



Task Force 02

SUSTAINABLE CLIMATE ACTION AND INCLUSIVE JUST ENERGY TRANSITIONS

Justice in the Energy Transition: Recommendations to Ensure Public Participation on Decision-Making Processes

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Abstract

In 2023, global investments in renewable energy surpassed investments in fossil fuels: US\$659 billion against US\$106 billion (IEA, 2023). However, we still do not have a global measure that allows us to know how much land has already been used to generate renewable energy and how much land is projected to be incorporated. This gap led to developments and projects being evaluated only on local scales, disregarding global or regional impacts over food production, agriculture, or resource use, for example. Equally, poses non-negligible challenges regarding the rights of nature and of the social subjects who inhabit the spaces to be explored. Many renewable projects are violating the principles of environmental and climate justice, highlighting how environmental racism guides this process of expansion. Therefore, these projects have suffered continuous criticism and questioning regarding their legitimacy. That is why we state 7 recommendations to ensure that the energy transition will be sustainable and fair.

Keywords: [Renewable energy](#); [solar energy](#); [wind energy](#); [land use](#); land conflict; environmental [conflict](#) ; [rural communities](#); environmental impacts; public participation; social governance; environmental justice; climate justice; environmental racism.

Diagnosis of the Issue

In 2023, global investments in renewable energy surpassed investments in fossil fuels: US\$659 billion against US\$106 billion (IEA, 2023). Multilateral institutions and many governments are working to amplify these investments. However, we still do not have a global measure that allows us to know how much land has already been used to generate renewable energy and how much land is projected to be incorporated. This gap led to developments and projects being evaluated only on local scales, disregarding global or regional impacts on food production, agriculture, or resource use, for example. Although it is difficult to estimate, at least **161 million hectares** globally would be necessary to generate **wind energy** with an additional **27 million hectares** globally to generate **solar energy**, according to Scheidel & Sorman (2012), underlining the emergency of a new global land rush.

This replacement of a fossil-based energy matrix with another one, equally intensive, that uses and exploits land and natural resources (especially water and minerals) poses non-negligible challenges regarding the rights of nature and of the social subjects who inhabit the spaces to be explored. As Lamhamidi and Vries (2022) stated, “the impacts on landscape, land tenure, and land-use patterns of constructing [renewable] energy facilities are significant, and they may subsequently undermine the authority of local communities. Still, the connection between land and energy is not yet part of integrated development policies and political debates when deciding on renewable energy projects”.

In countries such as Portugal, Spain, Mexico, Colombia or Brazil, plans and policies dedicated to energy transition are, in most cases, implemented without a governance structure that enables effective popular participation or social control. Therefore, access

to information and justice are not guaranteed. Similarly, no methodologies or models are applied for participatory planning of territorial ordering and the use of natural resources.

For Brazil, specifically, there are a series of diagnoses on socio-environmental impacts and conflicts between rural communities, the state and companies related to renewable energy generation projects (Gorayeb et al, 2019; Maia et al, 2022). These diagnoses make use of literature produced also in the Global North to demonstrate similar impacts which can be replicated in other countries in the South to survey the impacts and damages caused by renewable energy. Traldi and Rodrigues (2022) demonstrated how long-term lease contracts, over 20 to 50 years, with automatic renewal clauses are the main instruments that wind and solar companies use to control land. These contracts transfer to companies the power to define how the leased area will be used, imposing on small farmers and entire communities the loss of areas for cultivation, animal husbandry and socio-cultural reproduction. Maia et al. (2022) demonstrate how these contracts are signed based on misinformation and contain numerous abusive clauses which violate the principles of environmental and climate justice in their procedural, redistributive and recognition forms.

Surveys on the damage and impacts caused by renewable energy developments demonstrate how human health suffers from serious problems, such as Wind Turbine Syndrome (Maciel, 2023), leading to new processes of expulsion and rural exodus. They also demonstrate damage to fauna, flora and human societies that was not properly analyzed and compensated in the authorization process for the construction of energy facilities. Throughout 2023, a coalition made up of more than 30 civil society organizations and Brazilian social movements carried out a participatory survey of impacts and damages caused by wind and solar farms in the Northeast region and recommended 111 measures to safeguard the rights of affected communities (Coletivo

Nordeste Potência, 2024). These studies indicate that there is a recurrence in the choice of locations where these projects are installed: territories of non-white, peasant, traditional, Quilombola or indigenous populations, highlighting how environmental racism guides this process of expansion of new renewables. Therefore, these projects have suffered continuous criticism and questioning regarding their legitimacy.

