BRAZIL

Case study on multi-level climate governance

Find our draft analysis and other case studies on the articulation of local, regional and national climate policies in the G20 countries on Climate Chance website
www.climate-chance.org

CLIMATE CHANCE

icare & consult

Brazil

In collaboration with • **Victor P. Goncalves** • **Débora Luisa** • *(I-Care & Consult Brazil)*

CONTENTS

Introduction

Brazil is considered a highly decentralized country since the adoption of the 1988 Federal Constitution. It is divided into 5,570 cities, in 26 states with broad political, administrative, legislative, and financial autonomy. The states are accountable to the Union (Central Government) and the municipalities are accountable to the States. Therefore, all entities have some autonomy, however, some of the responsibilities are divided between the Union and the States (such as providing access to health services and education and protecting the environment). In addition, each entity must respect the laws and rules of the entity within which it is inserted. The Brazilian Constitution does not detail the powers of the states, and it is up to them to define the main rules, noting that, in no way they can contradict the Federal Constitution. The current Federative Pact, which defines the responsibilities and the allocation of resources, is being discussed and a new proposal (Proposed Amendment to the Constitution 188/2019) may cause changes to the current model.

1.Distribution of climate-energy related powers

TABLE 1

SUMMARY OF CLIMATE RESPONSIBILITIES ACROSS LOCAL STATES, AND FEDERAL GOVERNMENT IN BRAZIL

	5,570 MUNICIPALITIES	26 STATES	CENTRAL GOVERNMENT
ENERGY	- Public lighting infrastructure - Discount on IPTU (Property Tax and Urban Territorial Tax) for energy efficiency actions	- Supervision of energy concessionaires - Promoting incentive programs for energy production or energy savings	- Power generation and distribution - Authorization for energy production auctions - Concession grants for new transmission facilities
TRANSPORT	- Mobility planning through a mobility master plan - Urban public transport - Traffic management	- Intercity public transport - Administration of state highways and roads	- Railways, Airports, Shipping, and Ports - Transport regulation and policy - Funding of provincial and municipal projects
HOUSING	- Promotion of housing construction programs and improvement of housing conditions (shared responsibility).	- Social housing and community amenities [b] - Funding for housing	- Mortgage assurance - Funding for housing
WASTE	- Waste collection and treatment - Water supply and sanitation - *Official Community Plan d*	- State Solid Waste Plans	- National Solid Waste Plan
ECONOMY	- Municipal budget usage - Control of the municipal collection. - Investments in energy and environment	- Distribution of the state budget and control of activities carried out and financed. - Control of the state collection. - Actions plans	- Stipulation and control of the annual national budget. - Control of the manufacture and circulation of the money produced. - Federal financing for energy and environment - Action Plans
URBAN AND RURAL PLANNING	- Master Plan for urban and rural planning for municipalities of over 20 thousand inhabitants - Authorization for land parcelling - Protection of historical and cultural heritage - Control and inspection of the built space and its surroundings through a Construction Code	- Inspection, incentive and planning	- Agrarian Reform - National Urban Development Policy - Regulation of the «Urban Policy» chapter of the Constitution through the City Statute
ENVIRONMENTAL PROTECTION	- Management of green spaces - Environmental Licensing (shared responsibility that can be delegated from the State) - Environment protection and pollution control in any of its forms - Forest, fauna and flora preservation	- Environmental Licensing for regional activities (responsibility can be shared with the municipality) - Environment protection and pollution control in any of its forms - Forest, fauna and flora preservation	- Regulation of aspects of Environmental Licensing through CONAMA (National Council for the Environment) which includes States and Municipalities - Protection, improvement and recovery of environmental quality through SISNAMA (National Environment System) that includes States and Municipalities - Licensing of companies that develop their activities in more than one state through IBAMA (Brazilian Institute of the Environment) - Environment protection and pollution control in any of its forms - Forest, fauna and flora preservation
INFRASTRUCTURE	- Basic sanitation infrastructure - Asphalting streets - Management of public spaces (parks, squares, woods, etc.)	- Major infrastructure projects within the state - Highways connecting state cities, regional airports, public supply works	- Large infrastructure projects in one state or more
BUDGET 2019 (IN MILLIONS OF REAIS - EUROS)	5,703 (859)	4,366 (673)	4,574 (689)

The 2019 total budget is presented subdivided into some sectors of interest for this analysis: (In billions of reais):

	5,570 MUNICIPALITIES	26 STATES	CENTRAL GOVERNMENT	TOTAL
Budget for Energy 2019 (in billions of reais)	1.782	73	2.578	4.433
Budget for Transports 2019 (in billions of reais)	14.499	22.581	11.958	49.038
Budget for Habitation 2019 (in billions of reais)	2.483	1.574	22	4.079
Budget for Sanitation 2019 (in billions of reais)	15.099	2.132	515	17.746
Budget for Urban development 2019 (in billions of reais)	56.892	4.715	7.409	69.016
Budget for Environment Management 2019 (in billions of reais)	5.703	4.366	4.574	14.643

Since the adoption of the 1988 Constitution, there has been a movement of fiscal decentralization in Brazil. About 5.8% of the municipalities aggregate 57.4% of the Brazilian population, which is very concentrated in large cities (31.7% of the population lives in 48 municipalities with more than 500,000 inhabitants)[1]. Nevertheless, almost half of the municipal tax collection is concentrated in small municipalities[2]. Larger municipalities have a better capacity to raise their own revenue, but a large majority of small cities depend on revenues from intergovernmental transfers.

2. National legislation for local climate planning and monitoring

Brazil's planning, management, and legislation efforts to tackle climate change are still modest and this is one of the reasons why actions taken by the national government to reduce GHG Emissions are considered "very low" by the Climate Change Performance Index (CCPI), an independent monitoring tool for countries' climate protection performance.

Policies for climate change at the national level advanced with the *National Plan on Climate Change* (2008), followed by the *National Policy on Climate Change* (2009). **However, the National Plan, the National Policy, Brazil's Nationally Determined Contributions (NDC) or any other policy does not establish clear parameters in all sectors for achieving the goals, or on how the national goals are to be distributed to state and local levels.**

This lack of parameters for states and municipalities is a characteristic of the federal system, which allows states and municipalities to act in a decentralized manner from the Central Government. This autonomy allowed each federated entity to assume commitments to tackle climate change, which creates a competitive environment: since the federal government has reduced its efforts to combat climate change, each entity seeks to lead the subject. However, the lack of top-down regulation does not allow for a clear and explicit articulation between the federated entities.

