Indigenous Peoples, Sámi residents have raised concerns about the superficial nature of the consultations, noting that only a small fraction of the Sámi population was surveyed. Only 50 Sámi individuals were consulted, despite the region being home to approximately 2,500 Sámi people.

While Nornickel claims adherence to the principle of Free, Prior, and Informed Consent (FPIC), communities are often left with little choice in practice. Instead of genuine dialogue, Nornickel presents the so-called "preferential deals," effectively pressuring communities into relocation. These tactics reflect deeper structural issues:

existing governance structures, including Russian laws and international frameworks like the Arctic Council, have largely failed to protect Indigenous rights, leaving communities vulnerable to exploitation and displacement. Nornickel's operations reinforce this gap, avoiding meaningful consultation with affected communities.

While branded as FPIC, such practices erode Indigenous sovereignty and perpetuate systemic injustice, highlighting the significant power imbalance between industrial developers and economically vulnerable Indigenous populations. Companies exploit this vulnerability by offering minor incentives, while the consent they secure serves to legitimize their activities. The result is a deeply imbalanced transaction that leaves Indigenous communities with little more than unmet promises and the burden of exploitation. In the hands of companies like Nornickel, FPIC becomes a superficial mechanism, masking underlying coercion and perpetuating the systemic erosion of Indigenous rights and autonomy.

Towards a Just Transition

As nations seek to meet climate targets, the stakes for the Arctic's ecosystems and peoples have never been higher. The region has been eyed as a major site for green energy projects, including wind farms, solar power, and hydropower. Indigenous communities are once again caught in the middle of the green wars.

Nornickel, a company that portrays itself as a leader in Russia's green energy ambitions, is deeply tainted by a legacy of environmental destruction and violations of Indigenous rights. The Kolmozerskoye project and similar initiatives highlight the urgent need for a global dialogue on the ethics of Arctic resource extraction. The questions remain: Will Arctic Indigenous peoples have a say in shaping the future of their lands and resources in the race for green energy? Or will the pursuit of green energy come at the expense of the Arctic's ecosystems and peoples? These questions are particularly pressing given the geopolitical and economic pressures driving Arctic resource extraction, including the involvement of state-backed corporations like Rosatom and Nornickel. The answer will shape the future of the Arctic and its role in the global green economy.

Like any other land-intensive extractive initiative, the development of green mega-projects is prone to provoke conflicts with the communities affected at the local level. It can, therefore, easily renew historical processes of dispossession and colonialism and undermine decades of hard-won progress. The Arctic's lithium frontier reflects the contradictions of a green economy reliant on resource-intensive practices and encapsulates the paradox of the green economy: resources essential for sustainability threaten to undermine the very goals they aim to achieve. A sustainable future requires not just technological innovation but also a commitment to equity, accountability, and ecological stewardship. Without these measures, the pursuit of "white gold" may leave behind a legacy of loss rather than progress.

On the contrary, a Just Transition framework emphasizes fairness and inclusivity in the shift toward a green economy, ensuring that Indigenous communities, ecosystems, and local stakeholders are prioritized rather than marginalized. In the Arctic context, a just transition framework must include:

1. Participatory Governance: Indigenous Peoples, including the Sámi, must be actively involved in decision-making processes at all stages of resource extraction projects. This requires formal mechanisms for consultation and consent with veto power over projects that affect their lands.

2. Benefit-Sharing Mechanisms: Revenue generated from Arctic lithium extraction must be equitably distributed to Indigenous communities. This could include, but is not limited to, royalty payments, investment in local infrastructure, and funding for cultural preservation programs. A portion of profits from projects like Kolmozerskoye should fund community-led initiatives, such as renewable energy systems, education, and healthcare, empowering Indigenous Peoples to shape their own sustainable futures.

3. Legal Protections for Indigenous Rights: Strengthened legal frameworks should designate no-go zones for industrial activity in culturally or ecologically significant areas.

4. Environmental Stewardship: Mining operations must adhere to stringent environmental standards, with mandatory third-party audits and real-time monitoring of ecological impacts.

Mining activity in Norilsk, as seen from Talnakh. Photo: Ninaras

Due to the country's political context, the authors prefer to remain anonymous.

The Unseen Cost of a 'Just Transition': Indigenous Rights at Risk in Nepal's Renewable Energy Projects

The concept of just transition is central to the global discourse on climate change, environmental justice, and sustainable development. It promises to ensure that no people, workers, regions, or sectors are left behind in the shift from a high-carbon to a low-carbon economy. For Indigenous Peoples, 'just transition' is not merely about shifting to renewable energy; it is about recognizing their rights, sovereignty, and authority over ancestral lands, waters, and resources. Indigenous Peoples view the Earth as sacred, not as a resource to be exploited. This perspective is completely denied in Nepal's ambitious hydropower plans.

By Durga Mani Rai

Nepal, a small Himalayan nation with a total area of 147,181 square kilometers, is nestled between China and India. Known as the 'Third Pole' and the 'Asian Freshwater Tower,' it is home to over 6,000 rivers, with an estimated theoretical hydropower potential of approximately 83,000 MW. Nepal ranks as one of the world's richest countries in water resources. The country has long viewed hydropower as the key to its economic transformation. The government has prioritized hydropower development not only for energy transition and climate mitigation but also as a pathway to economic prosperity.

According to the 2021 population census report, Indigenous Peoples, also known as Adivasi Janajati, make up around 35.08% of Nepal's total population of 29,164,578. However, Indigenous experts, scholars, and organizations argue that their population exceeds 50%. There are 60 Indigenous groups officially recognized, while the 2021 census report lists 19 additional Indigenous groups that have yet to be recognized.

Indigenous Peoples in Nepal have endured centuries of systematic discrimination, colonization, racism, exclusion, and marginalization in social, cultural, political, and economic spheres. Over the past 250 years, the modernization efforts—such as state-building, land and resource nationalization, cultural assimilation, territorial reorganization, power centralization, infrastructure development, forced labor, and the shift from feudalism to capitalism—have significantly harmed Indigenous Peoples. Nepali society remains highly stratified, with the state-imposed Hindu caste system favoring upper castes (Bahun and Chhetri), who occupy key positions in the state. Nearly half of the population within 90% of Indigenous groups lives in extreme poverty.

Legal Commitments vs. Threats

National Climate Change Policy 2019 aims to reduce the vulnerabilities of communities, build the resilience of ecosystems, and mobilize international financial resources in a just manner to contribute to the socio-economic prosperity of the nation by building a climate-resilient society. Nepal's Long-term Strategy for Net-Zero Emissions 2021 aims to achieve net-zero greenhouse gas emissions by 2045.

During the 28th Conference of the Parties (COP 28) to the United Nations Framework Convention on Climate Change held in December 2023 in Dubai, Nepal committed to achieving net-zero greenhouse gas emissions and fully utilizing hydropower potentials to secure clean energy. The energy transition plan outlined in the Second Nationally Determined Contribution of 2020 aims to generate 15,000 MW (1,400 MW baseline in 2021) of clean energy by 2030. However, it aims to generate only 5,000 MW using national resources. The Fifteenth Plan (Fiscal Year 2019/20 – 2023/24) aims to develop 40,000 MW of electricity by 2044.

Nepal ratified the International Labour Organization (ILO) Convention No.169 and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in 2007. Articles 51(b)(3) and 51(j)(8) of the Constitution of Nepal 2015 commit to implementing international treaties and ensuring Indigenous Peoples' rights to a dignified life, identity, and participation in decision-making processes. In 2023, the Supreme Court of Nepal issued a mandamus order directing the government to implement the ILO Convention 169, UNDRIP, the UN Guiding Principles on Business and Human Rights, and the Declaration on the Right to Development in the context of development projects. Yet, these treaties have not translated into meaningful change on the ground.

The Committee on the Elimination of Racial Discrimination (CERD) has expressed concerns about the absence of laws guaranteeing Indigenous Peoples' rights to own, use, and develop their traditional lands and resources. Despite Nepal's legal frameworks, Indigenous Peoples continue to face systemic exclusion.

Indigenous Peoples are defending their land, resources, and self-determination against the threat posed by clean energy projects, which have led to land dispossession, forced evictions, militarization, and environmental harm. These projects jeopardize Indigenous cultural identity, spirituality, and livelihoods. Despite growing movements advocating for sovereignty and self-determination, the government and developers continue to push these aggressive energy projects in the name of development and decarbonizing the economy.

Case Studies: The Human Cost of Energy Projects

Currently, 81 hydropower projects are in operation, 180 are under construction, and 311 are undergoing license surveys. The state, private entities, public institutions, and International Financial Institutions are investing in these projects as they continue to commit to increasing their roles as climate banks. Nearly all of them are located within the traditional territories of Indigenous Peoples. Nevertheless, the Free, Prior and Informed Consent (FPIC) of the affected communities has been routinely ignored. Accor-

dingly, the pursuit of renewable energy projects is revealing the darker side to this transition—one that disproportionately impacts Indigenous Peoples and their rights to land territories and resources and self-determination.

1. World Bank-financed Bharatpur-Bardaghat Transmission Line

The World Bank-financed Bharatpur-Bardaghat 220kV power transmission line, part of the Nepal-India Electricity Transmission and Trade Project, is in operation in Binayi Tribeni Rural Municipality-2, Nawalparasi district. Implemented by the Nepal Electricity Authority, the state-owned corporation, the project caused significant adverse impacts on Indigenous and local communities, including damage to homes, schools, cultural sites, agricultural lands, and the environment, and posed health and safety risks. The affected communities filed a complaint with the World Bank's Inspection Panel on October 18, 2021.

The World Bank Board approved an investigation into the project on March 3, 2022. The parties involved agreed to pursue dispute resolution, and a Dispute Resolution Agreement was signed on April 11, 2023. However, nine signatories withdrew from the process, and those dissatisfied with the resolution filed a case against the project in the Supreme Court with support from the Lawyers' Association for Human Rights of Nepalese Indigenous Peoples (LAHURNIP). The case is still pending.

2. European Investment Bank-Financed Marshyangdi Corridor Transmission Line

The 220 kV Marsyangdi Corridor transmission line project in Lamjung district, funded by the European Investment Bank, has raised significant concerns regarding Indigenous Peoples' rights. The bank has financed €95 million for the project, which is part of a broader investment in Nepal's hydropower sector. The project has failed to uphold the Indigenous Peoples' right to FPIC, violated the bank's social and environmental safeguards, and breached its finance contract with Nepal Electricity Authority. In 2018, affected communities filed a complaint with the bank's accountability office, which issued an investigation report in 2021 that identified grave human rights violations and recommended corrective actions, including halting the Marsyangdi Corridor project until the violations are addressed.

Though the bank suspended further disbursements, the affected communities continue to press for the implementation of the report's recommendations. Despite this, the Nepal Electricity Authority and the bank are pushing forward with the project, supported by security forces. Legal and strategic support for the communities is provided by LAHURNIP and the Accountability Counsel, a US-based legal organization working to hold development banks accountable for their social and environmental policies and human rights.

3. Asian Development Bank-Financed Tamakoshi-Kathmandu Transmission Line

In Kathmandu's Shankharapur municipality, Indigenous Tamang communities have been protesting against the Asian Development Bank-financed Tamakoshi-Kathmandu 200/400 kV Transmission Line and substation projects for the past 5 years. The substation is being built

in a populated area, while the transmission line crosses homes, lands, and sacred sites. In January 2023, the Nepal Electricity Authority deployed security forces to forcefully begin survey work, leading to protests and the detention of 10 community leaders, including women and a minor. Despite filing complaints through multiple grievance mechanisms, including the National Human Rights Commission and the Asian Development Bank Nepal Resident Mission, the communities' demands for FPIC have been ignored.

The government also set up an Armed Police Force camp at the site, further escalating tensions. The use of security forces to suppress Indigenous protests has become a concerning pattern. Police were deployed to intimidate and arrest community members. On 16 January 2025, 18 protesters were brutally beaten and arrested, with six detained for nine days and coerced into signing agreements to stop their protests, criminalizing their resistance. On February 4, LAHURNIP filed a complaint with the complaint mechanism of the Asian Development Bank.

A Call for a Truly Just Transition

Nepal's transition to renewable energy must not come at the expense of Indigenous Peoples' rights. A just transition is not only about reducing carbon emissions; it must also center the rights, dignity, and self-determination of the Indigenous Peoples who have stewarded the Earth for generations.

The cases in Nawalparasi, Lamjung, and Shankharapur are just a few examples of how this transition is negatively affecting Indigenous Peoples in Nepal. It is the legal duty of the Government of Nepal to translate ILO Convention No.169, the UNDRIP, and court orders into action to ensure that the just transition is genuinely just for Indigenous Peoples. It is imperative that the state, policymakers, developers, and International Financial Institutions respect the rights of Indigenous Peoples and sovereignty in the context of the just transition.

Will Nepal's energy transition become a model for environmental justice, or will it continue to prioritize economic growth at the expense of its Indigenous Peoples? The answer depends on whether the state, policymakers, developers, and international financiers are willing to listen to the voices of those who stand to lose the most in this transition.

Durga Mani Rai (YAMPHU) is an Indigenous lawyer, human rights defender and a secretariat member of the Lawyers' Association for Human Rights of Nepalese Indigenous Peoples (LAHURNIP).

‘mînawâchihiwewi-ne-wîkiwan/Healing Our Home: Buildings of the Land’

The words ‘mînawâchihiwewi-ne-wîkiwan/Healing Our Home: buildings of the Land’ go far beyond a clean energy project title. They are interconnected to the Moose Cree ways of being. That means there is life in the words that extend to the energy-efficient homes being designed and built through this work. This is about creating something that is ‘of’ the land, which is a relational approach grounded in Indigenous teachings that diverges from mainstream approaches within clean energy and energy efficiency and housing sectors.

