







THERE HAS BEEN **A VERITABLE** BOOM' **IN RECENT YEARS** REGARDING **INVESTMENTS** IN LARGE WIND FARMS IN BRAZIL, MAINLY IN THE NORTHEAST REGION.

There has been a veritable 'boom' in recent years regarding investments in large wind farms in Brazil, mainly in the Northeast region. The accelerated expansion of the segment in the country has been driven by financial institutions, with emphasis on the role of the National Bank for Economic and Social Development (BNDES). The focus on wind farms by the BNDES has reflected the government's intentions of diversifying the energy matrix, especially after the electricity 'blackout' in 2001, and its characterization as a 'clean' energy source, capable of significantly reducing greenhouse gas emissions as part of the country's strategies to face the climate change crisis.

However, there is increasing evidence that the accelerated installation of large wind farms in the Northeast has, in many cases, brought socio-environmental damage to territories, livelihoods and the rights of local communities - which indicates that there is an urgent need for a broad public debate on the subject, including the role of financial institutions such as the BNDES.

This technical note provides a brief analysis of the characteristics of planning, licensing and financing of wind farms in the Chapada do Araripe region (on the border between the states of Piauí, Pernambuco and Ceará) with a focus on the management of socioenvironmental risks and the rights of local communities. The two wind farms analyzed in this paper (Araripe III and Araripe IV) are part of a group of large wind farms run by the holding company Casa dos Ventos, one of the largest players in the industry in Brazil. In the case of Araripe III, the projects received financing from BNDES in a partnership with the New Development Bank – NDB (the "BRICs Bank"), as a pilot initiative for "clean energy" financing in Latin America.

In the first part of this paper, we will present further context of trends in the wind energy sector in Brazil, the role of BNDES and the performance of the holding company Casa dos Ventos. The second part will offer a brief profile of the Araripe III and IV Complexes. The third part will offer characteristics of wind farm planning, environmental licensing and implementation processes in terms of socio-environmental risk management and the rights of local communities, particularly quilombola communities and family farmers. In the fourth part, we will analyze the effectiveness of safeguard systems in the face of issues identified by project financiers, with emphasis on BNDES and NDB. The final part offers conclusions and recommendations from the present study.

This report is one of the fruits of a collaborative effort between Conectas Direitos Humanos, Instituto Maíra, the International Accountability Project (IAP) and the Semiarid Renewable Energy Committee (CERSA, Comitê de Energia Renovável do Semiárido), which involved analyses of wind farms and the role of financial institutions from the perspective of the socio-environmental rights of local communities.

Technicians and consultants from these organizations made visits to the Chapada do Araripe region between January 2020 and October 2022. When discussing the preparation of this paper, we must highlight and acknowledge the collaboration of several organizations at the local, regional and national levels, such as the Association of Remnants of Quilombos of Serra dos Rafaéis (ARQSR), the National Coordination of Articulation of Black Rural Quilombola Communities (CONAQ), the Federation of Rural Workers and Family Farmers of the State of Pernambuco (FETAPE), the Public Defender's Office of the State of Piauí, the Federal Public Defender's Office, the Brazilian Bar Association (OAB), Piauí chapter (Center for the Defense of Quilombolas and Indigenous/Original Peoples) and the Federal Prosecution Office.

WIND FARMS, SOCIO-ENVIRONMENTAL RIGHTS AND FINANCIAL INSTITUTIONS: THE CASE OF CHAPADA DO ARARIPE

Author and Research: Brent Millikan, Fernanda Drummond, Camila Mikie, Julia Neiva, Thaynah Gutierrez, Alexandre Sampaio,

Daniel Faggiano e Ricélia Marinho

Translation: Luis Misiara Layout and Art: Joana Resek

Photos: Acervo Brent Millikan e Alexandre Sampaio

Support: International Accountability Project, Instituto Maíra e

Comitê de Energia Renovável do Semiárido

Conectas Human Rights. 2023 contato@conectas.org



The information contained in this document reflects the conditions observed up until the present date and is subject to change. The opinions of the authors do not necessarily reflect the position of Conectas Direitos Humanos as an institution.

### **SUMMARY**

#### **Presentation**

p. 2

The wind energy 'boom' in Brazil and the role of BNDES

p. 6

Profile of the Ventos do Araripe III and IV Complexes

p. 10

 Management of socio-environmental risks and rights of local communities in the planning, licensing and implementation of the Araripe III and Araripe IV Complexes

p. 12

4. Wind Farms in the Chapada do Araripe region and the Socio-Environmental Policy of Financial Institutions

p. 18

5. Conclusions and Recommendations

p. 23

**Notes** 

p. 28

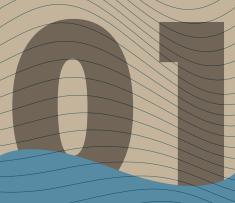
References

p. 30



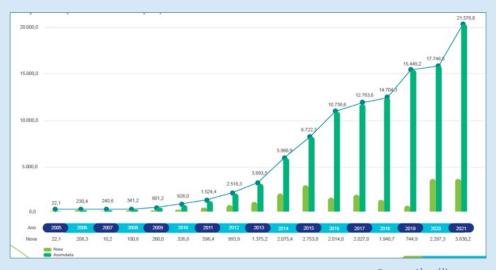
# THE WIND

IN BRAZIL AND THE ROLE OF BNDES



According to data from the Brazilian Wind Energy Association (Abeeólica), at the end of 2022 Brazil had a total of 904 wind plants and 25.63 GW of installed wind power – which represents a growth of 18.85% compared to December 2021, when the installed capacity amounted to 21.57 GW. In 2022, 109 new wind farms were installed in the country, which posted a total of 4.06 GW of new capacity, a record for the sector (Abeeólica, 2022). Brazil was the third country that most installed wind farms in the world, according to data from GWEC (the Global Wind Energy Council).

