



SOCIO- ENVIRONMENTAL SAFEGUARDS FOR RENEWABLE ENERGY



**“Nothing about us without us”
was the motto of the group
that developed the safeguards,
comprising affected
communities and advisors, as
well as researchers on the topic.**

Participating in this processes were: ActionAid; Apoinme; AS-PTA; *Assessoria Cirandas* [Cirandas Advisory]; *Associação Afro Brasileira Quilombo Erê* [Afro-Brazilian Association Quilombo Erê]; *Associação Comunitária do Amarelão* [Amarelão Community Association]; *Associação Comunitária e Beneficente Vila Ana Maria (Abevila)* [Ana Maria Village Community and Beneficent Association]; *Associação de Educação, Arte, Cultura e Agroecologia Sítio Ágatha* [Sítio Ágatha Association of Education, Art, Culture and Agro-Ecology]; *Associação Tronco Velho Pankararu* [Tronco Velho Pankararu Association]; CENTRAC - *Centro de Ação Cultural* [Centre for Cultural Action]; *Cooperativa da Agricultura Familiar Camponesa do Polo da Borborema* (CoopBorborema) [Borborema Regional Cooperative of Smallholder Family Agriculture]; *Colegiado Territorial do Alto Sertão de Alagoas* [Territorial Collegiate of Alagoas' Alto Sertão Region]; *Comissão Ilha Ativa* [Active Island Commission]; *Comitê de Energias Renováveis do Semiárido* (CERSA) [Semi-Arid Region Renewable Energy Committee]; *Conselho Pastoral dos Pescadores - Regional Maranhão* [Pastoral Council of Fishers - Maranhão Region]; *Comissão Pastoral da Terra (CPT Nordeste 2)* [Pastoral Land Commission - CPT Northeast 2]; *Eco Maretório* [Eco Tidal Zones]; *Escola de Formação Política e Cidadania* [School of Political Education and Citizenship]; Fetag; *Frente por uma Nova Política Energética Para o Brasil* [Front for a New Energy Policy for Brazil]; *Fundo Casa Socio-ambiental* [Casa Socio-Environmental Fund]; GeografAR/UFBA; *Grupo Ambientalista da Bahia* (Gambá) [Environmentalist Group of Bahia]; *Instituto Climalnfo* [Climalnfo Institute]; *Instituto de Estudos Socioeconômicos* (Inesc) [Institute of Socio-economic Studies]; *Instituto Terramar* [Terramar Institute]; *Movimento Salve as Serras* [Save the Mountain Ridges Movement]; *Programa de Pós-graduação em Ciências Jurídicas da Universidade Federal da Paraíba* (PPGCJ/UFPB) [Postgraduate Programme in Legal Sciences at the Federal University of Paraíba]; Researcher Danilo Serejo; *Polo da Borborema* [Borborema Region Hub]; Serra dos Rafaéis Quilombo; and *Rede Quilombola da Chapada Norte da Bahia* [Quilombola Network of the North Chapada of Bahia].

Collaboration: *Associação Quilombola do Cumbe /Aracati* (CE)[Cumbe Quilombola Association / Aracati, Ceará]; *Programa de extensão Acesso ao Sistema Interamericano (aSIDH) da Universidade Federal de Pernambuco* (UFPE) [Outreach Programme 'Access to the Inter-American Human Rights System' of the Federal University of Pernambuco]; *Fórum Brasileiro de Mudança do Clima* (FBMC) [Brazilian Forum on Climate Change]; *Labcart do Departamento de Geografia da Universidade Federal do Ceará* (UFC) [Cartography Laboratory of the Department of Geography at the Federal University of Ceará]; *Observatório da Energia Eólica da UFC* [Wind Power Observatory at UFC]; *Serviço de Assistência Rural e Urbana* (SAR) [Rural and Urban Assistance Service]; and Conectas.

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1. PRESENTATION

Despite being classified as clean energy, how large wind and solar power plants and their transmission lines are being installed in the Brazilian Northeast is far from harmless. As a result, there is a need to create mechanisms to protect against the risks, damage, and impacts that these projects impose on territories and, peoples and communities inhabiting them.

It is urgent to safeguard lives, ecosystems, landscapes, and activities already existing in the territories.

This document is an initial compilation of protection mechanisms and measures, informed by the impacts and damage experienced and observed by the peoples who are directly affected. Several hands prepared it based on a challenge brought by the Northeast Power Plan: how can our country generate and transmit renewable power without violating human rights, causing environmental inequality and racism in the territories, jeopardising food production and food security, causing deforestation and biodiversity loss, and without instituting abusive contractual relationships and concentration of income that will lead to the expulsion of rural communities from the land?

The solution may still appear distant, but the safeguards outlined here can pave the way for the developments to establish its sites and influence while thoughtfully respecting the rights of peoples and communities and safeguarding ways of life, traditions, ecosystems, and biodiversity.

It is important to emphasise that this product, which we have named *Socio-Environmental Safeguards for Renewable Energy*, will undoubtedly grow and be perfected as it circulates in different spaces while the debate in Brazil advances on what a fair, inclusive, and communal energy transition means.

In short, although this document already contains a broad overview of the problems and possible solutions, it can constantly be enriched, modified, and adapted by social movements and organisations and in no way replaces active and attentive listening to the communities affected by specific projects, since each of them will have particular needs and demands.



HOW IT WAS DONE

The safeguards have been taking shape since 2022. The long journey was necessary to understand scenarios, trace affected peoples and partners, conduct online and face-to-face dialogues, experiences, studies, and training, and get input from experts and allied organisations.

Safeguards are not targeted at just one institution or sector. While they can be made feasible through legislation, regulations, or standard-setting, they can also be implemented voluntarily by companies or required by financing agents to ensure safety for all people involved.

Here we present proposals for land use contracts, environmental licences, energy generation and transmission concessions, and a specific section on transmission lines.

For a better understanding of some of the technical terms specific to these activities and their regulation, the reader can refer to the glossary at the end of the document.

Topics such as offshore wind farms, green hydrogen, and some specificities of centralised solar plants are still under discussion and require further investigation to reach objective recommendations but are nevertheless equally urgent.

Fundamental issues such as gender, health, food production, and the rights of traditional communities permeate the whole set of safeguards demanded by the collective.

We hope that this collective construction of consensus and demands will inspire public authorities, companies, financing agents, and others responsible for the implementation and operation of projects to listen and promote better governance and social participation in all areas of renewable energy production and transmission.



2. INTRODUCTION

Brazil has the potential to significantly contribute to the global decarbonisation efforts. The urgent need for a global energy transition is undeniable. The increasingly severe impacts of the climate crisis serve as a reminder that decarbonisation of the energy sector is crucial for stabilising global warming. However, if this transition is limited to the power sector alone, it will only have a minimal impact on improving living conditions.

We, social movements and organisations, traditional peoples and communities, socio-environmental activists and researchers in the field of renewable energies - who put together this document - demand that it also be a transition to a fair, communal, and inclusive power generation model.

As it has been done, the growing expansion of renewables has intensified territorial conflicts, generated threats to biodiversity, and aggravated injustices and socio-environmental damage to the peoples of the countryside, the forest, the waters, and their ecosystems.

In addition to correcting the course, it is essential to ensure reparations for the damages already caused and mitigate the witnessed socio-environmental impacts.

