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# SECURING INDIGENOUS RIGHTS IN THE TRANSITION TO A GREEN ECONOMY

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Cultural Survival

## WHITE PAPER

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Indigenous communities are raising awareness about how proposed lithium mining in Peehee Mu'huh (Thacker Pass), Nevada, United States, will impact their ancestral burial grounds, water resources and wildlife. Photo credits: Chanda Callao/@Peopleofredmountain.

In the last decade, the transition to a low-carbon economy has been a central focus for governments and businesses alike. As efforts to counter climate change are encouraging a switch from fossil fuels to "clean" energy, demand for transition minerals, such as lithium, cobalt, copper, zinc and nickel, has risen exponentially. While the ultimate goal is a positive change in energy consumption, the impact of increased mining activity to obtain these resources without the Free, Prior and Informed Consent of Indigenous Peoples is a threat to their rights, ways of life and territories, and at the same time constitutes a substantial risk of material losses for companies.

In considering the need for economic development, Cultural Survival believes that the wellbeing of certain communities cannot be constructed at the expense of the rights of others – especially Indigenous communities whose lands cover approximately 24% of the Earth's surface and who steward approximately 80% of the planet's remaining biodiversity while making invaluable contributions to climate change mitigation and adaptation, wildlife conservation, biodiversity protection and more.[1] A Just Transition must focus on human rights, including the UN Declaration on the Rights of Indigenous Peoples and the right to Free, Prior and Informed Consent, and must respect Indigenous Peoples' self-determination and traditional knowledge.

## Background

Transition mineral mining perpetuates the same problems as fossil fuel development under a new name. Operationally, this type of mining facilitates the transition towards energy produced by "clean" and "green" energy sources, such as batteries, solar energy and wind energy. However,

1 Claudia Sobrevila, World Bank. The Role of Indigenous Peoples in Biodiversity Conservation: The Natural but Often Forgotten Partners. 44300. May 2008. World Bank Document

in the pursuit of sustainable energy, companies are perpetuating the same unsustainable practices that have violated Indigenous Peoples' rights for centuries. Mineral production using traditional mining technologies, such as open-pit mining or water-intensive extraction, has not changed. Similarly, the growing demand for transition minerals brings in tow an increasing number of reports of human rights violations that solely and disproportionately impact Indigenous Peoples. There is no possibility to change the location where such mining takes place. Minerals must be extracted where they exist, which is very often on or near Indigenous Peoples' territories.

The impact of extractive industries, specifically on Indigenous Peoples, should not be underestimated. In 2021, the Business & Human Rights Resource Centre reported that in 10 years, 495 human rights complaints have been filed against the 103 companies it monitors that are involved in transition mineral extraction.[2] Exploitation occurs on unceded lands and without the Free, Prior and Informed Consent of Indigenous Peoples – a situation that can lead to the desecration of sacred sites, killings of human rights advocates protesting against this exploitation and environmental threats to the lands, waters and livelihood resources of people who are already experiencing first-hand the effects of climate change. These impacts are global and will continue if there is no necessary shift in the way Indigenous Rights are conceived.

## Challenges

Indigenous communities are taking a leadership role in emerging green economies by holding companies accountable for meeting human rights commitments throughout the supply chain. Clean energy technologies—from electric vehicles and energy storage systems to wind turbines and solar panels—require a wide range of minerals and metals and, as such, both their demand and value are on the rise. A report by the International Energy Agency forecasts that mineral requirements for clean energy technologies will quadruple by 2040, with electric vehicles and energy storage systems creating the largest demand in the industry. Demand for lithium—crucial for the production of batteries for electric vehicles—is expected to grow tenfold over the next decade, thus creating the need for a new mine to commence operations every year. With demand for transition minerals skyrocketing, increased mining also threatens Indigenous rights and territories where there is not a comprehensive assessment of the risks and harms to Indigenous Peoples, or participation of the impacted communities. The price of lithium continues to rise and has reached an unprecedented US$80,000 per ton in August 2022, up US$30,000 on 2021.