1 IBGE, 2019

2 Santos AMSP. Política urbana no contexto federativo brasileiro: aspectos institucionais e financeiros. Rio de Janeiro: EDUERJ; 2017. 288 p

2.1— 2000–2010: The institutional and legal framework on climate change lacks mechanisms to promote or integrate cities' and states' cimate policies

The 2000-2010 period was characterized by the creation of numerous policies and institutions composing the current institutional and legal framework in Brazil. In 2000, the Central Government created the *Brazilian Forum on Climate Change* (**FBMC** in Portuguese, decree 3.515/2000), a hybrid scientific body (federal government and civil society) that aimed to assist the Presidency of the Republic in the creation and promotion of public policies for mitigation and adaptation. In its origin, the Forum sought to stimulate the creation of regional, state, and municipal forums on climate change. Given the expansion of forums with about 23 state or municipal forums, the **FBMC** focuses its efforts on articulating itself with these forums and coordinating the different regions' climate agendas and policies.

Between 2007 and 2009, a series of instruments were created to guide Brazilian climate policies. In 2007, the Central Government created the *Secretariat for Climate Change and Environmental Quality* (**SMCQ** in Portuguese) focused on the implementation of mitigation actions, and the *Interministerial Committee on Climate Change* (**CIM** in Portuguese, decree 6.263/2007). The **CIM** was coordinated by the Office of the Presidency of the Republic, several federal ministries, and the *Brazilian Forum on Climate Change* to ensure the participation of civil society and local governments. It oversaw preparing the National Policy on Climate Change and the National Climate Change Plan (PNMC). An *Executive Group on Climate Change* (**GEx** in Portuguese), subordinated to the CIM was created specifically to prepare, implement, monitor, and evaluate the National Plan **PNMC** (under CIM guidance).

COMPREHENSIVE FRAMEWORK OF THE NATIONAL CLIMATE CHANGE PLAN

The *National Climate Change Plan* launched in 2008 provides a comprehensive framework of 25 actions to reduce deforestation, increase the production of renewable energy, the share of the rail, mass transit and bicycling in the country's transportation sector, and increase the recycling of waste. It had the following main goals:

- Reducing annual deforestation rate in the Amazonia, by 80 % by 2020 (Decree nº 7.390/2010); expanding domestic consumption of ethanol;
- Doubling the area of planted forests;
- Replacing one million old refrigerators per year for 10 years and increasing recycling of solid urban waste;
- Increasing cogeneration electricity supply and reducing non-technical losses in electricity distribution;
- Recommending the creation of a national cap-and-trade system for carbon emissions.

BOX 1

However, the absence of monitoring mechanisms does not allow us to measure the impacts of the Plan. Many of these commitments, in perspective, were facilitated due to the definition of goals linked to a GDP growth of 5% per year, which never materialized.

The **GEx** had also the power to create Working Groups (WG) on climate related issues, in which the participation of states and municipalities was promoted. **However, the outcomes from these were never internalized by the higher authorities, the GEx and the CIM. There is no record of activities after 2014, a time when there was already low adherence and participation by Brazilian states**[3].

3 Federal Senate Environment Commission (2019). Evaluation of the National Policy on Climate Change. Found at: https://bit.ly/34iFcer

In 2009, the main guiding instrument of Brazilian climate policy was created: The National Policy on Climate Change (**PNMC** in Portuguese, law 12.187/2009), which formalized Brazil's voluntary commitment to the UNFCCC to reduce GHG emissions between 36.1% and 38.9% of projected emissions by 2020. Even though the GHG emissions reduction goals were modest considering the real pace of the economy, the National Policy represented an important step for Brazil, since few countries had, at the time, legal instruments to consolidate their climate change strategies. Also, the law recognized multipartite bodies as PNMC governance instruments: the Interministerial Commission, the Brazilian Forum, the Interministerial Committee, the Brazilian Network for Research on Global Climate Change (Rede Clima in Portuguese) and the Commission for the Coordination of Meteorology, Climatology and Hydrology Activities.

Two additional instruments were created with the National Policy:

- In 2009, the *Brazilian Panel on Climate Change* (**PBMC** in Portuguese), a national scientific body, which aimed to gather, synthesize, and evaluate scientific information on the relevant aspects of climate change in Brazil.
- In 2010, the first *National Fund on Climate Change* (**FNMC** in Portuguese), with the objective of securing resources to support projects or studies and finance enterprises, institutions and local governments with adaptation or mitigation actions. The Fund was regulated by Decree No. 7,343 / 2010 and was most recently amended by Decree No. 9.578 / 2018. As of 2013, the budget has been restricted (e.g. the resource for non-reimbursable projects has been reduced from R$ 33 million to R$ 5 million between 2011 and 2018 – CMA, 2019). The last call for projects was held in 2018 and as of 2019 the fund's operations were halted. The *National Fund for Climate Change* were also an unprecedented initiative for a developing country, designed to be one of the most important instruments of policy.

Despite the advancement of climate policies, there was little connection between the National Policy with state and municipal policies. The Policy provided some guidelines for states and municipalities but did not require them to formulate climate plans or specific objectives. Since 2001, municipalities of over 20,000 inhabitants are required to formulate a Master Plan, representing the basic instrument of urban policy establishing the rules, parameters, incentives, and instruments for the development of the city. Some cities are integrating climate and environmental priorities in these plans on a voluntary basis.

In contrast, according to the Policy, national actions to tackle climate change should have considered and integrated the actions promoted at the state and municipal levels by public and private entities, but the 2008 National Plan did not provide mechanisms to integrate these local actions. Several states and municipalities had formulated emissions reduction targets, such as the first state law created by Amazonas, which also established a dedicated body to deal with climate change issues, but is now phased out due to budget constraints (LSE, 2015). A similar observation can be made for cap-and-trade systems initiatives developed at the subnational level but which did not occur neither: both the state of Rio de Janeiro and Sao Paulo were contemplating the creation of a state emissions trading systems, but neither were realised. Rio de Janeiro could have become the first Latin American government to pass an emissions trading system if the state governor had signed the decree in June 2012 (EFD, 2016).

Despite the lack of a governance model and a clear articulation with states and municipalities, in this period climate change was no longer treated exclusively as an environmental and international agenda and became part of the country's development agenda, involving productive sectors, civil society, and all levels of government.

2.2— 2011–2018: Development of Sectoral Plans and Policies with few obligations or support for cities and regions

The Decree in 2010 (no. 7.390/2010) regulating the National Plan also required sectoral plans to support the implementation of the National Policy and ensure that several national policies were integrating mitigation actions[4] : 4 plans already existing were integrated as sectoral plans while 4 new plans were drafted on mining, industry, agriculture and health (LSE, 2015) :

- Action Plan to Prevent and Control Deforestation in the Amazon (PPCDAm);
- Action Plan to Prevent and Control Deforestation and Fire in the Cerrado (PPCerrado);
- Low-Carbon Agriculture Plan (ABC Plan);
- Ten-Year National Energy Expansion Plan (PDE);
- Plan for Climate Change Mitigation for the Consolidation of a Low-Carbon Economy in the Manufacturing Industry;
- Low-Carbon Mining Plan (PMBC);
- Plan on Transportation and Urban Mobility for Climate Change Mitigation (PSTM);
- Health Mitigation and Adaptation Plan.