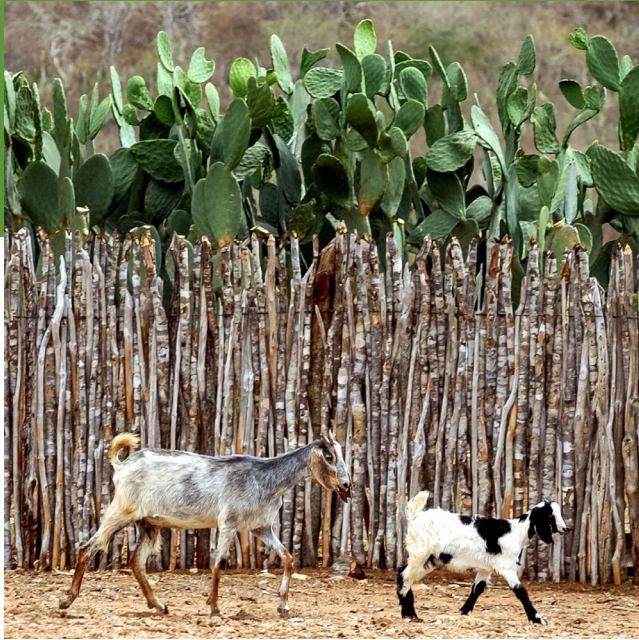
To this end, we have strived to shed light on the many disturbances and adverse impacts of the large-scale generation and transmission of renewable energy, often hidden under the "clean energy" label.

This position cannot be achieved, however, at the expense of historically exploited, marginalised and vulnerable peoples and populations — who have been paying the price for the implementation of wind and solar plants in their territories — or by forcibly maintaining our historical role as a commodities exporter.

Consultation with communities affected by energy sector ventures shows that a large part of the solution lies in the correct implementation of public policies and the guarantee of existing rights. However, a transformation in our energy policy is also necessary, with effective popular participation in its planning and development.

Implementing public policies in the territories needs to precede developments, and energy potential studies produced by the *Empresa de Pesquisa Energética* [Energy Research Company] (EPE) are instrumental in this. Notwithstanding, in addition to wind or solar energy potential, other variables need to be analysed to define which territories should be allocated for energy generation and transmission, considering the socio-environmental cost of these projects.





This planning process must provide exclusion zones for ventures, defined based on dialogue with those residing in the territory and environmental premises, including the principles of precaution and prevention. **The use of land for food and water production, environmental conservation, and the maintenance of the territories, cultures, and ways of life of indigenous peoples and traditional communities must not be hindered in order to favor large-scale commercial power generation.**

In these territories, if their residents desire, energy generation should be based on decentralised, community-driven, and self-managed solar models. This path ensures food security for these communities and a significant portion of Brazilians and conserves the country's rich biodiversity.

Where there is high energy potential, the government must prioritise the regularisation of traditional territories, articulate environmental entities, resolve agrarian conflicts, plan sustainable use with inclusive ecological-economic zoning and encourage social participation in the appropriate decision-making instances.

For its part, the private sector can contribute to the extra work that the development will demand of the public sector by financing these initiatives through a sectoral fund created for this purpose and fed by the private sector itself. Above all, it must voluntarily comply with or implement the best social and environmental practices, both globally and locally in order to mitigate as many of the project's social and environmental impacts as possible, incorporating the ESG agenda and avoiding potential future conflicts, including judicialization.

Furthermore, Convention 169 of the International Labour Organisation must be faithfully complied with free, prior, and informed consent, respecting the autonomous protocols of the communities - where they have already been built - which regulate this consultation.

Only with these measures we can have energy generation that will serve as a catalyst for local development, rather than a condemnatory sentence for communities that will need to be supported by the government later on. Careless implementation could relegate the Brazilian Northeast region to a mere energy supplier to the world, deepening our country's regional and historical inequalities.

Brazil needs to decide whether its fair energy transition is a priority. If so, it also needs to treat its energy-generating territories as indispensable so that impacts from energy generation and transmission are mitigated, damages are avoided, and reparations are adequate.

3. SAFEGUARDS FOR LAND USE TRANSFER AND EASEMENT CONTRACTS

Contracts drafted for the installation of large renewable energy projects on small properties have been marked by clauses with long contractual terms, derisory remuneration, insufficient social compensation, disadvantageous conditions, exorbitant fines and other agreements that are contentious to the interests of the communities involved.

IDENTIFIED PROBLEMS

Contractual unfairness; contractual injury.

LEGAL INSTITUTIONS AND VIOLATED RIGHTS

- Negotiation inequities harm some contractual principles such as: **autonomy of contractual will; social function of the contract; contractual equity;**
- Unfair contracts allocate most of the income from the land to tenants, limiting the **usufruct of the land** by its owners or occupiers;
- Hindrances to access and use of leased land cause **dispossession;**
- Loss of land use threatens **water sovereignty and food security;**
- Landowners are losing the right to apply for the **special retirement pension for rural workers;**
- The excessive costliness for the most vulnerable contractual party harms **human dignity.**



GUIDELINES FOR SAFEGUARDS:

- Compliance with the social function of land, prioritising its use for biodiversity conservation and food production;
- Guarantee of the human right to land, work and rural housing;
- Autonomy of rural, indigenous and traditional communities over the management of the use of their lands and territories, including the use of energy resources therein, while respecting their specific forms of organisation and representation;

- Preservation of the way of life and health of rural populations;
- Guarantee of the right to free, prior and informed consultation of indigenous peoples, quilombolas and other traditional peoples and communities, and smallholder family farming in projects that may affect, directly or indirectly, their territories;
- Priority for harnessing energy potential with decentralised, community-based and self-managed solar energy generation projects in the territories of indigenous peoples, quilombolas, traditional peoples and communities, agrarian reform settlements and smallholder family farms;
- Ensuring rural communities' participation in the outcome of harnessing potential wind and solar energy in their territories;
- Fair payment for land use, considering the differential income arising from the location in regions with high wind and solar potential;
- Transparency in contractual relationships, ensuring prior access to information on project dimensions, land use restrictions, and environmental and health impacts;
- Protection of the weakest party in the legal relationship, i.e., the small landowner or possessor - including independent and free legal assistance and social value from the government, never from the interested company, in order to balance the evident inequity between the two parties of the contract;
- Contracts must seek a symmetrical relationship between the parties - companies and small landowners - in order to guarantee equity and fair compensation for the communities;
- Alignment of contract clauses with the basic rules of the Brazilian Civil Code and the agrarian norms of Brazilian law;
- Definition of basic demands and conditions by the affected communities for the construction of contract models;
- Companies must promote transparency of the interests and active communication, publicising all project information and ending the confidentiality of contracts;
- Detailed provision of payments for energy generation and installation of wind turbines or other equipment for power generation and transmission;
- The government must create mechanisms to facilitate the revision of contractual clauses that are excessively onerous in terms of rights and obligations, making the interests of the communities compatible with the implementation of the projects and balancing the business relationship;
- Guarantee by the government that there is full reparation for the violated rights of affected populations living in areas of direct and indirect influence of energy projects, regardless of whether or not they have signed a contract to implement such projects;
- Prohibition of adhesion contracts or contracts unilaterally drawn up by companies, ensuring rural communities and family farmers the opportunity to actively and effectively influence the formulation of contractual conditions.





