



# **State policies x government policies: climate justice and response strategies for the Brazilian coastal zone in the face of the climate emergency**

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## **Abstract**

Extreme weather events have intensified, and their projections indicate worrying scenarios for Brazil, especially its extensive coastal zone. This essay analyzes the Brazilian public response to these threats, focusing on climate justice through two crucial instruments: the 2016 National Adaptation Plan (PNA) and the 2023-2024 Climate Plan. The analysis reveals a deficient implementation of the actions foreseen in the PNA. It highlights the vulnerability of Brazilian environmental policies in the face of administrative and ideological changes by governments. The Climate Plan, unlike the PNA, incorporates climate justice as a central element, reflecting significant progress in addressing environmental inequalities. However, its effectiveness will depend on continuous and solid governance. This study concludes that climate adaptation in Brazil must be strengthened as a state policy, focusing on climate justice and the mobilization of adequate resources to face the climate emergency fairly and effectively.

**Keywords:** National Adaptation Plan. Climate Justice. Climate Plan. Coastal Zone. Public Policies.

## **Políticas de estado e políticas de governo: a justiça climática e as estratégias de resposta para a zona costeira brasileira em face à emergência climática**

### **Resumo**

Os eventos climáticos extremos têm se intensificado e suas projeções indicam cenários preocupantes para o Brasil, especialmente para sua extensa zona costeira. Este ensaio analisa a resposta pública brasileira diante dessas ameaças, focando a justiça climática, por meio de dois importantes instrumentos: o Plano Nacional de Adaptação (PNA) de 2016 e o Plano Clima de 2023-2024. A análise revela uma implementação deficiente das ações previstas no PNA e destaca a vulnerabilidade das políticas ambientais brasileiras diante das mudanças administrativas e ideológicas dos governos. O Plano Clima, diferentemente do PNA, incorpora a justiça climática como elemento central, refletindo um avanço significativo na abordagem das desigualdades ambientais. Contudo, sua efetividade dependerá de uma governança contínua e sólida. Este estudo conclui que a adaptação climática no Brasil deve ser fortalecida como uma política de estado, com foco na justiça climática e na mobilização de recursos adequados para enfrentar a emergência climática de maneira justa e eficaz.

**Palavras-chave:** Plano Nacional de Adaptação. Justiça climática. Plano Clima. Zona Costeira. Políticas Públicas.

## **Políticas de Estado x políticas de gobierno: justicia climática y estrategias de respuesta para la zona costera brasileña ante la emergencia climática**

### **Resumen**

Los fenómenos climáticos extremos se han intensificado y sus proyecciones indican escenarios preocupantes para Brasil, especialmente para su extensa zona costera. Este ensayo analiza la respuesta pública brasileña a estas amenazas, centrándose en la justicia climática a través de dos instrumentos cruciales: el Plan Nacional de Adaptación (PNA) de 2016 y el Plan Climático 2023-2024. El análisis revela una deficiente implementación de las acciones previstas en el PNA. Destaca la vulnerabilidad de las políticas ambientales brasileñas frente a los cambios administrativos e ideológicos de los gobiernos. El Plan Climático, a diferencia del ANP, incorpora la justicia climática como elemento central, lo que refleja avances significativos en el abordaje de las desigualdades ambientales. Sin embargo, su eficacia dependerá de una gobernanza continua y sólida. Este estudio concluye que la adaptación climática en Brasil debe fortalecerse como política de Estado, centrándose en la justicia climática y la movilización de recursos adecuados para enfrentar la emergencia climática de manera justa y efectiva.

**Palabras clave:** Plan Nacional de Adaptación. Justicia climática. Plan Climático. Zona costera. Políticas públicas.

## **1 Introduction**

Extreme weather events are a reality on the most diverse edges of the planet. An increase in intensity—and frequency—have been observed, and projections confirm scenarios of this trend in the face of climate change (Intergovernmental Panel on Climate Change (IPCC), 2023). Severe climate impacts have the potential to affect everyone. Still, not everyone suffers or will suffer harm in the same way; more

than that, not everyone will have the conditions and capabilities to react in the same way.