The plans are linked to the PNMC and contained details about the contribution of each sector to the emission reductions highlighted in the National Policy.

• DEFORESTATION • The PPCDAm was undoubtedly the most successful plan of all in terms of reducing GHG emissions mainly because it was coordinated by the Casa Civil (Office of the President of Brazil). But the Plan was transferred in 2013 to the Ministry of the Environment and lost strength. Its implementation led to a significant reduction in deforestation in the Brazilian Amazon (drop of 83% between 2004 and 2012 – CMA, 2019), recognized worldwide as one of the main actions implemented to date to protect tropical forests and combat the effects of climate change.

The PPCerrado also brought good results in terms of the reduction of deforestation in the Cerrado. According to the monitoring of Prodes Cerrado, a project that monitors the clearing of native vegetation in the biome, between 2004 and 2012 there was a reduction of over 68% in the increased deforestation of the biome.

Also, in 2015, the National Commission for REDD+ (CONAREDD+) was established to monitor the implementation of the National Strategy for REDD+[5] in Brazil. It is formed by several ministries as well as Civil House of the Presidency of the Republic. Regarding the REDD+, the most advanced states in terms of regulation are Acre, Amazonas and Mato Grosso, with legislation already in place or in the final drafting phase. These laws were drafted with the participation of civil society through the State Forums in Mato Grosso and Amazonas, and in the case of Acre, with the participation of state councils. In all three cases, several public and sector-wise consultations were held.[6]

• AGRICULTURE • The Low-Carbon Agriculture Plan (ABC Plan) was launched to promote the adoption of sustainable production technologies, selected to meet the GHG emissions reduction goals in the agricultural sector. The ABC Plan could have had better results given the importance of agriculture Brazil. However, the relatively limited funds dedicated the ABC, compared to the

4 Sectoral Plans included Clean Development Mechanisms (CDM) and Nationally Appropriate Mitigation Actions (NAMA)s, a planning tool within the UNFCCC that refers to any action that reduces emissions in developing countries.

5 The National Strategy for REDD + in Brazil (ENREDD+), seeks the elimination of illegal deforestation, the conservation and recovery of forest ecosystems and the development of a sustainable low carbon forest economy, generating economic, social and environmental benefits.

6 REDD + in the states of the Amazon: mapping initiatives and challenges for integration with the Brazilian strategy. IDESAM, 2012, found at: https://idesam.org/publicacao/mapeamento-redd-amazonia-ptbr.pdf

Safra Plan - around 1% of it (CMA, 2019) - and the National Family Farming Program7, indicate little commitment from public policies to low carbon agriculture. Despite these limitations, the Plan is still considered to have high potential for sustainability, mainly due to its capacity to support initiatives that can increase climate resilience and reduce the impacts of Brazilian agricultural production, due to the use of high productivity actions and technologies.

• **ENERGY** • The Ten-Year National Energy Expansion Plan (PDE) foresees investments of R$ 2.3 billion for the energy sector until 2029. However, this plan is an example of route deviation, since 77.6% of the total value represents the expected investments in the oil and natural gas sector (CMA, 2019).

• **MOBILITY** • Prior to the Sectoral Plan PSTM, a law in 2012 establishing the *National Urban Mobility Policy* (PNMU), stipulated that towns with more than 20,000 inhabitants must produce their Urban Mobility Plan (UMP), prioritizing active mobility and public transport and in a way that is integrated with their master plan, within three years. Previously, only cities with more than 500,000 inhabitants were under this obligation; with this new law, there are now 1,663 municipalities that must submit a UMP, otherwise they will no longer be able to receive federal funds intended for urban mobility (CODATU, 2015).

• **INDUSTRY** • The Plan for Climate Change Mitigation for the Consolidation of a Low-Carbon Economy in the Manufacturing Industry aimed at increasing the energy efficiency of the industrial sector (voluntary commitment to a 5% reduction in industrial emissions related to energy use and industrial processes compared to the baseline scenario projections for 2020). As a result of the Plan, the National Confederation of Industry (CNI in portuguese), which represents more than 800,000 industries in the country, has developed a series of initiatives, studies and strategic recommendations to achieve the goals (CNI, 2018). Between 2009 and 2016, CNI produced annual position papers for the industrial sector in relation to international negotiations under the UNFCCC.

• **ADAPTATION** • In 2015, the Federal Government launched the study "*Brazil 2040: Scenarios and alternatives for adapting to climate change*", to estimate how climate change would affect economic sectors in different horizons and to suggest strategies for prevention and resilience. The study was composed of six sub-themes: climatic scenarios, water resources, urban and coastal infrastructure, agriculture, transport and energy. The primary objective of the study was subsidizing relevant processes of the National Policy on Climate Change and the National Plan for Adaptation to Climate Change (**PNA**), an instrument developed by the federal government in collaboration with the civil society, the private sector and state governments with 11 sectors covered. The one related to cities established 15 guidelines and recommendations among which was *"federative articulation between the three spheres of government aiming at cooperative action in reducing vulnerability to climate change through inter-federative planning and management between municipalities and states, especially public functions of common interest in metropolitan regions and urban agglomerations"*. The PNA has not yet been implemented effectively since the PNMC and the sectoral plans foreseen therein were elaborated with a greater orientation on mitigation issues. A Decree in 2018 indicated (no. 9.578/2018) that the PNA must be revised prior to the preparation of the *Planos Plurianuais* - multi-annual mandatory plan that establishes guidelines and goals to be followed by the Federal Government over a period of four years.

All these sectoral plans have no explicit obligations or guidance for states and municipalities. However, in 2013, there was a short attempt to articulate national policies with states and municipalities within the Federative Articulation Center for Climate (NAFC) that was created with the objective of integrating the various climate sectoral policies, notably regarding impacts, to promote

7 Every year a "harvest plan" groups together the measures taken by the government for the crop year beginning in June. There is one Plano Safra for commercial agriculture and a smaller one for family farming which provide financing for costs and investments in the implantation, expansion, or modernization of the structure of production, processing and services in rural establishments

the exchange of experience between municipal bodies. The NAFC worked intensively during a certain period, where working groups were created to promote the discussion and participation of states and municipalities. However, its results were never internalized by higher levels. The Center has not been active since 2014 according to the Ministry of the Environment portal.

From 2015 to 2016, Brazil faced a strong economic and political turbulence that culminated in the impeachment of the president and the environmental agenda lost strength, which led states and municipalities to lead the main actions.

