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INDIGENOUS RIGHTS AND THE “GREEN MINERALS BOOM”

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February 16, 2023

Transition to renewables



Rapidly transitioning the global energy system from fossil fuels to renewables is considered necessary for addressing climate change.

The Department of Interior has designated a list of **50** critical minerals.

The demand for these minerals is increasing dramatically as clean energy technologies replace traditional hydrocarbon resources.



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Critical mineral needs for clean energy technologies

	Copper	Cobalt	Nickel	Lithium	REEs	Chromium	Zinc	PGMs	Aluminium
Solar PV	●	●	●	●	●	●	●	●	●
Wind	●	●	●	●	●	●	●	●	●
Hydro	●	●	●	●	●	●	●	●	●
CSP	●	●	●	●	●	●	●	●	●
Bioenergy	●	●	●	●	●	●	●	●	●
Geothermal	●	●	●	●	●	●	●	●	●
Nuclear	●	●	●	●	●	●	●	●	●
Electricity networks	●	●	●	●	●	●	●	●	●
EVs and battery storage	●	●	●	●	●	●	●	●	●
Hydrogen	●	●	●	●	●	●	●	●	●

Relative importance of minerals for a particular clean energy technology:

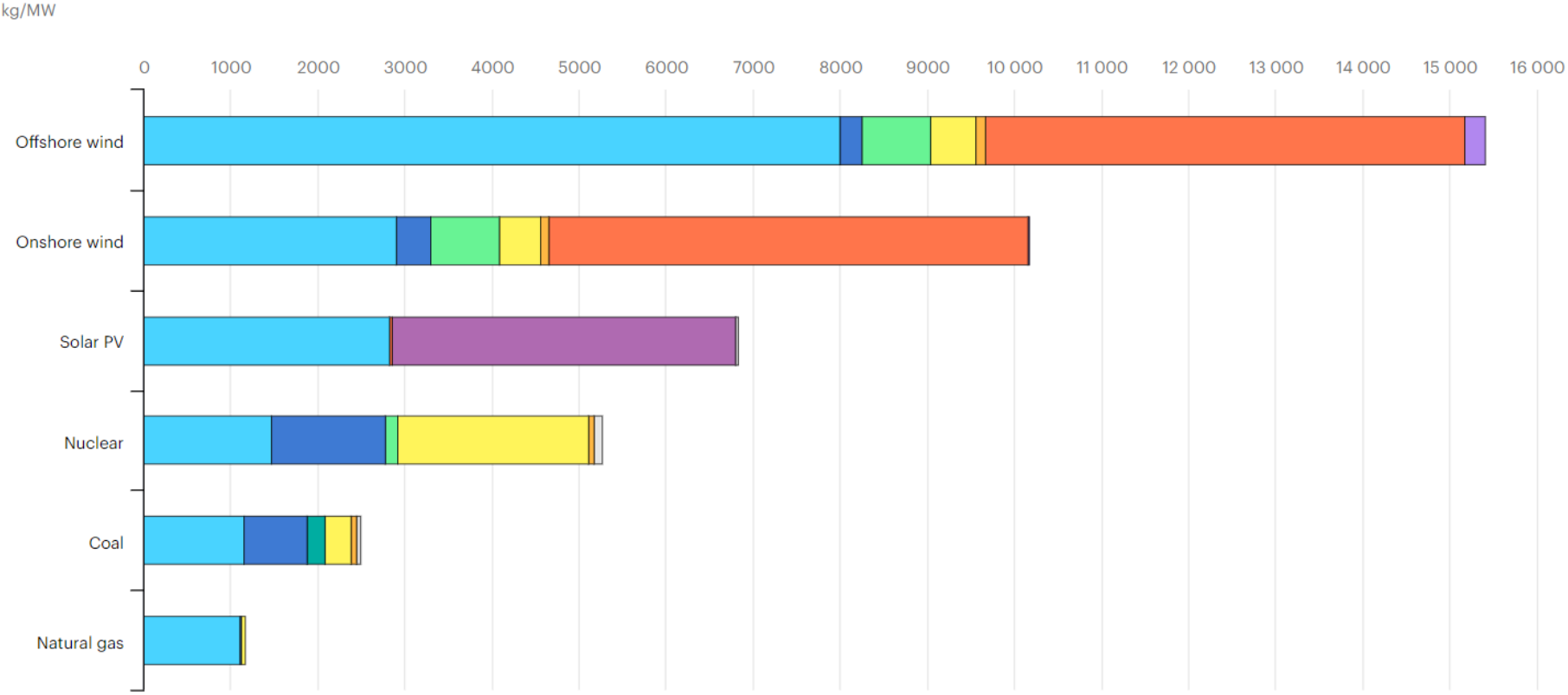
High: ● Moderate: ● Low: ●



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Minerals used in clean energy technologies compared to other power generation sources

