

Race to Critical Minerals Defeating Sustainable Development Goals? The case of Latin America

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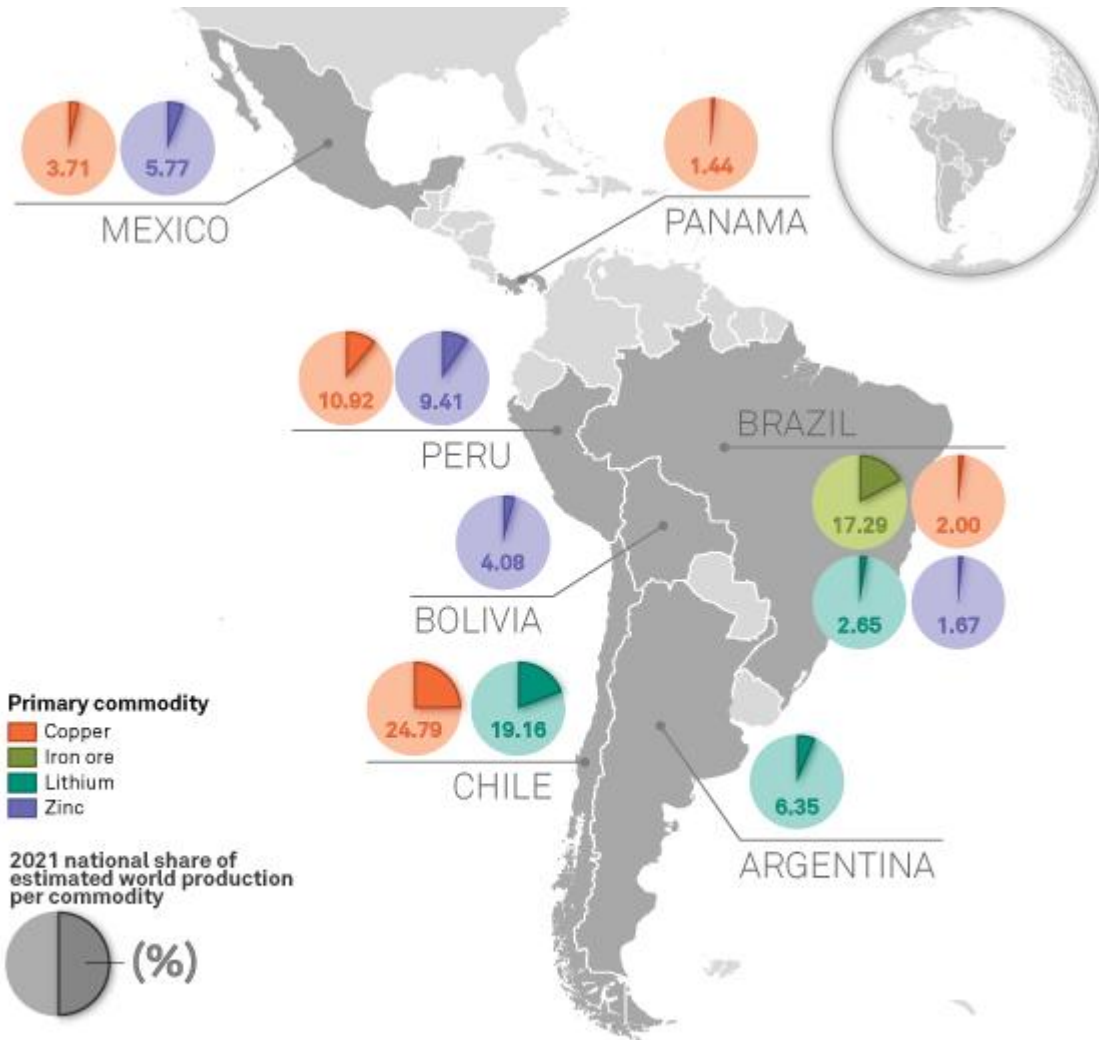