In 2016, Brazil ratified the Paris Agreement and established its NDC, committing to reduce GHG emissions by 37% below 2005 levels by 2025, with a subsequent indicative contribution of reducing GHG emissions by 43% below 2005 levels, in 2030. To this end, the country pledged to increase the share of sustainable bioenergy in its energy mix to approximately 18% by 2030, to restore and reforest 12 million hectares of forests, as well as to achieve an estimated 45% share of renewable energy in the energy mix in 2030. **There are no specific targets for states or municipalities in Brazilian's NDC.**

2.3— 2019–2020: Skepticism of the federal government and strengthening of the cities' and states' agenda

With the election of the far-right President Jair Messias Bolsonaro, environmental and climate policies were no longer a priority for the Central Government, and States and Municipalities have taken the lead.

According to the Environment Committee[8] (CMA in Portuguese) of the Brazilian Senate, this is a moment of rupture in Brazilian climate policy, with the extinction of the reference areas in the Environment and Foreign Affairs portfolios, the paralysis of the entire governance structure on climate change, the discontinuity in the implementation of policy instruments, including important financial mechanisms such as the National Climate Fund and the Amazon Fund, and the country's refusal to host the 25th Conference of the Parties. For example, in 2018, the federal government budget, approved by Congress in 2018, provided for an investment of R$ 437 million for the country to adapt to the effects of climate change. However, the use of 82% of this total, R$ 357 million, was halted since the Ministry of the Environment did not disclose the plan for the application of the resources.

During Bolsonaro's mandate, the federal government edited a set of decrees that relate to environmental policy and the PNMC. These changes indicate a clear dismantling of Brazilian structures in the area of climate change and the stagnation of national debates aimed at the implementation of the PNMC. Most of the decrees created new multipartite structures reducing the participation of civil society in favor of greater participation by representatives of the private sector. In some areas, there is no mention whatsoever of the participation of states or municipalities in the created Commissions. For example, the new Decree for the National Fund on Climate Change appointed its Steering Committee, an action that sought to correct the stoppage of resource applications since 2019. However, the Steering Committee increased the representation of the private sector, in detriment of the academic sector, civil society and states and municipalities. Thus, while previously balanced, participation now includes five private sector confederations and the Brazilian Climate Change Forum, which also now has private sector representatives.

8 Evaluation of the National Policy on Climate Change, found at: https://issuu.com/ascomcontarato/docs/avalia__o_da_pol_tica_nacional_sobre_mudan_a_do_cl

As of 2019, the Secretariat for Climate Change and Forests, the Department of Environmental Education, the Plans to Combat Deforestation were eliminated, in addition to the reduction of inspection operations by IBAMA – responsible for the execution of the National Environment Policy, carrying out various activities for the preservation and conservation of the natural heritage, exercising control and inspection over the use of natural resources. According to information from IBAMA employees, the institution suffered a major cut in resources, which forced the reduction and pace of its inspection operations which led to a reduction in the number of fines imposed (a 25% reduction between 2018 and 2019) and increased deforestation in Brazilian biomes. In 2020, for example, the Amazon recorded a 15.7% increase in the number of fires, while the Pantanal had an increase of 120% compared to 2019. The National Institute of Space Research (INPE) registered, until November 2020, 40 thousand km^2 of deforestation in the Pantanal, about 30% of the biome (INPE, 2020). In addition, there was a change in administrative rules and routines and the government management positions were held by people with no experience. This has culminated in the invasion of gold mining and deforestation in indigenous and Quilombola lands and an increase in the number of fires, mainly in the Amazon and the Pantanal.

Soon after the fires in the Amazon took on a large proportion and became an international appeal, the Central Government mentioned the lack of resources to combat deforestation. As a matter of fact, the gravity of the country's fiscal situation has led to strong contingency in all areas of the government, which has directly affected the programs for monitoring and fighting forest fires, which lost 38% and 24% of their budget, respectively. However, the government took the step of disqualifying the Amazon Fund, an important source of non-budgetary resources, accusing it of being the object of irregularities, suggesting changes in the destination of the funds and criticizing its entire governance structure. The Amazon Fund had a Steering Committee - COFA, with the task of determining its guidelines and monitoring the results obtained; and with a Technical Committee - CTFA, appointed by the Ministry of the Environment, whose role is to attest to emissions from deforestation in the Amazon. Decree No. 9,759, of April 2019, promoted the extinction of several multipartite bodies of the federal public administration, including COFA and CTFA. To this date, the new governance of the Amazon Fund has not been defined.

The Fund, in which 60% of the approved projects aimed to support federal, state, and municipal governments in their actions to strengthen forest management, had its activity paralyzed and has not approved projects since the beginning of 2019, despite the governors of the Amazon region having expressed themselves in favor of continuing operations.

More recently, Brazil updated its NDC. According to several organizations like WWF and Brazil Climate Observatory, the Brazilian government wasted a chance to show commitment to the climate issue and to proactively position itself in the international debate. **Instead of increasing its ambitions, the Brazilian NDC goes back on commitments already made.** The new NDC does not show the absolute numbers of emission reductions, only maintains the relative target for 2025 (a reduction of 37% compared to 2005) and assumes as a target for 2030 what was previously an indication (a reduction of 43% compared to 2005). The base year emissions reference, 2005, was 2.1 GtCO2e in the first NDC and goes to 2.8 GtCO2e because of a methodological improvement. That is, the absolute targets that previously represented net emissions levels of 1.3 GtCO2e in 2025 and 1.2 GtCO2e in 2030 are increased to 1.8 GtCO2e in 2025 and 1.6 GtCO2e in 2030. In addition, the new NDC does not propose emissions neutrality in 2060, but indicates that this is an intention conditioned to the payment of US$10 billion per year to achieve the proposed results.

In this context of a strong discontinuity of climate policies and the absence of top-down goals, states and municipalities have shown encouraging progress in developing their own plans and goals

in insolation but also through transnational networks or in partnership with international entities. Networks such as ICLEI support 41 cities and the State Governments of Amazonas, Pernambuco, Minas Gerais and São Paulo, while C40 supports 4 Brazilian cities (São Paulo, Salvador, Curitiba and Rio de Janeiro) to become carbon neutral by 2050. Lastly, the Covenant of Mayors has 103 Brazilian cities that are signatories to the Covenant of Mayors in Latin America and committed to formulating and implementing mitigation and adaptation plans.

Yet, while these networks bring crucial support, monitoring the national framework offered to Brazilian states and municipalities and tracking their progress remains essential to ensure coherence between the different administrations and at the national level. A rapid summary of the obligations toward municipalities and states illustrates this lack of coherence.