#### Evolution of Installed Capacity in Wind Farms in Brazil - MW (2005-2021)



Source: Abeeólica, 2022

Wind energy was the power source that grew the most in Brazil in 2022, representing 51.03% of new installed capacity, which led the sector to achieve a share of 13.4% of the Brazilian electricity matrix. The newly installed wind farms were concentrated in the states of Bahia, Piauí, Rio Grande do Norte, Pernambuco and Ceará (Abeeólica, 2022). According to data from BloombergNEF, USD 6.20 billion (BRL 31.86 billion) were invested in the sector in 2022, representing 42% of total investments made in renewable energy (solar, wind, biofuels, biomass and waste, Small Hydroelectric Power Plants – SHPP, and others). Considering the strong growth trends of offshore wind farms, the expansion of the market for green hydrogen, and the possibilities of public and private financing (including via 'green' funds), one may predict that the sector's strong expansion trajectory will continue at an accelerated pace.¹

The growth trajectory of the wind sector over the last two decades in Brazil has been strongly encouraged by public banks, notably BNDES. The Bank's operations in this period have been guided by federal government policies in favor

of diversifying the energy matrix, starting with the Emergency Wind Energy Program (Proeólica), created by Interim Measure 2,198-3, of June 2001, in the midst of the 'blackout' in the electricity sector that year. The following year, the Incentive Program for Alternative Electric Energy Sources (Proinfa) was launched through Law No. 10,438/2002, which determined that Eletrobrás, directly or through its subsidiaries, would contract the acquisition of energy from wind farms up to a limit of 1,100 MW. Starting in 2004, under the legal framework of the "New Model of the Electrical Sector" (Law No. 10,848/2004), with the strengthening of Proinfa by Decree No. 5,025/2004, the federal government began to contract energy from wind farms and other renewable sources through tenders, in order to encourage investments and competition regarding the cost of energy for consumers. At the same time, the government created a stimulus package for the sector, including reduced taxes and long-term credit facilities with attractive financial conditions, mainly via the BNDES bank.<sup>2</sup> Starting in 2013, BNDES began to apply specific criteria for wind sector financing, such as encouraging technological content produced in the country, generating jobs in the industry and boosting the supply chain, attracting national and foreign companies.

The volume allocated by BNDES to the wind sector has progressively increased in recent years. Between 2005 and 2013, this amount increased from BRL 465 million to BRL 3.6 billion. In 2014, BNDES disbursed BRL 6.6 billion for wind farms, an increase of 83.3% compared to the previous year (ActionAid, 2016). According to Rodriguez and Oliveira (2023), between 2016 and April 2023, BNDES carried out 641 financial operations to expand wind energy generation (53.9% of all of the bank's operations) totaling BRL 29.8 billion. According to data from the Bank itself, the financing for wind projects approved between 2017 and 2021 added 6.9 GW of energy to the Brazilian electricity matrix, that is, 73.4% of the total 9.4 GW added via sources considered to be renewable (BNDES, 2022).

#### THE CASA DOS VENTOS

Created in 2007 by a northeastern business group led by Mário Araripe (former owner of the company Troller), the CDV holding is now one of the biggest players in the renewable energy sector in Brazil, focusing on the states of Rio Grande do Norte, Bahia, Pernambuco and Piauí. Since 2015, its portfolio has included hybrid projects, involving wind farms integrated with centralized solar photovoltaic installations. In October 2022, the French giant Total acquired control over 35% of Casa dos Ventos.<sup>3</sup>

Casa dos Ventos has been one of the main beneficiaries of BNDES financing in the wind energy sector in Brazil. Between 2017 and 2023, BNDES disbursed over BRL 2 billion for six financing operations by the CDV holding, with the purpose of installing wind farms and hybrid parks (combining wind and photovoltaic energy generation) in the Northeast region, with approximately 1,500 MW of installed power.

Typically, BNDES loans to CDV have been contracted via special purpose entities (SPEs), connected to the holding company and created to implement specific projects. In many cases, this financing has involved a combination of direct and indirect operations, with the participation of intermediary banks such as Santander and Bradesco. In addition to the credit from BNDES, the Casa dos Ventos wind complexes have received funds from the issuance of infrastructure debentures, from the Northeast Development Fund (FDNE) and Banco do Nordeste (BNB).

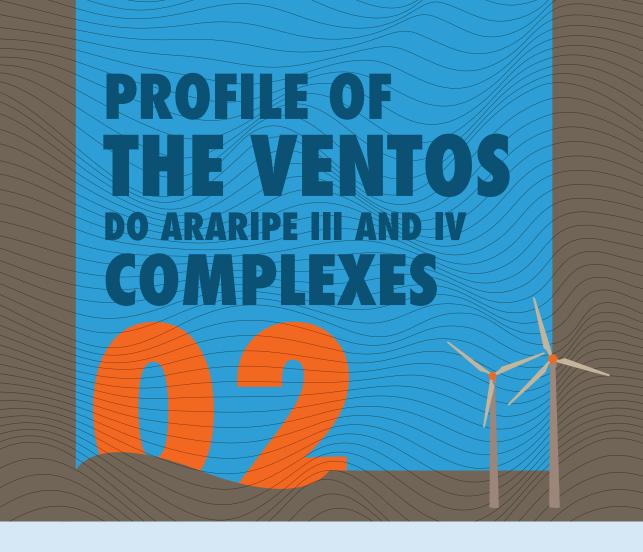
A common practice of the CDV holding has been the sale of wind farms to other business groups once the construction phase has been completed by the SPEs in charge. As described below, in the case of the Araripe IV Complex, this process was actually anticipated.

It is important to highlight that the Casa dos Ventos holding is a signatory to the UN Global Compact and states, on its website, that it "works in line with the 17 Sustainable Development Goals (SDGs) and best ESG practices, preserving local biomes, developing social projects in the communities in which it is present and contributing to a low-carbon economy".



Wind and Photovoltaic Solar Projects developed by the holding company Casa dos Ve<u>ntos</u>

Source: Casa dos Ventos < casados ventos.com.br >



The Ventos do Araripe III Complex was designed to include 14 wind farms in the municipalities of Simões (PI), Currais Novos (PI) and Araripina (PE), in the Caatinga biome, with an installed power of 358 MW, through 156 energy–generating turbines, also including transmission lines, roads, substations and other infrastructure. The project also entails the development of a centralized photovoltaic park, with 200 MW of installed power.

Until September 2017, the Ventos do Araripe III Complex benefited from long-term financing from BNDES of approximately BRL 1.1 billion, including the actions of Santander and Bradesco as onlending banks. Due to the volume of funds raised, CDV had bank guarantees from five financial institutions: ABN-AMRO, Banco Itaú, Banco ABC, Banco do Brasil and Sumitomo. Furthermore, the venture involves the issuance of incentivized green debentures to add to the financial leverage (Casa dos Ventos, 2017).