By Bohdana Chiupka-Innes, Freddie Huppé Campbell, Mackenzie Roop and Paulina Larreategui

Moose Cree First Nation is a Cree Nation whose traditional territory overlaps with the Muskegowuk Territory and extends from southern James Bay along Moose River down to Hearst, Ontario, and into Quebec along the border.

The Moose Cree People understand the world as they are all related to Mother Earth’s creations. Everything is interconnected with one another to achieve harmony and balance. This is the Cree way of life, which is called ililiwi-pimâtisîwin. Due to colonization, the homes stopped reflecting the Moose Cree People and how they live.

Bohdana Chiupka-Innes is a Moose Cree woman and one of the few Indigenous intern architects in so-called Canada. She has dedicated her career to revitalizing her culture and ways of being through her work.

Bohdana is leading the ‘mînawâchihiwewi-ne-wîkiwan’ project alongside her Nation to bring ililiwi-pimâtisîwin back into community housing. The community of Moose Cree is well involved and has been engaged at every stage of this project, including its inception being grounded in the extensive engagement of the Community Comprehensive Plan.

Bohdana’s groundwork for this project was supported through Indigenous Clean Energy’s ImaGENation, a capacity-building program supporting Indigenous youth exploring clean and energy-efficient projects for their communities. This formed the basis of her master’s in architecture thesis from Laurentian University. She has been able to continue realizing her thesis work through her internship with J.L. Richards & Associates Limited (JLR) architecture firm. The Moose Cree First Nation Housing Authority, JLR, Bohdana and the Nation are working in partnership to create the MCFN Housing Prototype.

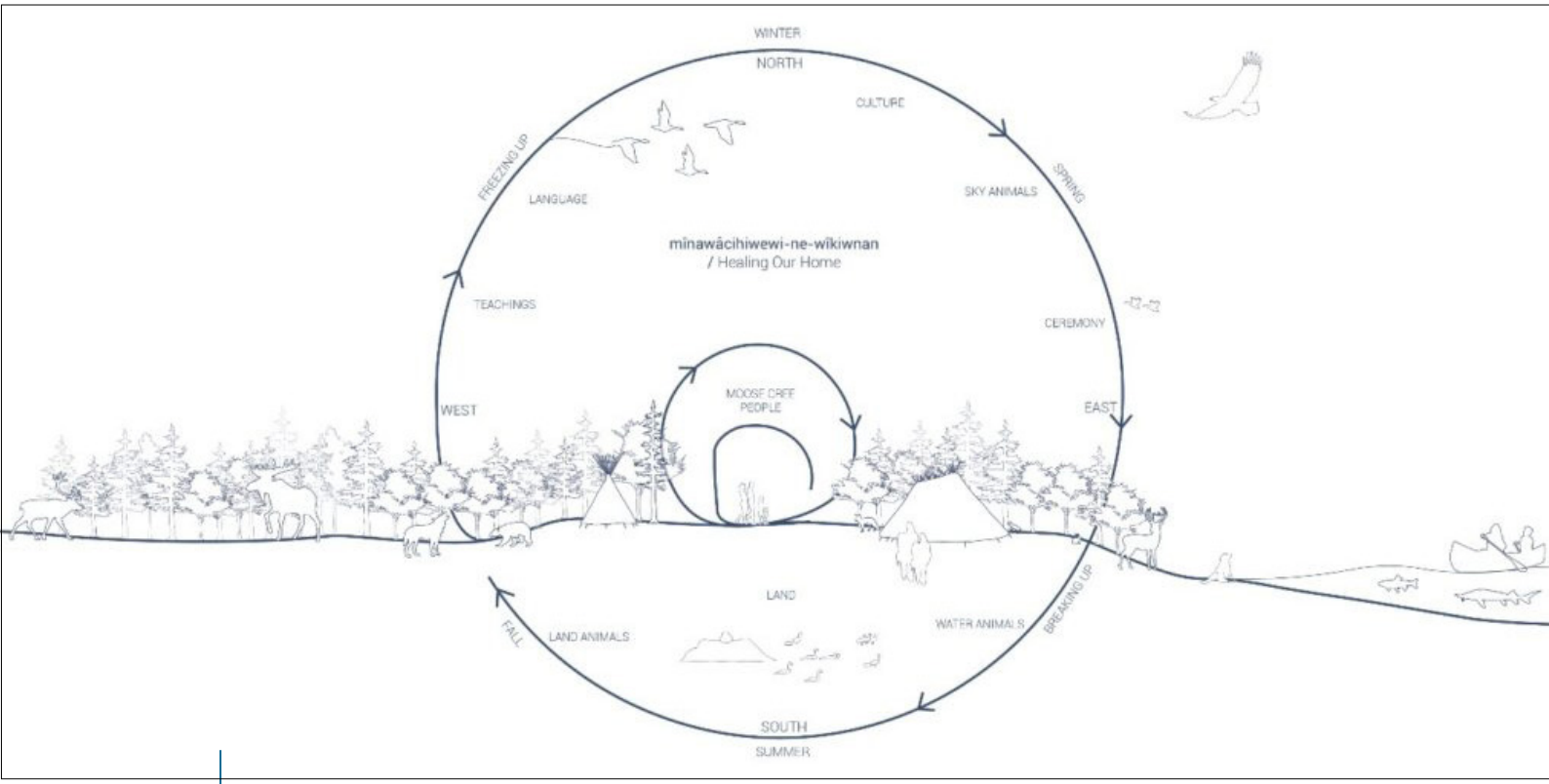
This first housing prototype was designed to reflect Moose Cree’s traditional structure of cook tents while achieving national Net-Zero Energy standards. It is now going through feasibility stu-

dies, modularization standards, and scalability assessments. This is the story of how one youth followed her community's call to create a path towards living sustainably, with pride, together again.

History of the Moose Cree

Moose Cree People have lived on their traditional homelands for thousands of years in reciprocity with Mother Earth and the beings within her – ililiwi-pimâtisîwin (Cree way of life). Moose Factory Island has always been a gathering place for all families in the summer months.

The process of settler-colonization in Canada came hand in hand with the development of global capital markets. The Moose Cree Peoples and British settlers' trading relationship led to the Hudson's Bay Company establishing its second post in Moose Factory in 1673. The lands, waters, and animals that were harmonious in traditional economies were, for the first time, subject to the demands of European capitalism. This supply was only to be made possible by establishing legal practices to gain control over Aboriginally governed lands and resources. The Crown eventually dominated social, property, and land laws by legislating the "Indian Act" in 1876 – the only legislation in Canada that establishes rights and freedoms of an individual race, including property, and forced entire Nations into administrative, economic, and social boundaries of control.



For the Moose Cree people, Earth and Culture are deeply intertwined: they cannot be understood separately. Photo: Bohdana Chiupka Innes

The Moose buildings of the Land Cree remained tied to their homelands, despite residential schools and enforced resource control that occurred before the signing of Treaty 9 in 1905. This resulted in the Canadian government creating two reservations for the Moose Cree people. One of the reservations, 299 hectares in size, is located on Moose Factory Island, called 'Factory Island 1', and is where Innes' Moose Cree First Nation relatives live today. The second, 'Moose Factory 68', is 17,094 hectares, and remains undeveloped on the east side of the Moose River 15 km south of Moose Factory Island.

The Breakdown of the Moose Cree Way of Life

The loss of self-government forced Indigenous populations into inadequate housing in tiny reservation boundaries, often in random or unproductive areas that were not reflective of the Nations' traditional usages. In addition, the designation of British crown lands and public lands allowed for active forms of legalizing land dispossession over traditional productive grounds and limiting traditional activities.

This new situation affected the boundaries of traditional harvesting economies and ways of life, forever changing the experience of quality of life and shelter that communities' unique practices and knowledges were rich with. Traditional teachings and spiritual foundations of governance were lost, the Moose Cree way of life broken, and intergenerational trauma led to families becoming more and more dependent on the new Canadian government and colonial way of life.

Canadian government-imposed housing and infrastructure resulted in inadequate environmental design, a lack of investment in quality materials, and a lack of incorporation of cultural-social aspects such as intergenerational living within the Moose Cree First Nation. This situation is prominent across the country as housing in Indigenous communities, due to colonially enforced housing standards, has become famous for influencing a lower standard of living and longevity, factoring health, infrastructural safety, unaffordability, and overcrowding.

The effects of colonization are still occurring today, as the Moose Cree people have suffered for many generations. Having a home that reflects traditional ways and values of life will help ensure that infrastructure meets real needs and is designed for the environment, therefore actualizing sustainable living.

Community Driven, Project-Based Innovation and Solution

Bohdana was supported to do this project through the ImaGENation program at Indigenous Clean Energy. ImaGENation is an Indigenous Clean Energy capacity-building program that supports Indigenous youth-led clean energy projects grounded in kinship, mentorship, and a shared energy future.With support through this program, she researched and designed a prototype net-zero home and housing development plan that responded to and built from her community's past engagement findings of values, interests, and long-term goals.

The Moose Cree First Nation Comprehensive Community Plan (CCP) is a living document created in 2018 that outlines the Nation's future vision and strategy. The CCP engaged over 1000 community members through 57 community events. Bohdana Innes envisioned the 'mî-

nawâchihiwewi-ne-wîkiwan/Healing Our Home: buildings of the Land' project to incorporate and connect to her Nation's CCP.

- Okimawiwin (education): the prototype includes a cook tent to share traditional teachings around food sovereignty and a space for intergenerational education

- Milopimatisiwin (health): the cook tent offers family and community nourishment in addition to the environmentally-specific design of the home, which contributes to healthier and safer living

- Uski nesta ka itakwaki uskeek (land and resources): proposing a design that focuses on protecting the Land through Land-based activities to teach traditional harvesting

- Waakoomitowin (social): including appropriate spaces for traditional gatherings to heal and connect back with the community's traditions, in addition to sizeable rooms designed for larger families

- Eshikeeshowaywin nesta atuskanaysiwin (language and culture): as language and culture allow the community to stay connected to their ancestors, the project creates an opportunity for language and culture teaching programs, in addition to language being embedded into the design and different elements of this project.

Wâskâhikana nešta Ihtâwinihkewin (housing and infrastructure): the Housing Design Prototype incorporates the Land and most importantly the Cree way of life.

The process of designing the project involved the community at every stage. Bohdana took a community-led approach, as illustrated in Image 2 below, which begins with understanding the land and history of the people and ensures those values are incorporated throughout the process. By involving every level of the community, from youth to carers to elders, in engagement and with guidance from an informed advisory board, the engagement timeline was enjoyed by feasts, gatherings, feedback discussions, and community governance activities. In this way, the home's design revolved around community-centered solutions reflecting cultural values and traditional ways of life. The process of input is continued and living as the project gets further into feasibility studies, modularity production, and scalability development.

Net-Zero Standards: Moose Cree Community Housing Prototype

The prototype house will define a new construction standard for the community and within the Mushkegowuk area. This project was designed to test better building solutions for the environment, and will be moving into construction phases before the next housing development is built in the community.

The Moose Cree Housing Design Prototype incorporates the unique perspectives of Moose Cree People, reflecting their cultural values and traditional way of life. The prototype incorporates social gathering spaces such as the cook tent for traditional cooking and the garage for traditional harvesting activities, as shown in illustration 3. The house designs are adapted to different family sizes with a modular, multi-generational approach. For example, larger houses are accessibly designed to connect to elders' suites for elders to be close to their families while

living independently in extreme winter settings.

The prototype design considers three different sizes of houses. The first design is a core home with a 2-bedroom unit for couples, singles, or small families that can be expanded as the family grows. The second design is a 3-bedroom unit, an extension of the core home with an additional room. Lastly, the third design is a 4-bedroom unit with an elder's suite. This unit is designed as two separate spaces connected through a deck and a roof, making it one home. These three designs can be expanded or adapted as the family grows, because additional rooms or an elder's suite can be added. Also, houses come with a detached garage for hunting and harvesting activities.

The prototype's design elements integrate natural visual and energy-efficient design. While stylistically lending to the interconnection of the natural environment, it also incorporates energy-efficient design suited for heat fluctuations and weather patterns typically experienced by the northern community. It also incorporates materials from the Land and traditional construction methods, helping upskill the community while using renewable and local materials.

The prototype house will be designed to Net-Zero Energy standards with passive design solutions to reduce heating and cooling within the home. The currently approved design consists of a single 2500 square-foot house with 4-bedroom units, which is 1900sf, and a kookum's (grandma) suite at 600sf. The home's construction includes increased R-values for the building envelope to meet Net-Zero Energy standards, a PV system, an air source heat pump with electrical backup for heating and cooling, a wood stove, an ERV ventilation system, and conventional wood construction.

This home embodies the Moose Cree way of life through its connection with the land, which is connected to all of Mother Earth's creations. Bringing Moose Cree culture back and designing for the land, this work is not only healing families but also healing communities and the land.

Continued Scope of Work

Alongside her Nation, Bohdana will continue to build out her work in the community to meet housing demands for over 300 families. In the short-medium term, she will lead the carrying out of the following projects:

1. Modularizing the housing prototype for scalability for Moose Cree First Nation is essential to work to ensure affordability and replicability for housing in the community. The construction period for this prototype is May-October due to the community location and logistics. Additionally, this approach can train locals on how to build energy-efficient homes and can increase the local economy, which will create affordable homes.

2. Housing condition assessments of five existing houses and renovating two houses for energy efficiency. This will allow existing homes to be renovated to a more energy-efficient design. Currently, we have a lot of homes that have unlivable conditions or need minor to major repairs.