This is the main pillar of climate justice (Torres et al., 2023). In other words, there is existing vulnerability within the peripheral territories, with the black population; LGBTQIAPN+ community; traditional communities; indigenous peoples; and women, children, and older people, who suffer more severe effects. This situation is a reflection of a history of the production of inequalities in our country, which dates back to the colonial period, environmental racism, patriarchy, and other forms of oppression and injustice in Brazil.

The colonial, extractive, and exporting companies in Brazil occupied the coast (Moraes, 1999). The coastal zone, approximately 8000 kilometers long, houses 17 of the 26 Brazilian states, and is where 54.8% of the population—if municipalities up to 150 km from the coast are considered—are located (IBGE, 2022). In this territorial area, there are countless records of climate injustices, including the south of Bahia (2021), Recife (2022), the crime tragedy in Vila do Sahy in São Sebastião (2023), and the events in Rio Grande do South in 2024, which tend to increase owing to the intrinsic vulnerability of coastal areas to a worsening climate emergency (Gonçalves et al., 2019).

Given this reality, what has been done to transform it? What have been the public responses, and what are their strategies, related to climate adaptation on the Brazilian coast? To answer this question, two important instruments were analyzed, on a national scale, focusing on the coastal zone: (i) the National Adaptation Plan (PNA) (2016) and (ii) the Climate Adaptation Plan (Plano Clima)–(2023–2024). In the Brazilian case, it is possible to see that the publication of a planning and management instrument, such as a climate plan, is just the beginning of a long journey. Its implementation is not seen, as the results indicate, as a State policy, but rather a government policy: fragile and dependent on whoever is governing at a given moment. This is, without a doubt, a recipe for failure.

For this discussion, and aiming to answer the questions elaborated above, this essay starts from the conceptual lens of climate justice and is divided as follows: Introduction, Context and conceptual lenses, Materials and methods, Results, Discussion, and Conclusion.

## **2 Context and conceptual lenses**

After a period of relative political and economic stability, Brazil has experienced turbulence in the last decade. Going through a political–economic crisis that had an impact on its environmental and climate policies, the country saw, year after year, an increase in the presence of politicians with conservative ideology (Tanscheit, 2023) who presented themselves as refractory to the socio-environmental agenda at the National Congress, which culminated in major setbacks Min Brazilian environmental management legislation (Capelari; Milhorange; De Araújo, 2023).

These dismantling setbacks resulted from an incremental rupture in a context of strengthening environmental policies and the legal system that had been affecting them, which had been occurring from the institution of the National Environmental Policy in 1981 until mid-2010. Exemplifying this setback, Neves (2023, p. 49) points out

the repeal of the 1965 Forest Code in 2012, weakening of the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm) from 2013, and construction of the Belo Monte Hydroelectric Plant and the PEC 65/2012, which inaugurated the attempt to dismantle the environmental licensing system.

The scenario of regression intensified after the coup d'état materialized with the impeachment of then president Dilma Rousseff (Workers' Party) (Jinkings, 2016), which led to the rise of her then vice-president Michel Temer (Brazilian Democratic Movement) and consequently "the instability of the environmental area deepened, through the reduction of federal spending, especially in environmental control, the abandonment of the PPCDAm and the advancement of proposals to make the environmental licensing system more flexible" (Neves, 2023 p. 49). Thus, although it is recognized that the center-left governments of the Workers Party combined socio-environmental concerns with a neo-developmental agenda and characterized themselves as a government that prioritized the paradigm of ecological modernization without breaking with the status quo (Menezes; Barbosa Jr., 2021), the fact is that the setbacks deepened with the conservative governments that followed (Barbosa; Alves; Grelle, 2021; Menezes; Barbosa Jr., 2021; Milhorange, 2022; Neves, 2023).

The dismantling of environmental policy arises from its inherent vulnerability, given that despite the environment being a right guaranteed in the advanced Federal Constitution, article 225 states that "Everyone has the right to the environment, a common use of the people and essential to a healthy quality of life, imposing on public authorities and the community the duty to defend and preserve it for present and future generations" (BRASIL, 1988). Quantifying its diffuse benefits is complex and easily overcome by the interests of groups who can exert great pressure (Neves, 2023), who consider economic progress to be a higher interest than interests linked to environmental protection (Prieur, 2012).