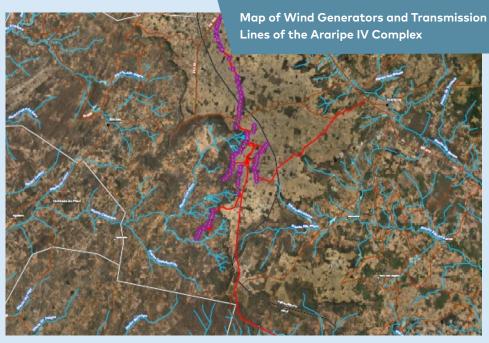
The Araripe III Complex also benefited from a BRL 67.3 million loan from BN-DES, approved in 2018, for SPEs linked to the CDV holding company. The financing used part of the USD 300 million loan from the New Development Bank (NDB) to

BNDES to support pilot initiatives for the generation of wind, solar and hydroelectric energy (SHPP s with capacity of up to 30 MW) and energy from biomass (biogas and agricultural waste).

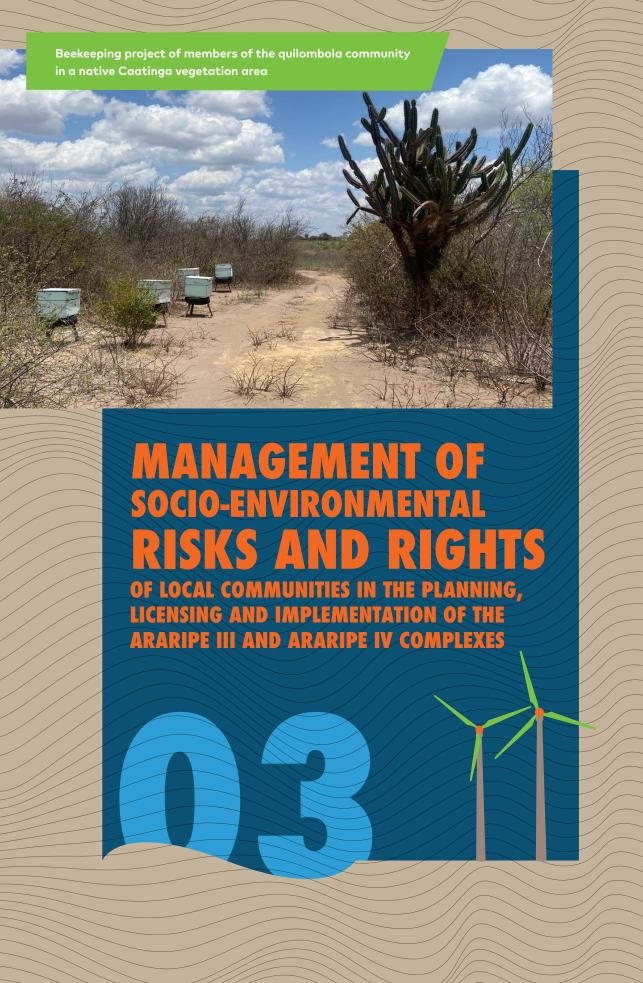
After the construction phase, the Araripe III Complex was acquired by Auren Energia, a company that emerged from the corporate reorganization of the assets of Votorantim S.A and CPP Investments.

The Araripe IV Complex, currently in its initial construction phase, is located a few kilometers north of the Araripe III Complex, in the municipalities of Araripina (PE) and Simões (PI), in the Caatinga biome. The complex was designed to include 80 wind turbines in ten wind farms (Ventos de São Zacarias 01 to 10) composed of 8 wind turbines each, totaling 496 MW of installed power. As a hybrid project, it envisages the construction of a centralized photovoltaic solar energy park, with an installed capacity of 350 MW. The complex also entails the construction of transmission lines, establishing connections both internally and with other wind farms, including the Araripe III Complex.

Even before completing the construction phase, the Araripe IV Complex was acquired, in June 2022, by Hydro Rein, the Norsk Hydro group's renewable energy arm, and the green investment fund Green Investment Group (GIG), owned by Macquarie Asset Management. The joint venture envisages the construction and operation of a hybrid project (renamed "Feijão") for the generation of wind and solar photovoltaic energy.<sup>4</sup>



Source: Complexo Eólico Araripe IV, EIA, Maron Ambiental (abril 2021)



### UNDERESTIMATION OF SOCIO-ENVIRONMENTAL IMPACTS

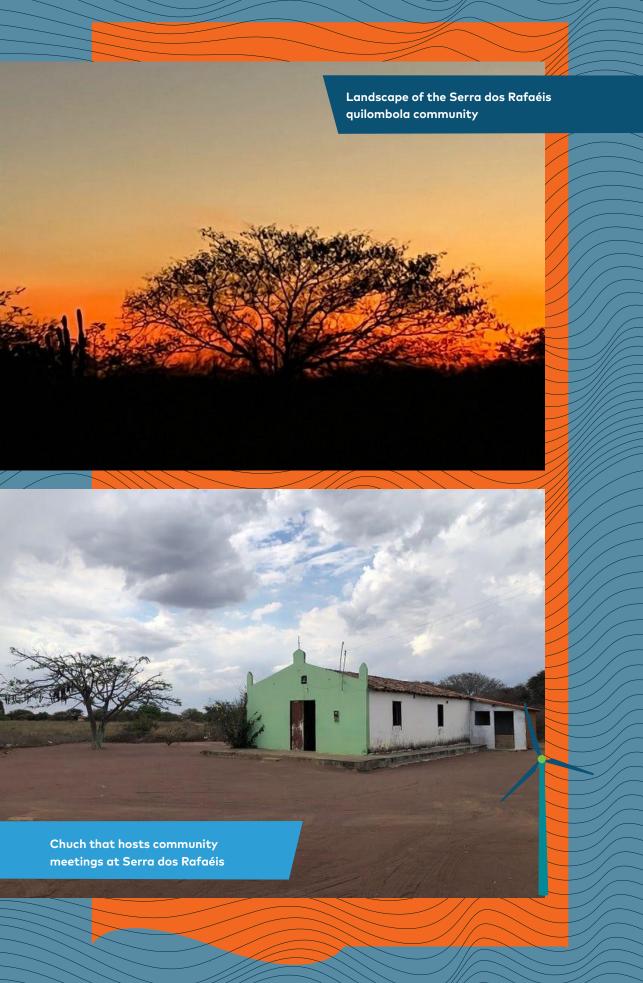
There is strong evidence of underestimation of socio-environmental impacts in the planning, environmental licensing and implementation processes of the Araripe III and IV complexes with regard to local flora and fauna, water resources, productive activities and the physical and mental health of local communities. Among other factors that explain this phenomenon, we must highlight:

- the lack of studies on the cumulative and synergistic impacts of different complexes and their respective wind and photovoltaic energy generation parks being implemented in the same territory;
- the division of environmental licensing processes between individual energy generation complexes, with different requirements applied by the state environmental bodies of Pernambuco and Piauí, in terms of carrying out an Environmental Impact Study – EIA or Simplified Assessment Report – RAS, associated with ambiguities in the legal framework (CONAMA Resolution 462/2014);
- the lack of effective participation of local populations in preparatory studies, such as the remnant quilombola community in Serra dos Rafaéis, which resulted in the absence of traditional knowledge about territories and ways of life.