3. Community feasibility study for Treaty Land Entitlement (TLE), which is 77 acres on Moose Factory Island. MCFN is anticipating the expansion of the reservation in 5 years. The community plan will highlight commercial, institutional,

residential zones, cultural areas (e.g. outdoor gathering spaces, cultural gathering spaces), and the scalability of the MCFN housing prototype project. The end document will be a feasibility study report.

Due to the upfront community and land kinship work that Bohdana did, in addition to ongoing community planning led by the Nation, all of these projects are interconnected. This is what in-built sustainability planning and action look like. This approach takes time and demonstrates how time is essential to projects that uphold Indigenous, environmental, and human rights.

Youth-led Modelling Energy Efficient Community Housing Futures

Shelter is a basic need, and in so-called Canada, adequate housing is deemed a fundamental human right. The systems that are in place continue to create barriers and inaccessibility for Indigenous Nations to have housing rights met. As a country, and around the globe, there needs to be more equitable support, effort, and resources for Indigenous housing. Projects like Bohdana's pave the way for housing projects that go far beyond baseline standards and create lasting and sustainable change for communities.

This is a living, breathing story of what is possible when Indigenous youth and communities are supported to lead and create their own versions of energy sovereignty. It highlights the importance of taking the time to ground the work in community, ceremony, and the land before, during, and after a clean energy project. This type of approach is inherently connected to the upholding of relational responsibilities, which ensure greater longevity for housing and infrastructure for future generations. Not only is this an example of a project with incredible impact, but it is also one that shows what is possible when communities are at the heart of their homes.

Bohdana Chiupka-Innes is a graduate of the McEwen School of Architecture at Laurentian University and is a member of the Moose Cree First Nation, Mushkegowuk Territory. She currently lives in Ottawa on the Unceded Traditional Territory of the Algonquin Anishinaabeg people and is an Architect Trainee with J.L. Richards & Associates Limited (JLR).

Freddie Huppé Campbell (she/they) holds a Bachelor of Science in Public Policy from the University of Mary and a Master of Science in Conflict Prevention and Peacebuilding from Durham University. Freddie leads the Energy and Climate team at Indigenous Clean Energy, where they work in support of clean energy sovereignty.

Mackenzie Roop holds a B.A. in International Development from McGill University and an M.A. in Indigenous Development Practice from the University of Winnipeg. Her focus is on building cross-jurisdictional relationships and approaches to strengthen Indigenous leadership in the energy sector.

Paulina Larreategui holds a Law Degree from the Catholic University of Ecuador, a Master's Degree in International Relations from FLACSO and is a Johnson-Shoyama PhD candidate in Public Policy from the University of Regina. She currently lives and works in Treaty 4 Territory, where she embraces life's adventures with her family.

Redefining Green: Outcomes and Reflections from the Summit on Indigenous Rights and the Green Economy

On October 8-10, 2024, in Geneva, Switzerland, Indigenous delegations from all seven socio-cultural regions came together to address a fundamental question: How do we ensure the green economy does not become yet another chapter of exploitation but instead a turning point for justice? The summit went beyond voicing concerns—it focused on action, strategy and collective power. Indigenous leaders, activists and allies worked to shape a vision for a just transition that recognizes Indigenous rights, ensures meaningful participation, and confronts the economic structures driving land dispossession and resource extraction. This article presents the key outcomes of the Just Transition and Indigenous Peoples Summit—what was achieved, what remains ahead, and why this moment marks a critical shift in the global conversation.

By Rodion Sulyandziga

The global transition to a green economy is accelerating, driven by the urgent need to reduce carbon emissions and combat climate change. However, this transition is not occurring in a vacuum; it has profound implications for Indigenous Peoples whose lands and livelihoods are increasingly targeted for resource extraction and renewable energy projects. Renewable energy, electric vehicles, and "green" mining are being promoted as solutions to the climate crisis. But if history repeats itself, these industries will expand at the expense of Indigenous lands, rights, and sovereignty.

Indigenous voices have often been excluded from high-level negotiations that determine how resources are extracted and who benefits from them. For the industrial modern world, the green economy is a golden opportunity; for Indigenous Peoples, it is yet another existential threat wrapped in sustainability slogans.

The Just Transition and Indigenous Peoples Summit was a response to these challenges. This Summit marked a historic milestone as the first Indigenous-led gathering focused on reshaping the green economy. For the first time, Indigenous Peoples came together to set the agenda, define priorities, draw lines, and engage directly with global stakeholders on their own terms. Accordingly, they entered the discussion as recognized partners and rights-holders.

The Moment of Truth: Why this Summit was Critical

The concept of a Just Transition, broadly defined, aims to ensure that the shift away from fossil fuels does not exacerbate social inequalities.

Yet, for Indigenous communities, the reality is that the green transition often mirrors past injustices. The mining of lithium, nickel, and cobalt—key materials for battery production—has led to land dispossession, environmental degradation, and the violation of Indigenous rights, as illustrated by the cases of Numu/Nuwu (Northern Paiute) and Newe (Western Shoshone) Indigenous Peoples in the United States, the Lickan Antay People in Chile, and the Indigenous village of Ust-Avam on the Taimyr Peninsula in the Russian Arctic.

Renewable energy infrastructure, including large-scale solar and wind farms, has been developed on Indigenous territories without adequate consultation or consent. The Sámi People's struggle against wind farms has been emblematic in this respect.

The Summit became a defining moment—a test of whether the green economy can break from the past patterns or will be yet another expansion to re-discovered Indigenous lands. It marked a critical turning pointby shifting the conversation from one of recognition to one of concrete demands. Indigenous Peoples articulated a clear position: any transition that disregards Indigenous rights cannot be considered just. This position is supported by international legal frameworks, including the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which enshrines the principle of Free, Prior, and Informed Consent (FPIC) as a legal and ethical obligation.

Photo: Rodion Sulyandziga

The Summit: Key Milestones

The Summit was held over three days, and the work was organized as follows:

Day 1: Setting the Stage – Representatives from seven regions outlined the current state of the green transition and its impacts on Indigenous Peoples. The discussions made it clear: without Indigenous leadership, the transition risks repeating the same extractive patterns of the past.

Day 2: Solutions – Delegates shared models, case studies, and strategies for community resilience, strengthening Indigenous networks, and defining key demands for a Just Transition. The focus was not just on resistance but on building viable alternatives rooted in Indigenous governance and knowledge.

Day 3: Global Connections – The summit culminated in high-level engagements with coalitions, UN agencies, and other global actors, ensuring Indigenous voices are embedded in decision-making spaces. Approval of the Outcome Document. The final discussions underscored the importance of securing a permanent spot for Indigenous Peoples in global decision-making on the green economy.

Summit Goals and Achievements

The Summit set out three core objectives. First, it aimed to consolidate the Indigenous movement on Just transition – a strong, unified network that spans continentsandstrengthens both national and international alliances. The second objective was to providea venue for direct engagement between Indigenous Peoples, global institutions, and major actors shaping the green economy, including: the Initiative for Responsible Mining Assurance (IRMA), the Global Battery Alliance and key corporate players, the World Economic Forum, UN agencies, and international human rights and environmental coalitions. Finally, the Summit aimed to articulate a policy framework that centers Indigenous governance and consent in all transition-related projects.

These objectives were met with notable success through dialogues with the WEF, IRMA, the Global Battery Alliance, and UN bodies. These debates signaled a shift from superficial engagement to substantive discussions. While these discussions remain ongoing, the Summit established an essential precedent: Indigenous Peoples must not only be consulted, but fully engaged into decision-making processes at all levels.

A central argument of the Summit was that the green economy, as currently structured, does not inherently resolve the systemic issues of resource extraction. While it aims to reduce reliance on fossil fuels, it still operates within a profit-driven paradigm that prioritizes resource extraction over environmental sustainability and social equity. The contradiction is apparent: a transition intended to mitigate environmental harm is, in many cases, reproducing it.

The summit's discussions highlighted case studies where Indigenous communities have successfully resisted exploitative projects while promoting alternative models of development. For instance, Indigenous-owned renewable energy initiatives or projects developed in collaboration with Indigenous leaders, have provided viable models for responsible extraction. These examples underscore that the green transition is not inherently exploitative but that its current

trajectory is deeply flawed.

A Seat at the Table and Outcome Document

The Summit was driven by a clear intention – to ensure that Indigenous Peoples not only secure a seat at the table but play a leading role in shaping the Just Transition. This requires moving beyond mere consultation toward genuine leadership, where Indigenous knowledge and rights serve as foundational pillars in the green economy's future.

A major achievement of the Summit was the adoption of an Outcome Document: Principles and Protocols — Just Transition Indigenous Summit, which outlines key principles and policy recommendations that – if implemented – could reshape the structure of the emerging green economy. These principles and recommendations were published on the Summit website, and among them, we can highlight:

Legal enforcement of FPIC: Existing mechanisms for obtaining Indigenous consent are often circumvented or weakened through corporate and governmental loopholes. The document calls for binding legal frameworks that make FPIC a prerequisite for all extractive and energy projects affecting Indigenous lands and territories;

The Summit represented a historic milestone for the transformation of the green economy. Photo: Rodion Sulyandziga

Indigenous-led governance models: Rather than treating Indigenous participation as a procedural formality, the document advocates for Indigenous governance structures to be embedded within regulatory and decision-making frameworks;

Economic equity in resource projects: The document rejects the dominant economic model in which Indigenous communities bear the environmental and social costs of extraction while receiving minimal economic benefits. Instead, it proposes revenue-sharing mechanisms and direct Indigenous ownership of energy and mining projects;

Recognition of Indigenous knowledge systems: The green transition must integrate Indigenous knowledge into climate adaptation and sustainability policies.

Moving Forward: Institutional Accountability and Indigenous Leadership

The Summit was not a conclusion, but a strategic intervention in an ongoing struggle. It served as a pivotal moment to realign priorities and forge new pathways for progress while acknowledging that sustained effort would be required. Key action points moving forward include:

Strengthening Indigenous legal strategies: Indigenous Peoples will pursue stronger legal frameworks at national and international levels.

Expanding Indigenous economic models: Community-led renewable energy projects and ethical resource governance initiatives will be prioritized to demonstrate alternatives to extractive practices. These models emphasize collective ownership, sustainable resource management, and long-term community benefits.

The Summit articulates as another space for Indigenous Peoples to lead development alternatives. Photo: Rodion Sulyandziga

Ensuring institutional accountability: Future engagement with global institutions will focus on holding actors accountable for their commitments to Indigenous rights. This includes advocating for compliance mechanisms that enforce ethical standards in the mining and energy sectors.

Conclusion: A Transition Without Justice Is Not Sustainable

The Summit made one fact unmistakably clear: a just transition cannot be defined solely by environmental metrics; it must be evaluated in terms of social and political justice. A green economy that perpetuates land dispossession, weakens Indigenous sovereignty and prioritizes profit over rights is not a true transition—it is merely a continuation of existing power structures under a new name.

As the global community moves forward, there is an urgent need to shift from superficial commitments to enforceable and bold policies. The just transition cannot be reduced to a mere adjustment of energy systems; it must be a structural transformation that confronts and corrects the historical and ongoing injustices faced by Indigenous Peoples.

The Just Transition and Indigenous Peoples Summit was a step toward this goal, but its success will ultimately be measured by the extent to which global institutions and governments are willing to rebalance control and recognize Indigenous leadership. Without this shift, the promise of a green future will remain fundamentally compromised. The path forward depends on what we do next. And thanks to the Summit, we are ready.

For more information about the Summit on Indigenous Rights and the Green Economy, visit: www.indigenoussummit.org

Rodion Sulyandziga is an indigenous Udege leader from Eastern Siberia (Russia). He is currently Chair of the Summit and the Indigenous Peoples' Global Coordinating Committee (IPGCC). Since 2000, he has served as Director of the Center for Support of Indigenous Peoples of the North/Russian Indigenous Training Center (CSIPN/RITC).

What Does a Just Transition Look Like for Indigenous Peoples?

At the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change (UNFCCC) in Dubai, the world's governments declared the "beginning of the end" of the fossil fuel era, a symbolic milestone framed as a global turning point. But for Indigenous Peoples, that phrase invites a deeper question: Is this the beginning of the end of the extractive model that has long targeted their territories, or the beginning of a new and intensified pressure on the ecosystems and cultures they have safeguarded?

By Galina Angarova and Yblin Román Escobar

The "beginning of the end" of the fossil fuel era phrase signalled a long-overdue consensus on phasing out fossil fuels but failed to confront the underlying economic model driving both climate breakdown and environmental injustice. The dominant solution proposed for the climate crisis is a shift to renewable energy technologies and electric vehicles (batteries), which depend heavily on mineral extraction.

The scramble for the so-called transition minerals, including lithium, cobalt, copper, and nickel, often labelled as critical to the clean energy transition, is driving a global push for more mining. The World Bank forecasts a 500 % increase in demand for these minerals by 2050; the International Energy Agency estimates increases of 40 % for copper and Rare Earth Elements (REEs), 60-70 % for nickel and cobalt and almost 90% for lithium by 2040.

The reality is that more than 54 % of the global reserves for these energy transition minerals lie on or near Indigenous lands. Framing certain minerals as "critical" allows governments to classify mining as a matter of national security or economic emergency, granting companies the right to operate on Indigenous territories without respecting their right to Free Prior and Informed Consent (FPIC). In Latin America – in Chile, Bolivia, and Argentina- nearly 60 % of lithium projects are located on Indigenous Peoples' territories. These operations are advancing under fast-tracked legal frameworks that bypass strong environmental assessments. Also, as Indigenous Peoples have made clear at a recent Andean Summit, the projects violate Indigenous Peoples' right to FPIC, endanger their access to water, and threaten their cultures and traditional livelihoods.