2 Business & Human Rights Resource Centre. Transition Minerals Tracker. https://www.business-humanrights.org/en/from-us/transition-minerals-tracker/

**Critical mineral needs for clean energy technologies**

| | Coper | Cobalt | Nickel | Lithium | REEs | Chromium | Zinc | PGMs | Aluminium |
|---|---|---|---|---|---|---|---|---|---|
| **Solar PV** | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **Wind** | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **Hydro** | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **CSP** | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **Bioenergy** | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **Geothermal** | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **Nuclear** | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **Elctricity networks** | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **EVs and battery storage** | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **Hydrogen** | ● | ● | ● | ● | ● | ● | ● | ● | ● |

Relative importance of minerals for a particular clean energy technology: High: ● Moderate: ● Low: ●

Source: International Energy Agency

The rapid increase in mining exacerbates the danger of further displacement and dispossession of Indigenous Peoples, as well as human rights violations. Throughout the world, Indigenous territories contain significant concentrations of untapped heavy metal reserves. In the United States, 97% of nickel, 89% of copper, 79% of lithium and 68% of cobalt reserves and resources are located within 35 miles of Native American reservations.[3] Globally, mining has a potential influence on 50 million square kilometers of the Earth's land surface, of which 8% coincides with protected areas, 7% with key biodiversity areas and 16% with remaining wilderness areas.[4]

The methods used in the extraction of transition minerals, such as water-intensive methods and open-pit mining, remain the same and the current growing demand further threatens cultural and sacred sites, watersheds and landscapes. In addition, toxic materials such as arsenic, mercury, cadmium, chromium and lead are released into the air and water during the extraction process, with devastating long-term effects on both people and the environments on which they depend.

Furthermore, the exponential growth of transition mineral extraction will not only continue to threaten Indigenous Peoples and their territories, but also the lands that are vitally important for biodiversity and carbon capture. For the clean energy transition to be truly a

3 MSCI. ESG Research. Mining Energy-Transition Metals: National Aims, Local Conflicts. June 2021. https://www.msci.com/www/blog-posts/mining-energy-transition-metals/02531033947

4 Sonter, L.J., Dade, M.C., Watson, J.E.M. et al. Renewable energy production will exacerbate mining threats to biodiversity. Nat Commun 11, 4174 (2020). https://doi.org/10.1038/s41467-020-17928-5

Just Transition, Indigenous Peoples and other marginalized populations must be placed at the center of the decision-making process, particularly where proposed projects and policies may affect their rights and ways of life.

Indigenous leadership organizations call on governments and companies involved in the new green economy to respect and uphold the rights enshrined in the UN Declaration on the Rights of Indigenous Peoples, such as the right to Free, Prior and Informed Consent, in all areas related to the extraction, mining, production, consumption, sale and recycling of transition and rare-earth minerals worldwide. In addition, they entreat States to create laws and other tools necessary to uphold the rights of Indigenous Peoples and urge companies to respect them in all their activities, in accordance with generally accepted international standards, and to engage in open, fair and equitable dialogue with Indigenous communities.

Indigenous leaders recognize that overcoming these challenges will require a combination of dynamic solutions and support from partners, governments, NGOs and civil society organizations. Certain concrete measures to help mitigate these problems include:

- Build the capacity of Indigenous communities whose lands and territories are being or are planned to be mined for transition minerals, including training communities on how to lobby stakeholders to represent the interests of shareholders so that they represent Indigenous Peoples's interests.
- Secure land titling and land rights for Indigenous communities.
- Campaign globally to support Indigenous Peoples who are affected by transition mineral extraction.
- Organize direct dialogues between company and Indigenous Peoples' representatives.
- Produce official expert opinions for specific cases and projects and provide independent environmental impact assessments.
- Engage in the Initiative for Responsible Mining Assurance and use the certification processes as leverage to improve the practices of mining companies and vehicle manufacturers.
- Advocate for legal initiatives and law reform.
- Educate companies on Free, Prior and Informed Consent as a key right for Indigenous Peoples' self-determination over their political, social, economic and cultural priorities.
- Educate companies about the wide range of risks posed by the violation of Indigenous rights.