A GENERAL SAFEGUARDS FOR PUBLIC CONTROL OF LEASING PLANS

- A1** Norms should be established in all possible levels to protect rural, forest and waterfront peoples and traditional communities, as well as the owner or possessor of rural property with an area of up to four fiscal modules, setting the minimum content of the land use assignment contract for energy generation or transmission, to recognise their vulnerability in the negotiating relationship with companies.
- A2** The assignment of use or easement of rural properties for energy generation and transmission will only be granted if it does not hinder the fulfilment of the land's social function and its natural vocation for biodiversity conservation and food production, including the maintenance of fishing territories.
- A3** Creation of instances of popular representation and participation - which in this document we will call "dialogue tables", which can be structured in the form of community councils, forums or similar entities - to address climate and energy justice in territories and tidal areas, and represent the communities affected by renewable energy projects when executing lease plans, and issuing generation and transmission grants and environmental licensing.
- A4** The validity of the consent of rural communities, family farmers and artisanal fishers in contracting with renewable energy companies should be conditional on the provision of independent technical and legal guidance, to be carried out by legal assistance networks composed of public defenders, civil society organisations or their unions and associations during the negotiation phases.
- A5** Obligatory analysis by the Brazilian energy regulatory agency ANEEL regarding compliance with the minimum content of land use and easement contracts for energy generation and transmission must be defined based on consultation with society and mandatorily presented by companies in requests for licensing, grants and public financing for development, installation and operation of renewable energy projects.
- A6** When assessing the price of a hectare for land use, easements or compensation for expropriation contracts for energy generation and transmission, the economic criterion of the differential land income resulting from the location of rural properties in regions with high energy potential should be taken into account, preventing socio-economic vulnerabilities from being exploited in an obvious situation of geographical blackmail.
- A7** In addition to the individual remuneration of the lessor (small landowner or possessor), the lessees (companies) and dominant parties (easement contracts) must take on the contractual obligation to revert part of the economic profit from the enterprise that is the subject of the contract to the local community, directing it to community funds or locally-initiated social projects.
- A8** Collective contracts for the economic exploitation of the territories' energy potential must establish the conditions for rural communities' economic and financial participation in the results of utilising these resources.
- A9** Companies' access to territories for the economic exploitation of the energy potential therein must take place through collective negotiation and contracting processes with rural and fishing communities, respecting their specific and self-recognised forms of organisation and representation.
- A10** Land use assignment contracts for energy generation must fulfil their social function, ensuring fair and non-prejudicial exchanges for the collective interest and the safety, health, well-being, and tranquillity of rural communities affected by the projects.

B MINIMAL CONTRACTUAL CONTENT

- B1** Land use transfer contracts for the installation of power generation enterprises must exclude the portion of the property designated as legal reserve and other areas protected by environmental legislation.
- B2** The contract will delimit the area allocated for the installation of the enterprise, with the residual portion of the rural property remaining under the complete control of the owner or possessor, in which they can freely explore agricultural, livestock, plant extraction, forestry or agro-industrial activities at their discretion.
- B3** Contracts must assign the company the duty of repairing and mitigating any impacts and damages caused to the leased property's surroundings.
- B4** Contracts must guarantee full reparations by companies for violations of the rights of affected populations living in areas of direct or indirect influence of power generation projects, whether or not they have signed land use assignment contracts.
- B5** The lessor may establish in the contract a minimum distance between the wind turbine and their home that is greater than that provided for in current technical regulations to avoid the harmful effects of noise and visual pollution.
- B6** The installation of wind turbines within rural properties must be at least two kilometres (2 km) away from the homes and workplaces of the people living around them, following technical safety, health and environmental criteria indicated by scientific studies.
- B7** The company will be responsible for adapting and repairing existing buildings and other improvements on the leased property, aiming at eliminating the impacts of noise and other adverse effects on the health and lifestyles of local populations resulting from the installation and operation of the project without detriment to observing the minimum distance between the installation of power generation equipment and the homes and workplaces of rural populations.
- B8** Contract renewal depends on the express consent of the owner or possessor of the rural property, subject to renegotiation of the contractual conditions to ensure a balanced relationship between the parties, taking into account the amortisation of investments, with the explicit prohibition against automatic renewal or renewal at the sole discretion of the company.
- B9** In the event of the death of the owner or possessor of the rural property, the continuation of the contract for the residual term is subject to renegotiation of the contractual conditions with their heirs and successors.
- B10** Following pre-established mechanisms, contracts must be reviewed periodically to ensure contractual equity and remove conditions that may become excessively onerous for rural communities.
- B11** Contracts must contain a clause stating that sub-letting or assignment of the contract to third parties (other companies) is subject to the consent of the lessor, small landowner or possessor and subject to revision of the terms agreed in accordance with the enterprise to be set up by the new company.
- B12** Contracts must guarantee the right to withdraw during the study phase (pre-operational) without charge to lessors.
- B13** Contracts must guarantee the right to compensation and cancellation in the event of a severe occurrence associated with the wind turbines and transmission structures, which poses a risk to the physical integrity of the community's residents and their livestock.
- B14** In the event of failure to maintain the equipment on the part of the lessee (company), there is the potential of cancelling the contract or paralysing the operation of the wind turbine until the problems are remedied, without detriment to the land use remuneration.

B MINIMAL CONTRACTUAL CONTENT

- B15** The lessee (company) is liable to pay a fine and is responsible for repairs and compensation for lessors in the event of soil and water pollution on the property as a result of the lessee's activities.
- B16** Contracts must provide for their cancellation without charge to the lessor, small landowner or possessor in the event of non-compliance with any conditions agreed by the lessee (company), with a fine and compensation for any damage.
- B17** At the end of the contract, the assignee undertakes the removal and proper disposal of the equipment and physical structures installed on the rural property, including base platforms built of wind turbines and other infrastructure, and must return the area ceded for use to its original state, within the timeframe defined by the licensing body with the participation of the owner/possessor.
- B18** At the end of the contract, the lessee must bear land recovery costs through appropriate restoration techniques, planting suitable native seedlings, soil enrichment, and monitoring within the timeframe defined by the licensing authority with the participation of the owner/possessor.
- B19** The contract must not include a confidentiality clause so that the contractual conditions can be discussed collectively and the families can procure assistance.
- B20** The contract must stipulate that the lessee bears the taxes and charges relating to the leased property during the land lease period.
- B21** In case of wind turbine inactivity, a maximum period must be determined for the company to perform maintenance or remove deterrents to its operation. After this period - during which the lessor must receive the minimum monthly payment determined in the contract - the company must decommission the turbine and terminate the contract to enable the full use of the land as outlined in safeguards 17 and 18.
- B22** In the event of injury to health caused by energy generation or transmission projects, the company must bear the total costs of treatment and take immediate measures to cease the causes of illness.
- B23** Land use assignment contracts for energy generation and transmission that have already been signed must be reviewed in light of the new understandings and established safeguards.