Indigenous Principles for a Just Transition

The Latin American reality is not an exception. Across the globe, energy transition projects con-

tinue to advance without ensuring respect for Indigenous Peoples' rights. At the Indigenous Peoples Summit on Just Transition in Geneva, nearly 100 Indigenous leaders from all seven socio-cultural regions of the world agreed on a first-ever document to define what a just energy transition is from an Indigenous perspective to ensure the transition is fair and equitable.

Indigenous Peoples are not calling for minor reforms to existing frameworks. What they demand is that their rights be respected across the full spectrum of Human Rights and Indigenous Peoples' rights, as outlined by the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). The outcome document from the Geneva Summit, "The Indigenous Peoples' Principles and Protocols for a Just Transition", presents a foundation rooted in ancestral knowledge, legal traditions, and relationships of care and responsibility with the natural world.

These protocols reject extractivism as a starting point. They outline a shift from systems that treat land and water as commodities to frameworks grounded in Indigenous law, consent, and accountability. Land is not a resource to be managed but a living relation to be nurtured and respected. FPIC is not a bureaucratic step, it is a political and legal commitment to Indigenous self-determination.

At a time when the dominant climate discourse prioritises competitiveness, security, and industrial growth, Indigenous Peoples are reminding the world that the real response to the polycrisis crisis is not dominance but justice.

SIRGE coalition meeting in the Atacama Desert, Chile. Photo: SIRGE

Gaps in Global Climate Finance and Governance

The language of a "just transition" has gained prominence in global climate discussions, including at the UNFCCC and the UN Convention on Biological Diversity (CBD). This should involve a process driven by frontline and Indigenous communities that ensures that the move away from extractive economies toward regenerative ones is equitable, democratic, and rooted in self-determination. It prioritizes repairing historical harms, redistributing power and resources, and creating sustainable livelihoods in harmony with Mother Earth.

However, current interpretations of just transition at the COPs remain narrow. They focus primarily on labour transitions, industrial strategy, value additions and supply chain resilience. This framework often sidelines deeper justice dimensions, particularly those raised by Indigenous Peoples, land defenders, and frontline communities. What is left out is land rights, consent, decolonization, and systemic change.

For example, Climate finance mechanisms continue to favour large-scale infrastructure over Indigenous-led systems. At UNFCCC COP26 in 2021 in Glasgow, governments and private funders pledged $1.7 billion USD between 2021–2025 to support Indigenous Peoples and local communities in securing land and resource rights. The pledge was seen as a first step toward centering Indigenous Peoples' rights in climate action, recognizing their vital role in protecting forests and biodiversity. Indigenous Peoples and other communities at the local level that depend on forests manage 50 % of the world's land and safeguard a great percentage of the remaining biodiversity, but they receive less than 1 % of climate finance and under 5 % of environmental aid. Furthermore, most of this finance is absorbed by NGOs, consultants, and agencies rather than reaching communities directly.

The latest data from the Forest Tenure Funders Group 2023-2024 report on the 1,7 USD billion pledge shows some improvement, but it is still far below what their contributions merit. According to the report, Indigenous Peoples' and local communities' organisations received 2.6 % in 2021, 2.1 % in 2022, and 10.6 % in 2023 of the yearly contributions building up the 1,7 USD billion target. Meanwhile, UNFCCC processes continue to privilege market-based solutions and industry partnerships while limiting Indigenous Peoples' ability to shape negotiations.

Indigenous Demands for True Climate Justice

At UNFCCC COPs and other global climate forums, Indigenous Peoples bring demands that are grounded in lived experience, international legislation, and the urgent need to stop the ongoing violation of their rights in the name of climate action. They call for binding legal recognition of their land and territorial rights as the foundational step toward climate justice. Without secure land tenure, the extractive model will continue to override Indigenous governance, regardless of policymakers' "green" intentions.

The principle of FPIC must be fully implemented, not as a procedural formality but as a substantive right. Indigenous communities must lead their own environmental and social assessments of projects that affect them. The growing calls for a global moratorium on mining in Indigenous territories without consent reflect the deep harms

already unfolding in the name of the energy transition. Indigenous leaders have made it clear: decarbonization cannot be used to justify another wave of colonial intrusion.

Equally pressing is the demand for direct, long-term climate finance. Indigenous Peoples face both the disproportionate impacts of Climate Change and the consequences of the solutions put forward to address it. At the same time, they protect biodiversity and ecosystems essential to keeping planetary resilience and stewarding vast carbon sinks. Yet, as mentioned above, they receive less than 1 % of global climate funding. Indigenous Peoples are calling for direct access to funding that is aligned with the UNDRIP, the Paris Agreement and the Convention on Biological Diversity. At the same time, Indigenous governance systems and protocols must be recognized within the formal climate architecture, from Nationally Determined Contributions (NDCs) to global climate financing frameworks.

Also essential is the protection of Indigenous women and land defenders. The targeting and criminalisation of those who speak out against extractive projects are escalating, and international accountability mechanisms must be enforced to safeguard those defending life itself. The transition is not neutral; it is being increasingly militarized, securitized, and imposed. In 2023, at least 196 land and environmental defenders were killed worldwide. Of those, 43 % were Indigenous, an alarming figure that reflects how disproportionately Indigenous communities bear the brunt of violence linked to land and environmental defence.

Finally, what does a just transition look like for Indigenous Peoples? It is not a question of compensation or market incentives, but it is a question of survival, of rights, of relationships. Too often, justice is framed in economic terms, as if value can only be measured by return on investment. But justice is not a balance sheet. There is no price tag on the bond between people and land, no metric that can measure a spiritual relationship with water, or a duty passed down through generations to protect biodiversity.

Galina Angarova (Buryat), Executive Director of the SIRGE Coalition, brings extensive experience in Indigenous Peoples' rights and environmental advocacy. She previously led Cultural Survival and held roles at the Swift Foundation, Tebtebba, and Pacific Environment. Galina has represented Indigenous Peoples at the UN on sustainable development and climate finance, and holds an MPA from the University of New Mexico.

Yblin Román Escobar (Kolla-Quechua descent) is a Policy Adviser at the SIRGE Coalition, advocating for Indigenous Peoples' rights in EU and international policy. She lectures on Sustainability at VIVES University College and is affiliated with Ghent University, where she specializes in Social Life Cycle Impact Assessment. She holds a Ph.D. in Environmental Toxicology and a Master's in Environmental Sciences from Ghent University.

Indigenous Peoples and the Energy Transition: Mining and Pollution in Argentina

For over 50 years, through their steadfast activism, the Indigenous movement has played a key role in the international arena, achieving recognition of our collective rights as peoples within nation-states. Today, climate change — which threatens all of humanity and our Mother Earth — demands that we continue to hold States accountable. Indigenous Peoples are without doubt among those most severely affected by global warming. The energy transition required to address climate change must respect the human rights of Indigenous Peoples, incorporate our ancestral knowledge, and align with the goals of sustainable development.

By Sandra Ceballos

The energy transition — a shift toward a more sustainable energy system — is both urgent and necessary to mitigate climate change and meet the goals of the Paris Agreement. This involves significantly reducing greenhouse gas emissions, lowering energy consumption, and increasing the share of renewable energy sources such as solar, wind, hydroelectric, and geothermal. It also requires decreasing the world's dependence on fossil fuels and fostering innovation and technological development.

Argentina's legal framework on Indigenous Peoples is of constitutional status. It recognizes their pre-existence as distinct peoples, their right to collective ownership of ancestral territories and to management of natural resources. Although Argentina has ratified ILO Convention 169 and endorsed the United Nations Declaration on the Rights of Indigenous Peoples, there are still no national laws regulating collective land ownership or the right to Free, Prior and Informed Consent. As a result, the effective exercise of Indigenous Peoples' specific collective rights is often dependent on the political will of national and provincial governments.

Regulatory Rollbacks and Violations of Rights in Argentina

The Argentine Republic has signed and ratified the Paris Agreement. In December 2020, it submitted its Second Nationally-Determined Contribution (NDC), committing to limiting net greenhouse gas emissions to no more than 359 million metric tons of carbon dioxide by 2030, in line with Article 4.4 of the Agreement. The government's current actions are, however, moving in the opposite direction. President Javier Milei, who denies the existence of climate change and has claimed it is "just another collapsing lie", ordered the withdrawal of Argentina's delegation on the third day of COP29, held in Baku, Azerbaijan — a move that caused significant concern among other delegations.

In recent months, the government has introduced a series of regulatory changes that pose serious threats to the rights of Indigenous communities. These measures dismantle oversight mechanisms for extractive activities and have a severe impact on Indigenous territorial rights. They also encourage the intensified exploitation of natural resources by repealing laws deemed "restrictive" and dismantling state regulatory bodies — signalling a policy of full deregulation in the agricultural, energy, and mining sectors.

Furthermore, the National Executive issued Emergency Decree 1083/2024, which repealed the most recent extension of the Indigenous Territorial Emergency Law. The expiry of this legal protection leaves Indigenous communities at risk of forced evictions — some of which have already begun — and is heightening tensions that need to be urgently addressed through the passage of a law to implement Indigenous communal land ownership. In addition, in 2020, the Inter-American Court of Human Rights issued its ruling in Lhaka Honhat v. Argentina, ordering the State to adopt "legislative and/or other measures to provide legal certainty for the human right to Indigenous communal property".

A New Form of Colonialism

In an increasingly adverse context for Indigenous rights, lithium extraction — a key component of the energy transition — is advancing rapidly. Pía Marchegiani, Deputy Executive Director of the Environment and Natural Resources Foundation (FARN), notes that, in recent years, global demand for lithium has surged, largely driven by mounting pressure from the Global North to accelerate energy transition strategies. "But what about ecosystems and human rights?" she asks.

Indeed, complaints from Indigenous Peoples have intensified in response to the exploitation of natural resources by companies operating with the backing of both provincial and national governments. These operations often ignore environmental impact assessments and violate the human rights of those most affected. While moving away from fossil fuels is undeniably urgent, doing so by replicating the current model of excessive natural resource consumption will only reinforce the very same extractivist logic that underpins today's energy system — a model that is abusive, individualistic, and inherently harmful to both people and the planet.

Lithium extraction has caused significant damage in several regions of Argentina.This is not an isolated phenomenon but part of a long history of plundering and sacrificing natural resources that has repeated itself throughout the continent. Since European colonization, Latin American territories have been treated as raw material reserves for the Global North. In this context, resistance to extractivism represents a continuing struggle to defend Indigenous lands and territories.

Colonial dynamics have intensified across the region in recent decades, marked by an increasing concentration of land and resources in the hands of large foreign corporations, facilitated by local governments. The Indigenous organizations are, however, responding.

Diaguita Women Defenders of Life

In the official discourse promoted by both transnational corporations and local governments, the energy transition is portrayed as the arrival of progress to rural territories. In the province

of Catamarca, media campaigns and official announcements seek to reinforce the idea of the "benefits" that mining would bring. From this perspective, it seems as if domestic economies and local forms of organization are "backward" compared to the innovation and "prosperity" promised by large mining projects, along with the promise of job creation.

The young Indigenous women of the Union of the Diaguita Nation Peoples are promoting a community defence strategy in response to the contradictions posed by the energy transition in their territory. They are rolling out concrete, localized practices that challenge exploitative policies, halt the plundering of their lands, and call for action. The young women from the Yocavil Valley, east of Catamarca, assert that life must be defended in real-time: "We can't just keep watching companies destroy the territories without doing anything."

The Yocavil Valley has a long-standing history of struggle by the peoples who have ancestrally inhabited it. The young Diaguita women leaders state that they are choosing to care for the land today because tomorrow will be too late, emphasizing that progress and development are not the same. Milagros Romero, from the Toro Yaco community, explains that a full life is related to both practice and reflection on how we consume, produce, and care for nature. For this reason, the Union of the Peoples of the Diaguita Nation produces and markets their food, spices and crafts while protecting the natural environment they belong to, all while actively blocking the entry of extractive companies. "We know very well the wealth we have; we do not want their so-called progress. That is why we are organizing to preserve our territory from mining companies," explains Milagros.

Similarly, in December 2024, the Solidarity Union of Communities of the Diaguita Cacano People issued a declaration condemning the presidential decree that repealed the Indigenous Territorial Emergency Law, and they called for the establishment of an Indigenous parliament. The declaration argued that the sole purpose of the decree was to allow unrestricted exploitation of Mother Earth and to dispossess Indigenous communities of their legitimate rights, which are recognized by international treaties and national legislation. Additionally, it warned that the situation had deteriorated because the government deemed the number of registered communities excessive and was labelling many as non-existent.

The Kolla People of Salinas Defend Their Territory Against the Expansion of Lithium Mining

In Jujuy, the communities of the Salinas Grandes and Laguna de Guayatayoc region are facing a serious violation of their human and environmental rights. Mining exploration continues to advance despite the absence of complete and comprehensive environmental impact assessments covering the entire basin, which are essential to accurately identify the real risks in this water-scarce area. The Indigenous Communities' Assembly of Salinas Grandes and Laguna de Guayatayoc has been engaged in decades of struggle and advocacy across multiple arenas. They have even drafted their own Free, Prior, and Informed Consent protocol, which the provincial government has yet to implement.

