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**Ref: Submission for Special Rapporteur’s thematic report on detoxification/decarbonization**

Dear Mr. Special Rapporteur,

This joint submission, signed by Conectas Human Rights[[1]](#footnote-1) and Latin American Climate Lawyers Initiative for Mobilizing Action (LACLIMA),[[2]](#footnote-2) presents contributions from the Brazilian context and focus on three main points: first, human rights violations involving toxic waste in energy transition projects; second, information on mining activities linked to illegal gold extraction and intensified prospecting for lithium; third, regulatory issues on waste disposal and its relationship to climate change.

1. **Human rights violations on energy transition projects**

In Ceará, a state in northeast Brazil, local communities complain that energy transition projects, such as wind and solar farms, have caused severe environmental impacts,[[3]](#footnote-3) including hazardous substances contained in wind turbines and solar panels. Research groups and social movements in the region have indicated a tendency to intensify the mining of rare metals, now intended for the development of new technologies,[[4]](#footnote-4) and that such mining leads to the disposal of toxic waste and an increase in greenhouse gas emissions. There are reports of human rights violations and environmental racism involving uranium mining in Santa Quitéria,[[5]](#footnote-5) the result of political decisions that see the use of nuclear energy as part of the energy transition. Complaints involving environmental racism are frequent in Brazil.[[6]](#footnote-6)

1. **Intensive mining activities for new technologies**

Brazil faces the challenge of increasing mining activities due to developing new technologies worldwide, especially with lithium and gold exploitation. Artisanal mining (“*garimpo*”) corresponds to roughly 54% of mining lands in Brazil, primarily concentrated in the Amazon rainforest, including illegal mining. Due to a legal good-faith presumption, gold exploited in protected lands, such as indigenous lands and conservation units, enters the legally commercialized gold market.[[7]](#footnote-7) It is estimated that approximately 30% of Brazilian gold is originated from illegal exploitation,[[8]](#footnote-8) which compromises its supply chain, including electronics[[9]](#footnote-9) and new technologies using gold, mostly in printed circuit boards. Despite the existing restrictive legislation, mercury is primarily used in gold extraction, being responsible for soil and water resources contamination that causes severe health, social, and environmental damages.[[10]](#footnote-10)

Lithium mining is also an issue in Brazil, generating significant amounts of mining slag and being responsible for considerable water and energy consumption.[[11]](#footnote-11) Lithium is used mainly in cells and batteries production, which is growing before new technologies in the electronics industry included electric vehicles.[[12]](#footnote-12) Recently, Brazil published Federal Decree No. 11,120/2022[[13]](#footnote-13) that allows foreign trade operations of Lithium, attracting foreign investments in the Brazilian mining sector. The Jequitinhonha Valley, located in the state of Minas Gerais, has one of the most significant lithium reserves in Brazil - the region has been historically affected by mining activities.

1. **Regulatory issues on waste legislation**

Both gold and lithium examples show how relevant is the life-cycle approach to new technologies, especially when mining activities are analyzed. Brazil has a National Solid Waste Policy (“PNRS” in Portuguese, established by Federal Law No. 12,305/2010)[[14]](#footnote-14) that mentions as its objective the implementation of life-cycle assessment, but has not ever regulated such an approach. Therefore, companies do not have any legal obligation to draft such assessments. In relation to waste from electrical and electronic equipment, Brazil has regulated an extended producer responsibility only for domestic electronics (Federal Decree No. 10,240/2020),[[15]](#footnote-15) with recycling targets ranging from 1% (2021) to 17% (2025).

In addition, the PNRS established the Hazardous Waste Operators Registry (“CNORP” in Portuguese) for all companies that uses hazardous waste in their activities, which obliges the indication of a technical manager and provides the Brazilian Federal Agency (“Ibama” in Portuguese) with a basis of generators and disposal companies of hazardous waste. However, such a registry is deeply related to environmental permits and, because of it and because of weak oversight, many companies that are not subject to Ibama’s permitting are not duly registered in CNORP.

Besides that, the transition towards a climate-safe and toxic-free circular economy is best achieved based on sector-specific, life-cycle assessments of the supply chain's environmental and human rights impacts. It also requires a comprehensive legal framework to address and tackle those impacts, including product, chemical, and waste legislation that is coherent and enforceable. In Brazil, waste legislation operates in a somewhat patchwork fashion, while environment-related product and chemical regulations still need to be improved and piecemeal. Finally, it is worth noting that Brazil has PNRS and a National Policy for Climate Change (Federal Law No. 12,187/2009);[[16]](#footnote-16) these regulations do not present provisions interrelating them.

1. [Conectas](https://conectas.org/) was founded in 2001 as a collective effort of professionals, academics, and activists. Based in Brazil, Conectas operates across the Global South landscape to monitor and mobilize international human rights agendas. Since January 2006, Conectas has advisory status with the United Nations (UN), and since February 2022 it is an observer organization at the UN Framework Convention on Climate Change (UNFCCC). [↑](#footnote-ref-1)
2. [LACLIMA](https://laclima.org/) is a network of legal experts dedicated to the development of climate change law in Latin America. Its goal is to consolidate a critical mass of lawyers who can develop and disseminate knowledge, as well as support the development of legal frameworks that can enable a pathway for decarbonization and climate resilience in Latin America, consistent with the implementation of the Paris Agreement. [↑](#footnote-ref-2)
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