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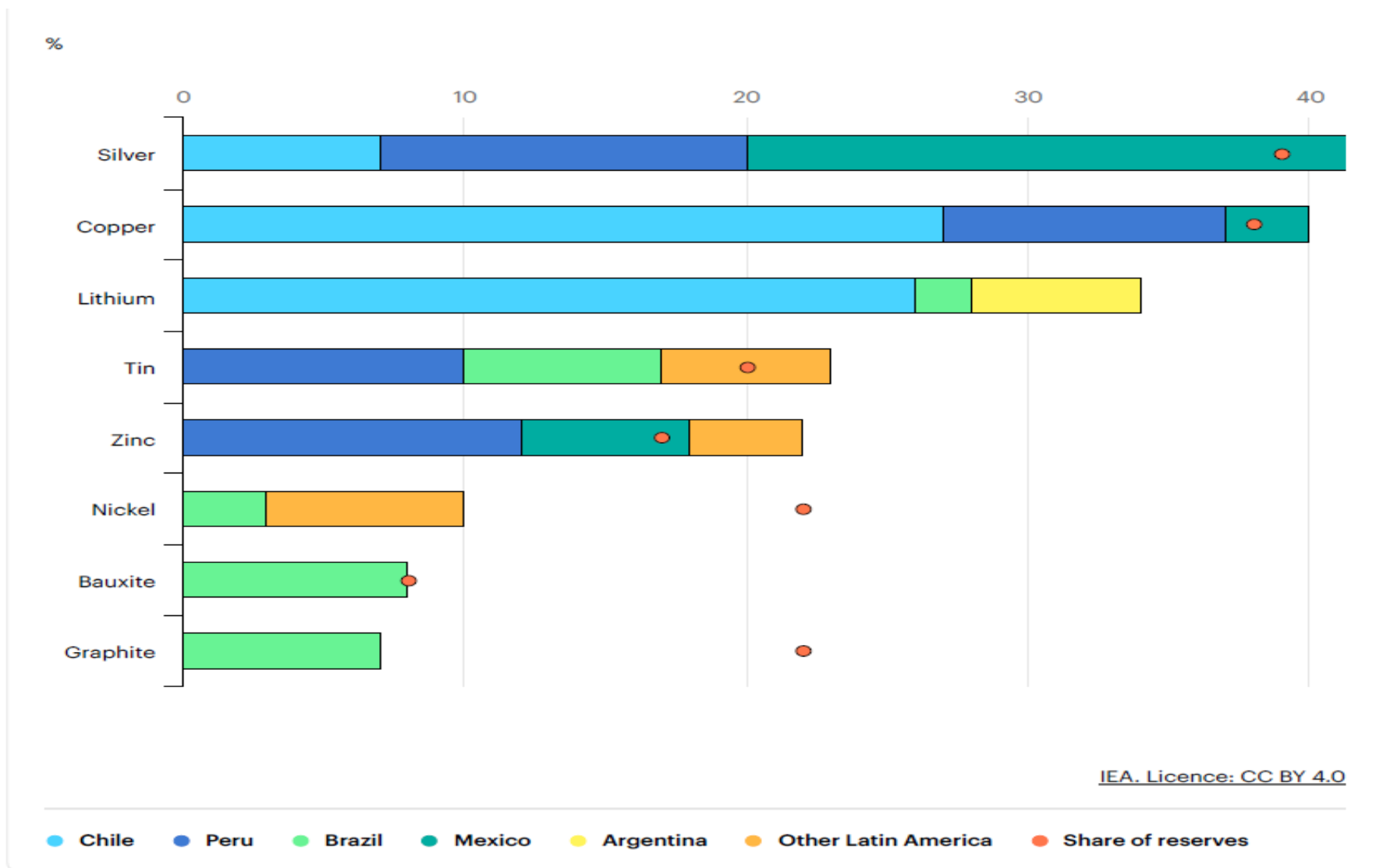
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Latin America's mining sector