Additionally, the brothers and sisters of the Kolla people of Jujuy from Salinas Grandes took part in the so-called Third March for Peace, which challenged the then provincial government led by Gerardo Morales in 2023. At that time, the executive branch imposed a provincial constitutional reform favouring resource exploitation at the expense of Indigenous Peoples' rights. Consequently, the communities endured violent repression, various forms of persecution, and the criminalization of social protest.

The Supreme Court of Justice of the Province of Jujuy granted an injunction affirming the right to environmental public information. This ruling benefits the Indigenous communities of Salinas Grandes and Laguna de Guayatayoc, recognizing their right to access reliable environmental information—a right already enshrined in the Escazú Agreement. The legal action was brought by the Foundation for Environment and Natural Resources (FARN) in order to obtain information on lithium and borate mining applications to operate within their territories.

Moreover, in a letter dated 24 February 2025, the Kolla communities of Jujuy received encouraging news: the World Bank has suspended all planned hydrological studies that were to be conducted without consulting or involving the Indigenous communities in the Salinas basin. The financial institution has also ordered the suspension of these studies until all stakeholders can engage in meaningful dialogue.

A Transition That Upholds Human Rights

The energy transition in our countries must represent an opportunity to move toward fairer and more equitable processes of energy production and distribution. In this context, the role of the international human rights protection system is crucial to ensuring respect for and enforcement of human rights within climate crisis solutions.

As stated by the International Forum of Indigenous Peoples on Climate Change in their final advocacy document on "Just Transition" for COP28 of the UNFCCC: "The rights, perspectives, knowledge systems, and lived experiences of Indigenous Peoples must be considered and fully integrated into the definitions, criteria, and implementation of Just Transition projects and programmes."

The normative framework established in the Declaration, alongside the commitments made under the Paris Agreement, moves us closer to the ideal of "justice" in the Energy Transition. The current extraction of transition minerals such as lithium, copper, and nickel on Indigenous territories is, however, happening without their Free, Prior and Informed Consent—falling far short of what justice requires.

Sandra Ceballos is President of the Association of Indigenous Women Lawyers (AMAI) and a professor at the Faculty of Law of the University of Buenos Aires (UBA). She specializes in Indigenous Peoples, Human Rights, and International Cooperation, holding a Master's degree in International Human Rights Law from UBA.

Bolivia: The Energy Transition and Indigenous Peoples' Rights in the Face of Critical Mineral Extraction

As attention remains focused on lithium extraction, Indigenous Ayoreo, Chiquitano, and Guarayo communities are facing a new threat to their territories: the expansion of rare earth and critical mineral mining. These projects, which are presented as essential to a so-called green energy transition, risk deepening the extractivist model. There is an urgent need to restore effective safeguards and to guarantee the implementation of Free, Prior and Informed Consent processes, in full respect of Indigenous Peoples' right to self-determination.

By Miguel Vargas Delgado

The energy transition aims to gradually reduce fossil fuel consumption by promoting the electrification of the economy through technologies such as solar panels and wind turbines. However, this shift faces major limitations due to its heavy reliance on the extraction of rare earth elements or critical minerals—a group of at least 17 elements found in the Earth's crust. These resources are strategic for modern technologies and essential to contemporary society.

Although many countries—especially in Europe—have sped up their energy transitions to meet climate commitments and to respond to the energy crisis triggered by the war between Russia and Ukraine, not all possess sufficient reserves of these minerals. The success of the transition is closely linked to the availability and supply of these resources, potentially reinforcing extractivist development models in resource-rich countries.

According to the International Energy Agency, China is the world's leading producer and processor of rare earth elements, accounting for around 60% of global extraction and nearly 90% of global processing. The Xi Jinping administration has recognized that the value of these minerals lies not only in their marketability but also in their strategic importance for technological advancement. As a result, Western countries have become increasingly dependent on China—a dynamic that directly affects both the pace and the sovereignty of the global energy transition. In Latin America, only Brazil ranks among the top ten countries with the largest reserves, placing third with approximately 15% of the global total.

Rare Earth Elements and Critical Minerals in Indigenous Territories

Paradoxically, the energy transition that is being driven by renewable sources has increased

the demand for rare earth elements and critical minerals—non-renewable resources—the extraction of which is concentrated in strategic and fragile ecosystems, such as Indigenous territories. A global study published in 2022, based on the international platform on mineral supplies for the energy transition, reveals that more than a half of extractive projects related to these resources are located within or near Indigenous lands.

In Latin America and the Caribbean, an estimated 73% of these projects directly or indirectly affect formally titled Indigenous territories. Many also overlap with areas facing high levels of water stress, further increasing their environmental vulnerability.

The exploitation of rare earth elements and critical minerals brings not only significant environmental impacts but also deep social and cultural consequences. These include the risk of forced displacement of Indigenous communities and threats to their cultural identity, driven by migration, territorial fragmentation, and the rapid transformation of their ways of life. Traditional decision-making structures and governance systems are also being undermined—especially as state authorities continue to disregard the right to Free, Prior and Informed Consent.

Monte Verde Indigenous Territory. Photo: Nahim Aslla Ortiz – Justicia Alimentaria

Bolivia in the Context of Rare Earth Element and Critical Mineral Extraction

Bolivia is suffering a profound economic and energy crisis resulting from the collapse of its hydrocarbon-based development model. The surge in international oil prices, combined with a sharp decline in domestic gas reserves, has triggered a severe fiscal imbalance. This crisis has far-reaching impacts across the social, political, and legal spheres and is compounded by weak democratic institutions and a lack of independence of the different branches of government.

Against this backdrop of multidimensional crisis, the national government has chosen to further entrench the extractivist development model by expanding hydrocarbon and mining frontiers into the Amazon, and is showing increased interest in the extraction of rare earth elements and critical minerals. While international attention on the energy transition has largely focused on lithium extraction projects in the country's southeast, it is essential to also pay close attention to exploration and extraction initiatives targeting rare earth elements and critical minerals in regions such as the Amazon, Chiquitanía, Chaco, and Pantanal.

As part of the expansion of the extractivist model, in 2022 Bolivia established the Vice Ministry of Technological Minerals and Rare Earth Elements as part of its extractivist expansion strategy. Two years later, in January 2024, the Ministry of Mining and Metallurgy announced the commencement of exploration activities for these resources. The national government is seeking to promote a "new, non-traditional mining" approach to meet the growing global demand in the face of the energy transition. The objective is to diversify mineral extraction beyond traditional resources—such as silver, tin, lead, zinc, and gold—towards others like nickel, cobalt, and rare earth elements. To support this, the Bolivian Mining Corporation (COMIBOL), the state-owned enterprise that manages the mining production chain, has created the National Directorate of Technological Minerals and Rare Earths.

Alongside lithium extraction in Potosí, led by Yacimientos de Litio Bolivianos (YLB), two rare earth exploration projects are currently underway in Bolivia: Cerro Manomó and Rincón del Tigre, both located in Santa Cruz department within the Chiquitanía and Pantanal regions. These projects aim to identify and quantify reserves of minerals, including thorium, niobium, nickel, cobalt, chromium, gold, and rare earth elements.

Additionally, in 2023, prospecting activities took place in San Javier (Chiquitanía), where samples of rubidium, cesium, tungsten, titanium, tantalum, lanthanum, praseodymium, europium, cerium, neodymium, samarium, and thorium were taken. To date, the results of these studies remain unpublished, and little is known about which stakeholders may be involved in the extraction phase.

Technological Minerals and Rare Earth Elements in Indigenous Territories

There is currently no official database on the presence of technological minerals or rare earth elements in Indigenous territories of the Eastern region, the Chaco, and the Amazon. However, an overlay analysis conducted by CEJIS—comparing the Map of Technological Minerals and Rare Earths in Bolivia with the surface area of the 58 Indigenous Territories formally recognized by

the State—reveals that these projects are mainly concentrated in the regions of Chiquitanía, Pantanal, and Northern Amazonia.

In Chiquitanía, the Indigenous Community Lands (TCO) of Guarayos, Monte Verde, Lomerío, and Zapocó are directly threatened by the Pico Suto project, while the Bajo Paragua TCO is affected by the Cerro Manomó project. In the Pantanal, the Rincón del Tigre project is directly affecting the Pantanal TCO and the territory of the same name owned by the Ayoreo people. In the Northern Amazon, the Madre de Dios gold mining project will directly affect the Multiethnic II Territory.

In addition, projects implemented by COMIBOL in Santa Cruz department will have an indirect impact on four Indigenous territories: Guarayos, Pantanal, Tobité, and Turubó Este.

Indigenous Peoples in Voluntary Isolation and Initial Contact

Prospecting projects also pose a significant threat to Indigenous Peoples living in voluntary isolation and initial contact in the Pantanal and the transitional areas toward the Chaco. In particular, the Rincón del Tigre project directly affects the migratory routes of the last Ayoreo groups that remain in voluntary isolation.

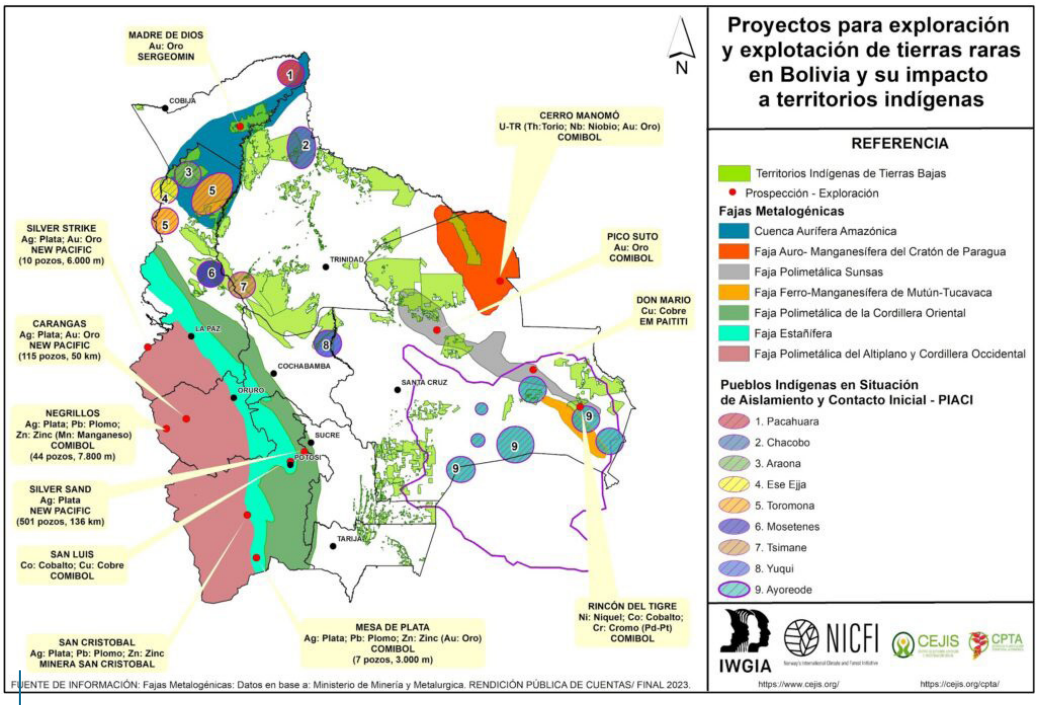
Monte Verde Territory. Photo: Nahim Aslla Ortiz – Justicia Alimentaria

There is no evidence that safeguards have been developed to protect the integrity of these peoples or to uphold their decision to remain in isolation, as established by Article 31 of the Political Constitution of the State, in force since 2009. In an effort to strengthen international protections, the situation of the rights of Indigenous Peoples'—including those living in voluntary isolation and initial contact— was addressed during the 24th session of the United Nations Permanent Forum on Indigenous Issues, in the context of critical mineral extraction. On that occasion, the Forum recommended "prohibiting any economic activity, particularly exploration, research, extraction, and processing of critical minerals for the energy transition, in territories known to be inhabited by peoples in voluntary isolation."

Far from implementing this recommendation, national authorities are continuing to expand prospecting activities into regions with a confirmed presence of Indigenous Peoples in voluntary isolation and initial contact.

Absence of Prior Consultation and Environmental Information

Although the Constitution states an obligation to conduct Free, Prior and Informed Consultation (FPIC) with Indigenous Peoples before any activity that may affect their lives or rights, the national policy promoting the so-called "new non-traditional mining" — particularly the exploitation of rare earth elements and critical minerals — has not been put out to consultation with the Indigenous communities in the Chiquitanía or Pantanal TCOs.



Projects for the exploration and extraction of rare earth elements in Bolivia and their impact on Indigenous territories, including areas inhabited by peoples living in voluntary isolation and initial contact. Source: Bolivia's Ministry of Mining and Metallurgy and CEJIS – CPTA (2024). Prepared by: CEJIS – CPTA

The Pico Suto, Cerro Manomó, and Rincón del Tigre projects were not previously discussed with the Guarayo, Chiquitano, or Ayoreo Indigenous authorities. The exclusion of Indigenous communities from consultation processes is rooted in Mining and Metallurgy Law No. 535, enacted in May 2014, which exempts prospecting activities from the requirement for consultation. This provision is openly unconstitutional, as it contradicts both the national Constitution and international instruments on Indigenous rights.

The application of this law exacerbates the vulnerability of Indigenous Peoples, particularly the Ayoreo, who include groups living in voluntary isolation in the area targeted by the Rincón del Tigre project. The law allows prospecting activities to proceed without oversight or Indigenous participation, based solely on a simple administrative authorization issued by the mining authorities. This situation is further compounded by the lack of publicly available information on the environmental impacts — both at the prospecting stage and during potential future exploitation.