# Investing in circular economies based on Indigenous Knowledge

One of the most overlooked solutions to this potential crisis is the fact that many of the transition minerals are highly recyclable (see table below). In practice, however, they are hardly recycled at all. According to the International Energy Agency, "recycling can play an important role in relieving the burden on primary supply from virgin materials at a time when demand starts to surge."[5]

Recycling many of these materials is possible; however, as the recent report by the Institute for Sustainable Futures and Earthworks highlights, a large amount of these materials are currently recycled into other products or face other challenges

**Battery and EV material intensity and recycling**

| Materials | Al Aluminium | Cu Copper | Li Lithium | Co Cobalt | Ni Nickel | Mn Manganese | Dy Dysprosium | Nd Neodymium |
|---|---|---|---|---|---|---|---|---|
| Current materials intensity [t/GWh] | 220 | 220 | 113 | 124 | 415 | 406 | 0.083 kg/ vehicle | 0.695 kg/ vehicle |
| Future technology [t/GWh] | 220 | 220 | 411 | 0 | 0 | 0 | 0.083 kg/ vehicle | 0.695 kg/ vehicle |
| Current recycling rate [%] | 70% | 70% | 0% | 90% | 90% | 0% | 0% | 0% |
| Potential recycling rate [%] | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% |

Note: Current materials intensity based on an assumed market share of a range of LIB technologies: NMC (60%), LMO (20%), NCA (15%), and LFP (5%)46. Future technology based on introduction of Li-S batteries.47 Current recycling rate based on a collection efficiency of 100% and recovery rates from various studies. Potential recycling rate based on assumption of 95%.

Source: Dominish, E., Florin, N. and Teske, S., 2019, Responsible Minerals Sourcing for Renewable Energy, Earthworks, Institute for Sustainable Futures, University of Technology Sydney

5 International Energy Agency. The State of Play – The Role of Critical Minerals in Clean Energy Transitions. https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/the-state-of-play#abstract

to be recycled at a large scale, such that recycling cannot yet replace the extraction of more minerals to make the same products.[6] Recycling is essential to reducing future mining, yet there will be a delay until the battery production cycle can be fully circular. It remains to be seen whether this is possible. In the meantime, mining companies must be held accountable and comply with Indigenous rights, human rights, environmental and other standards at national and international levels to ensure that Indigenous communities and ecosystems do not suffer further abuses as new technologies expand. Without securing these rights and protections, renewables will only serve to shift the location of pollution, emissions and health, cultural and ecological impacts, not to diminish them.

Circular economies take into account every aspect of a product's life cycle, from its production to what happens to its elements when its useful life is over. As regards electric vehicle batteries, there are options on the horizon, as, under ideal conditions, 50-60% of certain minerals in recycled batteries can be reused for the supply necessary of these minerals by 2040.[7]

Currently used in electric vehicles and solar panels, green energy technologies are replacing one extractive practice with another. They may change the way they pollute or the location of dispossessed land, but they do not eliminate these problems. This perpetuates the current system that is destroying the planet. For renewables to be a serious alternative to current energy production and consumption cycles, they must be based on a raft of truly alternative principles and practices. Such alternative practices must consider all costs (climate, environmental, human rights and biodiversity loss) and not only the emissions generated by use of the product.

Indigenous Peoples have sustained diverse and complex societies with circular economies over millennia without defaulting to the sort of replacement extractivism that some of today's renewable energy options entail. As Cultural Survival's executive director Galina Angarova points out, "healthy and sustainable economies should mirror healthy ecological systems. Healthy ecosystems are interconnected and resilient to change; they are interdependent and regenerate each other, rather than depleting and weakening the system."[8]

6 Institute for Sustainable Futures, Earthworks. Reducing new mining for electric vehicle battery metals: responsible sourcing through demand reduction strategies and recycling. April 2021. https://www.uts.edu.au/sites/default/files/2021-04/20210423_EW%20report%20final.pdf

7 Jessica Dunn, Margaret Slattery, Alissa Kendall, Hanjiro Ambrose, and Shuhan Shen. Circularity of Lithium-Ion Battery Materials in Electric Vehicles. Environmental Science & Technology 2021 55 (8). https://pubs.acs.org/doi/10.1021/acs.est.0c07030

