

FUTURE LABS:

PROPOSALS FROM WORKERS FOR A JUST ENERGY TRANSITION

URBAN WORKERS



1ST EDITION

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FUTURE LABS

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INTRODUCTION

FUTURES LABS: BUILDING JUST TRANSITION POLICIES IN BRAZIL BY LISTENING TO UNIONS

Brazil is on a path of global transformation where the connection between labor and climate is a central element for advancing towards a Just Energy Transition. From May to November 2025, Aurora Lab conducted the *Caravana do Futuro*, which was guided by this theme. The *Caravana* sought to connect territories, amplify voices, and develop new possible futures that incorporate climate justice, a just transition, and decent work.

In this context, the Futures Labs are an initiative that seeks to contribute to strengthening the Just Transition. This material aims to translate the demands of workers, developed during the Labs, into concrete public policy proposals that can contribute to domestic and international debate.

THE INITIATIVE AND ACTORS INVOLVED

The Futures Labs were conducted by Aurora Lab in strategic partnership with relevant and representative unions in this discussion, including the ABC Metalworkers' Union, the Unified Federation of Oil Workers (Federação Única dos Petroleiros - FUP), the Northeast Regional Federation of Urban Workers (Federação Regional dos Urbanitários dos Nordeste - FRUNE), and the Unified Confederation of Urban Workers (Confederação Nacional dos Urbanitários - CNU).

The main objective of this initiative is twofold: first, to create spaces for listening and dialogue on workers' concerns, demands, and pro

posed solutions; and second, to contribute to the development of concrete proposals for a just transition.

The methodology used was created in partnership with Instituto Procomun, based on their Citizens' Labs, and adapted to the Unions' context, allowing workers to draw on their vast experience in defending labor rights to propose pathways that ensure a truly just energy transition.

THE CO-CREATION PROCESS AND THE SECTORS COVERED

Over the course of three months, the Futures Labs mobilized approximately **120 workers and union leaders to co-create proposals for a Just Transition**. The discussions focused on three sectors crucial to Brazilian decarbonization: **oil and gas, automakers/transportation, and power generation**, with a particular focus on renewable energy.

The co-creation meetings took place in São Bernardo do Campo (São Paulo), Rio de Janeiro (Rio de Janeiro), Salvador (Bahia), and Mosso-ró (Rio Grande do Norte). To enrich the landscape and connect key areas for climate action, the initiative also invited experts from the climate and labor fields to provide reflections on the challenges and possibilities for advancing mechanisms that guarantee climate justice and decent work.

DIFFERENT SECTORS, DIFFERENT CHALLENGES FOR THE ENERGY TRANSITION

The debates held in different regions and sectors revealed concerns expressed across the board: the risk of job losses, the need to (re)skill entire sectors of the workforce to face the transition, and the need

for legal frameworks that guarantee rights throughout the process.

At the same time, each sector faces unique realities regarding the pace of the transition. **Renewable energy workers**, for example, are already experiencing the impacts of a transition that is advancing at an accelerated and unplanned pace, and that has failed to incorporate issues related to labor rights and job quality adequately.

Metalworking sector also face impacts in the near future. With the advancement of transportation electrification, Brazil faces significant risks if it fails to implement measures to position itself in a market dominated by foreign technologies and markets. Beyond a debate about jobs, this will also need to be a debate about industry and its role in decarbonization.

Finally, the reality of **oil workers'** demands necessitates a comprehensive and planned transformation in the medium and long term, preparing the sector for the necessary transition away from fossil fuels as soon as possible, without losing sight of energy sovereignty and the role of the State.

20 PROPOSALS FOR A JUST TRANSITION AGENDA

The most tangible and immediate result of the Futures Labs was the development of 20 public policy proposals. These proposals were formulated based on the specific realities and concerns of each sector and are compiled into three sectoral notebooks that summarize the discussions held. In addition to these proposals, each sector also developed others aimed at strengthening its labor union involvement on the energy transition agenda.