Recommendations

For a fair transition, it is necessary to observe the distribution of damages and benefits in the locations where energy projects are installed. Similarly, it is necessary to guarantee effective participation of communities in governance bodies and decision-making processes while also promoting measures to recognize affected groups and their self-recognized needs. In this sense, we recommend three sets of measures and actions to be adopted by G20 member and guest countries. The first of these particularly deals with social governance in environmental matters and the energy transition. The second set of measures has to do with the possibility of adopting other models of local territorial development, in which rural communities take the lead in generating new renewable energy, whose existing technologies allow a change of direction in relation to other energy sources following centralized projects and models. The third has to do with accountability and analysis of energy transition project results towards climate protection and income redistribution.

1. We recommend the recognition and **institutionalization of rights of access to information and participation** in environmental issues in the energy transition.

To achieve this, the following measures must be adopted:

- 1.1 The consolidation of **participatory socioeconomic and ecological zonings**

that make it possible to understand the socio-cultural, economic and environmental characteristics of territories, also aiming to protect small-scale agriculture and socio-biodiversity. Social cartography, participatory rural diagnoses and other methodologies that involve local populations in identifying the potential of their locations prove to be effective instruments for more democratic management of natural resources and territories. Justice, sustainability and equity in the energy transition involve local territorial development, with the inclusion of populations and protection of their ways of life.

- 1.2 The **obligation of collective, prior, free and informed consultation** with

the populations living in the areas affected by transition projects, with its release relying on the consent of the said population. Convention 169 of the International Labor Organization (ILO) recommends mandatory consultation with tribal and indigenous peoples and United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas establishes the same rights to peasants. In addition to respecting and applying it, the right to consultation must be extended to all communities affected by transition projects.

- 1.3 The **guarantee of independent and free technical advice for the affected populations** from the moment of conception and presentation of the project

to public authorities. Diagnoses carried out in Brazil demonstrate that local communities only become aware of projects when they are already in advanced stages of consolidation, with studies on technical and environmental feasibility already completed. This limits the possibilities for deliberation about the stakes in a project. Furthermore, technical language and legal or administrative processes are little to non permeable to the local people's understanding.

1.4 The construction and indication of **international parameters for carrying out studies on the impacts of projects on the health, safety and well-being of the affected populations and for measuring impacts on climate** (e.g. GHG emissions). The same energy companies encounter different scenarios regarding obligations and requirements, which even complicates due diligence. For instance, different understandings between countries and governments regarding the appropriate distance between wind turbines and homes have left the way open for political and legal challenges.

1.5 The establishment of City, State and/or National **Councils for Energy Transition, guaranteeing government and civil society parity** in its composition and ensuring the right of veto in the definition of policies and plans for energy transition.

Furthermore, we recommend: 2) the prioritization of **decentralized and distributed models** in rural and urban areas, individual or collective, for the generation of electric energy, which guarantees the socioeconomic inclusion of women and ethnic-racial, religious and political minorities, promoting income, water and food security, self-management and belonging.

Aiming for better accountability, we also recommend: 3) **designing international indicators to evaluate results** of incentives for the generation of renewable energy. In addition to promoting greater transparency in the use and distribution of public resources, it is essential that companies and economic groups in the energy sector that violate social rights no longer receive tax incentives or benefit from loans from development financing institutions.

Scenario of outcomes

If adopted, the sets of recommendations hereby presented will allow us to achieve justice in the energy transition with greater equity in the distribution of the benefits generated. Guaranteeing transparency, accountability and public participation in the process of preparing and implementing energy plans and policies is the path to equalization and prevention of social conflicts, even enabling greater legal security for states, financiers and investors.

Recommendation	Main outcomes expected
Adoption of a participatory socioeconomic and ecological zonings	Avoid legal contestation and social, cultural and environmental degradation
Obligation of collective, prior, free, and informed consultation with the populations living in the areas affected by transition projects	Avoid legal contestation and get local consensus
Independent and free technical and legal advice for the affected populations	Ensure informed consultation and get local consensus
International parameters for carrying out studies on the impacts of projects on the health, safety and well-being of the affected populations and for measuring impacts on climate	Predictability
Establishment of City, State and/or National Councils for Energy Transition	Ensure public participation and social control
Prioritization of decentralized and distributed models in rural and urban areas, individual or collective, for the generation of electric energy	Improve family income; defeat energy poverty; ensure local development
International indicators to evaluate results of incentives for the generation of renewable energy	Predictability and accountability

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