With the election of the far-right government of Jair Bolsonaro (Social Liberal Party), the change in Brazilian environmental policy reached its peak (Acselrad, 2022). With the addition of neoliberalism, which preaches the reduction of public spending (Tanscheit, 2023); the understanding that traditional communities, indigenous populations, and family farmers are "enemies" of the nation who drain State resources; and attacks on environmentalists, nongovernmental organizations, and scientists, there was a systemic dismantling of environmental policy, with the practice of an illiberal policy supported by authoritarian strategies and populist discourses (Menezes; Barbosa Jr., 2021; Milhorange, 2022).

The situation still presented a scenario in which radical right-wing populist ideology (Tanscheit, 2023) was associated with authoritarian neo-extractivist practices (Furtado; Acselrad; Pinto et al., 2021), with enormous impacts on biodiversity and the residents of the territories. In the climate area, there was a reorientation of the government structure, with the country's presence being reduced, for example, at the Conferences of the Parties, in addition to the abandonment of the agenda drawn up years before for the PNA in 2016 (Torres; Urbinatti; Gomes et al., 2021).

The PNA is a clear example of how government policies or strategies are hostage to political interests or ideological disputes, not rooted in a construction of state policy, and, more than that, without the necessary social control given the

impact on the daily lives of the affected population. Di Giulio et al. (2016) draw attention to the incongruity between having a “high level of concern among the population with the subject of ‘climate change,’ but still few actions for mitigation or adaptation taken by this same population” (p.1).

In a country that has historically prioritized mitigation actions, especially concerning fires in the Amazon—the main vector of greenhouse gas emissions—the topic of adaptation is still very incipient. Di Giulio et al. (2016) highlighted at the time how timely the creation of the PNA was, “especially the growing understanding that mitigation actions will not be sufficient to avoid the impacts resulting from climate change” (Di Giulio et al., 2016, p.1). However, the authors warn that the PNA fell short of expectations in terms of implementation. This was mainly by prioritizing actions:

aimed at the need to expand and systematize knowledge and provide environmental information, to improve the quality of climate projections as a support for public adaptation policies. We understand that it is not up to an adaptation policy to focus only on gathering more data and evidence about a process about which we have already achieved an excellent level of understanding and evidence. As adaptation is a continuous process that needs to be started urgently, the focus should be directed not only on developing new knowledge but also on applying existing knowledge to real actions so that the Brazilian population becomes more prepared and less vulnerable to future climate change. We understand that decision-making does not need to wait for new and even more conclusive results; the technical-scientific knowledge available today is sufficient for states and, particularly, cities and their current and future managers to implement adaptive measures. (Di Giulio et al., 2016, p.1)

These elements highlighted by the authors were confirmed, not only by the structure of the PNA but by the situation and administrative discontinuity that followed. Despite Bolsonaro’s campaign promise to abolish the Ministry of the Environment, he remained in place owing to popular pressure and the understanding that this measure could drive away foreign investment.

Bolsonaro appointed Ricardo Salles as minister, with whom he shared the same ideology, expressed through institutional actions and intentions, such as using the context of the COVID-19 pandemic to “pass the herd,” taking advantage of the smallest attention to environmental issues to deregulate the Brazilian environmental management legal system (Menezes; Barbosa Jr., 2021).

In practice, the Bolsonaro government promoted the dismantling of Brazilian environmental policies and the emptying of councils with the participation of civil society (Losekann; Paiva, 2024). Losekann and Paiva (2024) highlighted the following as dismantling actions: decree 9,806/2019, which promoted the dismantling of participatory collegiate bodies that supported Brazilian environmental policy actions; the weakening of CONAMA (Brazilian National Environmental Council), which went from 93 to 23 councilors, mainly reducing the participation of civil society, which reduced from 22 to four seats; decree 9,759/19, which extinguishes the Brazilian Climate Change Forum, the National Native Vegetation Recovery Plan and its respective Commission, the National Biodiversity Commission, and the National Forests Commission, reducing social participation mechanisms; and decree 10,239/2020, which transfers the Amazon Council from the Ministry of the

Environment (MMA) to the vice-presidency of the republic. As a result, the council became composed of military personnel, leaving out the governors of the Legal Amazon and civil society.