The initiatives presented here offer an initial translation for decision-makers and policymakers of what a Just Energy Transition might look like in practice. Because they are grounded in workers' experien

ces, the proposals ensure that policies are grounded in reality and provide safeguards for those directly impacted by the processes of building a low-carbon economy.

This publication also includes the perspectives of labor unions and climate and labor experts to provide context on the issues. More than a record, this publication is an invitation to dialogue and action.

May these pages inspire reflection, strengthen collaborative networks, and open space for transformative practices that build upon the ideas gathered here.

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VIEWS ON THE JUST ENERGY TRANSITION

PROPOSALS FROM URBAN WORKERS FOR A JUST ENERGY TRANSITION IN BRAZIL

**Júlia Margarida do Espírito Santo,
Paulo de Tarso Costa**

The National Confederation of Urban Workers¹ acknowledges the severity of the climate crisis and the necessity of accelerating the energy transition to renewable sources. We also recognize that, historically, the labor movement has not always prioritized environmental issues as it should. It is time to commit to an energy model that unites sustainability, social justice, and democracy.

Clean energy will only be truly transformative if social inclusion, decent jobs, and universal access accompany it. The transition cannot deepen regional inequalities, exclude workers, or make labor relations more precarious.

The high cost of electricity in Brazil is one of the main obstacles to just development. Even with a predominantly renewable energy matrix, the country has one of the most expensive tariffs in the world. This penalizes the poorest, compromises the competitiveness of national industry, and limits access to essential rights. It is urgent to review the current Brazilian electricity model, which has become excessively commercialized, complex, and geared towards the financialization of the sector. The energy transition cannot repeat this path.

We advocate for a new model based on public planning, affordable

1. Translator's note: Unofficial translation of "Confederação Nacional dos Urbanitários."

tariffs, energy sovereignty, and social justice. Access to energy must be treated as a human right, not as a commodity.

In this context, strengthening union representation becomes fundamental. Workers need to have an active voice in the change process. It is necessary to guarantee professional training, decent working conditions, and the appreciation of local labor. Unions must be prepared to engage with new technologies, decentralized generation models, and transformations in the world of work.

The Northeast region is a key player in this process. It has enormous wind, solar, and hydroelectric potential, and it concentrates a significant portion of the country's renewable energy investments. This represents a historic opportunity to promote regional development and reindustrialization based on a low-carbon economy. However, this development will only be truly fair if it considers the rights of local communities, generates quality jobs, and strengthens regional productive arrangements.

The federal government, through programs such as the *Novo PAC* and the *Nova Indústria Brasil*, must recognize the strategic role of organized workers. The electricity sector can be the engine of a new phase of growth with inclusion, provided that investments are accompanied by public policies that integrate infrastructure, technical training, and regionalized innovation.

It is also necessary that traditional communities, indigenous peoples, quilombola communities, and populations affected by energy projects be heard and respected. The transition cannot be made without regard for the territories and the people who live in them.

Commitment of Urban Workers

We will not accept an energy transition that reproduces historical inequalities. We defend a transition of rights, justice, and dignified

life. It is not enough to generate clean energy: it is necessary to transform the structures that support the current model, guaranteeing access, fair tariffs, and social participation.

Strengthening union representation in the electricity sector is strengthening democracy in the world of work. It is ensuring that economic development is also social development. The Brazilian energy transition will only be just if it is built with dialogue, inclusion, and participation of workers and communities.

The Northeast region, with its immense energy and human potential, can lead this process, provided that investments value labor, combat inequalities, and contribute to building a more just, sovereign, and sustainable Brazil.

Júlia Margarida do Espírito Santo is an administrator who holds a bachelor's degree in International Relations and works for Eletrobrás Chesf. A native of Salvador, Bahia, she is strongly committed to defending the rights of workers in the electricity sector and the broader working class. She is an elected member of the Fachesf board, an alternate member of the FGTS Board of Trustees representing CUT, a regional director of ANAPAR, and Secretary of Energy for FRUNE. She is also part of the leadership of Sinergia Bahia, responsible for the Generators and Outsourced Companies secretariat in the State of Bahia.

