FORUM: Environmental Commission
QUESTION OF: Measures to Address the Environmental Impact of Lithium Mining Chile
MAIN SUBMITTER: Chile
CO-SUBMITTERS: Germany, Mexico, Nigeria, Columbia, China, Canada, France, Maldives, Singapore

THE ENVIRONMENTAL COMMISSION,

Recognizing that the rapid expansion of lithium extraction in Chile, driven by the global transition to renewable energy, poses significant risks to water resources, biodiversity, and indigenous communities, particularly in the Salar de Atacama and the Lithium Triangle,

Acknowledging the principle of common but differentiated responsibilities and the need for equitable technology transfer to developing nations rich in lithium reserves,

Reaffirming the sovereign right of states over their natural resources, while stressing the responsibility to manage them sustainably for present and future generations,

Deeply concerned by the lack of transparent, standardized, and enforceable environmental and social safeguards in Chile's lithium industry,

Emphasizing the importance of free, prior, and informed consent of indigenous peoples, including the Atacameño, Aymara, and Quechua communities, in accordance with the UN Declaration on the Rights of Indigenous Peoples,

Alarmed by the accelerating decline of groundwater levels and degradation of fragile wetland ecosystems in lithium-producing regions,

Convinced that a binding, transparent, and science-based international framework is necessary to ensure lithium extraction supports the global energy transition without sacrificing the ecosystems and communities it depends on,

1. Recommends the establishment of an International Lithium Sustainability Framework (ILSF) under United Nations Environmental Programme (UNEP) to set strict environmental standards for lithium mining, including but not limited to:
    a. Requiring mandatory and transparent environmental impact assessments during every stage of a project, including exploration, construction, operation, and closure monitoring:
        i. Applying for funding from the ILSF to ensure access to standardized and independent testing equipment and training programs to individuals to ensure the data is reliable and is not solely provided by the operating company,
        ii. Posing severe punishments for the violation of this, including but not limited to fines scaled to the company’s revenue and suspension of all operating licence,
    b. Monthly public reporting of water use, separating freshwater and brine, groundwater levels, and biodiversity data using methods such as:

i. Giving incentives to locals who consistently report data on daily water usage, such as community infrastructure, small amounts of payment, or priority access to local employment opportunities,
ii. Establishing a community monitoring program, where trained locals volunteers monitors and verify data, creating two verification systems to prevent data manipulation from companies,

c. Annual independent reports with published results, supervised by third party selected by the ILSF;

2. Calls upon member states to set strict water limits for lithium operations such as:
   a. A limit on freshwater consumption per tonne of lithium produced, to be reviewed annually by the ISLF, with the initial limit set at a maximum of 10 cubic meters per tonne of lithium produced:
      i. Establishing clear guidelines on wastewater management and the daily limit for discharge of pollutants such as heavy metals,
      ii. Requiring all lithium operations to install real-time monitoring systems connected to the ILSF database, with data made publicly accessible,
   b. A requirement to recycle processed water targeting a minimum of 80% water recovery by 2030,
   c. A rule forbidding brine extraction from aquifers where data show ground water decline exceeding 5% over any five year period, with a 5% decline triggering an immediate mandatory pause in operations and a review by the ILSF;
3. Mandates protection of ecosystems to prevent further impact on biodiversity and protecting endangered species through:
   a. Prohibiting lithium extraction in critical habitats, such as wetlands and flamingo breeding grounds, and all areas designated as protected under national law or international agreements, such as UNESCO with the ILSF maintaining a publicly accessible map of all prohibited zones:
      i. Requiring local communities to be directly involved in the mapping process due to their prior and valuable knowledge of the land and should not be considered as an afterthought,
      ii. Insisting that all mining sites found on critical habitats face a mandatory environmental examination, with the penalty of suspension if found to be causing irreversible damage,
   b. Requiring mining operations to fund biodiversity restoration programs, with a mandatory contribution of at least 2% of annual gross revenue:
      i. Suggesting the restoration to specifically focus on wetlands and native vegetation, particularly in regions where plant coverage has dropped by approximately 0.4% due to lithium extraction,
      ii. Prioritizing key species who serve as the fundamental basis of the environment, such as the Andean and James's flamingo, which have fallen in population by around 10-12%,
   c. Creating an independent scientific panel to monitor ecosystems healing in the lithium triangle which would:

i. Introduce a training program to educate experts to make up the panel, ensuring promising results, in partnership with regional universities, with the goal of establishing a self sufficient local workforce,
ii. Post results in an online platform on a monthly basis, allowing communities journalists, and researchers to monitor ecosystem health in real time;