Within the scope of this article, it also highlights the fact that the Bolsonaro government was ultimately composed of climate deniers, placing Brazil as one of the few countries led by people who do not believe in the climate emergency (Franchini; Mauad; Viola, 2020). As a result, the country withdrew from international discussions associated with combating climate change and weakened measures to combat deforestation, the country's main source of greenhouse gas emissions (Barbosa; Alves; Grelle, 2021), defining the debate on the topic as an “international Marxist plot” (Milhorange, 2022 p. 760). Furthermore, the budget of climate institutions was reduced—in his first year in government, Bolsonaro cut 95% of the budget for the National Climate Change Policy (Milhorange, 2022).

Even though dismantling is a process, Neves (2023) points out that Jair Bolsonaro's far-right government was unsuccessful in achieving the total annihilation of environmental defense instruments. For the author, these failures resulted from two factors: the systemic nature of the political–institutional architecture of Brazilian environmental policy and the crucial role of civil society organizations.

With the election of a progressive government in 2023, which considers the relevance of environmental and climate issues, and therefore aims to reconstruct environmental policy, it is necessary to consider that the dismantling promoted will have repercussions beyond the period in which it was initiated (Neves, 2023). In this way, actions such as the “repeal” of anti-environmental legislation at the beginning of the new government and the environmental and climate agenda gaining centrality (Pajolla, 2022; Lima, 2023) evidenced by the change in nomenclature of the Ministry of the Environment, which came to be called the Ministry of Environment and Climate Change, is essential. However, it is necessary to overcome the contradictions in the promotion of “green capitalism” that characterized the first progressive governments of the 2000s and 2010s (Menezes; Barbosa Jr., 2021) given the worsening of the socio-environmental crisis and the climate emergency.

It is precisely at this juncture, from 2023, that the federal government's resumption of the climate agenda begins, with the construction of the Climate Plan (Plano Clima). In contrast to the PNA, which did not have as a central element the dimensions of climate justice and the focus on inequalities, environmental racism, ancestral and local demands, and knowledge (Torres; Leonel; Pires de Araújo, et al., 2020), the Climate Plan, in turn, has climate justice as its guiding element, highlighting the attempt to incorporate this agenda, in a different way to the PNA.

### **3 Material and methods**

In June 2024, 12 requests were made to the Federal Government's Ministry of the Environment and Climate Change, through the Access to Information Law (Law 12,527/2011, regulated by Decree No. 7724). The requests sought information about the implementation—or lack thereof—of the actions established in the 2016 PNA about the “Coastal Zones Strategy” sector (BRASIL, 2016). The two requests concern each of the 12 actions proposed in the PNA for the coastal zone.

A final request also concerned the incorporation or not of the notion of climate justice in the PNA. Thus, using the triangulation method, the PNA (2016) and the available documents from the Climate Plan (2024) were analyzed, in addition to contemporary production on climate justice and adaptation for the coastal zone. The Brazilian PNA was prepared through a Working Group of the Interministerial Committee on Climate Change, established by Decree No. 6.263/2007 of November 21, 2007. The Working Group was formed by members of 12 ministries and other agencies and foundations, that is, with an intersectoral character.

#### 4 Results

The “Coastal Zones Strategy” document has 12 actions:

1. Carry out planialtimetric mapping of the coastal zone;
2. Develop a continuous and standardized data acquisition program (biotic and abiotic);
3. Integrate and operate information and data systems for monitoring;
4. Integrate territorial planning instruments in different spheres with a focus on coastal erosion;
5. Determine priority areas for intervention;
6. Establish contingency plans for the coastal zone;
7. Improve integration between coastal and basin management;
8. Generate knowledge for diagnoses, monitoring, and forecasting impact and response;
9. Integrate public policies to increase preventive and corrective actions;
10. Insert the climate lens into coastal management;
11. Generate knowledge;
12. Promote conservation and management of CO<sub>2</sub> sinks.