C ECONOMIC COMPENSATION FOR LAND USE

- C1** Guaranteeing the payment of a fair price for the use of the property, which ensures that its owner or possessor will be able to reverse the differential income from the land coming from its location in regions with high energy potential.
- C2** Assigning remuneration criteria for land use without distinction between rural properties used to install infrastructure for providing ancillary services to the operation of projects (e.g. substations, transmission lines, interconnecting stations, access roads, buildings) and those used to install equipment for capturing and transforming wind kinetics or solar radiation.
- C3** Guaranteeing the payment of a minimum monthly fee (with annual inflationary corrections) for the use of land in the event of fluctuations in the generation, sale or market price of energy or a temporary pause in production, considering that the owner or possessor of the rural property should not bear the risks of the enterprise.
- C4** Establishing contractual and technical mechanisms for effective monitoring and control by rural communities of the generation and commercialisation of electricity, obtained from harnessing the wind and solar potential of their territories, with data on daily electricity generation.

4. SAFEGUARDS FOR ISSUING POWER GENERATION AND TRANSMISSION CONCESSIONS

The analysis carried out by ANEEL to issue authorisations for power generation plants does not take into account any social and environmental aspects, as it considers that the prior licence granted by the state or federal environmental agency is sufficient to identify and propose mitigations for the conflicts generated by the activity.

A specific approach by the agency is needed to reinforce inequalities between the actors involved in the process - in this case, communities and energy companies - especially regarding land use assignment contracts where the project is located.



IDENTIFIED PROBLEM

Lack of analysis of environmental, social, ethnocultural, productive and agrarian components when issuing permits.

VIOLATED RIGHTS

- **Self-recognition** as traditional communities;
- **Free, prior and informed consultation** with traditional communities affected by the project;
- **Right to territory and well-being**, including work, income promotion, and cultural, historical, religious and health aspects.

GUIDELINES AND BEST PRACTICES FOR IMPLEMENTATION OF THE CONCESSION PROCESS

- Public authorities should use mapping that considers territorial, productive, socio-cultural, and economic issues to guide the siting of new power plants;
- The criteria for issuing licenses and competing in auctions should contribute to protecting the rights of communities affected by energy generation projects. It should also mitigate and compensate for any damage caused by these projects;
- Regulatory agencies and licensing bodies must be able to analyse grant applications properly;
- Progress needs to be made in community mapping in areas with high energy potential;
- It is essential to raise awareness in the business sector about the risks of greenwashing and to connect the impacts and benefits of energy generation projects globally to their impacts and benefits locally.

A SAFEGUARDS FOR PERMIT ISSUANCE

- A1** Preparing a map by EPE and with popular participation, prioritising areas for energy generation and transmission, considering generation potential and taking into account protected areas, territories of recognised traditional communities or those in the process of being recognised, priority areas for biodiversity conservation, food production and water sources, regions with intense land conflicts and the social mapping carried out by the communities. Based on this data, the EPE and other competent public bodies should present exclusion areas for energy generation and transmission projects. Priority areas for energy generation should have their Permit Application Requests (*Despachos de Requerimento de Outorga* - DROs) and permits analysed earlier than other applications.
- A2** The Permit Application Request (DRO) must be mandatory to provide information on power generation and transmission plans to the government and potentially affected communities and allow more time for project analysis.
- A3** For the concession of the DRO and Public Utility Declaration (*Declaração de Utilidade Pública* - DUP), the developer must submit to ANEEL a list prepared or ratified by the responsible bodies (Palmares Foundation, INCRA, Funai) and by the traditional communities or indigenous peoples, either recognised or self-declared, residing in the polygonal area or otherwise affected by the project and who will be the subject of prior, free and informed consultation.
- A4** Prioritising the analysis of applications for DROs, DUPs and permits for projects that demonstrate that they have had exempt external monitoring and evaluation (Federal Public Prosecutor's Office - MPF or State Public Prosecutor's Office - MPE, Federal Public Defender's Office - DPU, networks of civil society lawyers or universities) when concluding land use contracts.
- A5** Creating bodies for popular participation - which in this document we will call "dialogue tables" but which can be structured in the form of councils, forums and other forms of collective organisation - to deal with climate and energy justice in the territories and to represent the communities affected or threatened by renewable energy generation and transmission projects, starting from the planning phase of the projects, and including lease, permit and environmental licensing plans.
- A6** In order to issue DROs and DUPs, ANEEL must demand proof of implementation of a communication plan aimed at all affected communities to inform them about the project and its possible impacts.
- A7** Upon receiving the DRO and DUP application, ANEEL must notify the government of the state, municipality or municipalities involved, and the Public Prosecutor's Office and the Public Defender's Office at federal and state levels to inform them of the plans to implement power plants in their territories.
- A8** Once the DRO and DUP have been applied for, ANEEL must inform the responsible government sectors so that they speed up the resolution of environmental and social liabilities in the territory (land regularisation, demarcation or recognition of traditional territories, creation of Conservation Units (UCs), investments in infrastructure, etc.), to prevent existing problems from being exacerbated by the new project.
- A9** Creating informative material to explain to communities the implementation phases of environmental licensing and authorising acts for the project at ANEEL. The material should be prepared with the participation of organisations representing affected communities and must clarify their rights, especially regarding contracts.
- A10** Compliance with environmental licensing conditions must be analysed before extending power generation and transmission concessions, and concessions can only be granted to projects that comply with those conditions.
- A11** ANEEL or other public bodies appointed by the agency must analyse compliance with the aforementioned minimum content of land use and easement contracts and expropriation indemnities in order to issue authorisations for power generation and transmission.
- A12** ANEEL should provide and widely publicise a platform for reporting abuses by concessionaires.

5. SAFEGUARDS FOR PUBLIC POLICIES AND COMPLEMENTARY MEASURES TO ENVIRONMENTAL LICENSING

Environmental licensing should be an essential instrument to mitigate and compensate for impacts and damages. In practice, however, the existing process needs to be revised to respond to the advance of wind and solar power generation centres in the Northeast region. A clear example is deforestation: according to the MapBiomas initiative, in 2022, these renewable energy projects totalled 4,291 hectares deforested. This figure is particularly worrying because the expansion occurs in two highly threatened and poorly protected biomes, the Cerrado and the Caatinga.

Furthermore, licensing must catch up to what is required to address the social and economic impacts on rural communities around these plants. A review of this process by the licensing bodies, associated with other policies and measures for land regularisation, respect for the International Labour Organisation Convention 169, and recognition of the rights and fundamental role of traditional peoples and populations in food production and the preservation of knowledge, must be a priority in any debate on the energy transition.

IDENTIFIED PROBLEMS

Ineffective licensing process, confusing regulations and lack of procedural transparency; limited social participation and restricted access to data at different stages of licensing; ineffective actions to repair the territory, compensate people and restore natural environments, generating systemic losses and strictly unilateral gains.

VIOLATED RIGHTS

- **Territoriality and the right to natural well-being** provided for by law;
- **Regulations** intended for particular, priority and biome preservation areas;
- **Prior, permanent, free and informed consultation;**
- **Right to an ecologically** balanced environment;
- **Social and environmental function** of land.



GUIDELINES AND BEST PRACTICES FOR LICENSING

- Establishment of a permanent forum for dialogue and prior consultation, starting with the licensing application or other initial studies that interfere with the territory;
- Adoption of energy generation technologies that reduce climate impact;
- Assessment of greenhouse gas emissions throughout the whole energy generation chain;
- Regulatory modernization with a permanent consultative forum composed of members from the project's Directly Affected Area (ADA), Area of Direct Influence (AID) and Area of Indirect Influence (AII);
- Three-phase environmental licensing for small, medium and large projects;
- Adoption of compensatory measures in line with the interests of the affected communities and subject to review;
- Guaranteed protection for human beings and the natural environment.
- The National Council of Traditional Peoples and Communities (CNPCT) must be considered an essential body for social oversight.