Based on the field work carried out by the team including Conectas, Instituto Maíra and IAP, together with local communities in Chapada do Araripe, it is reasonable to conclude that the underestimation of impacts of wind farms in the environmental planning and licensing process of the Araripe III and IV Complexes may include:

 Deforestation of native vegetation in the Caatinga biome to open access roads and yards for wind turbines and their respective transmission lines, with implications for greenhouse gas emissions, biodiversity, water resources and productive activities;<sup>5</sup>

- Increase in fauna deaths (birds, bats, etc.) caused by the movement of wind turbines that reach a height of over 100 meters;
- Loss of access to farms and other areas of agricultural activity affected by towers, access roads and transmission lines, with damage to food sovereignty and income generation;
- High noise levels and vibrations caused by wind turbine blades located very close to homes, contributing to physical and mental health problems, including stress and difficulty sleeping;
- Increase in dust resulting from the intensification of vehicle traffic
  and excavations associated with the project, affecting the health of
  the surrounding population (respiratory crises and other diseases
  resulting from inhalation and contact with dust) and the hygiene
  and cleanliness of homes, schools, churches, etc.;
- Increase in the levels of crime and female harassment in the community resulting from the flow of workers involved in the implementation of the ventures;
- Damage to rural roads caused by very heavy vehicles, used to transport wind turbine components and transmission lines;
- Increase in traffic accidents involving members of the community associated with the intensification of the flow of vehicles, the presence of large vehicles, the presence of obstacles and holes on the road without proper signage and the deterioration of rural roads.



# LACK OF FREE, PRIOR AND INFORMED CONSULTATION PROCESS

A recurring problem in the planning and environmental licensing of energy complexes in the Chapada do Araripe region has been the lack of observance, on the part of developers, of the right of traditional communities to free, prior and informed consultation (FPIC), guaranteed by ILO Convention 169<sup>6</sup>.

In the case of the Araripe IV Complex, despite the Serra dos Rafaéis Remnant Quilombo Community being formally recognized since 2010 by the Palmares Cultural Foundation as a quilombola community, the right to FPIC was ignored in the initial planning and environmental licensing phase of the project.

The state environmental bodies of Piauí and Pernambuco ignored the need for prior consultation with traditional communities as a condition for the issuance of environmental licenses (Prior License, Installation License) for wind farms in the Chapada do Araripe region.

The Ventos de São Zacarias SPE, linked to Casa dos Ventos, in turn, hired a consultancy company, ERM – apparently responsible for managing relations between the development and local communities –, independently conducting, between 2022 and 2023, the elaboration of a consultation protocol, usurping the right and autonomy of the community to prepare the document with observing its time and customs.

It is worth noting that the lack of actions by Brazil's National Institute for Colonization and Agrarian Reform (INCRA) and state land bodies in carrying out diagnoses for the recognition of the territorial rights of quilombola communities has contributed to the lack of awareness of the right to prior consultation on the part of entrepreneurs and licensing bodies.

# RELATIONS BETWEEN COMPANIES AND LOCAL COMMUNITIES

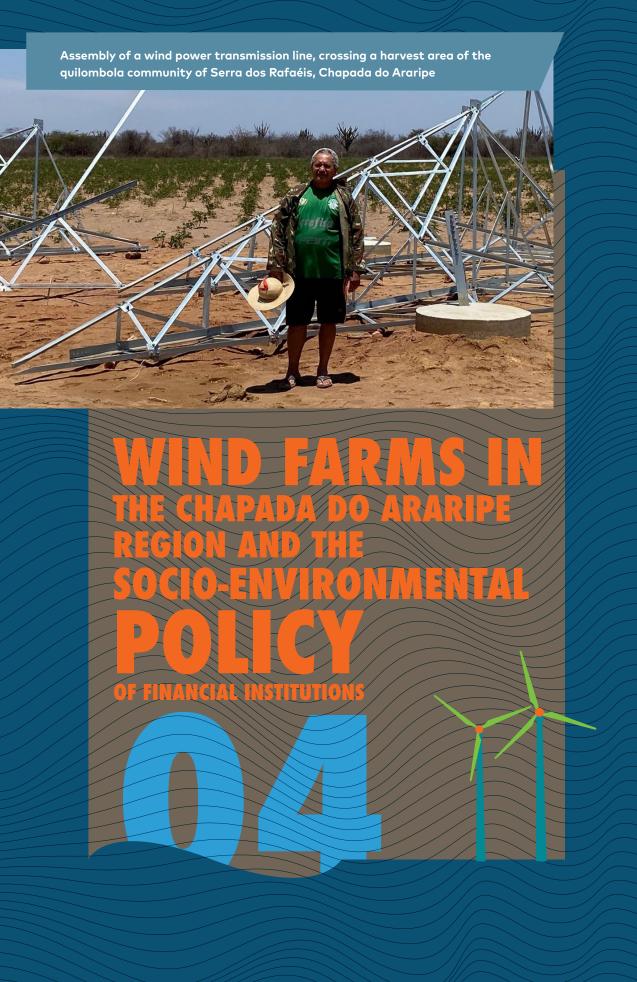
The arrival of wind farms in the Chapada do Araripe region has been characterized by major asymmetries in the relations between companies and the local community. In general, it is observed that proponents of wind complexes have taken advantage of the precarious performance, or even absence, of the State in implementing public policies associated with the assurance of rights, leading to

the belief that it could be negotiating the acceptance of projects in exchange for 'favors'. In addition to the already mentioned issues, the consultancy companies hired by the SPEs connected to Casa dos Ventos, in charge of 'managing' relations with local communities, would be adopting a series of practices that could resemble or result, to some extent, in manipulation and intimidation.