According to the responses received via Access to Information Law (LAI in Portuguese) of the 12 planned actions, four have some implementation, and the remaining do not. However, when analyzing the content of each return on shares, there was a mismatch of information, resulting in three shares showing some implementation and nine showing none. Some of the actions and information about implementation do not seem compatible with what was originally planned and will be the topic of the Discussion section.

In addition to the actions, the plan establishes three goals and 10 initiatives (Table 1).

Table 1. Goals and initiatives

Goal	Initiative
1. Establish Reference Centers for Coastal Management, forming and organizing	Establishment of four Reference Centers for Coastal Management.

information and tools for modeling climate risks and generating qualified responses in the coastal zone.	Qualification and availability of modeling instruments and tools and knowledge management platform for adaptation of the coastal zone.
	Training of governmental and nongovernmental actors to implement adaptation actions.
2. Strategy to make continental altimetry compatible with marine bathymetry developed and with defined resources for its execution.	Establishment of a work plan with methodology, cost, and pilot studies to make altimetry and bathymetry compatible with measures and guidelines to prevent the effects of erosion and flooding.
	Development of a strategy, with short- and medium-term actions, to implement methodology and systems for compatibility of altimetry and bathymetry.
	Preparation of regulations for implementing the strategy (governance structure and budget).
	Implementation of pilot projects in priority areas.
3. Macrodiagnosis of the coastal zone revised, considering vulnerability related to climate change.	Database to review the macrodiagnosis of the coastal zone organized based on the integration of environmental, economic, social, and cultural dimensions.
	Term of reference for review of the coastal zone macrodiagnosis prepared and validated by a group of experts (researchers and coastal managers).
	Coastal zone macrodiagnosis publication carried out and disseminated; managers, researchers, and civil society trained.

Source: Prepared by the author based on data from Brazil, 2016.

According to the responses received officially through Access to Information Law, none of the established goals, or even the proposed initiatives, were met. Of the three goals established (in the Coastal Zones Strategy), two had some action initiated, with one remaining unexecuted. In the document “1st Monitoring and Assessment Report–2016/2017 National Plan for Adaptation to Climate Change,”



Coastal Zones—2016/2017, the information is that actions related to the three goals have started (BRASIL, 2017). Among the actions said to be “carried out” in the monitoring report are: (i) the development of the National Program for the Conservation of the Coastline, with the project to make continental altimetry compatible with marine bathymetry as the central initiative; (ii) the creation of a coalition of institutions to support the implementation of Reference Centers for Coastal Management; (iii) agreement upon regional criteria to define Coastal Management Reference Cores; (iv) the creation of a thematic group, within the scope of the National Cartography Commission, to develop the methodology and assess the costs of making continental altimetry compatible with bathymetry; (v) carrying out inventory management using existing data from macro diagnostics of the coastal zone; (vi) engaging in cooperation with Federal University of Rio Grande (FURG) to prepare the requirements for the new macro diagnosis of the coastal zone, including a platform with a database under the control of the MMA; (vii) approval of Brazil’s participation in the preparation of the next IPCC Report, in the chapter referring to Oceans and Cryosphere (BRASIL, 2017).

The monitoring report also highlights the challenges/next steps: (i) raising human and financial resources to support the implementation of the sector’s goals and guidelines and (ii) preparation of a work plan for the implementation of Reference Centers for Coastal Management (BRASIL, 2017). Concerning the actions and their implementation, the responses to the consultation maintain a standard about their justification: the context of change and the new structure of the Ministry of the Environment, which began to prioritize the National Plan to Combat Litter at Sea, within the scope of the Agenda National Urban Environmental Quality. Only for three actions—2, 4, and 7—were no justifications given for non-implementation or non-initiation.

From Table 2 below it is possible to observe the actions not implemented and those with some implementation. Action 2—Developing a continuous and standardized data acquisition program (biotic and abiotic)—is identified as having some implementation, in which the following initiatives are listed:

I: Creation of the thematic group, within the scope of the National Cartography Commission, to develop the methodology and assess the costs of making continental altimetry compatible with bathymetry.