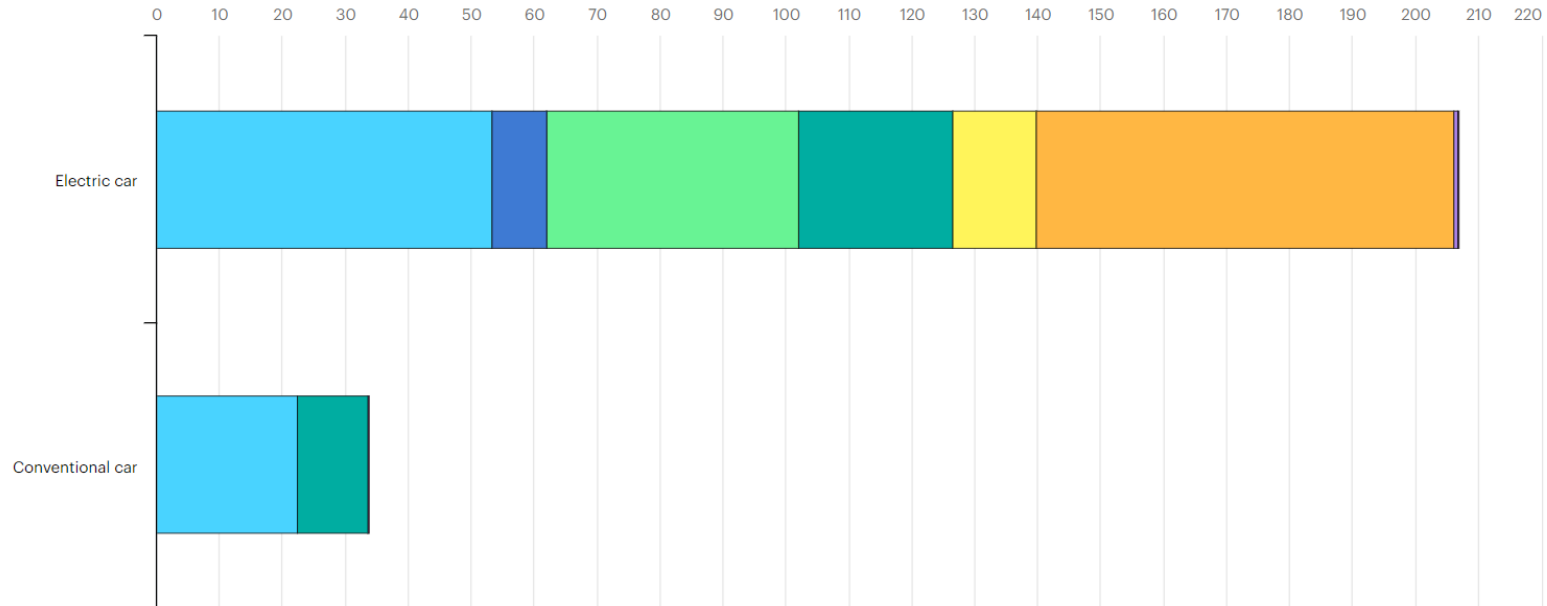


● Copper ● Nickel ● Manganese ● Cobalt ● Chromium ● Molybdenum ● Zinc ● Rare earths ● Silicon ● Others



Minerals used in electric cars compared to conventional cars

kg/vehicle



IEA. Licence: CC BY 4.0

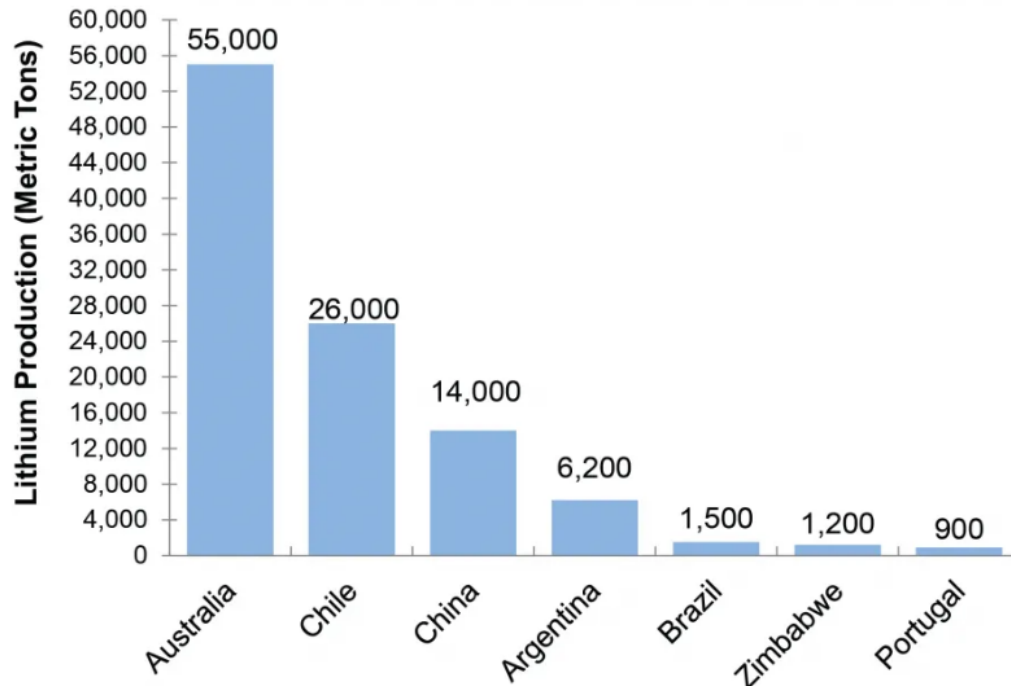
● Copper ● Lithium ● Nickel ● Manganese ● Cobalt ● Graphite ● Zinc ● Rare earths ● Others

EVs and battery storage account for about half of the mineral demand growth from clean energy technologies, spurred by surging demand for battery materials.



Lithium

WORLD LITHIUM PRODUCTION, 2021⁷



Demand for lithium is expected to grow by over **40** times by **2040**.

Lithium refining is dominated by **China** → more than 75% of global lithium processing

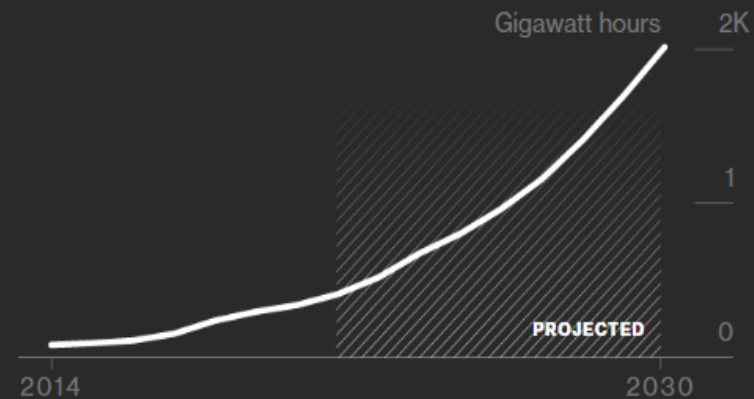


Lithium-Ion Batteries

KEY METALS AND MATERIALS:

● Copper ● Aluminum ● Lithium (LCE) ● Nickel ● Cobalt ● Manganese

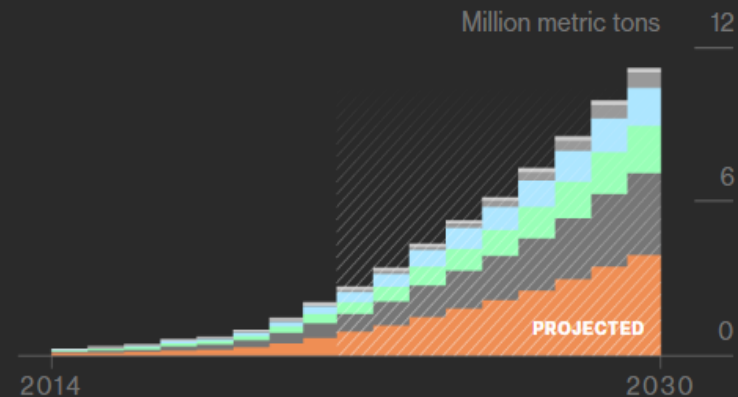
Lithium-Ion battery demand



Lithium-ion batteries able to store 1 gigawatt hour of energy require about **729 tons of lithium**, **1,202 tons of aluminum** and **1,731 tons of copper**, according to BloombergNEF estimates.