2.4 - Current planning obligations and monitoring for states and municipalities

• SUMMARY OF OBLIGATIONS OF BRAZILIAN LOCAL AUTHORITIES FOR CLIMATE PLANNING AND MONITORING • In general, national policies do not establish obligations for subnational authorities in relation to climate planning and monitoring. The following table summarizes the subject:

<table>
<tr><th></th><th>AT CITIES LEVEL</th><th>AT REGIONAL LEVEL</th></tr>
<tr><td rowspan="2">PLANNING TOOL</td><td colspan="2">Each entity has been using different planning tools at the local and regional level. Some cities and states follow the methodologies of international and initiatives, others seek inspiration in international plans, such as the case of the Energy and Climate Change Plan of the state of Minas Gerais, in collaboration with the French region of Haut-de-France.</td></tr>
<tr><td>No mandatory planning tools for climate, but some cities use other mandatory plans to promote climate goals and measures:
Master Plans are mandatory since 2001 for cities with more than 20,000 inhabitants as established by the City Statute, and defines the urban development guidelines of each city in at least 10 years.
An Urban Mobility Plan (UMP) is required since 2012, for cities since with more than 20,000 inhabitants, which must be integrated in the Master plan</td><td>No mandatory objectives or policies for state for climate, but most of the states have created their own climate laws.</td></tr>
<tr><td>MODALITIES OF REPORTING</td><td colspan="2">There are no national reporting tools, each city and region choose the one that best suits its reality and its technical-political processes. Each city and region determine its own rules unless they are linked to the obligations of its networks (ICLEI, C40…)</td></tr>
<tr><td>CARBON ACCOUNTING METHODS AND OBLIGATIONS</td><td colspan="2">There is no general rule for carbon accounting. Each city makes its own inventories, either by its own means, or through its networks. The city of São Paulo, for example, carries out its inventories based on the GPC method of C40, ICLEI and WRI.</td></tr>
<tr><td>MONITORING AND EVALUATION METHODS AND OBLIGATIONS</td><td colspan="2">The rules for monitoring indicators are different for each state and each city. There is no national determination on the topic.</td></tr>
</table>

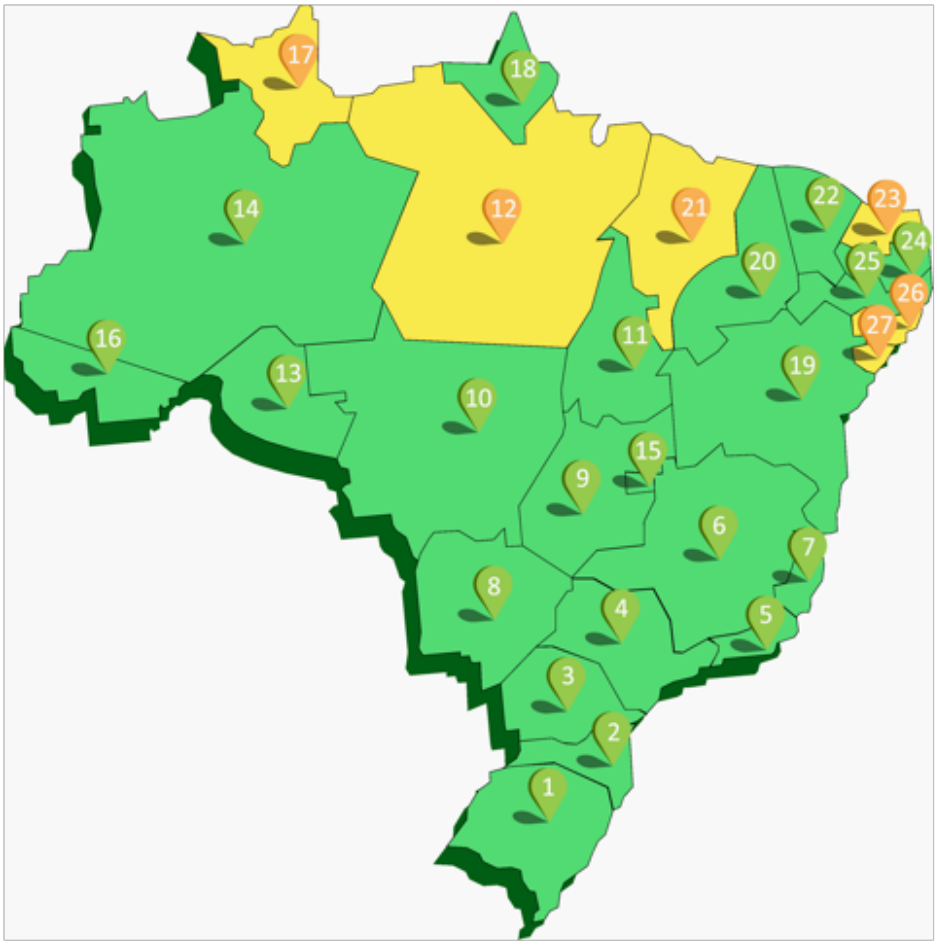
• TRACKING PROGRESS FOR CLIMATE PLANNING • The absence of monitoring at the federal level or at the state level for cities climate planning, makes difficult the analyses of their possible synergies with voluntary international initiatives, national tools and legislation that are available for Brazilian states and cities. States are developing plans and laws for climate action without precise federal guidance, usually developing laws and plans internally through their environmental departments. Many cities and states have laws, but do not have mitigation and adaptation plans or a governance structure. Others have plans, but do not have an inventory of emissions. Therefore, the decentralization or the lack of federal piloting creates a problem of compatibility and comparison between climate strategies.

A study conducted by Climate and Society Institute (iCS) evaluated the Climate Laws of Brazilian States in terms of existence of specific legislation for climate change, legislation related to climate governance and whether the state has any financial instrument. 21 of the 27 states (26 states + the federal district) have adopted specific climate legislation, with varied levels of implementation and monitoring of results, as is shown in the Figure below.

FIGURE 1

CLIMATE LAWS OF BRAZILIAN STATES

Source: iCS, 2019 - adapted by I Care & Consult



1. Rio Grande do Sul	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
2. Santa Catarina	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
3. Parana	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
4. Sao Paulo	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
5. Rio de Janeiro	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
6. Minas Gerais	√	CC Policy	√	CC Governance	X	Financing Instrument for CC
7. Espiritu Santo	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
8. Mato Grosso do Sul	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
9. Golas	√	CC Policy	√	CC Governance	X	Financing Instrument for CC
10. Mato Grosso	√	CC Policy	√	CC Governance	X	Financing Instrument for CC
11. Tocantins	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
12. Para	X	CC Policy	√	CC Governance	X	Financing Instrument for CC
13. Rondonia	√	CC Policy	√	CC Governance	X	Financing Instrument for CC
14. Amazonas	√	CC Policy	√	CC Governance	X	Financing Instrument for CC
15. Distrito Federal	√	CC Policy	X	CC Governance	X	Financing Instrument for CC
16. Acre	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
17. Roraima	X	CC Policy	X	CC Governance	X	Financing Instrument for CC
18. Amapa	√	CC Policy	√	CC Governance	X	Financing Instrument for CC
19. Bahia	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
20. Piaui	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
21. Maranhao	X	CC Policy	√	CC Governance	X	Financing Instrument for CC
22. Ceara	√	CC Policy	√	CC Governance	X	Financing Instrument for CC
23. Rio Grande do Norte	X	CC Policy	X	CC Governance	X	Financing Instrument for CC
24. Paraiba	√	CC Policy	X	CC Governance	X	Financing Instrument for CC
25. Perambuco	√	CC Policy	√	CC Governance	√	Financing Instrument for CC
26. Alagoas	X	CC Policy	√	CC Governance	√	Financing Instrument for CC
27. Sergipe	X	CC Policy	X	CC Governance	X	Financing Instrument for CC