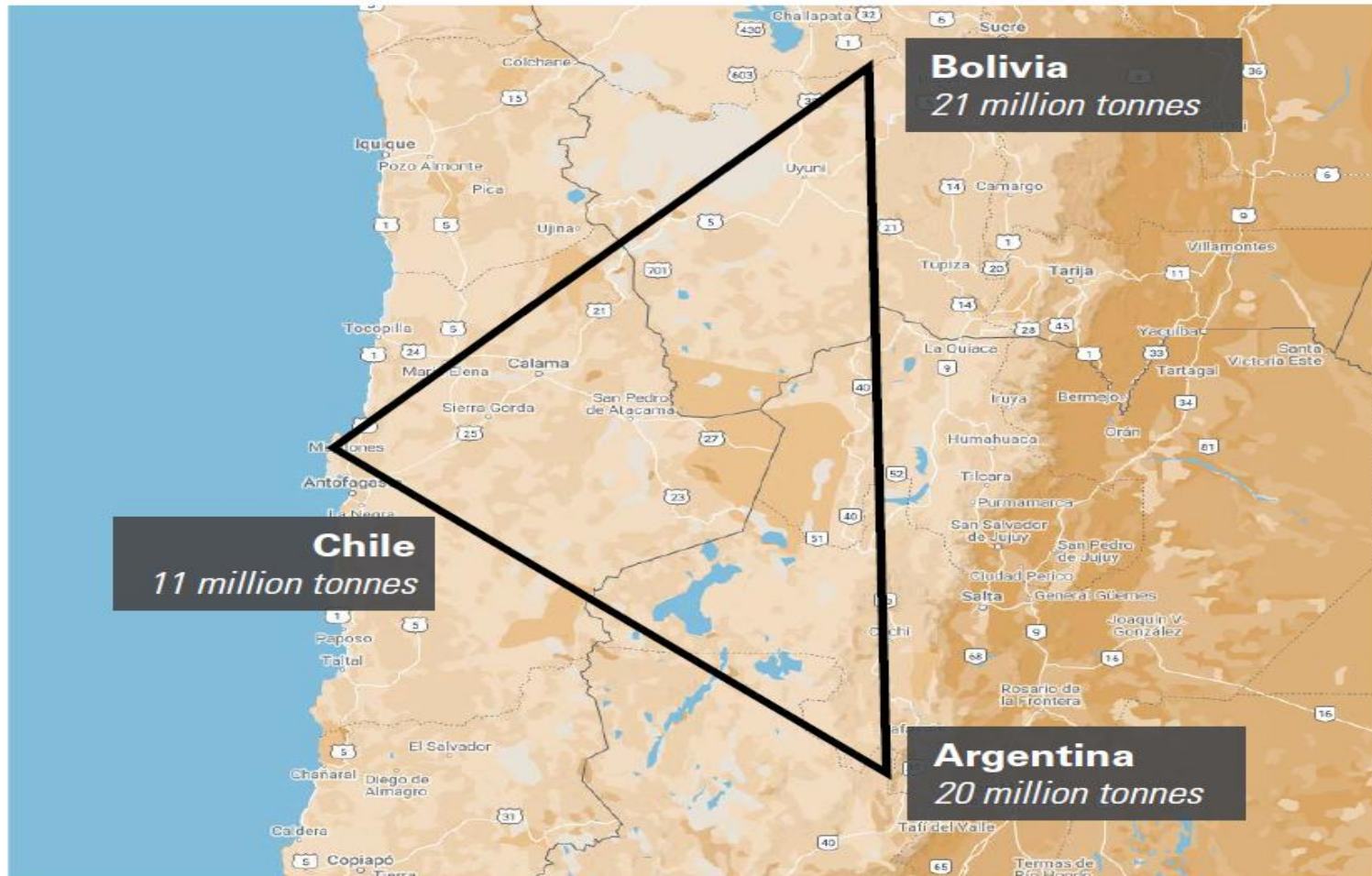
- Chile, Peru, and Mexico hold approx 40% of world's copper reserves, with additional reserves found in Argentina, Brazil, Colombia, and Ecuador.
- About two-thirds of global lithium reserves are in Latin America—primarily in Bolivia, Argentina, and Chile, with smaller quantities found in Mexico, Peru, and Brazil.
- Brazil is home to 17% of global nickel reserves, and additional reserves are found in Colombia and Cuba. The region also has small amounts of cobalt.