Supply of lithium raw materials will remain tight through 2022 as demand from the battery sector builds, BNEF said in a June report. Lithium hydroxide, the chemical favored for premium cells, could see shortages by 2027.

Total demand for materials



Limited availability of other materials is already threatening the battery sector's ability to keep pace with the EV boom, said Yang Hongxin, general manager of SVolt Energy Technology Co., which has an agreement to supply Jeep-maker Stellantis NV. Lithium chemicals and copper foil are a particular concern, while all key battery metals have seen prices advance since mid-2020.

Environmental concerns



Example: Flamingos of Chile

There are three species of flamingo found in the Chilean Andes which form the foundation of the region's ecotourism industry.

Two of these species breed nowhere else in the world.

Scientists found that the numbers of flamingos in the Salar de Atacama, where mining is taking place, are in decline.

The culprit is likely declining water levels, which reduces the food resources available to flamingos.

Aluminum

Aluminum is one of the most widely produced and used metals on earth.

It is the single most widely used material in solar photovoltaic (PV) applications. In fact, the metal accounts for more than 85% of most solar PV components – from frames to panels.

Annual global aluminum production averages roughly **65 million metric tons** of primary aluminum and **30** of recycled aluminum

The International Aluminum Institute expects annual global aluminum demand to nearly **double by 2050**, an increase of 35% and 170% in primary and recycled production respectively.



Aluminum.org

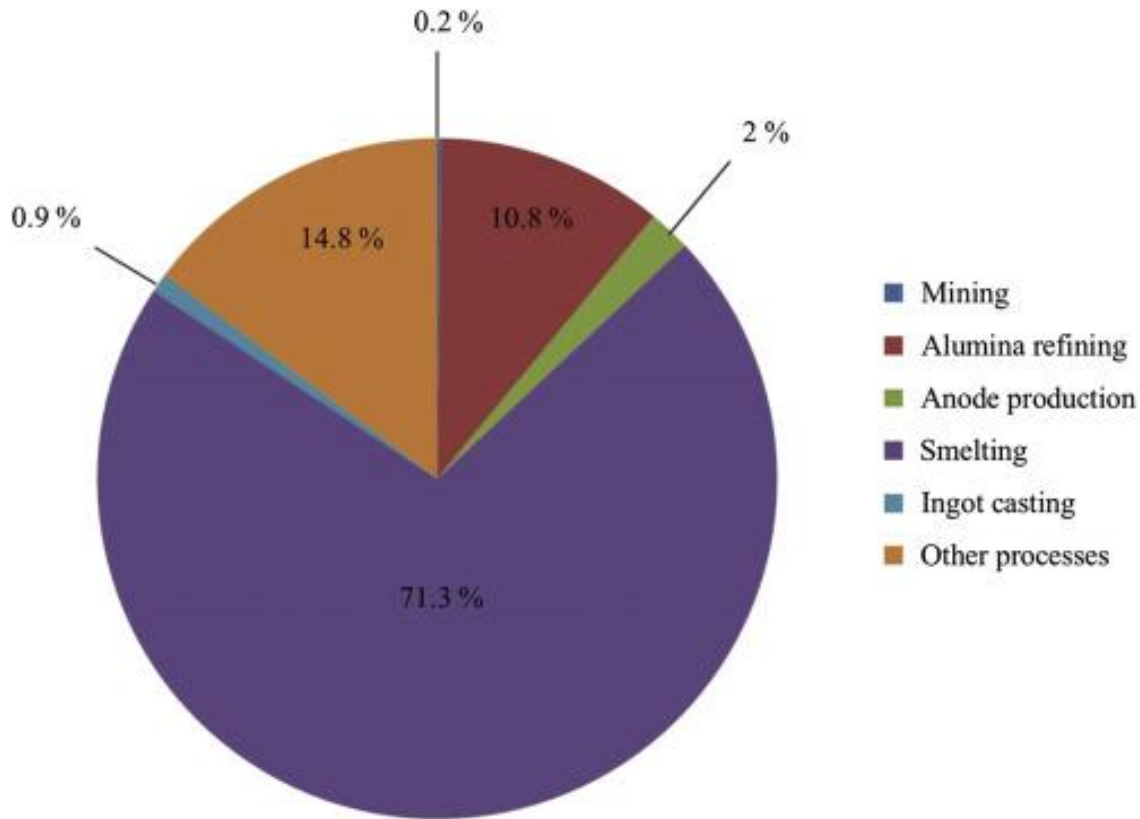


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Carbon impacts of aluminum production

Percentage contribution in greenhouse gas emissions from major processes of aluminum production.



Aluminum deposits tend to be located in forested tropical and semi-tropical areas that currently sequester large amounts of carbon.