As for international initiatives providing a framework for Brazilian states and municipalities for their climate policies we note as of September 2020:

- For cities: 103 Brazilian cities are signatories of the Covenant of Mayors in Latin America and the Caribbean, but only 10 have an GHG inventory, and 10 have an Adaptation assessment. Only Rio de Janeiro and Salvador are compliant and have submitted a full Mitigation and Adaptation plans (GCOM). Rio de Janeiro, Salvador signed cooperation agreements with C40 along with Curitiba and São Paulo.
- For states: 9 regions are members of the Under2 Coalitions, while 2 regions (Sao Paulo and Tocantins) are part of the Regions Adapt initiatives.

3. Articulation of the climate policy between the different levels of governance

3.1 - Linkages between local governments and provinces / territories

Climate change policies differ among Brazilian states and municipalities, and not any states have made mandatory for municipalities to adopt emissions reduction goals or to formulate local policy. The level of integration is therefore rather low between these two levels of governance. Presented below are the climate policies of three states and their relationship with their integrating municipalities.

• STATE OF PARÁ • Some states require the compatibility between municipalities policies and the state policy on climate change such as Pará, which has just approved its State Policy on Climate Change, which indicates, in its principles, that the municipalities of the state, when developing and implementing their policies and plans on climate change, must observe the state policy. However, the State Policy does not require municipalities to develop and implement their own climate policy.

The State System Steering Committee on Climate Change in charge of monitoring the implementation of the instruments of the State Policy on Climate Change of Pará and determining the measures necessary for the achievement of its goals does not mention the participation of municipalities. The Policy focused on access to information and attributed to the Municipal Climate Change Forums the role "*to promote discussion and dissemination at the local level on issues related to global climate change, with a view to collecting subsidies for public policy formulation, ensuring broad popular participation.*" (CPISP, 2020).

• STATE OF PIAUÍ • The state of Piauí, in the northeast region of Brazil, has a great income inequality among the population, besides a large part of the population living in poverty. In absolute terms, in 2017 Piauí had 1,456,395 people living in poverty, according to the Brazilian Institute of Geography and Statistics (IBGE), which represents 45.3% of the population of that state.

At the end of 2011, a law established the State Policy on Climate Change and Combating Poverty. Among its objectives are the fight against poverty, prioritizing the most vulnerable and least favoured communities in the application of measures and programs for adaptation of communities affected by adverse phenomena arising from climate change; and a national and international cooperation for the realization of mitigation projects, respecting the needs of sustainable development.

The law mentions the implementation of measures to promote climate change adaptation by the state and its municipalities, with the participation and collaboration of interested or beneficiary social economic agents, those especially vulnerable. The actions currently carried out are the exclusive responsibility of the state government. The greatest actions taken were the creation of Conservation Units in Piauí and the geospatial monitoring of the Biomes. The municipalities have the support of the state to carry out mitigation actions, but there is no explicit action plan for the cities.

• STATE OF MINAS GERAIS• The state of Minas Gerais, which is in the southeast region of the country, and one of the most developed, has also developed its Climate Change Policy. The Policy was followed by the elaboration of the Energy and Climate Change Plan (PEMC), which was based on the structure of the Climate, Air and Energy Plans of French cities. The PEMC was built in concertation with key players from the sectors addressed (Energy, Waste, Effluents, Transport, Industry and Agriculture, Forestry and Land Use) and with municipal players in a major participatory process.

Neither the policy nor the Plan defined actions and responsibilities of the municipalities, but from the Plan a series of actions were created to support cities. One of the Plan's developments was, for example, the creation of a 50-million-euro financing line dedicated to the municipalities. This financing credit line, managed by the Development Bank of Minas Gerais (BDMG), helped in the development of climate projects in some cities.

3.2 - Linkages between provinces / territories and the federal government

In general, it is perceived that, according to the characteristic of the country, which is based on a federal model, laws do not normally define explicit obligations to municipalities. Even when there is an obligation, as in the case of the elaboration of a Master Plan for municipalities of over 20,000 inhabitants, there are no specific rules or criteria that direct the norms that the municipalities may set.

In 2009, the Federal Court of Accounts (TCU)[9] carried out an assessment of climate policies in Brazil and indicated that the treatment of issues related to climate change took place in a dispersed manner and with weak results. It also indicated that the National Plan on Climate Change did not provide mechanisms for implementing the proposed actions and did not have a model for managing its actions or for disseminating the actions and results obtained.

TCU recommended that an action plan should have be drawn up with the objective of implementing priority measures, defining roles and responsibilities. However, no negotiation spaces were created, either at the federal or at the state level, other than the traditional committees. The policy has not progressed and there is still no explicit definition of the powers of each of the units that operate, nor of the role of states and municipalities in alignment with national policy. This creates a risk of duplication of efforts, implying greater public expenditure to obtain the same result, and it creates a conflict of powers, generating competition between state actors and local actors.

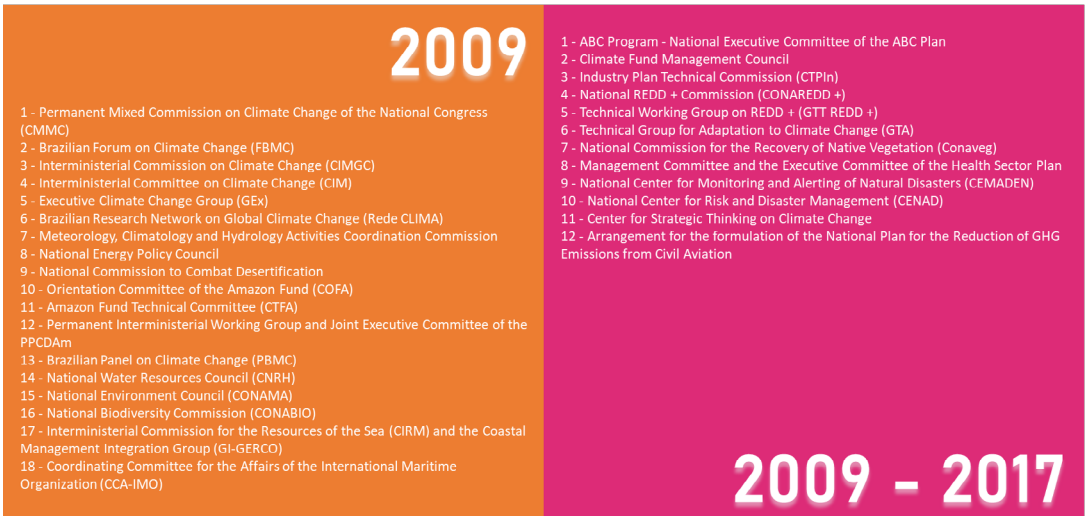
In the following years, the Ministry of Environment centralized the decisions and since the institution of the National Policy on Climate Change (PNMC) climate change began to take the shape of a State policy. In general, the PNMC allocates specific roles - including funding, public engagement and intergovernmental coordination - to federal authorities and has institutional arrangements to support regulation and policy implementation. The set of arrangements relevant to the PNMC, up to 2009 and from 2009 to 2017 are listed below. Some of these arrangements are linked to state and municipal spheres.