A GENERAL LICENSING SAFEGUARDS

- A1** Requiring an Environmental Impact Study and Environmental Impact Report (EIA/RIMA) for any centralised generation projects, with public studies and data, prior public consultation, and actions to mitigate the impacts caused by the project. Excluded from this obligation are distributed mini- and micro-generation projects that do not cause significant impacts on the physical, biotic, social and infrastructure axes.
- A2** Assessing projects' cumulative and synergistic impacts to effectively analyse the effects generated in the physical, social and biotic domains.
- A3** Locational definition considering the least impact on the social, physical and biotic domains, using social mapping, economic-ecological zoning (ZEE) and the most current technical studies. The impacted community and local research centres should also recommend the studies modelled on decision-making support tools that display impact and associated risk matrices.
- A4** Adopting reparation measures in line with the interests of the affected communities, defined in a participatory forum and subject to permanent review in line with the monitoring of impact indicators throughout the project's installation and operation processes.
- A5** Establishing a permanent advisory and deliberative Working Group with community participation and control to monitor licensing conditions and socio-economic, environmental and territorial indicators.
- A6** Social cartography must be adopted as a valid method for socio-economic assessment in licensing processes, starting with alternative location studies. According to the methodology defined by the impacted population, the company must bear the costs of carrying out the social mapping.
- A7** The EIA and the Basic Environmental Plan (PBA) must include a decommissioning and wasteland recovery plan, with estimated costs and the necessary financial guarantee. This plan must be revised throughout the project's useful life.
- A8** Hiring certified, trained companies with a history of legally compliant services (positive record) validated by the affected population.

B SAFEGUARDS FOR THE BIOTIC DOMAIN

- B1** Requiring Environmental Impact Studies (EIA) identifying and assessing possible impacts on terrestrial, aquatic and aerial ecosystems. Mitigation measures must be adopted before the project is installed, based on public studies, and be appropriate to the impacts demonstrated in the EIA for each phase of the project.
- B2** Developing studies to identify areas where endemic native species occur to protect fauna, with or without endangered status, for example, the hyacinth macaw. Social cartography should also be considered in this category.
- B3** Developing collision mitigation projects with appropriate prevention and rescue measures for birds and flying animals. These studies should be public and include the use of the most suitable technologies for the different phases of the project (Preliminary Licence - LP, Installation Licence - LI, and Operation Licence - LO).
- B4** Requiring the adoption of measures to mitigate impacts on fauna, with operation protocols for wildlife crossings and signposting based on migration route maps for different groups of fauna, among others. Publication of wildlife accident data.
- B5** Promoting communication campaigns to guide residents on how to deal with the occurrence of wild fauna on their properties due to habitat disturbance caused by the project.

C SAFEGUARDS FOR THE PHYSICAL DOMAIN

- C1** Selecting suitable sites, with priority on degraded areas, for the installation of wind and solar power plants while adopting construction and operation practices that minimise impacts on the soil and landscape, such as the compaction or deforestation of forested areas. In repairing degraded areas, the obligation to compensate at the same or near the impact of the plant must be considered.
- C2** Selecting suitable sites for the installation of wind and solar power plants, with the adoption of construction and operation practices that minimise the impact on springs, water resources and bodies of water, taking into account the uses of rural communities (in AEE, AID and AII), CAR requirements and consideration of social cartography.
- C3** Defining and selecting suitable sites for the installation of wind and solar power plants, defining exclusion areas and adopting visual impact mitigation measures, taking into account landscape elements also derived from the ZEE and social cartography.
- C4** Adopting special zones and exclusion areas, with measures to mitigate the impact on rivers, seas, waterfalls, fishing areas, human and animal watering points and those of ecological importance (such as marginal ponds and dune lagoons), considering social cartography for their definition, among others.



D SAFEGUARDS FOR THE SOCIO-ECONOMIC DOMAIN

- D1** If there are traditional communities in the area directly or indirectly affected by the energy generation or transmission project, the licensing process must begin, ensuring that free, prior and informed consent has taken place, as provided for in ILO 169. If the responsible bodies do not duly prove this, the process must be paralysed until consultation has taken place to guarantee its prior nature.
- D2** Analysis by the environmental licensing body, before issuing a preliminary licence, of compliance with the minimum content of the contract relating to the socio-environmental impacts of the project.
- D3** Obligation to carry out studies on the impact of noise, light, particulate and visual pollution ('stroboscopic effect' caused by flashing lights) and shading caused by wind towers within the scope of the EIA with ADA/AEE/AID/All coverage.
- D4** Obligation to carry out specific studies and monitoring of infrasound and low-frequency noise, considering their adverse effects on human and animal physical and mental health, within the scope of the EIA and the Basic Environmental Plan (PBA).
- D5** The analysis of socio-economic impacts should consider the positive and negative effects of the project or activity on the quality of life of the population living in the area and its area of influence, including at least the study of the following issues: local ways of life; how natural resources are utilised; the well-being and serenity of the local population; population densification; pressure for public services; land use and occupation; property valuation; mobility in rural areas and demand for public transport; ventilation and lighting; noise and air pollution; natural and cultural heritage; the local climate and its relationship with agricultural production; and land use conflicts.
- D6** Compatibility studies with environmental zoning and selection of sites that are not in conservation units or that do not significantly affect their protection according to the management plan.
- D7** Permanent monitoring of local communities through a forum to conduct decision-making processes and approval of studies, in addition to adaptation measures, including social cartography.

E PREPARATORY, MITIGATING, OR REMEDIATION PUBLIC POLICIES FOR AREAS WITH HIGH RENEWABLE ENERGY GENERATION POTENTIAL

- E1** Revision of CONAMA and ABNT standards on distancing turbines and wind turbines from homes and workplaces to avoid damage to public health, the environment and the territory.
- E2** Actions by public authorities to promote land regularisation and demarcation of indigenous lands, *quilombola* areas and conservation units before the installation of projects in areas with potential power generation.
- E3** Environmental licensing for energy generation and transmission should follow the ordinary procedure of issuing preliminary, installation and operating licences.
- E4** Developing periodic studies on the quality of employment and income offered in the territories affected by the generation and transmission of renewable energy to avoid human exploitation.
- E5** Fostering the appreciation of the Caatinga and Cerrado through the implementation of more stringent legislation aimed at protecting these biomes.
- E6** Regulatory modernisation with the establishment of a permanent consultative forum comprised of technical staff and residents of the ADA/AID/All to collaborate in defining the specifics of the Terms of Reference (TORs), communication instruments and registration/validation/revision of agreements.
- E7** Prior Economic-Ecological Zoning (EEZ) of areas with high energy potential or planned developments to identify sensitive environmental, social and cultural points and areas of exclusion. The EEZ must consider diversity, including communities and social maps of the territories.