Paulo de Tarso Costa has been an employee of Neoenergia/Coelba for 45 years. He holds a postgraduate degree in Labor Economics from the University of Campinas (Unicamp). Director of Sinergia/BA, Union Director of DIEESE, President of the National Confederation of Urban Workers – CNU.

CLEAN ENERGY IS SOMETHING ELSE

Between draconian land lease agreements and the trampling of human and environmental rights, the wind and solar sectors are accumulating a backlog of problems.

Cecilia Oliveira, Cristina Amorim

A company deforests a thousand hectares of vegetation to install a solar farm. A project covers one hundred springs of the São Francisco River. Wind turbine blades spin on a 100-meter-high tower a few steps from a public school. Workers are hired precariously, with low wages and, often, outsourced.

These are four real cases, among dozens of other situations, that are accumulating in Brazil, especially in the Northeast, since the first wind turbine appeared on the horizon. Between draconian land lease agreements and the trampling of human, environmental, and worker rights, the wind and solar sectors are accumulating a backlog of problems that are impossible to digest.

Here's a message for the lobbyists of the end of the world: it's obvious and non-negotiable that humanity needs to generate renewable energy, with the minimum possible greenhouse gas emissions, and abandon fossil fuels that cause global warming. For the good of all, the last drop of oil or molecule of fossil gas to be exploited cannot be the last one available.

That being said, the climate emergency cannot justify excessive acts such as deforestation, attacks on biodiversity, threats to the integrity of children and women, harassment of family farmers, precarious working conditions for workers in the sector,

and rural exodus—including in regions that have received investments in recent decades to produce fresh food and thus feed students, for example.

In short: to achieve one sustainable development goal, no one should be sacrificed.

Brazil is one of the most promising markets globally for attracting green investments. However, this positive outlook cannot lead to more conflicts and human rights violations, including labor rights abuses.

With this in mind, a series of actions is underway. Social movements and academia have meticulously mapped the problems in the Northeast and developed over one hundred recommendations for public managers, companies, and funding agents. The federal government produced its own diagnosis, and the Federal Public Prosecutor's Office and the Public Defender's Office have been engaging in dialogue with society.

The wind energy sector has looked inward and recognized problems, despite companies making little to no changes to their practices. The centralized solar generation sector is studying similar steps.

Now, the public machinery needs to work more efficiently: technical and legal standards must be updated, and energy planning must reconcile the multiple uses of land and sea to resolve conflicts.

The discussion on the Brazilian sustainable taxonomy, led by the Ministry of Finance, is another way to foster sound practices, provided it establishes socio-environmental safeguards for renewable energy generation. If incorporated, these good practices can generate more confidence, less social risk for those li-

ving in rural areas, and less financial risk for investors, providing the much-needed legal security from planning to execution.

Renewable energy can no longer be a mere charade of sustainability. Now is the time to act.

***Cecilia Oliveira** and **Cristina Amorim** are Coordinators of the Nordeste Potência initiative.*

FOR A TRULY JUST TRANSITION

Ana Georgina Dias

There is a consensus on the urgency of actions to address the major transformations brought about by the climate emergency. The need to replace non-renewable energy sources, through a just transition, is perhaps the most critical point on the global environmental agenda.

Although Brazil already has an energy matrix composed mainly of renewable energy sources, this does not necessarily mean that it is aligned with the concept of a just transition process. Despite having approximately 87% of its energy from renewable sources, the country has not seen a reduction in the use of fossil fuels, particularly oil. Essentially, instead of replacing fossil fuels with renewable energy, we are increasing our energy generation capacity by expanding wind and photovoltaic energy sources, without, however, advancing the decarbonization of our energy matrix. On the contrary, in absolute numbers, the generation of this type of energy has increased.