II: Creation of the National Program for the Conservation of the Coastline, established by Ordinance No. 76 (of 03/26/2018), which aims to promote the integrated management of the coastline, its technical–scientific knowledge, its variations according to extreme events and climate change, multiple uses and protection of marine and coastal ecosystems.

Action 7—Improving the integration between coastal management and basin management—also has some type of implementation:

I: Publication of Decree No. 10,000 (of 09/03/2019), which provides for the National Water Resources Council to change the name of the Technical Chamber for Integration with Environmental and Territorial Management to the Technical Chamber for Integration with Environmental and Territorial Management.

II: Establishment of a working group to integrate water resource management with coastal management in the Technical Chamber for Integration with Environmental and Territorial Management of the National Water Resources Council.

Through the Access to Information Law, the public authorities inform that Action 10—Inserting the climate lens in coastal management—had some implementation, although the result (described below) is not related to the action, but concerns the country’s participation in the IPCC:

I: Approved Brazil’s participation in the preparation of the next IPCC Report, in the chapter relating to Oceans and the Cryosphere.

II: Brazil’s participation in the preparation of the Special Report on Climate Change, Oceans and Cryosphere, by the IPCC, approved on September 24, 2019, by the 195 IPCC member governments, providing new evidence of the benefits of limiting global warming to the lowest possible level, in accordance with the goal that governments set themselves in the 2015 Paris Agreement.

Table 2. Coastal zone shares, PNA

	Not implemented	Some implementation
Action 1		
Action 2		
Action 3		
Action 4		
Action 5		
Action 6		
Action 7		
Action 8		
Action 9		
Action 10		
Action 11		
Action 12		

Source: Prepared by the author based on responses obtained through the Access to Information Act.

In response to the request for access to information, the National Secretariat for Climate Change, under the Ministry of Environment and Climate Change (MMA), through ORDER No. 43372/2024-MMA (1701489), informs that regarding the implementation of actions of the Coastal Zones Strategy, as part of the PNA, the theme of climate justice was not central to the indicated document. Despite being noticeable and appearing in some works on the topic (Torres, Leonel, Pires de Araújo et. al., 2020), the order makes it clear that the issue of climate justice was not taken into consideration – neither it nor the entire unfolding that means having it as your north.

The Climate Plan currently has 18 sectoral groups. There were initially 15 but another three were incorporated adaptively and following sectoral demands and pressures: Agriculture and Livestock; Biodiversity, Cities + Mobility; Risk and Disaster Management; Industry; Energy; Transport; Racial Equality and Combating Racism; Women; Traditional Peoples and Communities; Indigenous Peoples; Water Resources; Health; Food and Nutritional Security; Ocean and Coastal Zone, and Tourism. When preparing the PNA, 11 sectors were considered, represented by the competent government bodies: Agriculture, Water Resources, Food and Nutrition Security, Biodiversity, Cities, Disaster Risk Management, Industry and Mining, Infrastructure, Vulnerable People and Populations, Health, and Coastal Zones.

For this essay, it is worth highlighting the creation of sectors that directly dialogue with climate justice and that did not exist in the PNA: Racial Equality and Combating Racism, Traditional Peoples and Community, and Indigenous Peoples and Women. It is also possible to identify differences between the participatory process and consultations present in the Climate Plan (Plano Clima). In addition to the formal public consultation, at the end of the first document to present to society, a series of virtual and five in-person workshops (in all regions of the country) were organized, as well as the possibility of interaction and suggestion of action proposals through the ‘Brasil Participativo’ digital platform, under the responsibility of the National Secretariat for Social Participation of the General Secretariat of the Presidency of the Republic, developed in free software with the support of Dataprev, the Decision-Brasil community, the Ministry of Management and Innovation in Public Services, and the University of Brasília (UnB).

## 5 Discussion

What has been done in Brazil regarding responses to extreme weather events, especially in the coastal zone? This essay presents two instruments on a national scale, the PNA (2016) and the Climate Adaptation Plan (Plano Clima) (2023–2024) to analyze and illustrate the debate through the lens of climate justice. As long as inequalities persist in Brazil, the call to action against climate change must be, above all, against environmental inequalities. Adaptation and justice must be as intertwined in planning as in policies and social mobilization, so that adaptation and climate justice do not simply become empty or reproductive concepts of the production of inequalities in territories (Torres; Urbinatti; Gomes et al., 2021).