E PREPARATORY, MITIGATING, OR REMEDIATION PUBLIC POLICIES FOR AREAS WITH HIGH RENEWABLE ENERGY GENERATION POTENTIAL

- E8** Establishing, before the energy planning process, the delimitation of exclusion zones for the installation of projects, taking into account socio-environmental aspects, especially the areas on migratory bird routes and the occurrence of endangered species. The exclusion of important areas for biodiversity should also be observed in the environmental licensing process, especially when evaluating locational alternatives.
- E9** Lease project specifying prior registration of potential areas (land mosaic and socio-economic registration), determination of the off-limits regions and establishment of access corridors to areas of communal use.
- E10** Measuring and reducing the use of fossil fuels, considering the entire generation and transmission chain, with proper emissions monitoring and adoption of pollution control technologies, including the accumulated impact of neighbouring plants.
- E11** Creating a positive registry of power generation and transmission companies that comply with conditions, do not violate standards and have the best contractual and socio-environmental practices.
- E12** Offering compensation for communities already harmed by power generation or transmission projects through projects that are in the local interest.
- E13** Creating public campaigns informing the populations of protected territories of their rights.
- E14** Carrying out studies and measures to record, characterise and preserve local cultures based on the declaration of peoples (social cartography, ethnic mapping, zoning, land-use planning), taking into account local specificities and traditional ways of life.
- E15** Trade unions, associations and similar organisations must advise their members of the possibility of losing special social benefits for rural workers in the event of temporary work in the project's construction or leasing of their land. Developers (companies) should include this information in public campaigns aimed at affected populations and when presenting contracts.
- E16** Ensuring communities near power generation and transmission projects have access to free energy or adequate discount tariffs.
- E17** Ensuring the communities surrounding energy generation and transmission projects can access free, high-quality telecommunications resources.
- E18** Creating a positive registry, fed by the licensing authorities, ANEEL, ONS (National Operator of the Electricity System) and CCEE (Electricity Commercialisation Chamber), for companies fulfilling their socio-environmental, safety, technical and fiscal obligations. These companies could be given preference in the analysis of applications, among other incentives to be defined.
- E19** Creating programmes to strengthen licensing bodies and regulatory agencies in areas with high energy generation potential, with financing from the sector's funds or compensations.



SPECIFIC SAFEGUARDS

TRANSMISSION LINES

A SAFEGUARDS FOR TRANSMISSION LINES

- 1 Environmental licensing for energy generation and transmission should follow the ordinary procedure of issuing preliminary, installation and operation licences.
- 2 Requiring the best technical means to reduce the electromagnetic field of power transmission lines.
- 3 Social criteria should be applied in the impact study, considering the percentage of property affected by the transmission line, to prioritise the passage through large properties that are proportionally less affected.
- 4 Redefining transmission line corridors, considering traditional territories and family farming as exclusion areas.
- 5 Economic assessment and definition of a minimum parameter for the hectare valuation to be paid as compensation for expropriation, considering the specificities of each biome with a particular valuation for traditional territories and family farming areas.
- 6 Developing ways to adjust already paid compensations according to the newly established valuation.
- 7 Adding criteria to the locational study that considers the percentage of property affected by the areas of direct and indirect influence and the number of people displaced to prioritise the installation through large properties.
- 8 Current legislation should be updated to stipulate that the concession holder for the operation of transmission lines must make a monthly economic contribution to compensate for the losses and damages resulting from the occupation of productive or agricultural land.
- 9 The company must ask residents, 30 days in advance, for authorisation if it needs to enter the property to conduct studies or other activities linked to implementing the transmission line.
- 10 ANEEL must punish exemplarily, with the possibility of losing the permit, concessionaires who expose communities to dangers arising from the electricity grid or carry out acts of vandalism, coercion and threats to the impacted communities.

GENDER AND ITS INTERSECTIONALITIES

Rights violations in the territories affected by mega-projects aggravate the structural inequalities that affect people who have historically been excluded from democracy and citizenship and who face multiple forms of violence in their daily lives, such as cisgender women, the LGBTQIAPN+ population, children and adolescents. Issues such as the loss of land and territory, and ancestral ways of life, lead to domestic and social burden on women, a precarious present and future for children, adolescents and older people, and the denial of the existence and needs of LGBTQIAPN+ people.

VIOLATED RIGHTS

Violation of human rights, the right to identities that encompass race/ethnicity, gender, diversity, sexuality and generation; lack of acceptance based on gender identity; gender-based violence; damage to the reproductive health of people with wombs, girls and boys (cis and trans); violation of the rights of children and adolescents; and parental abandonment.

SAFEGUARDS FOR GENDER ISSUES AND THEIR INTERSECTIONALITIES

- 1 Creating mechanisms for reporting and characterising cases of violence against women, sexual abuse or exploitation of girls and boys, whether cis or trans and a system/observatory for systematising information to improve the diagnosis and give visibility to the realities experienced by communities facing energy generation and distribution projects, developing strategies to mitigate such damages.
- 2 Implementing prevention, assistance, protection, combat, and confrontation actions against all forms of violence against women, girls, and boys (cis and trans) typified by the Maria da Penha Law and the Child and Adolescent Statute (ECA).
- 3 Developing and implementing the Policy of Prevention of Sexual Exploitation, Abuse and Harassment (PSEAH), as well as creating and implementing a Code of Conduct for renewable energy and infrastructure companies (transmission lines), committing the sector to actions to combat abuse, harassment and sexual exploitation of children and adolescents.
- 4 Offering mandatory training (on human rights, gender, sexuality and race) for employees, fieldwork staff and the community to prevent cases of harassment, bullying, sexual exploitation and abuse and to build codes of conduct to act if they do occur.
- 5 Companies will be responsible for the behaviour of their employees in the affected communities and territories. Companies and the government will need to create networks for pregnant women who are victims of unwanted pregnancies, guaranteeing care, legal and safe abortion for those affected, as well as psychosocial support for those who have been pregnant and social protection for children born from these relationships.
- 6 Creating a programme aimed at women, girls and boys from the countryside and waterfronts who suffer bullying, harassment, exploitation and sexual abuse, guaranteeing psychological support, prevention of sexually transmitted infections (STIs) and the promotion of material conditions and knowledge to promote income generation and social reintegration.
- 7 Reviewing and improving the parameters for sanctions, including criminal sanctions, for companies that disrespect the human rights of children and adolescents.
- 8 Revoking power generation permits of companies that do not adopt and put into practice mechanisms to tackle abuse, harassment, sexual exploitation and all forms of violence against women, children and adolescents, and in cases of repeated denunciations of the practice of crimes typified in the Maria da Penha Law and the Child and Adolescent Statute by their agents and employees during the installation and operation phases of the projects.
- 9 Ensuring that domestic and care work carried out by various people, such as washing, ironing, cooking and others, is appreciated and fairly paid for by company teams during the installation and operation of energy generation and distribution projects.

6. TO WHOM THE SAFEGUARDS ARE DIRECTED?

Implementing safeguards is broad and complex and requires an inter-institutional effort. The public sector must lead the process, but companies and financing agents can take steps forward and implement best practices voluntarily.

1. Federal government

1.1. *Secretaria Geral da Presidência [General Secretariat of the Presidency]* - The dialogue table "Renewable energies: rights and impact", established within this secretariat, can bring together different ministries and government actors to resolve the conflicts generated by the activity. The promotion of actions in the areas of health, gender, demarcation of traditional territories, and protection of family farming and the environment, among others, can prevent the accumulation of liabilities that worsen with the arrival of the project.

1.2. *Ministério das Minas e Energia [Ministry of Mines and Energy]* - Leads Brazilian energy policy and regulates the sector. It can propose bills to the National Congress, coordinate zoning and control investments and priorities.

