## A Green Transition or an Expansion of Extraction?

This bulletin highlights threats involved in the so-called "energy transition," and exposes its dirty secret of exponential expansion of mining in the global South as a consequence of the massive demand for "green" energy.

Much has been said about the so-called "energy transition" towards zero-carbon emissions. Mounting pressure for addressing the very serious climate impacts of burning petroleum, coal and natural gas has led to more than 70 cities and countless companies and corporate networks pledging "carbon neutrality." But what does this mean?

In a nutshell, this means that, on the one hand, the carbon dioxide emissions accounted for these cities or companies will be supposedly compensated with "offset" projects elsewhere (for example, through large-scale tree plantation projects). The WRM has written extensively on <u>this false solution</u> and the many threats it represents for the climate, local environments and forest dependant peoples and populations. On the other hand, zero-carbon emissions pledges also include that many sectors of the economy, such as transportation for people or housing energy, will turn more and more to so-called renewable energies, sometimes also called "green" or "clean" energies.

This bulletin aims to reflect on the threats involved in this transition towards "green" or "clean" energies. First of all, this transition is *not* based on significantly reducing the massive energy production and consumption by a minority of actors concentrated in urban and industrialized centres. On the contrary. The "clean energy" promise, to make it appealing for consumers and corporate funders, is based on simply replacing fossil fuel-based energy with renewable energy. The dirty secret of this transition, though, is the exponential expansion of mining in the global South that would be needed to satisfy the massive demand for "green" energy.

Copper, cobalt, nickel and lithium, for example, are needed for electric vehicles, energy storage and cabling. Between 2017 and 2050, the World Bank predicts a growth of more than 900% in global demand of lithium, while the demand for cobalt is anticipated to increase nearly six-fold over the same period. (1) According to Bernstein's European Mining and Metals research team, in order to meet governments' commitments under the Paris Agreement, between 11 and 72 million tonnes of copper production would be needed in addition to meeting current industrial demand. A higher demand implies that copper production would have to grow by between 3.1% and 5.8% a year. (2) Prices of these minerals are expected to soar. Higher prices means a significant uplift in the share prices of mining companies such as Ivanhoe, First Quantum, Glencore, Antofagasta and Anglo American. One article in this bulletin points to the role of the European Union in driving the growth in mineral demand as a result of "green" energy.

Even the World Bank recognizes that "The clean energy transition will be significantly mineral intensive." (3) Unsurprisingly, since the Bank is an important funder of large-scale mining, its strategy is to create a "Climate-Smart Mining Facility" with a focus on making mining operations in forests, "Forest-Smart." An article in this bulletin explains this strategy and alerts on how the World Bank is planning to offset any pollution, deforestation or biodiversity loss that incurs during this "mining

intensive" transition.

Swiss multinational Glencore, for example, among the top three copper, cobalt, zinc and seaborne thermal coal producers, and in the top five of the major nickel producers, is planning to reduce emissions in its mining operations by using electric vehicles, renewable energy and digital technology. This in turn creates more demand for the minerals the company is already extracting. (4) More than 25 per cent of Glencore's mining activities are located in forest areas. (5) Isn't then this "transition" the opposite of what a "clean" economy promises to achieve?

Moreover, a number of the world's biggest companies extracting the key minerals used in battery manufacturing have been linked to a long chain of human rights abuses. Glencore faces 11 allegations of breaches of human rights laws, related to its mining of cobalt, most of which is located in the Democratic Republic of Congo (DRC). 32 allegations relate to its extraction of copper in countries such as Chile, Peru and Zambia. (6) Copper is key to the construction of wind turbines.

Mining impacts are devastating, especially on women. The devastation is not limited to the mining site. The impacts of this industry expand much beyond that. Bulletin articles address four aspects related to the mining industry that often receive less attention but have equally violent and destructive impacts:

- Biodiversity offsets. An article from Madagascar explains how the Australian mining company Base Resources is using a biodiversity offset project to keep its business-as-usual practise while cleaning up its image. In reality, the offset project, too, has severe consequences, particularly for women.

- Mine tailings dams. An article from Brazil recalls the disasters that are occurring (and are likely to increase) due to ruptured tailings dams in the Amazon. The more mining extraction, the more tailings dams that can fail.

- Compensation money. An article from India highlights how the money that the Indian Government collects from mining companies for "compensation" is being used to harass, persecute and evict people from their homes which have been turned into protected areas.

- Deep-sea mining. An article from a network in the Pacific Islands alerts on how the discourses of a Blue Economy hide a race to obtain minerals needed for the so-called "green" and renewable energy that are in the deep sea. Coastal territories and villages less than 30 km away from some of these sites are already having early impacts.

Meanwhile, fossil fuels (oil, gas and coal) are still being vastly pursued and extracted - from Indonesia and Nigeria to Ecuador, to name just a few. Many industries in the massive production chain are and will still demand high amounts of fossil fuel-based energy. Among them: the aviation, shipping, fertilizers or agro-industries. Another bulletin article from Ecuador reminds us of the amount of power that fossil fuel companies hold and how they expand their destructive operations.

We hope this bulletin is an eye-opener to the hidden impacts that are present at each site of corporate extraction. Contrasting this devastation are the stories of resistance and hope. Let's not be fooled by the "green" waves of oppression and stand in solidarity with those defending their territories, defending life.

(1) NS Energy, <u>Host of top energy firms extracting battery minerals linked to human right abuses</u>, September 2019 (2) Mining MX, <u>Glencore's green rebrand a complex brew for governments, society and shareholders</u>, July 2019

(3) World Bank, Climate-Smart Mining: Minerals for Climate Action

(4) Glencore, <u>Bank of America Merrill Lynch Smart Mine Conference 2019</u>. Leveraging ideas to <u>unlock value</u>, 2019

(5) World Bank, <u>Making Mining Forest-Smart</u>

(6) See note (1) and IndustriALL global union, <u>Calls for sustainable mining after 43 artisanal miners</u> <u>killed in DRC landslide</u>, July 2019