The practice of carrying out individualized negotiations around land lease contracts, without transparency about values and other fundamental matters – such as implications regarding the loss of access to productive areas and difficulties in eligibility for government social programs – has been a constant feature. These individual conversations have fostered a climate of mutual distrust among community members and contributed to the dissemination of false information – with rumors, for instance, that a resident was negotiating the lease of their land at a higher price or that a certain resident would be an obstacle to negotiations – thus weakening the community's social ties.

The use of individualized negotiations, which lack transparency, and attempts to isolate leaders who are critical towards the company, has followed a logic of eliminating any resistance to the accelerated implementation of wind farms.

It is important to highlight that, in the case of Araripe IV, representatives of consultancy companies hired by the Casa dos Ventos SPEs have even suggested to residents that the recognition of the remnant quilombola community of Serra dos Rafaéis, especially in terms of collective territorial rights, could 'disrupt' the leasing of land and, therefore, the implementation of the project – which had the effect of discouraging collective efforts for the recognition of this fundamental right.



### THE SOCIO-ENVIRONMENTAL POLICY OF BNDES

BNDES has a Socio-Environmental Responsibility Policy that defines the principles, guidelines and governance of the Bank's socio-environmental management, following the guidelines of National Monetary Council Resolution No. 4,327/2014, and a Socio-Environmental Policy which establishes criteria for financial support operations in general. Furthermore, the bank has instruments that cover part of the operations in sector-level and transversal aspects, which include:

- Sector Guides, with the identification of impacts (only for the water and sewage, cattle farming, sugar-energy and soy sectors);
- Sector Policies, with identified risks and guidelines for analyzing operations (only for the mining sector);
- Socio-environmental Guidelines and Criteria, with minimum requirements (only for the livestock, sugar and ethanol and thermoelectric generation sectors);
- Company Assessment Methodology, which incorporates socioenvironmental assets, among other intangible factors, into the credit analysis of companies;
- Action Policy in Support of Regional and Territorial Development, which provides guidelines for the analysis of the impact of operations on local development.

Even with a set of instruments for the prior analysis of socio-environmental risks of projects, the BNDES has demonstrated a tendency to use formal criteria – such as the granting of environmental licenses and the absence of legal actions with a final and unappealable ruling – to guide decision-making on project approval (INESC, 2015). In cases such as the Belo Monte Hydroelectric Complex, this allowed for the approval of substantial financial funds, despite the potential persistence of serious problems related to the underestimation of risks and socio-environmental impacts in preparatory studies and the lack of free, prior and informed consultation with indigenous peoples and other traditional communities – in a context in which conflicts of interest compromised the quality and

impartiality of environmental licensing, as well as the regular processing of legal actions filed by the Federal Prosecution Office.

The BNDES does not yet have a sector guide for wind farms (or hybrid installations with photovoltaic energy), which, in theory, could reinforce its socio-environmental policy in addressing specific issues. In any case, as demonstrated in the cases of financing approved for the Casa dos Ventos holding company, it is evident that the bank does not have an effective 'due diligence' policy for basic issues in wind farms, such as the requirement for prior assessment of cumulative impacts and synergy of wind farms in the same territory, transparency and observance of the rights of local communities (including specific rights of traditional populations, such as the right to FPIC) and guidelines to prevent and mitigate impacts from wind turbines and transmission lines, in locational and technological aspects.

### THE NEW DEVELOPMENT BANK: ENVIRONMENTAL POLICY AND RENEWABLE ENERGY

The New Development Bank (NDB) is a multilateral development bank created in 2014 during the sixth Annual Summit of the BRICS (Brazil, Russia, India, China and South Africa). Its purpose is to promote greater cooperation in the financing and development of projects in the five partner countries and in other developing countries, complementing multilateral, regional and national sources of funds, especially for investments in infrastructure and sustainable development.

The NDB guidelines emphasize:

- the use of domestic systems, including in terms of socio-environmental safeguards,
- ii) environmental sustainability,
- iii) the maintenance of a lean administrative system and
- iv) cooperation with other multilateral development banks.

In April 2016, the NDB announced its first financing operations in five countries, with a focus on 'renewable' energy. In the case of Brazil, a loan of USD 300 million was approved for BNDES, with the purpose of financing a set of renewable energy subprojects, totaling 600 MW, with emphasis on solar and wind power, including transmission lines for their integration into the national interconnection system (SIN). As indicated above, one of the subprojects financed with the

NDB loan was the installation of the Araripe III Complex by the Casa dos Ventos holding company.

In August 2016, the NDB published its first policies:

- i) 'Environmental and Social Policy',
- ii) 'Interim Information Disclosure Policy', and
- iii) 'Policy on Partnerships with National Development Banks'.

Despite the NDB's social and environmental policy requirements relating to topics such as prior assessment and management of socio-environmental impacts, public consultations, transparency and access to information, monitoring and reporting, as well as whistleblower mechanisms, the Bank has not concretely contributed to tackling typical problems of wind farms in the Chapada do Araripe region, relating to the prior analysis and management of socio-environmental risks (including cumulative and synergistic impacts) and observance of the rights of local communities (including the right to FPIC of traditional populations).

### **CLIMATE BONDS INITIATIVE**

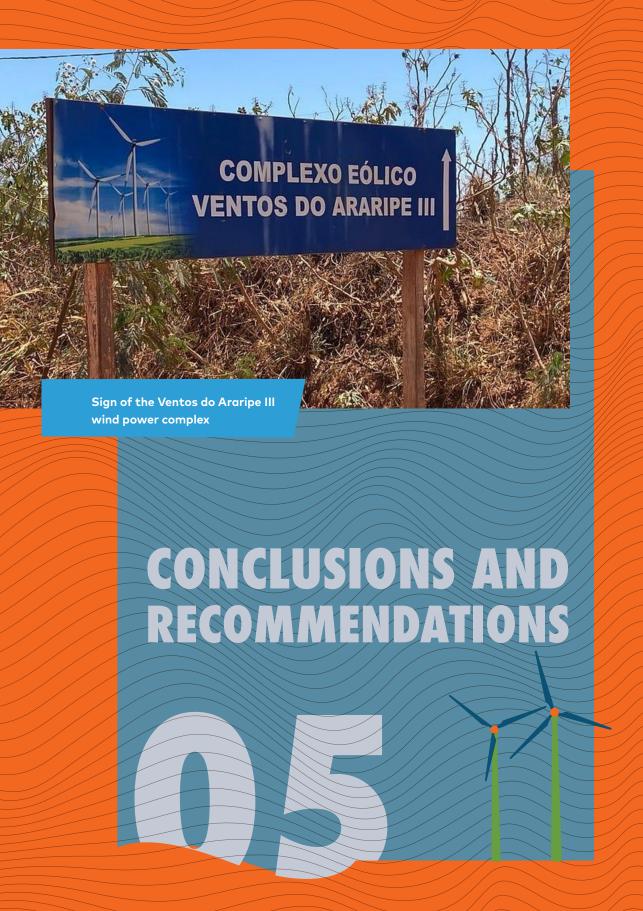
The Climate Bonds Initiative (CBI) is an international, non-profit organization that attempts to mobilize global capital to invest in projects for the transition to a low-carbon and climate-resilient economy. The focus of its strategy is the development of green and climate bond markets to reduce the cost of capital for ventures that tackle climate change.<sup>7</sup>