Producing aluminum is one of the most electrically intensive processes on earth

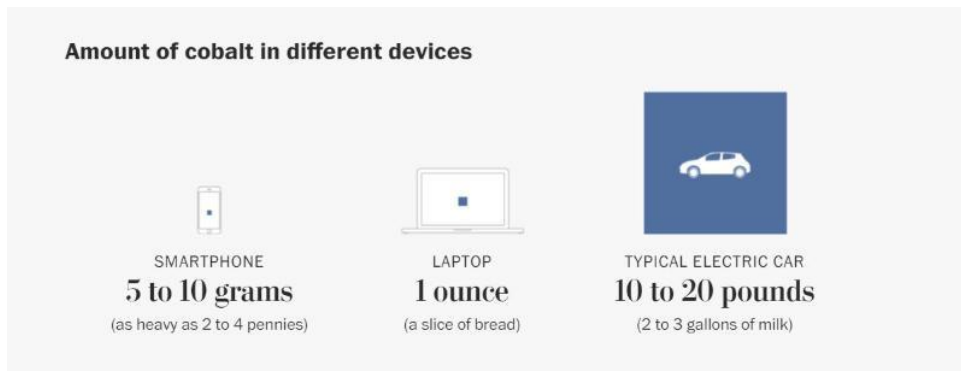
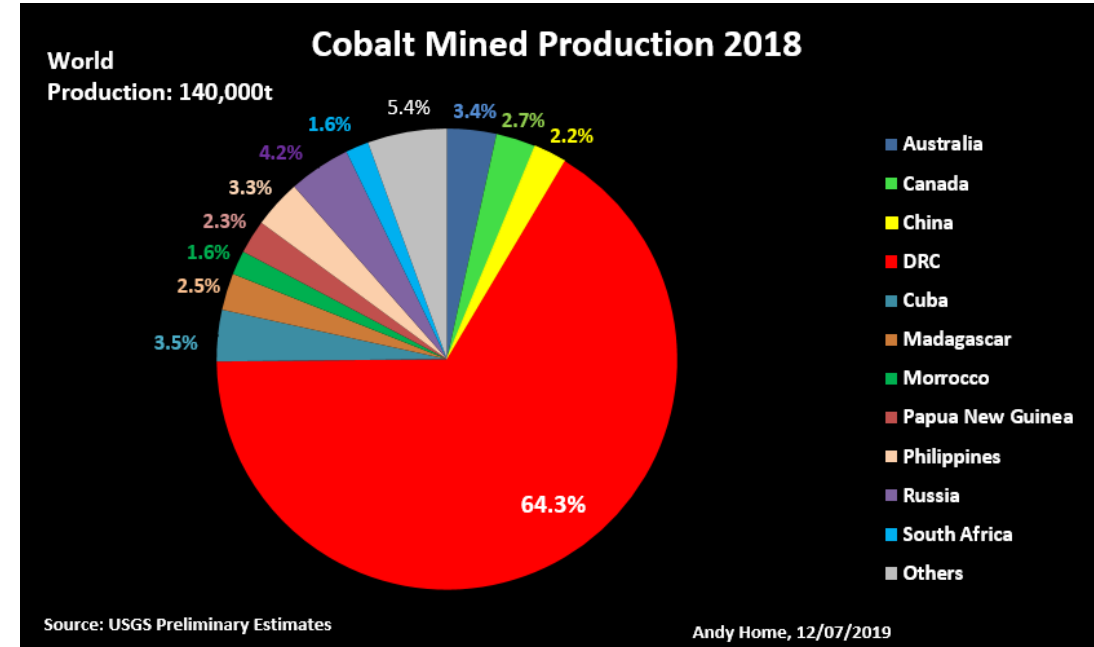


Cobalt

By 2030 the global demand for cobalt will quadruple.

Rising sales of EVs = a scramble to secure cobalt supply chains

Much of the sourcing challenges for cobalt is about uncertainty regarding availability, security, and cost/price of cobalt extraction.



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Cobalt - Environmental, Social and Governance risk factors



The Democratic Republic of Congo produces about 70% of all cobalt on world markets, some 120,000 metric tons per year.

Concerns:

- Coercion
- Politicization
- Artisanal mining
- Child labor
- Violence
- Forced labor
- Unacceptable environmental practices
- other human rights violations

<https://www.mining.com/tesla-resource-to-launch-final-pilot-in-drc-to-trace-cobalt-from-mine-to-evs/>



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Where is mineral extraction happening?

Who is it impacting?

Who is making the decisions?

Who does it benefit?

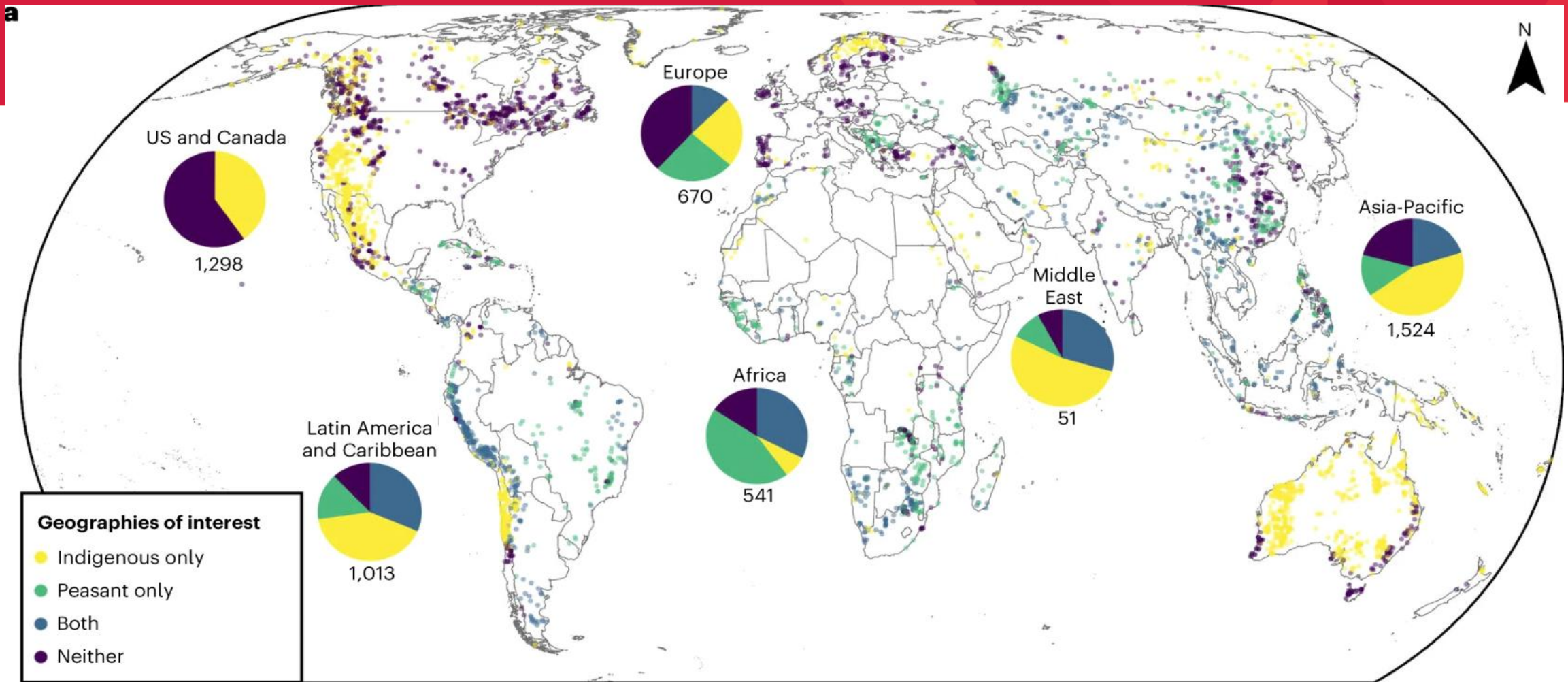
Minerals development in past eras has often been a source of great injustices, serious damage to the environment, and significant conflict.