9 This information appears in the following link. In the publication, the original link to the TCU study is no longer available: https://d3nehc6yl9qzo4.cloudfront.net/downloads/como_se_governa_a_pnmc_no_brasil_hoje.pdf

FIGURE 2

SET OF ARRANGEMENTS RELEVANT TO THE PNMC, UP TO 2009 AND FROM 2009 TO 2017.

Source: Instituto Clima e Sociedade, Brazilian Forum on Climate Change and WRI.



• **Brazilian Forum on Climate Change:** the Brazilian Forum on Climate Change (FBMC) is an example of an entity that supports society-government coordination, in a hybrid government-society system and with the collaboration of representatives of states and municipalities. It produces strategic guidelines that seek to mobilize society. The Federative Articulation for Climate Center (NAFC) also promotes dialogue between the state and federal governments to define an agenda for work on the National Policy on Climate Change. However, it has been inactive since 2014.

• **ABC Program and its articulation with the states:** the Low Carbon Emissions Agriculture Plan (ABC) Program, an instrument for integrating the actions of governments (federal, state and municipal), the productive sector and civil society, to reduce GHG emissions from agricultural and livestock activities, has a National Executive Committee, with the objective of periodically monitoring the implementation of the Program, in addition to proposing measures to overcome difficulties. At the operational state level, State Management Groups were created to promote the coordination and articulation of the Sectoral Plan for Agriculture in the states.

• **Energy policies**: With regard to the regulation of energy policies and the exploitation of mineral resources in the country, the National Council for Energy Policy (CNPE), created by the Decree no. 3,520, of June, 2000, has a representative from each state for definitions of operation and coordination. The council promotes the rational use of the country's energy resources with the inclusion of considerations related to the protection of the environment and the promotion of energy conservation.

• **Reduction in deforestation rates**: The Permanent Interministerial Working Group (GTPI) and the Mixed Executive Committee of the PPCDAm and the PPCerrado also have relations with states, especially when state plans to control deforestation are being prepared. It is the responsibility of these authorities to propose measures and coordinate actions aimed at reducing deforestation rates in Brazilian biomes, mainly through the elaboration of action plans for prevention and control.

• **Brazilian Panel on Climate Change**: Another important articulation entity created is the

Brazilian Panel on Climate Change (PBMC), with the role of gathering, synthesizing and evaluating scientific information on the relevant aspects of climate change in Brazil. It has several work groups that may involve states and municipalities. In parallel, the National Center for Risk and Disaster Management (CENAD), which implements the National Water Resources Policy and arbitrates conflicts, and the National Water Resources Council (CNRH), responsible for environmental licensing, including low carbon activities, have States and Municipalities in the operation and coordination.

• **Drought Observatory:** Monitoring device for drought conditions in the Northeast region of Brazil. Created in 2012 by the Ministry of National Integration, faced with the need to move from a strategy of ad-hoc responses to crises to a more anticipatory and integrated approach to risk management, the Drought Monitor benefits from the technical and financial support of the World Bank. With the participation of regional and federal agencies in the identification of drought conditions, the Drought Monitor produces a monthly drought severity map and indicators. This systematic risk assessment, shared between the regional and national spheres, is an essential tool for decision support and vulnerability reduction. The Monitoring device is present in the 5 regions of the country and has 19 participating states.[10]

To compensate for the lack of a common GHG accounting methods or the lack of local data, the Brazil Climate Observatory (*Observatório do Clima*, OC), has initiated an ambitious spatialization of GHG emission data at state and municipal levels. At the Federal level, the absence of monitoring mechanisms and the National Climate Change Plan does not allow measuring the impacts of the Plan. States are developing plans and laws for climate action without precise federal guidance in a different way, usually developing laws and plans internally through their environmental departments. Cities and states follow different planning tools, mostly from international initiatives.

Therefore, the Climate Observatory has built the Greenhouse Gas Emission and Removal Estimating System (SEEG) that estimates for each states and cities emissions based on the IPCC guidelines (IPCC), on the Brazilian GHG Inventories prepared by the Ministry of Science, Technology and Innovation (MCTI), and in data obtained from government reports, institutes, research centres, sector entities and non-governmental organizations (SEEG, n.d). For each state it estimates the distribution of emissions by sector, as well as their historical evolution. The SEEG method was adopted in India and Peru based on the Brazilian experience.

4. National and international funding for local governments

4.1 - National funding

• NATIONAL FUND ON CLIMATE CHANGE (CLIMATE FUND) • It can be considered the main instrument for promoting projects under the National Policy on Climate Change, it is linked to the Ministry of the Environment (MMA). Created by Law No. 12.114, in 2009, the Climate Fund has as funding sources amounts allocated in the annual budget law of the Union and its additional credits; donations made by national and international entities, public or private; resources from interest and amortization of financing and other modalities determined by Law No. 12.114 / 2009. The Fund finances projects in the areas of urban mobility, sustainable cities, efficient machinery and equipment, renewable energy, solid waste, charcoal, native forests, carbon management and services and innovative projects. The resources of the Climate Fund are divided into two types:

10 http://monitordesecas.ana.gov.br/mapa?mes=7&ano=2020

• Non-refundable financing, managed directly by the MMA and for which public calls are used, with lines of action and specific conditions for the presentation of projects. They are mostly aimed at municipalities, state departments, social and educational institutions, as well as companies, organizations and state foundations.

• Repayable financing, under the responsibility of National Bank for Economic and Social Development (BNDES). They are focused on mitigation actions, linked primarily to sectoral plans, and adaptation actions that have the potential for financial return and investments by the public sector.

According to MMA data, 192 projects were supported by the fund since its creation in 2009 and have already made nearly 100 million reais (€16 million) available for projects related to climate change (MMA). The fund had its last call for proposals made in 2018 and in 2019 it was almost completely paralyzed in its operations.