Conclusion

The energy transition cannot take place at the expense of the rights of Indigenous Peoples, nor through the destruction of their territories and the environment. The experience of Indigenous communities in the Chiquitanía and Pantanal regions reveals that, far from offering a departure from the extractivist model, the implementation of rare earth and critical mineral exploration and exploitation projects is actually entrenching it. This results in increased pressure on Indigenous territories and further violations of their collective rights.

The silent advance of this "new mining" in Bolivia's lowlands is already producing tangible consequences: exploration and extraction projects are being carried out without the consultation or consent of the affected Indigenous Peoples. These activities have led to significant losses of natural heritage — especially forests — and have worsened climate change impacts, such as water stress.

Bolivia is at a crossroads: it can continue down the path of extractivism or move toward development models that genuinely respect the self-determination of Indigenous Peoples. In this context, it is urgent to restore effective safeguards and ensure that Free, Prior and Informed Consultation processes are carried out at all stages of mining projects — as a minimum condition for advancing toward a truly just energy transition.

Miguel Vargas Delgado is a lawyer specializing in the rights of Indigenous Peoples and Executive Director of the Centre for Legal Studies and Social Research (CEJIS) in Bolivia.

The Friends of the Attawapiskat River and Indigenous Grassroots Advocacy for a Just Transition in Treaty 9 Territory

Through a single legislative act, Bill 5 seeks to deliberately amend or repeal numerous laws to advance mining interests. This proposal threatens the taiga and wetlands where many Indigenous Peoples live. Guided by Natural Law, the Oji-Cree, Ojibway, and Omushkegowuk communities have pledged to protect the waters that give them life and to resist the greed that poisons their rivers, endangers their children, and devastates their communities.

By Michel Koostachin and Kerrie Blaise

In April 2025, the Ontario government introduced Bill 5, officially titled the "Protecting Ontario by Unleashing Our Economy Act." This Bill prioritizes economic interests over environmental protection and fundamental human rights. Its goal is to spur economic growth and facilitate critical mineral extraction in northern Ontario, particularly in a region dubbed the "Ring of Fire" – a vast expanse of approximately 5,000 square kilometres where tens of thousands of mining claims have been staked absent any consent from Indigenous peoples.

The new legislation proposes the creation of "Special Economic Zones," zones where provincial laws—including environmental protections, health and safety standards, and even emergency response regulations—would no longer apply. For Indigenous Peoples in Treaty 9 territory in the Far North of Ontario, Canada, Bill 5 represents something far more insidious: a direct assault on our rights, our ecosystems, and our responsibilities under Natural Law. This move has been sharply criticized by grassroots Indigenous groups, legal experts, and environmental organizations, and has galvanized community organizing efforts across Northern Ontario.

The Friends of the Attawapiskat River (the Friends') is an Indigenous, grassroots advocacy group dedicated to protecting the health of the waters, people and communities living downstream of the proposed Ring of Fire. We are community members from Attawapiskat, Peawanuck, Kashechewan, Fort Albany, Neskantaga and Moose Factory in Treaty 9 territory. Together, we have a shared responsibility to protect our lands from exploitation and degradation. This means safeguarding the integrity of the boreal and muskeg (swamp) of the Hudson Bay-James Bay lowlands, its significant contribution to mitigating climate change, and the health of our grandchildren and those not yet born.

Natural Law: Sacred Responsibility and the Heart of Our Resistance

We are the ancestors of the Headmen who signed Treaty 9 with the Crown to peacefully share the lands. We, the Oji-cree, Ojibway, and Omushkegowuk Peoples, have lived in harmony with these lands given to us by the Creator since time immemorial. We are the Water People. The water gives us life, and we take care of the water in return. This is our duty to the Creator. Our traditional ways do not involve greed or violence to these lands, but love, harmony and an ongoing commitment to each other.

A deep adherence to Natural Law is at the heart of our communities' resistance. Natural Law refers to the Creator—everything we see, feel, and sense spiritually. The sun always rising in the east, the air we breathe—these are expressions of Natural Law. This understanding encompasses the four directions, the interconnectedness of mind and body, and the sacredness of Mother Earth.

Winter road. Photo: Eleven North Visuals

This worldview dictates a profound respect for all Creation. When we hunt, we observe protocols such as putting down tobacco. Within our lakes, creeks, rivers, the carbon sink and the ocean, we live in harmony with the aquatic, the four-legged and the winged ones. We see animals as sharing, so we must respect them. Natural Law reminds us that we do not own anything; we borrow everything. These teachings shape how we understand the land, the water, and our role in protecting them.

This sacred understanding fuels our concern over the destruction proposed in the name of critical mineral extraction. Bill 5 violates Natural Law. It violates our responsibilities to the land and future generations.

Legal Loopholes and Environmental Consequences

Bill 5 is an omnibus that purposefully alters numerous laws, or does away with them in their entirety, in one legislative action. Within the proposed Special Economic Zone, no provincial law would apply. This includes hundreds of regulations covering labour, health and safety, workers' rights, employment standards, emergency response, environmental protection, animal welfare, and water stewardship.

This legislative void raises many concerns about government transparency and accountability, and how, if at all, our Treaty and inherent rights will be upheld. Without applicable laws, there would be no clear mechanisms to monitor activities, protect public health, or ensure environmental safety. There is no provision for partnership with First Nations, nor for equal oversight or shared decision-making.

The government of Ontario is using global tensions over supply chains to justify advancing private interests. Bill 5 embodies greed that will destroy our future and the future of those not yet born. Permits issued by Ontario ministries will bypass Indigenous and treaty rights, circumventing any consultation with grassroots people or elected leadership. To date, the government has never sought our free, prior, or informed consent (FPIC); this will continue to be the case if Bill 5 comes into force. This puts at risk not only our communities but our relatives—the sturgeon, the caribou—whose populations are already in decline.

The proposed Ring of Fire development is upstream from many of our communities, approximately 100 miles away. Disturbing the peatlands—our muskeg—will affect far more than the immediate area. The waterways, including the Attawapiskat, Kapiskau, Ekwan, Opinnagau, Albany and Winisk Rivers, provide us access to our sacred traditional territories where we exercise our Treaty rights to harvest food and medicine. These waters and wetlands, which pass through the lands where the Ring of Fire is proposed, flow North to James Bay. The ancient peatlands of this region continue to serve as significant carbon sinks and have been cooling the whole earth for millennia. Here, the water travels underground, through rivers and creeks, and in the air through rain. If the Ring of Fire is developed, the many toxins synonymous with mining will travel throughout our waterways, posing a severe threat to all living beings.

Extractivism: A Colonial History

This maneuver comes amid a land rush: over

30,000 mining claims have already been staked in the Ring of Fire region—all without consent. First Nations have consistently stated that development must not proceed without our agreement. Instead of listening, the government is removing the very laws that require it. We remember what mining brought before. The De Beers diamond mine near Attawapiskat promised jobs and opportunities. What followed was contamination, housing shortages, and suicide declarations. The province received 14% of royalties; our community received little and bore the brunt of the suffering.

The discourse around "just transition" and "critical minerals" is often presented as a progressive path towards climate action. But in our experience, governments and industry use these terms to push the same extractive model. They speak of urgency and innovation, yet their actions follow a familiar pattern: overriding our consent, ignoring our laws, and exploiting our lands.

Our fundamental rights are systematically denied. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) is clear: free, prior, and informed consent (FPIC) is required for any development on Indigenous lands. Canadian courts have affirmed this. The federal government has endorsed it. Yet Ontario continues to treat UNDRIP as optional.

The frozen Attawapiskat River. The taiga and wetlands are under threat from advancing extractivism. Photo: Eleven North Visuals

Mining companies, both junior and major, often partner with political insiders to fast-track permits. Once deposits are found, they bypass formal consultation and approach First Nations directly, sowing division. Some members receive promises, while others are excluded. This divide-and-conquer tactic erodes trust, weakens unity, and silences dissent.

Industry consultants routinely overlook grassroots voices. They speak to chiefs but not families, boards but not youth, urban leaders but not land users. Consultation becomes a box-ticking exercise. Relationships and responsibilities are sacrificed for speed and profit. Success is measured in quarterly gains, not in clean rivers or living forests. They ignore Natural Law, which teaches reciprocity, humility, and care. That is the difference—and it is a vital one. When our teachings are dismissed, so is our survival.

What Indigenous-Led, Just Transition Looks Like

A just transition, to be meaningful, must be led by Indigenous Peoples. It must emerge from our laws, our relationships with the land, and the lived knowledge passed down through generations. This is not simply about consultation—it is about empowering us to lead, decide, and shape climate solutions rooted in care rather than profit.

Such a pathway would be grounded in Natural Law and our responsibilities to the next seven generations. It would honour Treaty rights and our teachings: to be kind, to speak the truth, to share the land. It would reflect deep relational accountability, where traditional knowledge is shared respectfully, guided by Elders and knowledge holders. It would require slowing down—studying land and water systems, understanding the full ecological, spiritual, and social impacts of any proposed activity. Every step would begin with a ceremony and proceed through informed consent and collaboration.

Our communities are not opposed to development. But we insist that it aligns with our values and responsibilities. We ask: How will this affect the river? What will happen to the caribou and moose? Who will drink this water in seven generations? These are not rhetorical questions—they reflect how we honour and uphold Indigenous and Treaty rights. We are taught to leave the land as we found it, to take only what we need, to share what we have, and to waste nothing.

We want our youth to understand the rhythms of the seasons, the health of animals, the winds, and shifts in water flow. We seek to build energy systems and economies that sustain—rather than exhaust—our communities. If technologies can help us care for the land while meeting our needs, we are open to them. But the decisions must be ours. This is what a just transition requires: not just new tools, but a transformation in values and power. Not extraction for new markets, but renewal grounded in respect and responsibility.

Taking Action

Last month, the Friends of the Attawapiskat River released a Protection Declaration, affirming our duty to safeguard the Hudson–James Bay Lowlands under Natural Law. These lands are among the world's most important carbon sinks. But more than that, they are our home, our teacher, and our sacred responsibility.

We resist not only with petitions but with presence. One of our members leads youth canoe trips on the Attawapiskat River. These journeys are not symbolic—they are living expressions of Treaty Rights, connecting young people to land, law, and memory. Behind these actions is a deep and growing movement—grassroots people coming together, sharing struggles, building hope, and collectively imagining the path forward. These gatherings are not only moments of community—they are acts of governance. They assert that our authority flows from our relationships to the land, not from colonial permission.

The promises and responsibilities of our Treaty bind us: for as long as the sun shines, the grass is green, the water flows, and the Anishinaabe are here. This is not a metaphor—it is a commitment. We are here to remind the world that we are the Water People of the Omushkegowuk territory. Within our lakes, creeks, rivers, muskeg, and ocean, we live in harmony with the aquatic, the four-legged, and the winged ones. These are our Natural Laws from the Creator.

We are protectors, not protestors. We have seen what greed has done—how it poisoned our rivers, harmed our children, and shattered our communities. But the fight against Bill 5 has brought us together. While the government tries to divide us, we are uniting—across communities, movements, and territories. We welcome the solidarity of our allies. We are speaking up, asserting our laws, living our responsibilities, and shaping a future grounded in Indigenous knowledge and care.

Michel Koostachin is a proud Cree member of Attawapiskat First Nation. He is the founder of the grassroots group, the Friends of the Attawapiskat River and is in his final year of the Bachelor of Social Work program at Ryerson University. Michel has spent many years practicing trauma-informed care and has been providing wellness services, on mental health, addictions, and grief throughout Northern Ontario fly-in communities. For over 20 years, Michel has been a "Skabbewsis" (helper) in ceremonies.

Kerrie Blaise is an accomplished environmental and Indigenous rights lawyer. She is one of only a handful of public-interest environmental lawyers serving Northern Ontario, and in 2023, she founded the environmental law non-profit, Legal Advocates for Nature's Defence. At LAND, she works to advance the protection of Indigenous rights and nature in response to urgent threats to lands and waters and amplify community voices – whether in the courts, before lawmakers or in public forums – to precipitate change.

Nickel for Electric Vehicles Threatens Key Forests and the Last Nomadic Tribes in Indonesia

The rapid exploitation of Indonesia's renewable energy resources raises significant concerns. The Indonesia Weda Bay Industrial Park has become the epicenter of nickel extraction, a mineral deemed essential by electric vehicle manufacturers. On Halmahera Island, Indigenous communities in the northern and central peninsulas are increasingly being displaced from their homes due to deforestation caused by nickel mining. This activity also threatens the daily lives and water sources of people living near the industrial area

By Garry Lotulung

Deep in the rural landscapes of Halmahera Island, in Dodaga Village, the O'Hongana Manyawa – which means "People of the forest"– often referred to as the Tobelo Dalam, are one of the remaining hunter-gatherer and nomadic tribes in Indonesia today. This tribe has always depended on and protected the forests of Halmahera. Sumean Gebe (42), his wife Bede Yuli (39), and their two children move through the forest, creating temporary shelters from palm leaves and tarpaulin. As the head of his family, Sumean spends his days hunting wild boar, deer, and other edible animals, supplementing their income by collecting and selling damar resin (commonly used as a pictorial varnish).

Besides the Kali Meja River, other members of the tribe, like Etus Hurata (56) and Tatoyo Penes (64) continue their traditional lifestyle as sago palm starch gatherers. Despite their advancing age, they move with agility through the forest, using bamboo sticks and machetes to collect and process sago for their daily sustenance. Daniel Totabo (27) continues the traditional practices, searching for Sogili (Asian eel) in the river during the dry season, demonstrating the community's deep connection to their natural environment.