Frequently there is a great disconnect between those who reap great benefits from mineral development and those who experience its negative impacts.

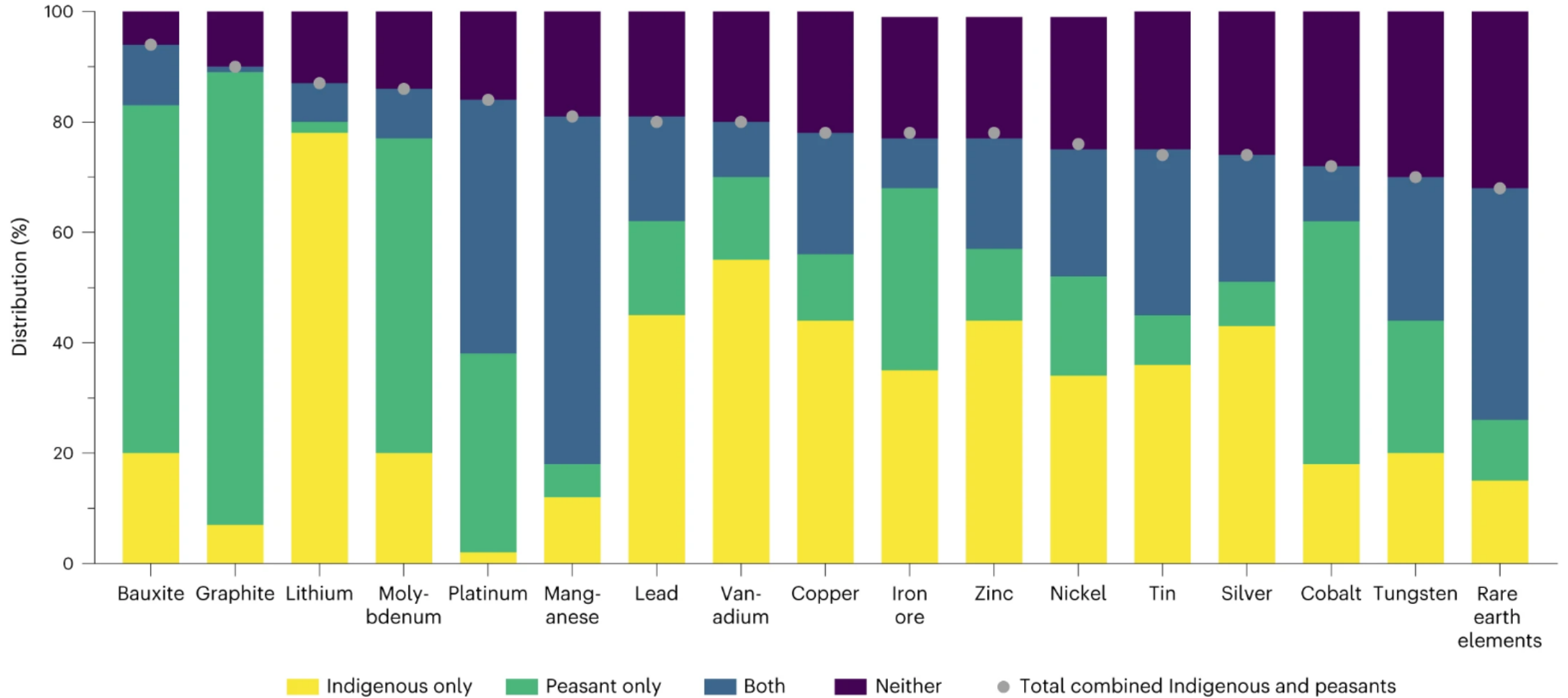


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Locations of 5,097 current and future mining activities for energy transition materials.



Indigenous Peoples and Mining Encounters: Strategies and Tactics Downing, et al. (2002)

“Much of the remaining unexploited ores in sufficient concentration to be attractive for modern commercial exploitation lie under indigenous lands. As pressure builds to gain access to their lands, a major sustainability and land access problem is unfolding. Mining can empower indigenous peoples, but previous encounters have stripped them of their sovereignty, their traditional wealth, and posed multiple impoverishment risks. The public has indicted the industry for tragic and unnecessary forced relocations, violations of human rights, under-compensation for damages, and lack of benefit sharing.”





There is a long list of minerals associated with the green energy transition and each one has a story.

Many of these stories involve impacts on indigenous peoples, lands and territories.

Consulting with indigenous peoples is necessary to:

- reduce conflict
- enshrine trust between indigenous communities and the private sector
- reduce environmental impacts
- ensure indigenous communities benefit from the mining activities
- give Indigenous voices decision making power



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ILO Convention No. 169 *On Indigenous and Tribal Peoples in Independent Countries*



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Convention 169

It is based on respect for the cultures and lifestyles of indigenous and tribal peoples and recognizes their right to define their own development priorities.

Its two basic postulates are:

1. their right to maintain and strengthen their cultures, lifestyles and institutions; and,
2. their right to participate effectively in decisions that affect them.

It contains 46 articles setting minimum standards of respect for the rights of indigenous peoples, including the ownership of their lands, the natural resources of their territories, preserving their traditional knowledge, self determination and prior consultation.



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The Path to Peace and Development

- Analyzes over 25 rulings of the courts of numerous Latin American countries, almost all of which are ruling in favor of indigenous communities.
- We also look at subsequent efforts of governments to bring their processes in line with the requirements of the Convention.
- It will be published in Spanish in March 2023 by the Human Rights Institute of the University of Deusto in Spain
- It will be published in English in April by the Foundation for Natural Resources and Energy Law

We participated in the **national assessment of Ecuador's mining laws and policies**. This Assessment identified inadequate consultation with indigenous peoples as a priority problem. We led the Technical Assistance effort on these issues with the Government of Ecuador

We are currently leading a similar Technical Assistance program on indigenous consultation with the Government of Mexico.