• THE AMAZON FUND • It is an accounting fund, established by the Decree No. 6.527, in 2008 and managed by BNDES, whose purpose is to raise donations for actions to prevent, monitor and combat deforestation and to promote conservation and the sustainable use of forests in the Amazon biome[11]. Up to 20% of the resources can be used in other Brazilian biomes and in other tropical countries. Proposals for requests for funds from the Amazon Fund can be made by public administration institutions (federal, state and municipal), public companies, private companies and civil society organizations

According to information from the Fund, more than 103 projects have already been supported since 2010, amounting to 1,860 million reais (~€300 000). Almost 60% of this resource went to government institutions in initiatives carried out by the Union, states and municipalities. The Fund, which received most of the donations from Germany and Norway, was suspended in 2019, after Brazil's image was eroded by the Amazon fires crisis and after the fund's governance structure was extinguished. The government wanted to start using money from the fund to compensate landowners in conservation units. More recently, the Government has signalled the release of resources that were suspended.

• NATIONAL ENVIRONMENT FUND (FNMA) • is administered by the Ministry of the Environment, which can be considered the main and oldest public socio-environmental fund in the country. It was created in 1989 by the Law No. 7.797 to support initiatives aimed at promoting the rational use of natural resources, including the maintenance, improvement, or recovery of the environmental quality of the diverse Brazilian ecosystems. Throughout its history, 1,446 socio-environmental projects were supported, for a total R $ 270 million (€41.3 million).

Public institutions belonging to the direct or indirect administration, at their different levels (federal, state and municipal) can receive resources from FNMA, as well as, Brazilian private non-profit institutions, civil society organizations from public interest (OSCIP) and grassroots organizations.

• ABC PROGRAM • it encourages investment in agricultural projects that reduce GHG emissions and deforestation, in addition to expanding the area of cultivated forests, and encouraging the recovery of degraded areas, increasing agricultural production on a sustainable basis and adaptation rural properties to environmental legislation. The Agribusiness Study Center of the Getulio Vargas Foundation (GVAgro) in partnership with the FGV's Center for Sustainability Studies (GVces)

11 The Amazon biome (Portuguese: Bioma Amazônia) contains the Amazon rainforest, an area of tropical rainforest, and other ecoregions that cover most of the Amazon basin and some adjacent areas to the north and east.

formed the ABC Observatory, active since 2013, an initiative aimed at engaging society in the debate on low carbon agriculture and monitor the actions of the Program. According to the Observatory, since its launch in July 2010, until April 2016, the ABC Program financed contracts totalling R$ 12.5 billion (€1,9 billion) by Brazil.

It is interesting to note that, according to an analysis carried out by Comptroller General of the Union (CGU), and analysing the results of the Ministry of Environment in 2019, only 13% of the values foreseen for the climate change program were applied. The Ministry's climate change program had a budget of R$ 10.3 million and R$ 1.2 million was executed, in approximate amounts. The auditors also noted a significant drop in support for projects to combat climate change through the National Fund on Climate Change (FMNC). In 2019, 9% of the expected R $ 8 million was executed, compared to 94% of the R$ 6.7 million foreseen for this action in 2018.

Finally, there are also some lines of financing from development agencies (such as AgeRio, BADESC, Desenvolve SP and BADESUL), Public Banks (such as Banco do Brasil and Caixa Econômica Federal) and Development Banks (such as BDMG, BID, BNDES, BRDE, Bando do Nordeste).

4.2 - External funding

The financial system is complex and monitoring the movement of resources is an enormous challenge, mainly due to the absence of a common definition of what is financing for the climate in Brazil. According to the report Global Landscape of Climate Finance 2019, climate finance flows reached a record high of USD 612 billion in 2017, followed by an 11% drop in 2018 to USD 546 billion. In Latin America, USD 28 billion were used to finance mitigation/adaptation projects.

In Brazil, there is an important participation of multilateral sources in climate finance. Data from Climate Funds Update shows that Brazil had USD 1,254.930 million approved until February 2019. Of this total, USD 720.43 million comes from the national fund Fundo Amazonia, fed by other countries. Cities and states are among the recipient institutions and account for USD 158 million of the total (CFU, 2020).

Virtually all projects were in the forestry sector. There are also investments from the Forest Investment Program (FIP), the Global Environment Facility (GEF4), Green Climate Fund (GCF), Partnership for Market Readiness and MDG Achievement Fund.

Among the main funds available to Brazil at the international level that fund public entities at the regional level are :[12]

Global Environmental Facility (**GEF**); Inter-American Development Bank (**IDB**); World Bank; Green Climate Fund (**GCF**); Green Climate Fund (**GCF**) - Project Preparation Facility; Green Climate Fund (**GCF**) - Readiness Programme; Climate Investment Funds (**CIF**)- Clean Technology Fund (**CTF**); Climate Investment Funds (**CIF**)- Pilot Program for Climate Resilience (**PPCR**); Climate Investment Funds (**CIF**)- Forest Investment Program (**FIP**); Climate Investment Funds (**CIF**)- Scaling up Renewable Energy in Low Income Countries Program (**SREP**); Adaptation Fund; Adaptation Fund - Readiness Grants; Global Climate Change Alliance (**GCCA+**); Norway's International Climate and Forest Initiative (**NICFI**); **IRENA/ADFD** Project Facility; Special Climate Change Fund (**SCCF**); Global Facility for Disaster Reduction and Recovery (**GFDRR**); Dutch Fund for Climate and Development; Nitric Acid Climate

12 https://ndcpartnership.org/climate-finance-explorer

Action Group (**NACAG**); Climate Services for Resilient Development Partnership; Climate Change Technical Assistance Facility (**CCTAF**); Energy Sector Management Assistance Program (**ESMAP**); Fonds Français pour l'Environnement Mondial (**FFEM**); The Carbon Fund - The Carbon Initiative for Development (**Ci-Dev**); The Readiness Fund - The Carbon Initiative for Development (**Ci-Dev**).

Brazil also has access to several bilateral funds. Bilateral cooperation, in turn, concerns the processes of transferring resources between two countries or the transfer of resources from one country to funds and multilateral organizations. Lateral financing resources are made available through development agencies and other institutions in the respective donor countries, or through multilateral agencies and funds.

As an example, there is cooperation between Brazil and France, whose executing agency is the French Development Agency (AFD). AFD has been partnering with several regional banks for climate finance. Among them, it is worth mentioning the line of credit created by the Development Bank of the State of Minas Gerais (BDMG), in 2013, which financed public projects in the areas of waste, energy, mobility and adaptation. Another AFD partnership with the Regional Bank for the Development of the Far South of Brazil (BRDE) has financed a series of projects within the Sustainable Production and Consumption Program (PCS) since 2018. The PCS was designed to provide credit lines and channel resources that meet the demand for financing for sustainable investments, private or public, in the three southern states of Brazil. The PCS also raised funds from the European Investment Bank (EIB) for sustainability-oriented projects.