Another critical point to highlight is that the need for decarbonization extends beyond the energy sector. Other activities significantly contribute to the country's high carbon emissions. Changes in land and forest use, agriculture, various industrial processes, water misuse, inadequate treatment, and insufficient waste recycling also have significant impacts on the climate. In addition, the lack of willingness to rethink consumption patterns, especially in wealthier countries, also constitutes a substantial barrier to a just transition.

Another vital aspect is the impact of a just transition on territories

and the people living in them. There will be profound changes, with repercussions on work, both in terms of occupations and income. At this point, it is not reasonable to think of a just transition that worsens people's living and working conditions, worsening the vulnerability to which some populations – especially indigenous peoples – are subjected, increasing unemployment and underemployment, and resulting in increased job insecurity.

The fact is that, so far, the growth of the renewable energy sector in Brazil cannot be seen as a step towards a just transition. Regarding labor, for example, in the case of wind energy, the most significant job creation occurs during the construction of the farms. Projects that hired between two and three thousand workers for construction end up being operated by 20 to 30 workers. Income is also significantly lower. It is estimated that remuneration in this segment is around 40% lower than in the traditional energy segment, even in renewable ones like hydro-electric power. Renewable energies could be an essential alternative to compensate, even if only in part, for the reduction in jobs in fossil fuel segments, such as coal and oil. However, what is observed is the generation of fewer jobs with lower quality in terms of remuneration, union representation, hiring practices, and social protection, compared to what has been generated in non-renewable segments.

The energy transition, to be just, cannot be a factor in exacerbating the already pronounced inequalities in our society. In this respect, it is necessary to promote public policies that address these impacts, whether environmental or social. It is essential to act to mitigate the effects of change and to build a model of economic and social development that addresses the needs of people, especially those most affected by the climate emergency and the transition itself.

Social dialogue is an essential means for the collective cons-

truction of development plans that consider sustainability and mitigate the deleterious effects of climate change, taking into account all relevant variables and actors involved. Definitely, listening is necessary so that actions and policies reflect, as faithfully as possible, the demands of society.

Ana Georgina Dias holds a degree in Economics from the University of Brasília (UnB) and a specialization in Economics and Labor from the DIEESE School of Labor Sciences. Currently, she serves as the Technical Supervisor of the Regional Office of the Inter-Union Department of Statistics and Socioeconomic Studies – DIEESE - in Bahia. Among her primary activities are union consulting and training, with a focus on collective bargaining.



PROPOSALS

PROPOSALS FROM URBAN WORKERS FOR A JUST ENERGY TRANSITION

1

PLAN AND REGULATE THE RENEWABLE ENERGY SECTOR.

Essential to promote local development, with a focus on protecting local communities, the right to land and territories, and workers in various sectors, and to reduce inequalities, land grabbing, and the concentration of resources in large companies.

2

GUARANTEE THE IMPLEMENTATION OF WORKER SAFEGUARDS IN RENEWABLE ENERGY PROJECTS.

Based on the decent work agenda and combating outsourcing and precarious work.

3

**CREATE SPECIFIC LEGISLATION
TO REGULATE WORK IN THE
RENEWABLE ENERGY SECTOR
(WIND AND SOLAR).**

To guarantee the protection of the working class through the regulation of activity in the sector.

4

**AMEND THE REGULATORY
STANDARDS (NRS) THAT DEAL
WITH RENEWABLE ENERGIES.**

Aiming at improving the working conditions of the electrical category.

5

**TO ENCOURAGE FORMAL
EDUCATION AND TECHNOLOGY
TRANSFER IN THE FIELD OF
RENEWABLE ENERGY.**

Aiming to address the lack of technical skills and knowledge in the sector, and promoting employability in communities that receive the projects and in those nearby.





Programação do

19:00 Café de boas vindas

19:30 Início das atividades e apresentação dos problemas

19:45 Início das atividades

20:00 Início das atividades

20:15 Início das atividades

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26:30 Início das atividades

26:45 Início das atividades

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