In April, at FNREL's Latin American conference on **International Mining and Energy Law, Development and Investment** in Mexico City, I will chair a panel that will discuss national treaty obligations to consult Indigenous Peoples in making resource decisions



12 BASIC PRINCIPLES OF CONSULTATION WITH INDIGENOUS PEOPLES



SDSG
SUSTAINABLE DEVELOPMENT
STRATEGIES GROUP

A document created as part of our review of international jurisprudence on Indigenous rights, which focused on ILO Convention No. 169

We aim to identify the basic principles of consultation to ensure that any legislation, regulation, or internal protocols of signatory countries of the Convention are consistent with the obligations they assumed upon ratification



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PRINCIPLE 1

CONSULTATION APPLIES TO LEGISLATIVE OR ADMINISTRATIVE MEASURES

Article 6 No. 1 (a) of the Convention requires the Government to consult the peoples concerned (indigenous or tribal) **whenever consideration is being given to legislative or administrative measures that may affect them directly.**

Therefore, a government should not adopt legislation, regulations, or administrative measures that could directly affect indigenous or tribal peoples without prior consultation with the representative institutions of the affected peoples.



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PRINCIPLE 2

SUSCEPTIBILITY TO DIRECT IMPACT

The duty to consult may be required with respect to:

- Administrative decisions on projects that can be developed on lands or territories recognized as belonging to indigenous or tribal peoples.
- Decisions concerning activities affecting lands or territories which, **although not officially recognized as belonging to indigenous or tribal communities, are disputed, claimed, or have important links to particular communities.**
- Decisions regarding projects that directly impact resources that are important to indigenous or tribal communities, such as water, wildlife, vegetation, or resources of historical or traditional use.
- Decisions regarding projects that impact sites of cultural or historical importance, sites of traditional use, ancestral tombs, etcetera.
- Decisions regarding activities that may directly impact indigenous peoples themselves, such as matters related to health, education, use of traditional languages, or maintenance of culture.



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PRINCIPLE 3

IDENTIFICATION OF INDIGENOUS OR TRIBAL PEOPLES TO WHOM THE CONVENTION APPLIES

Tribal peoples are groups whose social, cultural, and economic conditions distinguish them from other sectors of the national community. Tribal peoples self-identify as members of their group and are governed wholly or partly by their customs, traditions, or special legislation.

If a particular group qualifies as indigenous or tribal under these criteria, **the State should not adopt definitions or other provisions that disregard their Indigenous or tribal identity and thus affect their right to consultation.**



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PRINCIPLE 4

PURPOSE OF THE CONSULTATION

Consultations should be conducted in good faith and should aim at reaching an agreement or obtaining the consent of the people concerned.



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PRINCIPLE 5



<https://time.com/6109446/australia-aboriginals-green-energy/>

INFORMED CONSULTATION

If the process aims to reach an agreement, people must be provided with the necessary information to ensure all aspects of the project are understood.

The definition of what constitutes necessary information should be determined by listening to the voices of the people concerned.



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PRINCIPLE 6

CULTURALLY APPROPRIATE PROCESS

Consultations should be conducted under culturally appropriate procedures.

The community has the right to determine what information it needs and how it should be presented for cultural relevance.

Funds may be necessary to allow the affected peoples access to experts in relevant subjects.



PRINCIPLE 7



PRIOR CONSULTATION

Consultation with Indigenous communities must occur **prior to project development** or implementation of a plan.

Early notice provides adequate time for discussion within communities and allow communities to offer a thoughtful response to the State.



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PRINCIPLE 8

GOVERNMENT IS RESPONSIBLE FOR THE CONSULTATION

The Government must conduct the consultation and cannot delegate this responsibility to third parties.



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PRINCIPLE 9

THE ROLE OF THE PRIVATE SECTOR

Consultation must define a role for the company that intends to develop the project so that affected communities have an understanding of the possible benefits and risks of the project and can establish a genuine dialogue with the company.



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PRINCIPLE 10



<https://www.nationalgeographic.com/magazine/article/lithium-is-fueling-technology-today-at-what-cost>

STATE SAFEGUARDS

The State must comply with the following safeguards:

Conduct an appropriate and participatory process that guarantees the right to consultation, especially in regard to development or large-scale investment plans

Conduct an environmental impact assessment

Reasonable share of the benefits produced by the exploitation of natural resources



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PRINCIPLE 11



RESPECT THE AUTHORITIES OF EACH VILLAGE/COMMUNITY

It is the obligation of the State to carry out consultation processes that respect the decision-making system of each tribe or community so that an adequate and effective relationship is established with other state authorities, social or political actors, and interested third parties.

<https://www.hcn.org/articles/indigenous-affairs-social-justice-free-prior-and-informed-consent-is-the-gold-standard-of-indigenous-rights-why-isnt-it-followed>



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PRINCIPLE 12



PROTECTION OF THE COMMUNITY

The States must protect the community from third-party activities that aim to divide or interfere with their decision-making processes.

These activities may include offering money or economic benefits to obtain member consent, entering into secret agreements with members of the group or carrying out activities of exploration and exploitation of natural resources in a way that affects their right to consultation or to other rights.



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Examples

The “Lithium Triangle”

Andean salt flats with the largest lithium reserves in brines.

It holds approximately 60% of the world’s lithium reserves.

The “lithium triangle” encompasses the Atacama (Chile), Hombre Muerto (Argentina), and Uyuni (Bolivia) salt flats.

The extraction of brine as a water resource is not associated with water codes but with Mining Codes.

The lithium triangle as represented in international business circles. Source: <https://www.economist.com/the-americas/2017/06/15/a-battle-for-supremacy-in-the-lithium-triangle>.



Argentina



Argentina has the world's largest lithium reserves, with two active production sites and over 60 projects under development.

Water-reliant industries' actions in the region, including lithium extraction, heavily impact the already limited water resource.

An Indigenous community of the Salinas Grandes salt flat relies on llamas as a source of meat, textiles and crafts made from wool. They have already seen lush regions become barren, and fear that soon there will not be enough water for their llamas.

Nearby communities live from artisanal salt harvesting, and from producing food such as peas and potatoes – all of which require water.

Chile

Chile is the second-largest producer of lithium.