Latin America's Share in the Production and Reserves of Selected Minerals, 2021



Source: IEA (2023), Latin America's opportunity in critical minerals for the clean energy transition, IEA, Paris.

The “Lithium Triangle”



Source: United States Geological Survey (USGS), 2023

Overview of regulatory approaches

The latest “Natural Resources Outlook in Latin America and the Caribbean” made by the ECLAC states that most regulatory frameworks in the region establish that non-renewable natural resources in the subsoil, including minerals, belong to the State. It also says that the central government is the administrative body, except in Argentina, which delegates authority to the provincial governments. ECLAC’s report analyzed legal norms on mining property to determine that concessions are the most widely used mechanism in the region to enable decision-making on investment, production and destination of the extracted mineral.



Economic Commission for Latin America and the Caribbean (ECLAC), Natural Resources Outlook in Latin America and the Caribbean. Executive summary (LC/PUB.2023/7), Santiago, 2023.

Regulatory approaches

Country	Regulation	Resource exploitation modalities
Argentina	<ul style="list-style-type: none"> Confined to the provinces of Jujuy Provincial Act No. 5674 of 2011 La Rioja, Provincial Act No. 10.608 of 2023 	<p>The Provincial Act of Jujuy and the Provincial Act of La Rioja declare lithium a strategic natural resource. The first one justifies said category by saying it is a generator for socioeconomic development in the providence, and the second one states that its importance relies on the contributions to the energy transition.</p> <p>Argentina provides concessions to private firms, and in the case of the Jujuy providence, there is a shareholding in a State-owned enterprise called “Jujuy Energía y Minería Sociedad del Estado” (JEMSE).</p>
Brazil	<ul style="list-style-type: none"> Decree-Law No. 764 of 1969 Law No. 8,970 of 1994 Constitutional Amendment No. 6/1995 	<p>The Decree of 1969 authorized the formation of the Mineral Resources Research Company (CPRM), in the form of a mixed economy company, with the objective of conducting mineral research with a view to stimulating the discovery of new deposits and the intensification of the use of the country’s mineral and water resources.</p> <p>The Law from 1994, transformed CPRM into a public company and changed its corporate objects, so that CPRM started to perform mainly the function of Geological Service in Brazil and stopped acting in the execution of mineral research itself.</p> <p>The reform of Constitutional Amendment No. 6/1995 allowed the opening of the mining sector to foreign capital.</p> <p>Per information from 2021, Brazil used auctions to award mineral exploration licenses for copper and other minerals.</p>
Bolivia	<ul style="list-style-type: none"> Supreme Decree No. 29.496 of 2008 Political Constitution of the State (Article No. 369) 	<p>The Supreme Decree declares “the industrialization of the Salar de Uyuni to be a national priority for the productive, economic and social development of the Department of Potosi”.</p> <p>In its political constitution, it is established that the non-metallic natural resources existing in the salt flats, brines, evaporites, sulphurs and other forms to be “strategic for the country”.</p> <p>In 2017, “Yacimientos de Litio Bolivianos” (YLB) was created as state own public and decentralized company. It enjoys a certain independence from the Energy Ministry.</p>
Chile	<ul style="list-style-type: none"> Decree Law No. 2886 of 1979 National Lithium Commission (2014) Ministry of Mining before the Senate Mining and Energy Commission (2022); National Lithium Strategy (2023) 	<p>The decree of law from 1979 gives exclusive ownership of lithium to the State. The 2014 Commission reaffirmed the “strategic nature of lithium”, extending it to other industries, especially the energy industry.</p> <p>At a certain point, Chile considered having a revenue-based sliding scale royalty on copper and lithium. Said royalty would have adjusted to mineral prices. Nevertheless, as of 2023, Chile operates a system of lease contracts according to the agreement between CORFO and private actors. The strategy of 2023 implements the creation of a National Lithium Company (ENL). The enterprise would be formed as a public-private partnership in which the State would be the majority shareholder</p>

Mexican Regulatory approach

Regulation	Resource exploitation modalities
<p data-bbox="112 339 473 368">The Mexican Constitution</p> <p data-bbox="112 419 722 529">Article 27, para 3 of the Constitution provides that the Nation has direct domain over all natural resources and minerals.</p>	
<p data-bbox="112 851 444 879">Mining Law Reform (2022)</p> <p data-bbox="112 916 722 1125">Article 5 Bis of the Mining Law Reform (2022) establishes that lithium is a public utility resource and thus not available for any concession. It also states that lithium is part of the Nation heritage, and its exploration, exploitation, benefit and usage is reserved for the people of Mexico.</p>	
<p data-bbox="112 1165 645 1193">Federal Decree Law (DOF:23/08/2022)</p> <p data-bbox="112 1245 722 1382">The decree completes nationalises the mining of lithium (and some other critical minerals) and creates a government authority called “Litio para México” or “LitioMx”. The decree xxxx</p>	