One of the CBI's key initiatives is the Climate Bonds Standard and Certification Scheme, a bond labeling scheme designed as an easy-to-use tool to help investors and governments prioritize investments that truly contribute to tackling climate change. In this sense, the "Climate Bonds Taxonomy" has the purpose of helping to make investments that can be part of the low-carbon economy.

Recently, Climate Bonds approved the certification of the holding company Casa dos Ventos in order to facilitate the raising of funds from green funds. The approval was based on a favorable technical opinion from NINT — Natural Intelligence, an ESG consultancy and assessment company that, since February 2023, has been part of the ERM (Environmental Resources Management) group.8 During contact with NINT/ERM, it became clear that the main problems related to the underestimation of socio-environmental risks and violations of the rights of local communities in the wind farms led by Casa dos Ventos in Cha-

pada do Araripe were not effectively addressed in the preparation of the aforementioned technical opinion. It is worth mentioning that ERM was also directly involved in the controversial case in which "pseudo-consultation protocol" was drafted, on behalf of the Serra dos Rafaéis Quilombola Remnant Association, as mentioned above. In short, there are situations of conflict of interest between executors and consulting companies that can affect the observance of the rights of local communities and the quality of the certification processes, leaving them riddled with subjective writing and power relations, that is, subject to economic influence.

The Climate Bonds Initiative certification for the holding company Casa dos Ventos, meant to qualify its projects to receive green bonds, appears to follow a trend observed in other cases, where the CBI has been criticized for 'greenwashing' practices.9



The analysis of the cases of the Araripe III and IV Complexes, led by the Casa dos Ventos holding company, demonstrates a set of alarming issues regarding wind farm planning, environmental licensing and financing processes, with regard to the management of socio-environmental impacts and observance of the rights of local communities. The cases demonstrate the urgent need for dialogue and discussions on problems and alternative solutions, involving representatives of affected local communities, organized civil society, the scientific community, federal and state-level public bodies, the electrical and environmental sectors, the Public Defender's Office and the Public Prosecution Office. Up next, we will highlight some recommendations as a contribution to this necessary debate:

Among the efforts led by the federal government to promote a fair
energy transition, with environmental sustainability and social
inclusion, the country's legal framework needs to be strengthened
regarding instruments and decision-making processes in the planning
and environmental licensing of wind farms, addressing issues
relating to the prior analysis of socio-environmental risks (including
cumulative and synergistic impacts, as well as alternatives) and
observance of the rights of local communities, including with regard
to self-determination, clarifying responsibilities of public and private
institutions involved in the entire project cycle, as well as in previous
phases of sector-level planning.

Such a legal framework must cover the following necessary elements:

- i) within the scope of sector-level planning, the adoption of instruments and decision-making processes in the construction of fair, popular and inclusive energy transition plans, aligned with strategic government guidelines on sustainable development, which are capable to improve the prior analysis of socio-environmental risks, socioeconomic viability and alternatives, with transparency and social participation;
- ii) in the project phase, mechanisms to ensure maximum transparency and improvements in the quality of economic feasibility and environmental impact studies, especially with regard to direct and indirect impacts on local communities, and
- iii) maximum transparency between financial institutions and green funds regarding their involvement in projects starting from the analysis phase, including in regards to the application of socioenvironmental safeguards that address socio-environmental risks and the rights of affected local populations. <sup>10</sup>

- 2. In this sense, the improvement of planning and licensing processes for wind farms should include the condition of observing the right to consultation and free, prior and informed consent of people and traditional communities, always observing their autonomous consultation protocols. Such an improvement would respect the rights of indigenous and traditional communities whose claim derives from their self-determination, duly recognized by the 169 Convention of the International Labor Organization. This right has been expanded to acknowledge the need for any and all communities that wish to be identified as beneficiaries because as a participant in a process and project of real development, as clarified by UN Declaration on the Right to Development and be consolidated through the adoption of the new International Covenant on the Right to Development.
- 3. Also in this sense, a fundamental issue is the strengthening of policies on transparency and access to information and dialogue with local communities on matters of collective interest such as lease agreements and mitigation and compensation plans for socio-environmental impacts -, with the involvement of the Public Defender's Office and the Prosecution Prosecution Office.
- 4. With regard to environmental licensing, it is necessary to review and update CONAMA Resolution 462/2014 on wind farms, taking into account the experience accumulated in recent projects such as the complexes in the Chapada do Araripe region, for instance and the need to improve the regulation of specific issues, such as the review of low-impact concepts, approach to cumulative and synergistic impacts and alternatives, prohibition of deforestation of native vegetation in all biomes, protection of water sources, impacts related to the location of wind turbines and technologies used, characteristics of offshore wind farms and ties with "green hydrogen" production).

