

## Country profile for Brazil<sup>1</sup>

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Authors: ICLEI South America

The purpose of this country profile, developed in the framework of Urban-LEDS II project, is to provide a summary of relevant context at the national level, and background information that can feed into the overall project implementation and communication. It is intended to be a “*living document*” that will be updated over time during the project.

The document addresses the following specific requirements:

- To provide background information about the country to guide project implementation at the local level;
- To gain insight into the structures, process, roles and mandates of national, regional and local government levels with the aim to contribute towards vertical integration between national and local governments and to support the implementation of LEDS at the local level;
- To contribute towards the gap analysis and exploring vertical integration solutions with different levels of governments; and
- To establish a dialogue and explore partnerships and networking opportunities with political leaders at all government levels.

Please note that many of the information and indicators of this profile are aligned with the reporting platform carbonn Climate Registry (cCR) – <http://carbonn.org>

**Human activities in cities contribute a significant and growing proportion of global** greenhouse gas emissions, driving the demand for energy and other services in urban areas with rapid population growth. UN-Habitat and ICLEI are taking on this challenge by accelerating urban low emission development and climate resilience across more than 60 cities worldwide, using a multilevel governance approach to urban climate action. Through Urban-LEDS, cities develop comprehensive urban Low Emissions Development Strategies and work together to implement their plans and develop pilot projects and finance models for LEDS implementation. Urban-LEDS strengthens cooperation and information sharing across national and local governments, positioning all levels of government to advance, track and deliver on global climate and sustainability goals. [www.urban-leds.org](http://www.urban-leds.org)

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<sup>1</sup> Urban-LEDS II project Output (Op1.2)

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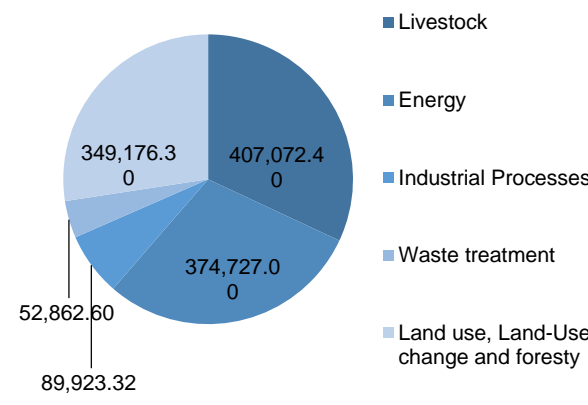
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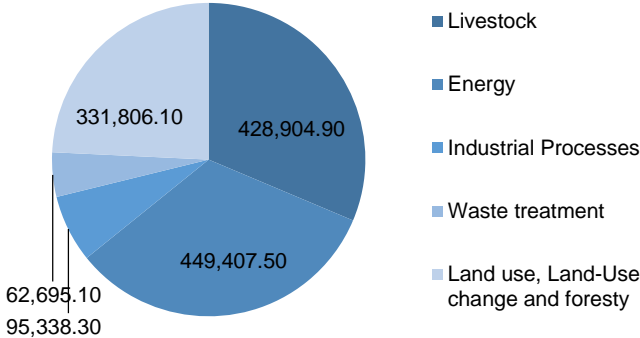
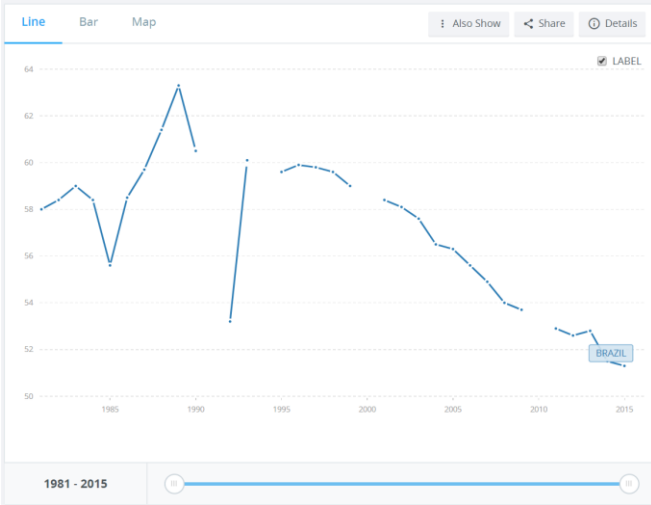
## 1. Overview

<p>Flag</p>	
<p>Country map with Urban-LEDS II project cities</p>	
<p>Key geographical attributes of the country</p>	<p>Brazil is particularly abundant in rivers and boasts eight major drainage basins.</p> <p>Amazon Rainforest: is home to an estimated one-third of all known animal species and makes up about half of the world's rainforests. The Amazon River carries more water into the Atlantic Ocean than any other river does to any other body of water.</p> <p>Climate: tropical and sub-tropical.</p> <p>Five marked eco-systems:</p> <ul style="list-style-type: none"> <li>• The tropical rainforest</li> <li>• The Pantanal (a tropical wetland)</li> <li>• The Cerrado (a tropical savannah)</li> </ul>