Critical minerals mining contradicts:



Ensure healthy lives and promote well-being for all at all ages



Reduce inequality within and among countries



Achieve gender equality and empower all women and girls



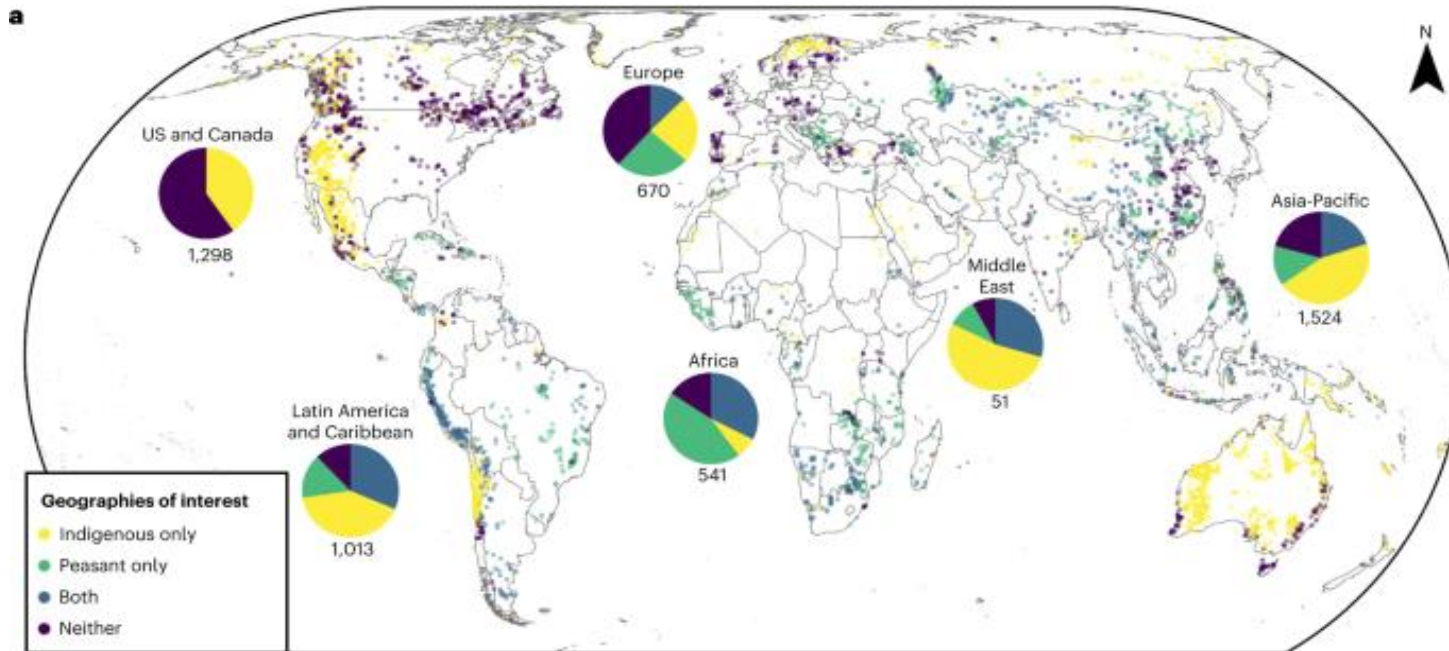
Take urgent action to combat climate change and its impacts