Mining is depleting indigenous communities' water supplies and affecting farming and pastoral practices.

Some communities rely on terraces to grow crops. Water flows down through vertical waterways between the terraces, from the highest point of the river, and is distributed in a controlled manner. This traditional practice is in danger of being lost.

As are the vineyards which some communities tend to produce wine.



<https://www.reuters.com/business/environment/exotic-wines-hide-heights-chiles-atacama-desert-2022-05-23/>



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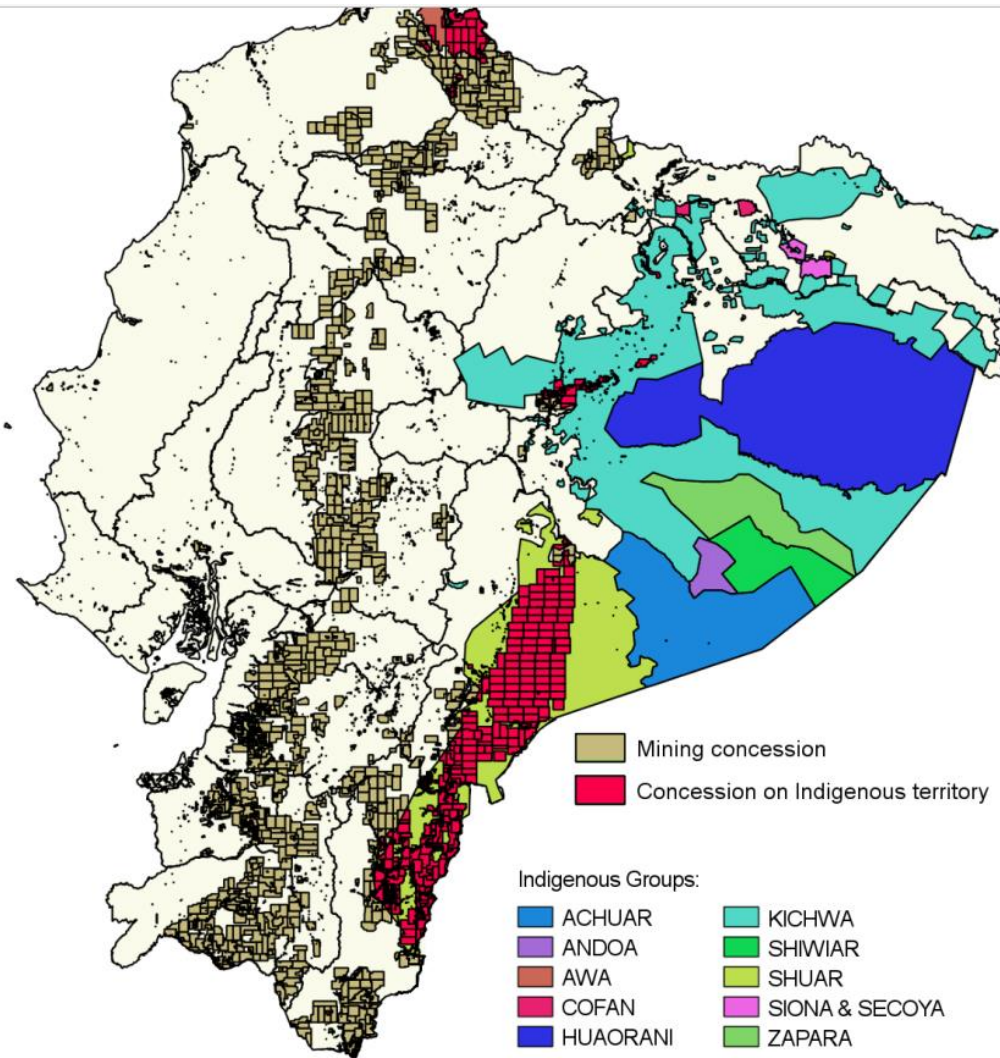
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Chile

Case	Tribunal	Year
Comunidades Indígena Inalafquen e Inocente Panguilef y la Asociación Indígena Futa Koyagtun Coz Coz Mapu vs. Servicio de Evaluación Ambiental	Corte Suprema de Justicia, 3ª Sala	2014
Oficina de Asuntos Indígenas de la Conadi vs. S.Q.M. Salar S.A	Corte Suprema de Justicia	2014
Organización Comunitaria “Los Pueblos Indígenas Unidos de la Cuenca de Tarapacá, Quebrada de Aroma, Coscaya, Miñi Miñi” vs. Servicio de Evaluación Ambiental	2º Tribunal Ambiental	2015
<i>Comunidad Indígena Atacameña de Peine c. Dirección General de Aguas</i>	Corte de Apelaciones de Antofagasta	2020
<i>Comunidad Indígena Colla Río Jorquera y Sus Afluentes con Comisión de Evaluación Ambiental de la Región de Atacama</i>	Corte Suprema de Justicia	2021



Ecuador



Roo Vandegrift, Daniel C. Thomas, Bitty A. Roy, and Mierya Lew; 2017.11.05 v1.0; The extent of recent mining concessions in Ecuador; Rainforest Information Center, Nimbin, New South Wales, Australia.



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Ecuador

Case	Tribunal	Year
Confederación de Nacionalidades Indígenas del Ecuador y otros contra Ley de Minería	Corte Constitucional	2010
Consulta popular del Consejo Nacional Electoral	Corte Constitucional	2014
Consulta Popular Galo Patricio Mina Espinoza, Luis Amador Mina Espinoza y otros pobladores de la comunidades asentadas en las parroquias de Lita	Corte Constitucional	2019
Consulta Popular del Prefecto del Azuay	Corte Constitucional	2019
JOSE RIVADENEIRA SERRANO, COORDINADORA ECUATORIANA DE ORGANIZACIONES PARA LA DEFENSA DE LA NATURALEZA Y AMBIENTE, CEDENMA, PEDRO BERMEO GUARDERAS, ASOCIACION ANIMALISTA LIBETA ECUADOR, Y ALEXANDRA ALMEIDA ALBUJA, ACCION ECOLOGICA	CORTE PROVINCIAL DE JUSTICIA DE SUCUMBIOS	2021
All Metals Minería y otros v. Corte Provincial	Corte Constitucional	2019
GAD de Santa Ana de Cotacachi v. ENAMI y otros	Corte Constitucional	2021