4. Requires indigenous consultation to guarantee social and environmental legitimacy by:
    a. Making free, prior, and informed consent (FPIC) a precondition for project approval:
        i. Requiring proof of consent by methods such as video documentation that includes the voices of every citizen, so that it represents the entire community and not just its leadership,
        ii. Assuring separate verification by third party, such as an UN-recognized human rights committee, to ensure safety and avoid corruption,
        iii. Fining companies which fail to comply with the consultation requirement with an amount depending on the scale of the company and the severity of the infringement up to 500,000 USD, with repeat-offenders facing work suspension, and a portion of the fine going directly to the affected community,
    b. Establishing benefits-sharing mechanisms to address community issues such as:
        i. Requiring that at least 3% of the revenue from mining be directed to community funding, with the aid from companies, the government, and local organizations;
        ii. Prioritizing movement on clean water, healthcare, and education based on the needs of local communities,
        iii. Recommending that companies set up rehabilitation funds in order to compensate for redundancy and to support land recovery as well as community wellbeing after mining stops, interpreted annually by an independent body;
5. Promotes Direct Lithium Extraction (DLE) to reduce water consumption and environmental impact,
    a. Providing financial incentives for developing countries to comply with methods such as,
        i. Proposing to multilateral banks to provide low interest loans to developing countries,
        ii. Suggesting multilateral banks to provide risk insurance for DLE projects in developing countries,
    b. Suggests tech transfer and local capacity building of skillsets through:
        i. Creating joint research and testing facilities in the lithium triangle, managed by UNEP and CORFO, allowing countries to do DLE test on their own brine before committing,
        ii. Requiring DLE verifications holders to license their technology at reasonable rates, preventing lockup of transition tools by certain firms,
        iii. Funding training programs for local engineers and mechanics to maintain and operate DLE systems, ensuring error free results,
    c. Regulating DLE technologies by incorporating specific guidelines, including descriptions, water consumption, and monitoring systems:
        i. Demanding complete transparency to all chemicals used and ways how brine is utilized, DLE may not be initially clean,

ii. Requiring real time monitoring of re-injected brine, with relevant data reported to national authorities for checking,
iii. Setting freshwater caps not as one global number, but as basins, providing step-by-step regulations for fragile desert areas,

d. Setting a target for DLE use in all new lithium projects by 2035, requiring public verification annually;

6. Establishes a global certification and traceability system for sustainably sourced lithium to ensure supply chain accountability,
    a. Creating a ILSF administered certification label given only to operation that meets every single requirement such as environmental, water, and social standard of this framework, reviewed and renewed every year,
    b. Requiring certified lithium to be tracked through a traceability system from extraction to sale, so manufactures and consumers can verify the credentials,
    c. Mandating that by 2030, all lithium imported into member states carry ISLF certification:
        i. Providing technical and financial assistance to developing countries, ensuring smaller producers are not unfairly excluded from global markets,
        ii. Publishing an annual report ranking certified operations by water efficiency, and community satisfaction to encourage improvements;

7. Recommends the establishment of an ILSF Research and Data Sharing Initiative to close knowledge gaps,
    a. Funding independent research on cumulative and long term environmental impact of lithium mining in Chile, including biodiversity loss, and the effects of brine extraction on wetlands ecosystems,
    b. Creating a publicly accessible database where all environmental data collected under this framework such as water levels, biodiversity, and restoration outcomes is stored:
        i. Requiring companies to contribute raw data to the data base as a condition of their operating licence,
        ii. Partnering with Chilean universities and research institutions to build local scientific capacity and ensure data analysis reflects regional expertise.