According to Survival International, 300-500 O'Hongana Manyawa people still reside in the forested interior of Halmahera. The latest research from the Association of Indigenous Peoples Defenders of Nusantara identifies 21 matarumah (lineages) inhabiting the Halmahera mainland, with each matarumah typically consisting of 4 to 5 family heads. These tribes have never had direct contact with people outside the forest and have traditionally protected the ecology around them, guided by customs that deeply respect the forest and its contents.

Tatoyo Penes, and Etus Hurata, from the O'Hongana Manyawa tribe pose for a photo while processing material from sago palm trees with traditional tools inside a jungle in East Halmahera, North Maluku, Indonesia. Photo: Garry Lotulung

However, their existence is now under severe threat from nickel mining projects. With Indonesia holding 42.3% of the world's nickel reserves, mining companies are increasingly encroaching on their traditional lands. Sumean and his community fear the consequences of continued industrial expansion. "If it continues like this, the forests in Halmahera will be destroyed," he says softly. "The trees will be cut down, the animals will be driven out and die because their homes have been completely cleared. Then where will we live?"

Attempts to Relocation

The government has taken a practical solution. It is recorded that since 1978, they have been actively relocating them by establishing several hamlets and villages as places to settle. In Dodaga Village, the relocation of this Indigenous community is also described by them as "Togutil Tribe Cultural Village." In reality, supporting facilities such as health, economy, and education built there are inadequate, so they cannot live their lives to the fullest.

The nomadic and hunting habits that have been carried out since they were young and the ties of the O'Hongana Manyawa community to the forest are already strong. Even though they got land and houses in a village, they had difficulty adapting to living comfortably there. As a result, the community abandoned the village, which is now inhabited by immigrants. "The house is very hot during the day and very cold at night because it uses a zinc roof. It is different from a leaf roof that can adjust to the season. We did get a house, but maybe they forgot that We also must find our own food every day," said Sumean.

Although they objected, they could not do much. Their lives will continue to be disturbed as long as the government has not followed up on the Constitutional Court's decision number 35 of 2012 concerning customary forests which has been stalled in parliament for more than 10 years. Several institutions in Indonesia are now actively pushing the government to recognize forest areas that have been controlled by Indigenous peoples for two or three decades.

Several trucks loaded with nickel ore headed to a smelter while Chimneys emitting smoke into the sky operated by Indonesia Weda Bay Industrial Park (IWIP), a nickel processing complex in Central Halmahera, North Maluku, Indonesia. The industrial park is powering the move to electric vehicles. Indonesia has been building a vast nickel industry. Photo: Garry Lotulung

The Industrial Landscape

The Indonesia Weda Industrial Park (IWIP), operating since 2020, represents the epicenter of nickel extraction in Halmahera. Located along Weda Bay, this industrial complex emerged from a joint venture between state-owned company PT Aneka Tambang, Strand Minerals, French mining company Eramet, and Chinese stainless-steel company Tsingshan Holding Group, which took control of 57% of Stand Minerals shares. The area has been a projected nickel production site since the New Order era (1966-1998), with the mountainous region long known for its rich nickel reserves.

The industrial area has dramatically transformed the landscape. Satellite imagery reveals extensive environmental changes: dense green plains have been replaced by coal-fired power plants, nickel smelters, and extensive mining operations. Thick smoke billows from 12 new coal-fired power plants, creating a stark contrast to the previous ecological environment. Geospatial research by Climate Rights International and the AI Climate Initiative at UC Berkeley has documented the massive impact, revealing that nickel mining activities have destroyed 5,331 hectares of tropical forest and released approximately 2.04 million metric tons of greenhouse gases. Data from Eramet also shows that around 6,000 hectares of the total area of Weda Bay Nickel's 45,065-hectare concession will be mined in a 25-year period.

The industrial park is a massive employment hub, currently employing around 43,000 workers across two shifts. Workers undergo significant challenges, with long working hours and difficult conditions. One worker mentioned spending around USD6 monthly on transportation from their residence to the smelter. The working environment is challenging, with wet and muddy roads, and workers constantly moving between shifts, spending up to half a day in the industrial area.

The human cost of this industrial development is significant. Data from the Mining Advocacy Network (JATAM) recorded 42 fatalities due to work accidents from 2018 to 2024, with the number of work-related incidents involving 125 workers in 2022. Despite the potential economic challenges, PT Indonesia Weda Bay claims to be actively supporting the local environment and community by planting over 10 square kilometers of new trees to prevent flooding, offering economic development programs, and launching coral and mangrove planting initiatives to protect marine ecosystems. The project has been included in the National Strategic Project since November 2020 and is predicted to attract investment worth US$15 billion, highlighting the complex economic motivations behind such large-scale industrial developments.

Environmental Destruction: Flooding, Water Quality, and Diseases

The ecological impact of nickel mining in Halmahera extends far beyond immediate deforestation, creating a complex web of environmental and social challenges. The Jaringan Advokasi Tambang (JATAM) has documented a dramatic increase in flooding events, with more than 12 floods exceeding one meter in height occurring between August 2020 and June 2024. The major flood in 2024 submerged seven villages (Lukolamo, Woe Jarana, Woe Kobe, Kulo Jaya, Lelilef,

Sagea, and Trans Waleh) and completely cut off vehicle access, causing 1.670 residents to be forced to spend their days in temporary refugee tents.

Water quality has dramatically deteriorated in the region. Residents like Ahmad Kruwet and Adrian Patapata report significant changes in their water sources. Where they once had clean, fresh water for drinking and daily use, they now face contaminated water sources that are unusable for basic needs. Ahmad now must buy gallons of water at USD 0.6-0.9, while Adrian's water has become smelly and discolored, rendering it unfit for drinking or even bathing.

The health impacts are equally concerning. The Lelilef Sawai Health Center has observed a sharp increase in respiratory infections. Head of the health center, Asjuati, reported that ISPA (Upper Respiratory Infection) cases nearly doubled from 174 in January to 345 in July 2024. The most vulnerable populations—children, the elderly, and mine workers—are particularly affected. Approximately 40% of daily patients are workers.

Agricultural and fishing communities have been devastated by these environmental changes. Farmers like Adrian have seen their plantations destroyed by floods and mud, with crops dying and soil quality declining rapidly. Fishermen such as Hernemus Takuling are forced to travel much further to find uncontaminated fishing grounds. Where they once fished close to shore, they now must travel up to 4 kilometers to catch fish of acceptable quality. The ecosystem disruption affects not just human communities but also wildlife, with endemic bird populations declining rapidly in the Central Halmahera region.

Global Context and Electric Vehicle Demand

The expansion of nickel mining is fundamentally driven by the global transition to electric vehicles. China, Europe, and the USA represented 95% of electric vehicle sales in 2023, with projections suggesting significant growth in the coming years. It is estimated that half of all new cars sold in China will be electric, with approximately 60 percent of plug-in vehicles being cheaper than their gasoline-powered counterparts. This increasing demand puts significant pressure on Indigenous Peoples.

Sagea, a key region in Halmahera, has actually been the target of several mining companies since 2010, with current mining business permits owned by five companies operating within the Sagea River Basin Area. Three companies are also known to be expanding mining concessions around Boki Maruru Cave, further intensifying the environmental pressures in the region. Tesla addressed Indigenous rights in its 2023 Impact Report, suggesting a potential no-go zone for mining system or a mining-free area that can protect the rights of uncontacted Indigenous peoples such as O'Hongana Manyawa. However, the company continues to source approximately 13% of its nickel from Indonesia, arguing that the energy transition would be impossible without these supplies.

While the expansion of electric vehicles (EVs) is often championed as a critical step toward decarbonization, the environmental cost of nickel extraction, particularly in regions like Halmahera, raises profound questions. The global shift to clean energy technologies, when pursued without strict environmental and human rights safeguards, can replicate the very extractive

logics that have fueled climate and ecological crises. Moreover, the shallow location of Indonesia's nickel deposits means that mining requires widespread deforestation, exacerbating the vulnerability of Indigenous communities whose forest-based livelihoods are directly undermined.

Resistance and Hope

Despite the overwhelming challenges, local communities in Halmahera are not passive victims of industrial expansion. In areas like Sagea, residents are actively protesting and seeking to protect their environmental and cultural heritage. In this sense, they are proposing the establishment of a National Geopark to preserve the unique geological and ecological characteristics of their region, demonstrating a proactive approach to conservation and community protection.

The struggle of the O'Hongana Manyawa and local communities has gained international attention. Organizations such as Survival International advocate for the rights of Indigenous Peoples and promote sustainable development. Mining-free zones, which protect uncontacted Indigenous Peoples and are already implemented in Brazil and Peru, offer a model for Indonesia. Meanwhile, local health and environmental professionals, along with researchers from Climate Rights International and Forest Watch Indonesia, are documenting the social and environmental impacts of nickel mining—crucial work that raises awareness and could help shape policy.

The future remains uncertain for the communities of Halmahera. Residents like Ahmad and Adrian continue to hope for government intervention and more sustainable development approaches. The situation in Halmahera exemplifies the global challenge of balancing technological progress with justice and sustainability. The destruction of forests, displacement of Indigenous communities, and environmental degradation raise critical questions about the true sustainability of the current approach to the energy transition. As those directly affected, residents like Ahmad and Adrian can only hope that the government can find the best way to resolve this problem. "I have experienced conditions like this for years, and maybe now I am used to it, but I still want to live a healthy and better life," said Ahmad.

Garry Lotulung is a photojournalist and documentary photographer based in Jakarta. He focuses on stories about the human condition, social change, and nature.

The Clean Energy Smokescreen: Quebec's Fossil Fuel Ban and the Mining Boom on Indigenous Lands

The US Department of Defense's involvement in projects such as Lomiko and Strange Lake shows how clean energy narratives can align with military objectives. Minerals such as graphite, lithium, rare earths, and nickel are essential not only for electric vehicle batteries but also for the military industry. Quebec has a decision to make: honor its commitments to Indigenous rights and climate justice, or quietly align itself with US military priorities.

By Earthworks

Quebec's highly publicized 2022 fossil fuel ban is framed as bold climate leadership. Yet, in reality, the province is doubling down on mining expansion, particularly for so-called critical minerals essential to U.S. clean energy and military supply chains. This creates a paradox whereby fossil fuels are villainized in Quebec while mineral extraction is quietly accelerated, benefiting Canadian mining corporations and U.S. industrial and military interests under the guise of the "green transition".

The contradiction becomes particularly apparent on Indigenous lands. Projects such as the Lomiko Graphite mine and the Strange Lake Rare Earth project highlight how the province's climate leadership narrative masks continued erosion of Indigenous sovereignty. Quebec's public image of environmental progress conceals the reality of resource extraction that often proceeds without Free, Prior and Informed Consent (FPIC), as enshrined in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

Indigenous Sovereignty and a Just Transition

Across Quebec, Indigenous lands are being opened up to mineral projects in the name of the energy transition, often without proper consultation or consent.t. According to a MiningWatch Canada report, an astounding 10% of Quebec is under mining claims, with 60% of the 338,000 claims overlapping with rivers, which magnifies the impacts. While Canada's 2021 passage of Bill C-15 enshrined UNDRIP into federal law, FPIC remains more aspirational than real. Communities are consulted only after projects are already in motion or presented with conditions that make the right to say no almost impossible.

In Canada and beyond, the principle of Free, Prior and Informed Consent (FPIC) is rarely upheld in an appropriate way for extractive pro-

jects. To truly give a community the right to say no, consultation would begin before the project has even begun, with attention given to meeting with traditional elders, women and children, not just men or Tribal chairs. If a community says no, then the project is halted. A true just transition to cleaner energy would require centering Indigenous Peoples' sovereignty as a north star before starting the process. FPIC should not be an afterthought.

In 2023, the R. c. Montour decision in Quebec gave UNDRIP "the same weight as a binding international instrument" when interpreting section 35(1) of the Constitution, marking an important precedent. While this was hailed as an historic step that further uplifted Indigenous Peoples' rights in the province, implementation has been uneven.

A Quebec Superior Court recently ruled in favor of the Mitchikanibikok Inik First Nation, which had taken the province to court for failing their constitutional duty to consult the Nation before granting mining claims on their territory. The ruling stated that the province must now consult and accommodate the Nation not only on existing but also new claims. It was a small victory in hindsight.

In April 2022, Quebec once again made a name for itself as a progressive leader by passing Bill 21, an act that prohibits new petroleum exploration and production, while also mandating site restoration. Bill 21 was celebrated widely as a step forward for Canada towards bold action to address climate change. The contradiction between Quebec's rhetoric around Indigenous Peoples' rights and its supposed climate change commitments is made clear, however, through the situation around the Lomiko Graphite mine in the Laurentides and Outaouais regions and the Strange Lake Rare Earth project in located in Nunavik. At these projects, promises of sustainability collide with the extractive reality of mining.

The U.S. Military Industry and Indigenous Opposition

In the Outaouais region of Quebec, Lomiko Metals Inc's La Loutre graphite project is a proposed open pit graphite mine that was touted as an "ecological transition" project. Recently, a multi-million dollar grant from the United States Department of Defense became one of the funding forces behind the widely opposed mine. It is said to be described by Lomiko as having the potential to be the seventh largest graphite mine in the world.

The project received a $8.35 million grant from the U.S. Department of Defense (DoD) through a technology investment agreement (TIA) under Title III of the Defense Production Act. This U.S. federal support is matched by a $4.9 million grant from Natural Resources Canada, which totals some $16.7 million in joint U.S.-Canadian funding for the mining project. The La Loutre mine marks one of the first instances in which the DoD has extended TIA support to a Canadian mineral project at such an early stage. Lomiko publicly positions the project as an energy transition initiative but the DoD's involvement highlights its significance for military applications.