Colombia

Case	Tribunal	Year
Organización Indígena de Antioquia y Comunidad Indígena EMBERA-CATIO de Chajeradó vs. Corporación Nacional de Desarrollo del Chocó (CODECHOCO) y la Compañía de Maderas del Darién (MADARIEN)	Tercera Sala de Revisión de la Corte Constitucional	1993
Procuradora Delegada para Asuntos Etnicos vs. Gobernador del Departamento del Cesar, el Registrador Nacional del Estado Civil y el Registrador Departamental del Cesar	Septima Sala de Revisión de la Corte Constitucional	1999
Julio Alberto Torres Torres y otros vs. Ministerio del Interior y de Justicia y otros	Cuarta Sala de Revisión de la Corte Constitucional	2010
Oscar Carupia Domicó y otros, a nombre de los resguardos Chidima-Tolo y Pescadito pertenecientes a la etnia Embera-Katío vs. Ministerios de Transporte, Ambiente, Vivienda y Desarrollo Territorial, Interior y de Justicia, de Minas y Energía, de Agricultura, de Defensa, el Consejo Asesor de Regalías	Quinta Sala de Revisión de la Corte Constitucional	2011
Jovannys Pardo Castro vs. la Dirección General Marítima de la Capitanía de Puerto de Cartagena (Dimar)	Primera Sala de Revisión de la Corte Constitucional	2012



Colombia

Case	Tribunal	Year
Junta Directiva del Consejo Comunitario de Mulaló vs. Ministerio del Medio Ambiente y Desarrollo Sostenible, Ministerio del Interior, Instituto Nacional de Vías (INVIAS), Consorcio D.I.S. S.A- EDL LTDA	Primera Sala de Revisión de la Corte Constitucional	2013
Zully Amparo Archibold vs. Ministerio de Comercio, Industria y Turismo, la Corporación Autónoma Regional Coralina y el Municipio de Providencia y Santa Catalina Islas	Cuarta Sala de Revisión de la Corte Constitucional	2014
Jacinto Epinayú, Luis Geronel Quintana y otros, identificados como indígenas del pueblo wayúu, vs. el Incoder, con vinculación de Agromar SAS	Primera Sala de Revisión de la Corte Constitucional	2015
Santacoloma Méndez y Negrete Montes	Corte Constitucional	2016
Comunidad Indígena Awá La Cabaña versus Consorcio Colombia Energy	Corte Constitucional	2018



Peru

Case	Tribunal	Year
Bustamante con Occidental Petrolera del Peru	Tribunal Constitucional de la Republica del Peru	2009
ASOCIACION INTERETNICA DE DESARROLLO DE LA SELVA PERUANA con Ministerio de Energia y Minas	Tribunal Constitucional de la Republica del Peru	2010
Gonzalo Tuanama Tuanama y más de 5000 Ciudadanos vs. Presidencia del Consejo de Ministros	Tribunal Constitucional de la Republica del Peru	2010
Ministerio de Energía y Minas vs. Gobierno Regional de Junín	Tribunal Constitucional de la Republica del Peru	2012
Instituto de Defensa Legal vs. Ministerio de Energía y Minas	Sala de Derecho Constitucional y Social Permanente de la Corte Suprema de Justicia de la Republica del Peru	2013



Peru

Case	Tribunal	Year
Instituto de Defensa Legal vs. Ministerio de Energía y Minas	Tribunal Constitucional de la Republica del Peru	2014
Instituto de Defensa Legal del Ambiente y el Desarrollo Sostenible Perú (IDLADS Perú) vs. Corte de Justicia de Lima	Tribunal Constitucional de la Republica del Peru	2021
ASOCIACION INTERETNICA DE DESARROLLO DE LA SELVA EPRUANA – AIDSESEP	Corte Suprema de Justicia de la Republica del Peru	2021
Comunidades campesinas Chila Chambilla y Chila Pucara vs. Instituto Minero Metalúrgico (Ingemmet) y Ministerio de Energía y Minas (MEM)	Tribunal Constitucional de la Republica del Peru	2019



Mexico

Case	Tribunal	Year
Acueducto Independencia y la tribu Yaqui	Suprema Corte de Justicia Nacional	2013
Mayas con Monsanto. Voto Concurrente disponible en	Suprema Corte de Justicia Nacional	2015
NORMA ANGÉLICA GARZÓN MARTÍNEZY OTROS vs. CÁMARA DE DIPUTADOS Y CÁMARA DE SENADORES DEL CONGRESO DE LA UNION	Suprema Corte de Justicia Nacional	2020
Comisariado Ejidal de Tecoltemi y la Comunidad Indígena Nahua de Tecoltemi con Camara de Diputados y Senadores del Congreso de la Union, Director General de Minas de la secretaria de Economia y Minera Gorrion	Corte Suprema de Justicia Nacional	2022



Guatemala

Case	Tribunal	Year
OXEC y Comunidad q'eqchi		2017
Centro de Acción Legal-Ambiental y Social de Guatemala (CALAS) contra Ministro de Energía y Minas	Corte de Constitucionalidad	2017



Inter-American Court of Human Rights

Case	Year
Caso del Pueblo Saramaka vs. Surinam	2007
Pueblo Indígena Kichwa de Sarayaku vs. Ecuador	2012



Nevada, USA

Thacker Pass Lithium mine project-
the largest known lithium resource in the US.

The project is located on land in northern Nevada inhabited by the Northern Paiute for as long as 15,000 years.

Several Indigenous nations believe Thacker Pass is a sacred site, including the Fort McDermitt Paiute Shoshone Tribe, the Reno-Sparks Indian Colony (RSIC), the Shoshone-Paiute Tribes of the Duck Valley Reservation, Lovelock Paiute Tribe, Fallon Paiute Shoshone Tribe, and the Pyramid Lake Paiute Tribe



<https://unicorriot.ninja/2022/indigenous-fear-desecration-of-burial-sites-at-thacker-pass-lithium-mine/>



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Australia

80% of mining activities in Australia take place on Aboriginal lands.

More than 40% of Australia's landmass is under Native Title, a law recognizing Aboriginal people have varying rights to live or hunt on the land.

Native Title is not the same as ownership, and Aboriginal people typically can't veto proposed projects on native-titled land that they don't want. Developers are required only to negotiate "in good faith" for six months to try to reach an agreement with the community.





Thank You!

Questions?



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<https://time.com/6109446/australia-aboriginals-green-energy/>

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