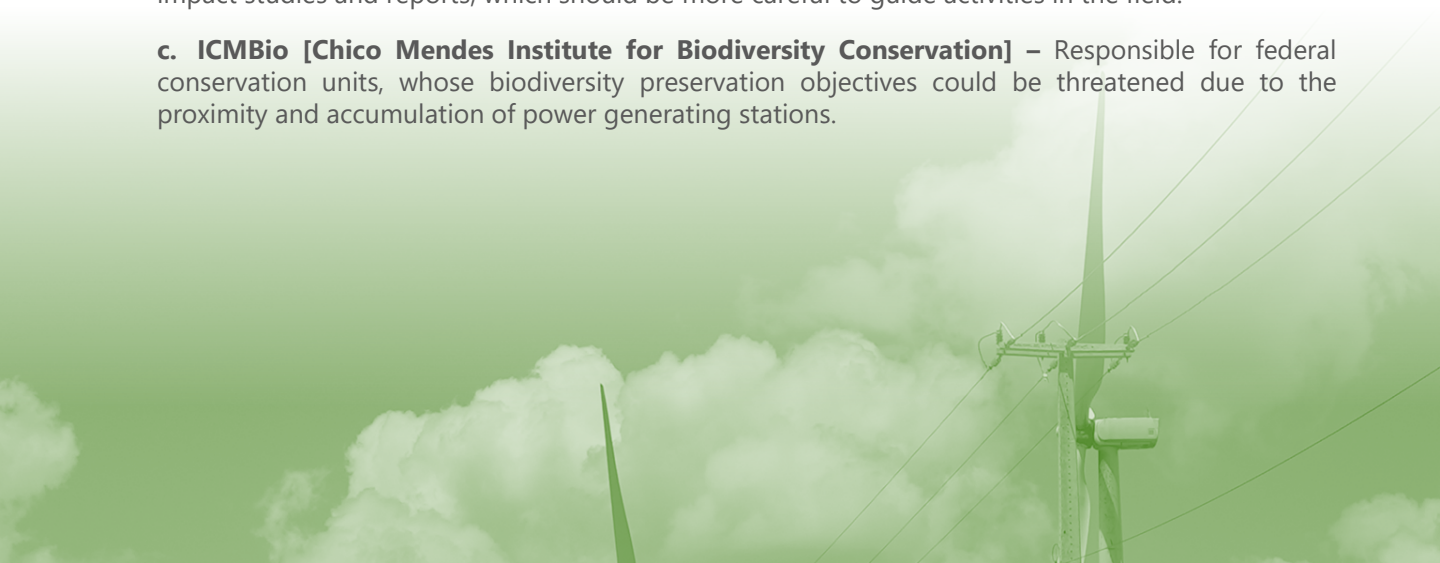
a. *Aneel* - Responsible for issuing power generation and transmission permits, at which point there is no qualitative check on the land situation and the contractual terms used to obtain the land where the projects will be installed. The agency could improve its regulations to fulfil this task and guarantee the fulfilment of its mission: to provide favourable conditions for the electricity market to develop with equity between agents and for the benefit of society.

1.3. *Ministério do Meio Ambiente e Mudança do Clima [Ministry of the Environment and Climate Change]* - It can carry out preparatory, mitigating or reparatory public policies in areas with high wind and solar potential, such as zoning, species inventories and studies that subsidise licensing and the establishment of greater protection in environmentally sensitive areas. It holds the presidency of CONAMA and can guide better regulation of the sector via a resolution of this collegiate body.

a. *CONAMA [National Council for the Environment]* - Responsible for Resolution 462/2014, which standardised the licensing of wind energy, and other resolutions connected to the sector, many of which fall into the category of simplified licensing and leave out essential definitions for preserving health and the environment. Various safeguards can be implemented by carefully reviewing this resolution in light of new studies and information collected in the field.

b. *IBAMA [Brazilian Institute of Environment and Renewable Natural Resources]* - Responsible for the federal environmental licensing process and issuing terms of reference for environmental impact studies and reports, which should be more careful to guide activities in the field.

c. *ICMBio [Chico Mendes Institute for Biodiversity Conservation]* - Responsible for federal conservation units, whose biodiversity preservation objectives could be threatened due to the proximity and accumulation of power generating stations.





Comunidade da Jurema, Amontada, Ceará, Brazil- Photo: Daniel Correia/ SAL Filmes

1.4. Ministério de Desenvolvimento Agrário e Agricultura Familiar [Ministry of Agrarian Development and Family Farming] – Responsible for public policies aimed at family farming, it plays a crucial role in ensuring that the investment made over the last two decades in this sector is harmonised with Brazilian energy policy.

a. INCRA [National Institute for Colonization and Agrarian Reform] – It is responsible for land regularisation in the priority regions for energy generation projects, resolving conflicts; it also plays a fundamental role in protecting *quilombola* areas and rural settlement projects, as well as guaranteeing prior, free and informed consultation with the communities that reside there.

1.5. Ministério da Fazenda [Ministry of Finance] – Leads the formulation of the federal government's *Plano de Transformação Ecológica* [Ecological Transformation Plan], which has the promotion of energy transition among its priorities and must also include social justice and the fight against inequality, to avoid perpetuating economic models based on inequality and without creating sacrifice zones for the implementation of a carbon neutral economy.

1.6. Ministério do Desenvolvimento, Indústria, Comércio e Serviços [Ministry of Development, Industry, Trade and Services] – It can encourage investments in renewable energies to bring concrete benefits to the populations where generation projects are installed, promoting better interaction between agents linked to the private sector and the socio-environmental, inclusive and fair agenda.

1.7. Ministério dos Povos Indígenas [Ministry of Indigenous Peoples] – In its mission to protect the rights of indigenous peoples, it can monitor the planning of new renewable energy projects in the vicinity of indigenous lands in order to mitigate their potential impacts.

1.8. Ministério dos Direitos Humanos e Cidadania [Ministry of Human Rights and Citizenship] – Essential in promoting, monitoring and defending the rights of traditional peoples and populations affected by renewable energy generation plants.

1.9. Ministério das Mulheres [Ministry of Women] – It must monitor the planning process and install renewable energy generation centres to protect women from harassment and other local impacts.

1.10. Ministério da Justiça/Funai [Ministry of Justice/National Foundation of Indigenous Peoples] – As the executor of the federal government's indigenous policy, it should monitor and prevent the advance of renewable power plants close to indigenous territories to safeguard traditional ways of life.

1.11. Ministério da Cultura/IPHAN [Ministry of Culture/ National Institute of Historic and Artistic Heritage] – It should monitor and influence the energy planning, granting and licensing processes to prevent areas of historical and archaeological importance from being impacted by power generation plants.

2. State governments - The level at which most projects are licensed and which usually acts to attract projects, including tax waivers. They can politically signal the need for better criteria for developers and make efforts to articulate public policies for diagnostic studies and mitigation and reparation actions aimed at affected territories and communities.

2.1. State environmental/licensing agencies - State environmental agencies licence most projects. Although their range for action is laid down in legislation that they cannot change, they can execute the process with more care, transparency and participation. They should demand that developers implement alternative location studies, hire reputable and capable companies to perform preliminary studies and define appropriate conditions, effective mitigation measures and remedial actions in line with the demands of the communities, execute the process in a participatory and transparent manner and monitor the conditions appropriately.