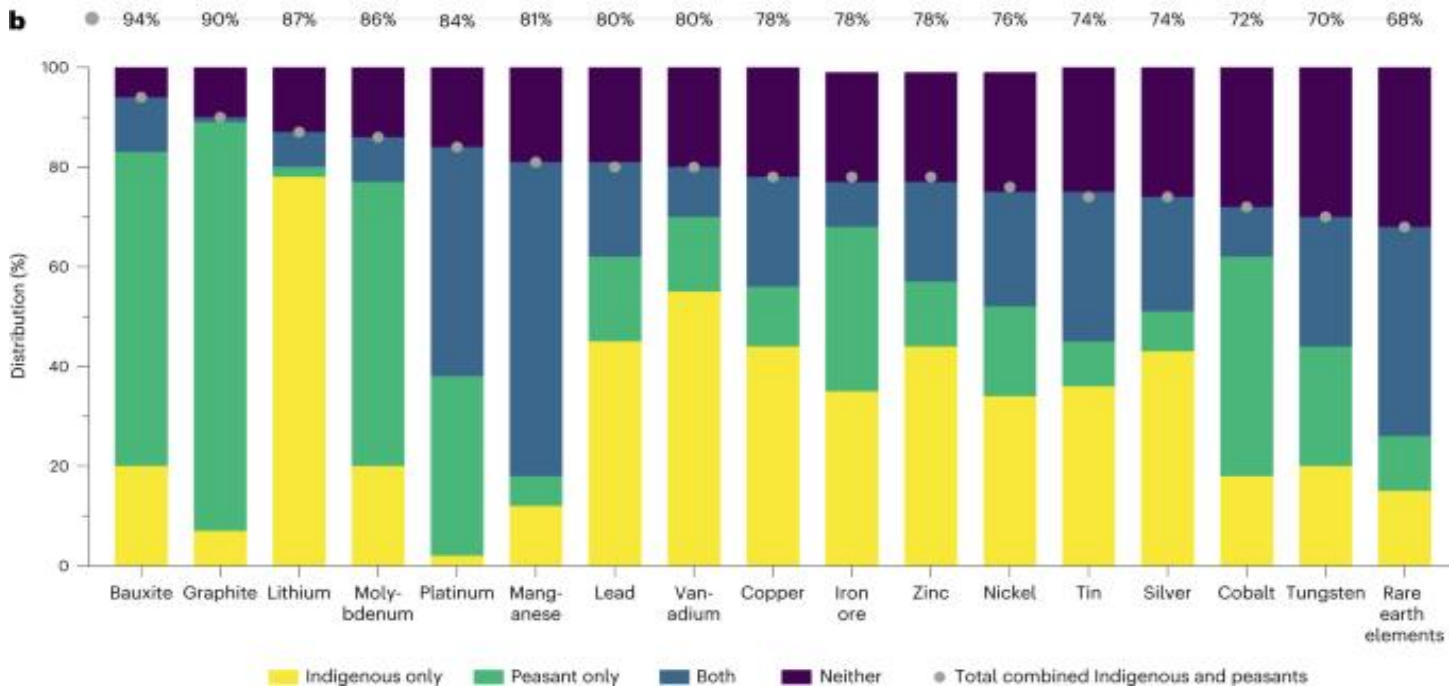
Ensure availability and sustainable management of water and sanitation for all



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



Defeating Goals 10 and 15? Minerals distribution on Indigenous lands



Source: John R. Owen et al, Energy transition minerals and their intersection with land-connected peoples, Nature Sustainability (2022).

Defeating Goals 6, 13 and 14? Lithium Mining Must Not Dry Up the Atacama Desert – The cracked and dried desert



Defeating Goals 3, 6, 13, 14 and 15? Buenavista Copper Mine turns the Sonora River Orange, Mexico



Defeating Goal 5: Mining leads to feminization of labor, unsafe working conditions, and vulnerability of women workforce

Feminization of labor



Natural disasters affecting women



Personal protective equipments in mining: unsafe for women

Critical Minerals Mining is Critical for Climate, but Harm needs to be Mitigated.

How?

1

Assessment

Impact assessment ex ante and ex post, monitoring and reporting requirements

2

Regulation

Well-regulated mining sectors and multifaceted reforms to social and environmental standards, fiscal regimes, and public spending

3

Investing

Sustainable public investment programs that link the mining sector to broader development goals

4

Legal Procedures

Robust legal procedures to mitigate social and environmental impacts

5

Partnerships and consultation

Public private partnerships and consultation with private stakeholders to seek their input and participation

Critical Minerals Mining is Critical for Climate, but Harm needs to be Mitigated.

How?

6

Commitments

Commitments on social contribution, to disburse mining profits to local communities

7

Moratorium

A moratorium on mining in Indigenous territories

8

Better practices

Companies to commit to international social and environmental best practices across the board

9

Compliance

Capacity-building for citizens to monitor compliance