The project has provoked opposition from the local communities, including the Kitigan Zibi Anishinabeg (KZA) First Nation, whose land it impacts. As with many extractive efforts, there is little evidence of genuine FPIC being sought.

The KZA community has actually been active in working towards restoring their territorial lands that have been “degraded”. Part of this process includes working with local and provincial governments to protect the ecosystems, as was promised by Canada at COP15. The work toward restoring balance in their territories goes against the expansion of mining. The Quebec government, despite backing mineral expansion, declined to provincially fund the Lomiko mine, citing a lack of “social acceptability”. This was celebrated as a rare, but not definitive, victory as Federal and U.S. funding are still in place.

The case of DoD funding for Canadian mines like Lomiko is not unique. In an interview with Le Journal, Robert P. Sanders, the U.S. Consul General in Montreal confirmed that there are others in process.

Strange Lake Rare Earths Project and Inuit/ Innu/Naskapi Concerns

One of those projects is the Strange Lake Rare Earth project by Torngat Metals company. While not funded directly by the DoD, the company will supply minerals to a US-based company under contract to manufacture rare earth magnets for US military purposes.

Torngat Metals’ (a Quebec based rare earths development company),, Strange Lake rare earth project straddles northern Quebec and Labrador on Labrador Inuit territory. Much like graphite, rare earths are a sought-after mineral for both electric vehicle batteries and military equipment. The mine is only one part of the plan, with a separation plant planned to be built in Sept-Îles. The project is already revealing its true colors. Previous plans put an access road through Inuit lands, which would require the Nunatsiavut government to hold their own environmental assessment. Torngat Metals changed the road’s location.

Two other Nations, the Innu Nation and the Naskapi Nation of Kawawachikamach, have also expressed concerns about the Torngat mine and its impact. They cite concerns about the project’s proximity to George River caribou calving grounds. The Innu Nation affirmed their connection to the land and unease as to how the project would affect it and pointed to Section 35 of the Canadian Constitution Act, which recognizes aboriginal rights. Yet those rights, much like within Bill C-15, remain undefined and unevenly implemented when it comes to extractive projects.

U.S. Department of War and the Just Transition

The involvement of the U.S. Department of Defense in projects such as Lomiko and Strange Lake underscores how clean energy narratives can align with military objectives. Minerals like graphite, lithium, rare earths and nickel are essential not only for electric vehicle batteries but also for military applications.

With the new name change from the Department of Defense to the Department of War, there are no longer any misconceptions as to the goals of this funding. The recent Big Beautiful Bill added another $13 billion in direct funding from the department, which will only continue to fund mining and processing facilities throughout not only the United States and Canada but around the world. Communities within the U.S., like People of Red Mountain in Nevada, continue to fight a DoD-backed lithium mine that bypassed consent.

This will only become exacerbated as more funding is distributed to mining companies. Quebec has a choice to make: uphold and honor their commitments towards UNDRIP and climate justice or quietly align with U.S. military priorities. Thus, an example of how the rhetoric of sustainability can function as a smokescreen for other objectives.

The Quebec Paradox

Quebec's ban on fossil fuel exploration under Bill 21 has been celebrated as proof of bold climate leadership. Yet, when viewed alongside the province's expansion of mining, the contradiction becomes impossible to ignore. Oil and gas are outlawed in the name of climate justice, while destructive mining projects advance under the banner of the "green transition".

The La Loutre graphite mine and Strange Lake rare earth project illustrate how this dynamic plays out when Indigenous territories are targeted for mineral extraction, FPIC remains sidelined, and external funding steers projects less toward climate solutions and more toward securing military supply chains. Quebec's leadership narrative reveals the nature of extractive projects where sovereignty, ecosystems, and long-term solutions are sacrificed for industrial goals.

If the province were serious about a just transition, Indigenous nations would hold decisive authority from before the projects are started. Free, Prior and Informed Consent would not be reduced to a mid-project checkbox but respected as a binding right that can change, reshape or halt projects entirely.

The paradox of banning fossil fuels while accelerating mining reveals that Quebec's "transition" is less about climate justice and more about replacing one extractive practice with another. It is not being dismantled but rebranded. A truly just transition requires centering Indigenous sovereignty as the foundation of climate policy.

Earthworks advocates stopping pollution from oil, gas, and mining while promoting a just and clean energy future. https://earthworks.org/

The similarities between the Transition Mineral and Fossil Fuel Economies and their Impacts on Indigenous Peoples: the Case of Lithium

The destruction of territories rich in biodiversity and cultural heritage is a concerning consequence of the global demand for minerals such as nickel, cobalt and lithium. These territories are being sacrificed in the name of economic growth and the so-called energy transition, as governments and corporations prioritise short-term gains. To challenge this contradiction and fight for their rights, Indigenous Peoples' proposals are not merely technical fixes but holistic responses rooted in their traditional knowledge, territorial sovereignty, and cultural survival.

By Edson Krenak

Guided by its just transition policy, the United Nations aims to phase out the fossil fuel economy (oil, gas, coal). To achieve this, the public and private sectors are building a renewable and "green" economy. However, this requires vast quantities of transition minerals, placing enormous pressure on land, forests and Indigenous communities, whose territories hold 54 percent of the minerals the world needs for the energy transition.

Moreover, the contradiction is that the extraction of minerals for "green technologies" relies on the same destructive practices that defined the fossil fuel economy. The experiences of and testimonies from communities in the "Lithium Triangle" (Chile, Argentina, and Bolivia) and Brazil (in the Jequitinhonha Valley and the Amazon) show that this approach does not end the creation of sacrifice zones: it merely shifts them, expands frontiers, and weakens legal protections.

The intensive use of water aquifers and subsoil sources, along with highly polluting mining processes, is thus resulting in devastating loss and damage in Indigenous territories. This reality exposes a fundamental hypocrisy of the "just transition", because it is built on unjust foundations, replicating the same patterns of ecological and social violence that it seeks to overcome, and undermining the ethical principle that no one should be left behind in climate objectives.

The Mineral Rush and the Re-creation of Sacrifice Zones

These questions become even more urgent in the context of the extraction of transition minerals such as copper, cobalt, nickel, and lithium. In South America, particularly in Chile, Bolivia, Argentina, and Brazil, expanding lithium mining operations are posing serious threats to the

health of Indigenous territories, disrupting fundamental biomes where biocultural balance is key to tackling climate change impacts, such as increasing heat.

These regions, which supply large amounts of lithium (a crucial metal for electric vehicle and computer batteries), are rapidly becoming new sacrifice zones, endangering vital water sources, unique forests, and the cultural fabric of Indigenous communities. This pattern of creating sacrifice zones is also evident in the fossil fuel economy, where extraction, refining, and waste from oil, gas, and coal have disproportionately contaminated Indigenous lands and waterways.

The unresolved management of nuclear waste thus has its parallel in transition mineral mining and tailings management. All of this perpetuates the crisis and exposes the clash between state policies, corporate activities, and Indigenous sacred sites. Indeed, non-governmental organisations, academics, and Indigenous advocates have been denouncing the fact that most of these indirect impacts of mining waste are intentionally being ignored by governments and policymakers.

The negative impacts sometimes explicitly form part of state or corporate strategies to displace communities from their traditional territories. In the words of sociologists Robert D. Bullard and Valerie Kuletz, sacrifice zones involve "an all-too-familiar pattern of disregard for the people that inhabit these desert areas, masking an exploitation of their land that goes back to the beginning of the so-called westward expansion".

Lithium Extraction and Indigenous Resistance in South America

Lithium is an essential component of renewable energy technologies, often found on or near Indigenous territories. In the Jequitinhonha River Valley in Minas Gerais (Brazil), companies are developing several lithium mines, with 17 pits planned. Activist Djama Arana, from the local community, describes how the government and corporations are turning the valley into a "sacrifice zone", repeating patterns of environmental destruction driven by economic interests.

Similarly, in the "Lithium Triangle", which covers parts of Argentina, Bolivia, and Chile, Indigenous communities are facing threats to their lands and livelihoods. Over 400 Indigenous Peoples inhabit this region, yet many do not hold the legal title to their ancestral lands. Nati Machaca, a protester in Purmamarca (Argentina), voices her concerns regarding the environmental impacts, highlighting the severe ecological damage caused by lithium extraction: "Our land is drying up, and our water is contaminated."

The lithium mining boom in the Jequitinhonha Valley in Minas Gerais is bringing serious challenges to Indigenous and traditional communities. The rapid expansion of mining threatens the environment: daily air pollution, high temperatures, destruction of the local ecosystem, and dead rivers where communities once fished, swam, and practised rituals. When I visited the area last July, I witnessed firsthand the impacts: cracked walls in homes, elderly residents with respiratory issues, and communities stripped of their cultural and spiritual connection to the land.

Lithium is extracted from hard rocks (Brazil) or from lithium-rich brines (Lithium Triangle). Global demand for lithium has soared due to the push toward electric vehicles, although the exact

amount needed remains uncertain. This underlines the urgency of strengthening the legal protection of Indigenous land rights and promoting sustainable mining practices. Recycling and repurposing lithium from used batteries could reduce mining, although neither industry nor governments seem interested in investing in recycling, claiming it is more expensive. Economic cost appears to be the only one they consider.

Ecocide Under the Guise of "Green Energy"

Despite international legal frameworks such as the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), Indigenous communities often find themselves excluded from decision-making processes, with governments failing to enforce the right to Free, Prior, and Informed Consent (FPIC). As with nuclear power, the exploitation of lithium for electric vehicles highlights the political, military and economic benefits of these resources, which overshadow the social and environmental harm they cause.

Ecocide and cultural genocide are replicated under the guise of "green energy", as Indigenous lands are transformed into sacrifice zones. This exploitation is also evident in the Jequitinhonha Valley, where lithium mining is contaminating water sources vital to local communities, and in the Lithium Triangle, where water-intensive mining is endangering the sustainability of Indigenous ways of life. Both regions reflect a colonial pattern of resource plundering whereby economic gain elsewhere comes at the expense of Indigenous survival and environmental health.

The re-creation of sacrifice zones by the transition mineral industry is similar to those created by oil drilling and coal mining. Both lead to land grabs, water depletion, and pollution: from the draining of aquifers and water sources by lithium mining in the Atacama Desert and Jequitinhonha, to the human rights violations of cobalt mining in the Democratic Republic of the Congo.

A development model based on resource extraction for export and on the biocultural and economic impoverishment of local communities is thus being reproduced, reflecting the colonial pattern of the fossil fuel economy. It is a schizophrenic climate solution whereby the environmental benefits of renewables are enjoyed in the so-called Global North (excluding Arctic Indigenous Peoples, who face the same issues as their relatives in the south), while the high environmental and social costs are borne by Indigenous communities and populations of the Global South.

The Indigenous Overarching Principles to Solve the Problem

To face up to this dire scenario, Indigenous Peoples have been advocating for the powerful overarching principle of an holistic approach. To describe this approach, I highlight three proposals from the Indigenous Peoples Dialogue (an event that happened in February 2025 and was coordinated by my team at Cultural Survival and SIRGE Coalition):

A. The non-negotiable governance standard of the Free Prior and Informed Consent.

FPIC is the legal-political tool with which to defend the rights of Indigenous Peoples. It has become the central pillar of Indigenous territorial advocacy and governance, enshrined in international laws such as UNDRIP and ILO Convention

169. FPIC is not a simple checklist or consultation protocol: it is based on the right to self-determination and governance, which means the power to say "no" to projects that harm their lands and livelihoods. The debate is not whether a project will happen, but whether it should happen at all. The right and decision-making power belongs to the community, not to the corporations.

B. The Indigenous stewardship model instead of a resource-driven model. The extractivist model is fundamentally opposed to Indigenous worldviews, especially those of the Atacameño peoples and the communities of Jequitinhonha. They inhabit these territories not to manage resources but to develop and maintain relationships, responsibilities, and reciprocity (the three "R"s of development from an Indigenous perspective). This model shifts the goal from resource extraction to territorial integrity for life.

C. The legal and political imagination solution: a rights-based approach for humans and more-than-humans. This point has a deep ontological connection to the previous one. The problem with conventional legal frameworks (even FPIC) is that they ignore context and are based on concessions, not reciprocity and care. They are designed to regulate extraction, not to prevent it. They therefore set "acceptable" levels of harm, pollution, and violations, making destruction measurable and legalisable.

The Indigenous movement has been proposing strong advocacy and litigation, together with a creative and courageous interpretation of international laws and policies with which to transform the legal and political landscape. Communities in Chile, Bolivia, Argentina, and Brazil are fighting for the rights of their river ancestors and their forest relatives because, from our perspective, they sustain life: human life in healthy and safe conditions. Technology cannot do that.

The exploitation of Indigenous lands to satisfy global economic demands, without sufficient legal protections or respect for Indigenous rights, is a reality. A just transition cannot be hypocritically built upon the very violation it seeks to solve: that generated by the fossil fuel exploitation model. The sourcing of lithium for electric vehicles and other technologies, including military drones, poses this stark paradox and contradiction: its extraction is harming peoples and environments from South America to Africa and even Europe.

A truly just transition must therefore be rooted in a rights-based approach that recognises that the integrity of life in territories is non-negotiable. Humanity must demand circular economies, reduced consumption, and alternative technologies that do not simply shift the burden of extraction from one right to another.

Edson Krenak is an activist, Indigenous writer, and member of the Krenak people. He is a doctoral candidate in Legal Anthropology at the University of Vienna and Brazil Manager at Cultural Survival. He serves on the boards of SIRGE Coalition, the Society for the Anthropology of Lowland South America (SALSA), and the Global Tailings Management Institute (GTMI).

IWGIA

INDIGENOUS Debates