3. Municipal governments - Responsible for issuing the developer a consent letter to install the project in their territory. To do this, they can demand studies and planning from the developer and licensing bodies on how to avoid the socio-economic impacts of the project, especially during the construction phase, when more significant provision of public services is required due to the sudden increase in population. The municipality often needs adequate compensation and preparation to absorb these impacts.

4. Private sector - It can voluntarily adhere to the safeguards without waiting for them to be standardised by the government, adapting its operations to the best practices and reducing its negative impact on territories and the environment.

4.1. Employers' associations (ABEEÓLICA; Absolar) - Although they have no power to regulate the practices of their members, they can make efforts to raise awareness and lead the process of voluntary implementation of socio-environmental safeguards to induce the activity less conflictual and subject to judicialisation.

5. Financing agents and insurance companies - As part of analysing financing and contracting insurance for projects, they can demand compliance with safeguards that still need to be standardised, thus advancing socio-environmental protection mechanisms.

6. Rural Workers' Unions - These unions can help mediate the negotiation process between enterprises and associated collectives, defending and protecting the rights of workers, as well as providing legal assistance. Unions can also use safeguards as training tools.

7. Members of the Judiciary - In conflicts, they play a fundamental role in defending individual, collective and diffuse rights.

8. Academia - Universities can deepen understanding of the impacts and damages experienced by renewable energy generation in the territory, producing scientific articles, promoting knowledge exchange between peers and society, and stimulating debate on the paths to a fair, inclusive, communal energy transition.



7. TERMS AND DEFINITIONS

ABEEÓLICA: *Associação Brasileira de Energia Eólica* [Brazilian Wind Energy Association]

ABNT: *Associação Brasileira de Normas Técnicas* [Brazilian Association of Technical Standards]

ADA: *Área Diretamente Afetada* [Directly Affected Area]

AEE: *Área do Entorno do Empreendimento* [Area Surrounding the Project]

AID: *Área de Influência Direta* [Area of Direct Influence]

All: *Área de Influência Indireta* [Area of Indirect Influence]

ANEEL: *Agência Nacional de Energia Elétrica* [Brazilian Electricity Regulatory Agency]

CAR: *Cadastro Ambiental Rural* [Rural Environmental Registry]

Commodities: agricultural, financial, livestock, mineral, energy and environmental raw materials produced on a large scale for the foreign market, influencing prices and production.

Climate change: significant and persistent changes over time in the patterns that characterise the planet's climate, such as temperature and precipitation. These changes are mainly caused by the burning of fossil fuels, deforestation and agricultural activity.

CONAMA: *Conselho Nacional do Meio Ambiente* [National Council for the Environment]

Decarbonisation: reduction of carbon emissions caused by the combustion of fossil fuels for energy generation, deforestation, livestock, agricultural and industrial activities into the atmosphere to limit global warming to 1.5°C above the average temperature of the pre-industrial period.

DPU: *Defensoria Pública da União* [Federal Public Defender's Office]

DRO: *Despacho de Requerimento de Outorga* [Permit Application Request] is an administrative act before the permit and exclusive to the energy generation sector, designed to facilitate environmental licensing and obtaining a contract to use transmission structures. The DRO is no longer compulsory as of the regulatory resolution published in 2023.

DUP: *Declaração de Utilidade Pública* [Declaration of Public Utility] is issued by ANEEL and used to authorise expropriation and easement contracts in places where transmission lines will be installed.

EIA/RIMA: *Estudo de Impacto Ambiental/Relatório de Impacto Ambiental* [Environmental Impact Assessment/Environmental Impact Report]

Energy transition: changing from an energy mix based on fossil fuels to one with no (or reduced) carbon emissions based on renewable energy sources.

EPE: *Empresa de Pesquisa Energética* [Energy Research Company]

ESG: Environmental, Social and Governance. The acronym refers to balancing environmental, social and governance aspects in business management.

Exclusion zones: places where developments should not take place.

Funai: *Fundação Nacional dos Povos Indígenas* [National Foundation of Indigenous Peoples]

Global warming: an increase in the planet's average temperature due to anthropogenic causes, mainly human activity. In other words, an increase in gas emissions into the atmosphere causing the greenhouse effect.

Greenhouse effect: an increase in the concentration of CO₂, CH₄, N₂O, SF₆, HFCs and PFCs gases in the atmosphere, preventing heat from being radiated, warming the Earth further and causing global warming.

Ibama: *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis* [Brazilian Institute of Environment and Renewable Natural Resources]





ICMBio: *Instituto Chico Mendes de Conservação da Biodiversidade* [Chico Mendes Institute for Biodiversity Conservation]

INCRA: *Instituto Nacional de Colonização e Reforma Agrária* [National Institute for Colonization and Agrarian Reform]

IPHAN: *Instituto do Patrimônio Histórico e Artístico Nacional* [National Institute of Historic and Artistic Heritage]

Land regularisation: an instrument for promoting citizenship that guarantees the social right to housing, the right to ownership of the land, plots, houses and activities there.

MMA: *Ministério do Meio Ambiente e Mudança do Clima* [Ministry of the Environment and Climate Change]

MME: *Ministério de Minas e Energia* [Ministry of Mines and Energy]

MP: *Ministério Público* [Public Prosecutor's Office]

Outorga [Permit]: authorising act issued by ANEEL to exploit energy generation and transmission.

PBA: *Plano Básico Ambiental* [Basic Environmental Plan]

Povos e Comunidades tradicionais (PCT) [Traditional Peoples and Communities]: culturally differentiated groups who recognise themselves as such, who have their forms of social organisation, who occupy and use territories and natural resources as a condition for their cultural, social, religious, ancestral and economic reproduction, using knowledge, innovations and practices generated and transmitted by tradition (item I Art. 3 Decree 6.040/2007). For this document in particular, examples of PCT are the peoples of the countryside, forest and waters, indigenous peoples, *quilombolas*, extractivists, smallholder farmers, peoples of the caatinga, *sertanejos*, pastoralists, travelling communities, fishers, coastal peoples and other peoples who find in the territory the conditions for the production of their subsistence, culture and way of life.

Renewable energies: derived from natural sources that are replenished by natural processes at a higher rate than they are consumed.

Sacrifice zones: an expression used to designate places/areas that undergo significant social and environmental losses to allow developments that are supposed to benefit the collective, although this is not always the case.

Safeguards: recommendations/guidelines designed to reduce negative impacts, empower people and promote the well-being of society and the environment.

SGP: *Secretaria Geral da Presidência da República* [General Secretariat of the Presidency of the Republic]

Solar plant, solar complex or solar farm: areas that house photovoltaic panels to harness sunlight to generate electricity.

STTR: *Sindicato dos Trabalhadores e Trabalhadoras Rurais* [Rural Workers' Union]

Territory: unit for planning public policies. It can also be defined as a grouping of identities which, in addition to social, economic, cultural and geographical criteria, requires the population to recognise belonging to the place as a prerequisite for territorial and social cohesion, suggesting that horizontality is a predominant element in understanding the territory (as in State Law No. 13.214/2014, of the State of Bahia).

Transmission lines: electrical transmission lines that connect power-generating plants to large consumers and energy distributors.

Wind farm or wind complex: areas that house wind turbines to harness the power of the wind to generate electricity.

Zoneamento Ecológico-Econômico (ZEE) [Ecological-Economic Zoning]: rules for land use and occupation.