If in the PNA it is clear, whether through the documentary analysis carried out, the articles that examined this focus, or the public response from the federal government, that climate justice was not taken into account in its preparation, this is a first striking difference for the Climate Plan (Plano Clima). In the PNA, Di Giulio et al. (2016) already warned about the difficulty of monitoring and implementation—which was confirmed—in addition to the lack of “effective mechanisms that promote dialogue and cooperation between those who produce knowledge and those who can use it in decision-making” (Torres; Urbinatti; Gomes et al., 2021). Still, Xavier et al. (2022) reinforce that the PNA brings the perspective of sustainability, as a fundamental principle, but is often mentioned in an ecological context, presenting a lack of integration of social and economic dimensions, which can make it difficult to understand the relationship with actors and with the socio-environmental dimension.

An analysis of the responses regarding the three actions that have some type of implementation, according to the federal government itself, raises doubts as to whether even these three actions have any type of implementation as they are not directly proposed in the PNA, but actions that were considered correlated. The one that draws the most attention is Action 10—Insert the climate lens into coastal management—in which Brazil's participation in the IPCC report is mentioned.

This is the argument that worried and alerted by Di Giulio et al. (2016), about the excessive focus on actions aimed at expanding and systematizing knowledge and information. As the authors point out, owing to the urgency of the topic, the focus should have already been directed to the application of existing knowledge in real actions. It is worth reflecting on whether actions such as this should be linked to plans, such as the PNA, or be constructed and implemented by governments.

A State policy must be strong, continuous, and long-term oriented, mobilizing the necessary resources to face the climate emergency systematically and comprehensively. Thus, climate policies should not be restricted to transitional government agendas, but rather institutionalized as State policies that guarantee the continuity and effectiveness of climate actions, regardless of changes in government. This integrated and adaptive approach is fundamental to ensuring that Brazil's response to climate challenges is effective, fair, and sustainable (Xavier et al., 2022).

Although it is of great importance to gain centrality on the climate agenda and the efforts of the current federal government to rebuild a dismantled environmental policy, it is worth highlighting that the current climate emergency scenario should no longer be seen as an isolated environmental problem, but rather a systemic and existential threat (Ripple et al., 2023) and that, therefore, should not be a topic restricted to the government agenda, but rather a strong State policy that mobilizes the necessary resources to face the emergency demands (Aronoff et al., 2020).

## 6 Conclusion

This essay analyzed climate adaptation strategies in the Brazilian coastal zone, focusing on climate justice and evaluating the implementation of the 2016 PNA and the 2023–2024 Climate Plan (Plano Clima). The analysis revealed that most of the actions foreseen in the PNA were not implemented, reflecting the federal government's lack of continuity and commitment to robust environmental policies. This gap was further aggravated by the systematic dismantling of environmental policies during the Bolsonaro government, highlighting the vulnerability of government policies in contrast to State policies.

The Climate Plan, unlike the PNA, incorporates climate justice as a central element, demonstrating significant progress in addressing environmental inequalities. However, the effectiveness of these policies depends on continued implementation and solid governance that transcends individual government administrations. The inclusion of sectoral groups focused on racial equality, combating racism, traditional peoples and communities, indigenous peoples, and women in the Climate Plan is a positive step, but the practical implementation of these actions must be closely monitored to ensure concrete results.

This study also highlights the need for more targeted actions that are less dependent on the production of new data, using existing knowledge to implement

real and urgent measures. Climate adaptation must be integrated into a strong State policy, which mobilizes adequate resources and promotes effective social participation to face the climate emergency fairly and effectively.

The trajectory of climate adaptation policies in Brazil illustrates the importance of an integrated and continuous governmental approach, which prioritizes climate justice and responds appropriately to the vulnerabilities of the coastal zone. Only through serious and sustained commitment will it be possible to transform the climate response into an effective State policy, capable of mitigating the impacts of climate change and promoting environmental justice for all affected communities.

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