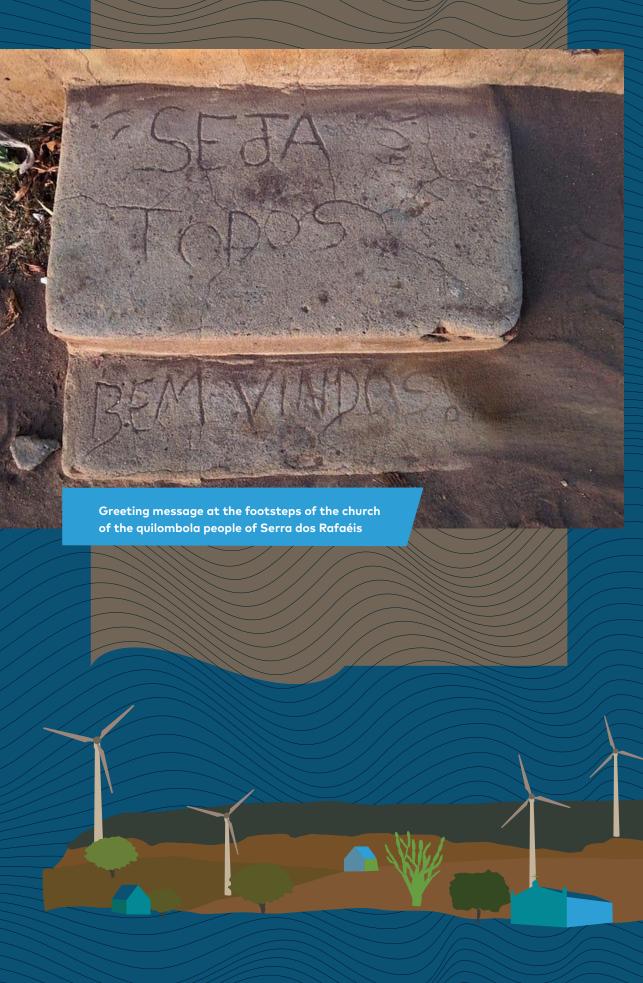
- 5. For BNDES, there remain challenges and opportunities to strengthen its contributions to a sustainable energy transition with social inclusion, including with regard to wind energy, in line with the objectives of the federal government (including with regard to deforestation, climate change and Sustainable Development Goals SDGs). An important contribution could be the establishment of a technical cooperation partnership between the Bank and the Energy Planning and Transition Secretariat of the Ministry of Mines and Energy and the Energy Research Company (EPE) as a linked body, with the participation of organizations from civil society, the scientific community and the private sector. This technical cooperation agenda could include support to improve the legal and institutional framework for planning, licensing and financing wind farms, including in terms of commitments, complements and synergies between public institutions and private actors.
- 6. When planning, licensing and financing wind farms, robust systems for monitoring socio-environmental impacts and the effectiveness of preventive, mitigating and compensatory measures must be ensured, with transparent and participatory methodologies, as well as effective mechanisms for receiving and processing complaints from affected communities.
- 7. The use of 'environmental regularity' criteria for projects, for loan approval purposes, based on a mere verification of a current environmental license and the absence of a final and unappealable court decision as has been common practice for BNDES in many cases should change in an attempt to improve socioenvironmental safeguards and other due diligence policies.

8. Within the private sector, there is an urgent need for entrepreneurs and investors to improve policies and practices related to the prior analysis and management of socio-environmental risks, and to observe the rights of local communities, considering the issues identified in this study; otherwise, there would be a risk of perpetuating practices which can be characterized as 'greenwashing'. This has implications for internal policies of entrepreneurs and investors, as well as certification programs such as the Climate Bonds Initiative and the recently created "Renewable Energy Certification Program - REC Brazil", a joint initiative of the Brazilian Wind Energy Association (ABEEólica) and the Brazilian Association for Clean Energy Generation (Abragel). In fact, in order to eliminate the current gap between socio-environmental responsibility narratives and the practices of corporations and investors, effective mechanisms should be secured to enforce national legislation and international instruments on environmental protection and the rights of local communities, including guarantees in terms of transparency and civil society participation, following the example of the United Nations Guiding Principles on Business and Human Rights.11

#### **NOTES**

- 1 'The next phase of wind power growth in five charts', BloombergNEF, 11/14/2022, https://www.bloomberg.com.br/blog/a-proxima-fase-do-crescimento-da-energia-eolica-em--cinco-graficos/
- As of the 2013 Reserve Energy Tender, BNDES' conditions for wind farm financing began to include, inter alia: financial cost based on the Long-Term Interest Rate (TJLP, Taxa de Juros de Longo Prazo), maximum participation in up to 80% of financeable items, amortization period of 16 years, with a six-month grace period after the project enters commercial operation, and minimum financing amount of \$10 million. https://www.bndes.gov.br/wps/portal/site/home/financiamento/produto/leiloes-infraestrutura/parques-eolicos-2013#
- 3 "Total buys 35% of the renewable energy giant Casa dos Ventos for over BRL 3 billion" Terra Economia, 10/25/2022, https://www.terra.com.br/economia/total-compra-35-da-gigante-de-energia-renovavel-casa-dos-ventos-por-mais-de-r-3-bi,a0ea74295116199475885cbbfa2cc-09dlmog4224.html
- 4 "Hydro Rein and Macquaire form partnership in wind and solar power in Brazil" EPBR, June 1, 2022. https://epbr.com.br/hydro-rein-e-macquaire-formam-parceria-em-eolica-e-solar-no-brasil/
- According to the Annual Report on Deforestation in Brazil 2022 produced by MapBiomas, a recent phenomenon in the Caatinga biome refers to the expansion of infrastructure such as solar, wind energy and transmission lines. In 2022, MapBiomas analysts recorded at least 69 alerts in deforestation areas, associated with wind farms, totaling 1,087.8 ha, and 23 alerts in areas of photovoltaic solar plants, totaling 3,203.48 ha. <a href="https://storage.googleapis.com/alerta-public/dashbo-ard/rad/2022/RAD">https://storage.googleapis.com/alerta-public/dashbo-ard/rad/2022/RAD</a> 2022.pdf
- 6 Internalized in the Brazilian legal system through Legislative Decree no. 143/2002 and Decree no. 5,051/2004.
- 7 See: <a href="https://www.climatebonds.net/about">https://www.climatebonds.net/about</a>
- 8 See: https://www.erm.com/about.
- 9 "It's time for Climate Bonds Initiative to scrap its hydro certification scheme" (commentary),
  Josh Klemm, 12/10/2019, Mongabay. <a href="https://news.mongabay.com/2019/12/its-time-for-climate-bonds-initiative-to-scrap-its-hydro-certification-scheme-commentary/">https://news.mongabay.com/2019/12/its-time-for-climate-bonds-initiative-to-scrap-its-hydro-certification-scheme-commentary/</a>
- In this sense, it is necessary for financial institutions and certification agents to avoid 'greenwashing' tendencies in the context of 'green' energy transition projects. Considering the issues raised in this report, it can be said that an example is the recent award for Complexo Araripe III as 'best infrastructure financing in Brazil' by LatinFinance:

  https://www.linkedin.com/pulse/project-finance-da-eólica-ventos-do-araripe-iii-recebe-ro-drigues/?originalSubdomain=pt
- 11 United Nations Guiding Principles on Business and Human Rights, 2011. <a href="https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr\_en.pdf">https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr\_en.pdf</a>