8 Galina Angarova. Returning to Circular Economies Rooted in Indigenous Values. Cultural Survival Quarterly Magazine. 46-2. June 2022. https://www.culturalsurvival.org/publications/cultural-survival-quarterly/returning-circular-economies-rooted-indigenous-values

# Cultural Survival – Session 2022: Securing Indigenous Rights in the Transition to a Green Economy

Organised by Cultural Survival and a global coalition of Indigenous leaders working on Securing Indigenous Rights in the Transition to a Green Economy, this panel brings together leaders working on the front lines of mining projects. They will map the global landscape of transition mineral exploitation and share viable pathways for a Just Transition that protects the rights of Indigenous Peoples and profits of extractive company shareholders in the long term and around the world. The objectives of this session are:

- Discuss global trends in the mining sector and share case studies of Indigenous leadership and resistance in the face of mining sector involvement.
- Explore how governments, companies and investors can support a Just Transition based on Indigenous sovereignty and self-determination.
- Make climate action more successful by integrating Indigenous solutions and partnerships throughout the value chain.

## Recommendations

- We call on governments, corporations and financial decision-makers to avoid the mistakes of the past and eliminate polluting mining, as well as to protect the rights and self-determination of Indigenous Peoples around the world, many of whom live in areas rich in transition minerals.
- To secure a Just Transition for Indigenous Peoples, governments and companies must employ a human rights-based approach to the protection of biodiversity, the advancement of Indigenous sovereignty and self-determination in all efforts relating to building green economies.
- A meaningful, intentional, and truly Just Transition will require a set of solutions including improving existing standards, reforming old mining laws, mandating circular economy practices, setting standards and meeting targets for minerals' reuse and recycling, reducing demand and accepting de-growth as a concept and a pathway, and most importantly, centering human rights and the right to the Free, Prior and Informed Consent in all decision-making.

# Useful websites

- SIRGE Coalition – The SIRGE Coalition
- https://www.culturalsurvival.org/ - Cultural Survival
- Securing Indigenous Rights in the Green Energy Economy - Cultural Survival
- Climate Smart Mining - Minerals For Climate Action
- Mineral Requirements for Clean Energy Transitions | The International Energy Agency
- Transition Minerals Tracker | The Business & Human Rights Resource Center
- The Role of Critical Minerals in Clean Energy Transition | The International Energy Agency
- Just Minerals | EarthWorks
- State Policies Promoting Hybrid and Electric Vehicles | National Conference of State Legislators
- Climate Smart Mining – Minerals For Climate Action | The World Bank
- The energy transition needs metals. But it needs social awareness too | The World Economic Forum
- What's the Impact of Mining of Indigenous Peoples | Mining People International
- The Renewable Energy Transition Has Companies Looking Out To Sea | The Market
- Uncommon Ground: The Impact of Natural Resource Corruption on Indigenous Peoples | Brookings
- Global Atlas of Environmental Justice | Environmental Justice Atlas

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# GLOBAL LANDSCAPES FORUM

The Global Landscapes Forum (GLF) is the world's largest knowledge-led platform on integrated land use, dedicated to achieving the Sustainable Development Goals and Paris Climate Agreement. The Forum takes a holistic approach to create sustainable landscapes that are productive, prosperous, equitable and resilient and considers five cohesive themes of food and livelihoods, landscape restoration, rights, finance and measuring progress. It is led by the Center for International Forestry Research (CIFOR), in collaboration with its co-founders UNEP and the World Bank and Charter Members.

**Charter Members**: CIAT, CIFOR-ICRAF, CIRAD, Climate Focus, Conservation International, Crop Trust, Ecoagriculture Partners, The European Forest Institute, Evergreen Agriculture, FAO, FSC, GEF, GIZ, ICIMOD, IFOAM - Organics International, The International Livestock Research Institute, INBAR, IPMG, IUFRO, Rainforest Alliance, Rare, Rights and Resources Initiative, SAN, TMG-Think Tank for Sustainability, UNCCD, UNEP, Wageningen Centre for Development Innovation part of Wageningen Research, World Farmer Organization, World Bank Group, World Resources Institute, WWF International, Youth in Landscapes Initiative (YIL)


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