

# **ESJP 2024: A sustainable future?**

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# software engineering research students

- have expressed concerns over extractive technologies and impact on Indigenous Peoples, the environment and biodiversity
- understand the need for lithium for “green technologies” but also consider that Indigenous Peoples should have more say in how their lands are used and water is extracted
- are from across the world and welcome resources that reflect different perspectives and the space to discuss these critical issues.

8. Question: The extraction of resources (such as cobalt and lithium) for green technologies should take into account the following:

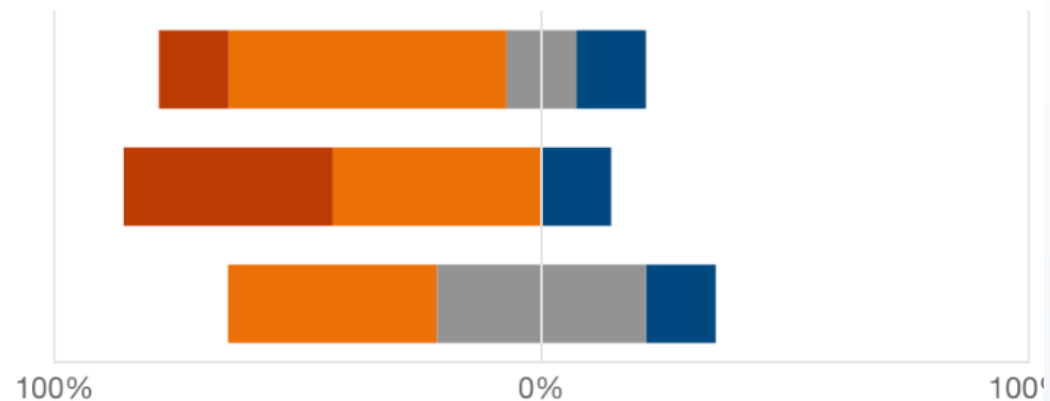
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■ Strongly agree  
 ■ Agree  
 ■ Neither agree or disagree  
 ■ Disagree  
 ■ Strongly disagree

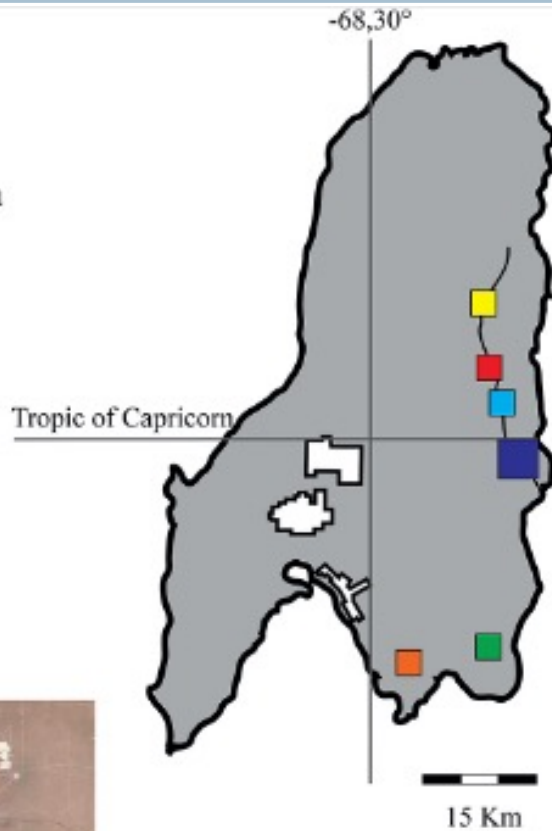
Statement 1: the carbon emissions of the resources

Statement 2: the impact on the environment and biodiversity

Statement 3: that technological advances in the Global North are not at the expense of the Global South



- Burro Muerto
- Laguna Chaxa
- Barros Negros
- Aguas de Quelana
- Laguna salada
- Laguna La Punta



<https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/csp2.94>



# Ignoring the wishes of Indigenous communities

## COLLA COMMUNITY OF COMUNA DE COPIAPÓ IN THE MARICUNGA SALT FLAT (ATACAMA REGION, CHILE)



Lesley Muñoz Rivera

*We have Indigenous consultations in which, if they come and ask you as an Indigenous person and part of the territory they are interested in exploiting, “Do you agree with what we want to do?” and as Indigenous people, we say no, then this consultation process is considered done and fulfilled. That is to say, there is no interest in preserving Indigenous cultures, territories, and environments in general. What’s more, this means that our knowledge is not taken into consideration, and therefore there is little that we can do to stop projects that seek to extract lithium from the Maricunga Salt Flat under the current normative order of the Indigenous consultation process.*

—Lesley Muñoz Rivera of the Indigenous Colla Community, Comuna de Copiapó and member of OPSAL<sup>162</sup>

<https://www.nrdc.org/sites/default/files/exhausted-lithium-mining-south-america-report.pdf>





“Pure Life” ©Graham Collins



“A sustainable future?” ©Graham Collins



1. Respect and ensure free, prior and informed consent for Indigenous and local communities.
2. Prioritize Indigenous knowledge and science of local ecosystems.
3. Strengthen environmental standards for mining operations and monitor activities.
4. Regulate and monitor the use of brines and make data about local water resources available and transparent.
5. Encourage, invest in, and implement alternative ways to obtain lithium (e.g., reusing or recycling batteries; geothermal direct lithium extraction if developed in a just and sustainable manner).
6. Ensure that companies throughout the battery supply chain require better practices from their suppliers.
7. Apply longer-term solutions that reduce the need for new batteries, such as public transit, biking and walking.
8. Enforce a moratorium on brine evaporation through application of the precautionary principle.

<https://www.nrdc.org/sites/default/files/exhausted-lithium-mining-south-america-report.pdf>