#### REFERENCES

Abeeólica - Brazilian Association of Wind Energy and New Technologies - Annual Bulletin 2021. <a href="https://abeeolica.org.br/wp-content/uploads/2022/07/ABEEOLICA\_BOLETIMANUAL-2021\_PORT.pdf">https://abeeolica.org.br/wp-content/uploads/2022/07/ABEEOLICA\_BOLETIMANUAL-2021\_PORT.pdf</a>

Abeeólica - Brazilian Association of Wind Energy and New Technologies, Annual Bulletin 2022. <a href="https://abeeolica.org.br/wp-content/uploads/2023/06/Boletim-de-Geracao-Eolica-2022.pdf">https://abeeolica.org.br/wp-content/uploads/2023/06/Boletim-de-Geracao-Eolica-2022.pdf</a>

Action Aid. The National Bank for Economic and Social Development (BNDES) and "renewable energy": the cases of the sugar-energy and wind sectors, 2016. <a href="https://ibase.br/wp-content/uploads/2023/04/O-BNDES-e-as-energias-renovaveis-os-casos-do-setor-sucroenergetico\_2016.pdf">https://ibase.br/wp-content/uploads/2023/04/O-BNDES-e-as-energias-renovaveis-os-casos-do-setor-sucroenergetico\_2016.pdf</a>

Association of Quilombo Remnants of Serra dos Rafaeis, Free, Prior and Informed Consultation Protocol, 2023. <a href="http://www.defensoria.pi.def.br/comunidade-quilombola-serra-dos-rafaeis-lanca-protocolo-de-consultas-com-a-participacao-da-defensoria-publica-do-estado-do-piaui/">http://www.defensoria.pi.def.br/comunidade-quilombola-serra-dos-rafaeis-lanca-protocolo-de-consultas-com-a-participacao-da-defensoria-publica-do-estado-do-piaui/</a>

National Bank for Economic and Social Development, 2022. Climate and development: BNDES' contribution to a fair transition. Available at: <a href="https://www.bndes.gov.br/wps/wcm/connect/site/3e0bc17b-5d93-481b-8b42-50cb0061b914/">https://www.bndes.gov.br/wps/wcm/connect/site/3e0bc17b-5d93-481b-8b42-50cb0061b914/</a>
BNDES-CLIMA-E-DESENVOLVIMENTO.pdf?MOD=AJPERES&CVID=ohDpXSF

Casa dos Ventos, 2017. Project Finance of wind farm Ventos do Araripe III receives international award, by Geraldo Rodrigues, 09/28/2018. <a href="https://www.linkedin.com/pulse/project-finance-da-e%C3%B3lica-ventos-do-araripe-iii-recebe-rodrigues/?originalSubdomain=pt">https://www.linkedin.com/pulse/project-finance-da-e%C3%B3lica-ventos-do-araripe-iii-recebe-rodrigues/?originalSubdomain=pt</a>

Conectas Direitos Humanos, The "owners" of the winds: how the installation of wind farms in the northeastern backlands impacts traditional communities, <a href="https://www.conectas.org/noticias/os-donos-dos-ventos-como-a-instalacao-de-parques-eolicos-no-sertao-nordestino-impacta-comunidades-tradicionais/">https://www.conectas.org/noticias/os-donos-dos-ventos-como-a-instalacao-de-parques-eolicos-no-sertao-nordestino-impacta-comunidades-tradicionais/(18/08/21)</a>

Conectas Direitos Humanos. How quilombola communities see these ventures, <a href="https://www.conectas.org/noticias/como-as-comunidades-quilombolas-enxergam-os-empreendimentos/">https://www.conectas.org/noticias/como-as-comunidades-quilombolas-enxergam-os-empreendimentos/</a> (18/08/21)

Conectas Direitos Humanos. The role of development banks. https://w tas.org/noticias/o-papel-dos-bancos-de-desenvolvimento/ (18/08/21)

Centralized Renewable Energy and Energy Transition Minerals: paradoxes between energy business and human rights of traditional peoples and communities in Brazil, Ricélia Maria Marinho Sales, Luís Gustavo de Lima Sales, Eduepb, Campina Grande – PB, 2023. https://zenodo.org/record/7970721

International Accountability Project - IAP. The same winds still blow — New Development Bank, transition energy and environmental racism.

https://accountability.medium.com/os-mesmos-ventos-ainda-sopram-novo-banco-de-desenvolvimento-energia-de-transi%C3%A7%C3%A3o-e-o-racismo-a02ade478bde-(04/09/23)

Mapbiomas - Annual Report on Deforestation in Brazil – 2022. <a href="https://storage.googleapis.com/alerta-public/dashboard/rad/2022/RAD\_2022.pdf">https://storage.googleapis.com/alerta-public/dashboard/rad/2022/RAD\_2022.pdf</a>

O ECO, Will the wind blow our biodiversity away? Wind farms threaten priority areas for the conservation of the Caatinga in Rio Grande do Norte, <a href="https://oeco.org.br/analises/o-vento-levara-nossa-biodiversidade/?">https://oeco.org.br/analises/o-vento-levara-nossa-biodiversidade/?</a> (01/09/2021)

Rodriguez, Maria Elena e R.Oliveira, BNDES and the Financing of Energy Transition (2016-2023), BRICS Policy Center, UFRJ. 2023 (unpublished)

Sales, Ricélia Maria Marinho, and Luiz Gustavo de Lima Sales (2023). Centralized Renewable Energy and Energy Transition Minerals: paradoxes between the energy business and the human rights of traditional peoples and communities in Brazil.

Universidade Estadual da Paraiba, EDUEDP,

https://zenodo.org/record/7970721

United Nations, Declaration on the Right to Development, 1986, <a href="https://acnudh.org/wp-content/uploads/2012/08/Declara%C3%A7%C3%A3o-sobre-o-Direito-ao-Desenvolvimento.pdf">https://acnudh.org/wp-content/uploads/2012/08/Declara%C3%A7%C3%A3o-sobre-o-Direito-ao-Desenvolvimento.pdf</a>

United Nations, Guiding Principles on Business and Human Rights: Implementing the United Nations' "Protect, Respect and Remedy Framework" 2011.

2011. <a href="https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr\_en.pdf">https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr\_en.pdf</a>



contato@conectas.org

follow our social networks







