
Wind energy on the Northeast Brazilian coast and the contradictions between 'clean energy', injustices and environmental racism

In dominant models of energy production and consumption, the centralization of the energy matrix and the concentration of decision-making power remain, and with all the marks of inequalities, patriarchy and environmental racism, even if the source of energy has changed.

Energy production in the face of demand to sustain, develop and expand predominant urban-industrial-capitalist ways of life in so-called global society, does not take place without high levels of interference on a daily basis in nature and the environment, as well as in multiple societies and peoples, their territories and experiences. Regardless of the source of energy and of the technology used to generate it, in these dominant models, energy ventures produce countless socio-environmental conflicts, risks and damage in contexts of deep-seated inequalities.

It just so happens that in Brazil and Latin America, the dynamics of demand for, access to and use of land, water and territory, as well as the ecological and socio-environmental harm that results from them, carry the inheritance of historical facts. An example of this is the expropriation of others' territories and the setting up of a political, economic, legal, military and religious power based on the supremacy of the colonizer, white men and women, over indigenous and black people. In these processes, violence, subjugation and violation of bodies, of history and of dignity, were instituted as methods. To this day, despite all the achievements in terms of winning rights, these inheritances are encrusted in the dominant political, economic and socio-cultural powers. In the current socio-environmental conflicts, such inheritances manifest themselves in the naturalization of white privileges over state policies and in the relations of the state and the private sector with each other and with black populations, indigenous peoples, riverine peoples, fisherfolk, *quilombola* communities and others. These do not necessarily have as a reference the consumerist and energy-intensive models of living and organizing life.

In these circumstances, even if the source for producing energy via the wind industry in Brazil, and particularly in the Northeast Region, is considered technologically and ecologically cleaner, the concrete way in which wind farms are implemented is marked by the productivist/consumerist logic. According to the values of this logic, the provision of human needs is only viable in the form of hyper-exploitation and profits at the expense of the environment, of territories and their peoples. And this does not take place without being cut across by structural racism and its expressions in the environmental reality and in the democratic fragilities involved in ensuring the rights of peoples.

Energy and violations of rights in the land of winds

Studies of the sector indicate that energy production originating in the wind industry accounts for some 10% of the Brazilian energy matrix today (2021). The Northeast is the most potent region of the country in terms of "wind deposits". Currently, there exist around 599 farms and 7285 towers already set up in Northeastern territories, amounting to approximately 16GW. According to the industry, this figure is equivalent to 80% of Brazil's total wind energy capacity,(1) and the trend is to continue growing on the basis of auctions already held to contract electrical energy.

Starting above all in 2002 with the advent of the Program of Incentives to Alternative Energy Sources – PROINFA, renewable energy sectors, chiefly those linked to wind energy, have been gaining ground vis-à-vis federal politics, regulatory frameworks, investments, subsidies and implementation mechanisms, like public auctions specifically for renewables held by the Ministry of Mines and Energy. Brazil – mainly the Northeast – has been standing out as the top producer of wind energy in Latin America, and is among the countries with the most wind energy capacity in the world. In states like Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Bahia and Piauí, wind farms occupy coastal areas above all, but are expanding to mountain areas and the hinterland.

However, like other energy production chains, there are innumerable violations of rights enmeshed in these processes. For example, even though Brazil is a signatory of Convention 169 of the International Labour Organization, traditional communities' right to be consulted prior to the establishment of mega-projects on their territories is not guaranteed. In general, the community is the last to be informed, and nearly always by means of public hearings prepared like a bureaucratic checklist, in order to present fragile impact studies. On the other hand, the projects chosen via the auctions do not give due consideration to the socio-environmental situation or to actual impacts, a fact amply denounced by communities already affected. Their denouncements are normally treated as unfounded complaints that are manageable with individual negotiations, promises and charitable projects.

However, despite the political and economic institutional decisions, where community participation is insufficiently taken into account, the environmental interference gradually becomes more visible in the process of wind farm implementation. In Quilombo do Cumbe (Aracati/East Coast of Ceará), for instance, the opening up of roads to transport cargo, materials and heavy equipment, changed the community's daily life, brought about respiratory illnesses owing to the intense dust constantly raised, and damaged the structure of people's homes. At the fishing community of Xavier (Camocim/West Coast of Ceará), lagoons were filled in and the community was confined to the area of the company. In both communities there were restrictions placed on access to areas of artisanal fishing.

Furthermore, jobs get created only during the construction work. These are geared only to men, and overwhelmingly men from outside the local communities. Major ventures mean the arrival of many men in the territories, which activates gender vulnerabilities impacting women and children. There are increased risks of sexual violence and exploitation, unwanted pregnancies and a population of young single mothers, in a context of losses of territory, work and prospects.

Within the sphere of legislation, there is an underestimation of the ecological and social effects of wind energy, considered a low impact and low carbon source. However, wind farms privatize large tracts of land, fencing off local communities' territories and causing direct harm, like the loss of access to fishing and farming areas. In the Northeastern Coastal Zone, fields of dunes and freshwater sources for lagoons between dunes are destroyed, thus impacting the flow of water tables and community agricultural activities. But while there are incentives of different kinds, including exclusive business sector participation in policy-making, there remains an absence of recognition of the populations that have lived there from time immemorial. This sharpens the very serious land-based conflicts and historical difficulties in ensuring territorial safety for traditional peoples and communities.

Just like in various other land and environmental conflicts caused by large-scale development projects, in the case of the wind energy industry, these communities are also affected by scandalous deficits of democratic representation. On a daily basis, they need to do battle with whiteness and with

the racist patriarchy that predominates in the justice system and in the legislative and executive branches of government to make sure they remain on their land. This notwithstanding, the arrival of such projects habitually generates inter-community conflicts in the face of the promises of improvements in the community's life that would compensate the socio-environmental and ecological damage. Disputes over narratives and meanings weaken community representatives, who suffer persecution and threats. Often, it is necessary to activate protective public policies. This situation has been greatly worsened by the pandemic, as well as by democracy-related defeats and the political chaos into which the elites have plunged the country since 2014. This has resulted in the rise — also in the territories — of extremist forces, anti-rights, anti-environmentalism and openly racist, misogynous and hetero-cis-normative.

Lastly, the theme of energy production needs to recognize environmental injustices and racism. Otherwise, the risks and energy safety and sustainability may be reduced to technological and market-based solutions, which accumulate discourses and intentions of meeting human needs with “green attention”, but are indifferent to the injustices and inequalities that cut through environmental reality and democracy.

They disregard, above all, the fact that human needs cry out for structural changes to the predominant model of economic and environmental exploitation and of power relations, and for the de-naturalization of disrespect for peoples in their diversity and for their rights. This also implies recognizing that the knowledge and experience of these populations represent enormous wealth and potentials for tackling, coexisting with and overcoming the environmental crises of our time.

Every type of large-scale energy production causes tremendous impacts — and the impacts are not only specific or localized. Rather, they affect every dimension and scale, from the implementation of these mega-ventures to the industrial sectors supplied by this energy production. In these dominant models of energy production and consumption, the centralization of the energy matrix and the concentration of decision-making power remain, and with all the marks of inequalities, even if the source of energy has changed. On the other hand, it is possible to valorize community-level experiences, experiences of more decentralized energy production, with a smaller scale and more autonomous alternatives and solutions to supply homes, communities and towns, using technologies based on renewable sources, with more popular participation and more attention paid to rights to water, land, territory and even energy.

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(1) Data made available [here](#) and [here](#). Accessed on June 14, 2021.