	<ul style="list-style-type: none"> <li>The Mata Atlantica (the “Atlantic forest”)</li> <li>The pampas (fertile plains)</li> </ul> <p>Brazil’s natural resources include: gold, iron ore, manganese, bauxite, nickel, phosphates, uranium, petroleum, platinum, tin, hydropower and timber.</p>												
Size of population (year)	208.494.900 (IBGE, 2018).												
Size (km2)	8.515.759,090 km <sup>2</sup> (IBGE, 2017).												
Population density (year)	22,43 hab/km <sup>2</sup> (IBGE, 2010).												
Official language(s)	Portuguese.												
Major religions	According to the census of 2010, both major religions are Christian: catholic, followed by protestant religion (IBGE, 2010).												
Time zone	Brasilia Standard Time (GMT -2:00).												
GDP per capita (€)	About € 720 (R\$ 30.407; IBGE, 2016).												
Annual GDP Growth rate	Growth of 1,00% in 2017 in comparison to 2016 (IBGE, 2018).												
% of population living in poverty	Poverty headcount ratio at national poverty lines (% of population) = 8,7% (World Bank, 2015)												
Unemployment rate	13,1 % referent to the first trimester of 2018 (IBGE, 2018).												
Greenhouse Gas emissions (total in C02e/year)	<p>According to the national inventory, in 2010 were emitted 1.271.418,52 GgCO<sub>2</sub> and projections indicate emission of 1.368.151,90 GgCO<sub>2</sub> to 2015 (Sirene, 2016).</p> <p>In the other hand, according to SEEG, in 2016 were emitted 2.277.855.679 MtCO<sub>2</sub> and in 2015 were emitted 2.091.294.927 MTCO<sub>2</sub>.</p>												
Greenhouse Gas emissions by sector	<p>According to 2010 emission reported but the national inventory:</p> <p style="text-align: center;"><b>CO<sub>2</sub> Equivalent 2010 (Gg)</b></p>  <table border="1"> <thead> <tr> <th>Sector</th> <th>CO<sub>2</sub> Equivalent 2010 (Gg)</th> </tr> </thead> <tbody> <tr> <td>Livestock</td> <td>407,072.40</td> </tr> <tr> <td>Energy</td> <td>374,727.00</td> </tr> <tr> <td>Industrial Processes</td> <td>89,923.32</td> </tr> <tr> <td>Waste treatment</td> <td>52,862.60</td> </tr> <tr> <td>Land use, Land-Use change and forestry</td> <td>349,176.30</td> </tr> </tbody> </table> <p>The projections to 2015, also in accordance with the national inventory, represents:</p>	Sector	CO <sub>2</sub> Equivalent 2010 (Gg)	Livestock	407,072.40	Energy	374,727.00	Industrial Processes	89,923.32	Waste treatment	52,862.60	Land use, Land-Use change and forestry	349,176.30
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<p><a href="#">GINI Index (World Bank)(1981-2015)</a></p>													
<p>Number of cities reporting in carbonn Climate Registry (cCR)</p>	<p>21 (twenty one brazilian cities)</p>												



## 2. Governance structure

The Brazilian Federal System consists in the Union, States, Federal and municipalities. The territory counts with a number of 26 States and the Federal District, which contains the Brazilian capital city, Brasilia. The country has 23 Ministries, 2 Secretaries with status of Ministry (Secretary of Government and General Secretary) and 4 departments equivalent to ministries (Union General legal advice office, Central Bank of Brazil, Chief Staff and the Institutional Security Office).

The new National government will officially start on the 1<sup>st</sup> January 2019. New Ministries might be announced and other be extinguished.

The first table shows how governments are appointed, the nature of the relationships between different governments (hierarchical, collaborative and equal, etc), as well as the number of regional and local governments.

- Spheres or Levels of Government

Level of Government	Character	Mandate/Role	Head of government (type)	Appointment (elected or appointed)
National	<p>Brazil is a Presidential Federative Republic, formed by the Union, States, and the municipalities.</p> <p>The head of state is elected democratically and the states have political autonomy.</p> <p>The union is divided into 3 powers: Legislative, which makes the laws; Executive, which executes programs and policies or provision of public service; and the Judiciary, which solves conflicts between citizens, entities and the state.</p> <p>The system is multiparty and allows the creation of new of parties.</p>	<p>Currently the national legislative competencies on climate/energy/environment are:</p> <p>The <b>Ministry of Environment</b> is responsible for formulating and implementing national environmental public policies jointly with public actors and the civil society for sustainable development. The Ministry is responsible for climate change and sustainable cities.</p> <p>The <b>Ministry of Mines and Energy</b> promotes investments in mining and energy-related activities, funds research and sets out government policies.</p> <p>The <b>Ministry of Cities</b> has the goal to improve cities establish national strategies, guidelines and priorities in the public resources application, as well as formulation of norms, monitor and evaluate</p>	<p>President:</p> <p>Michel Temer, since 12 May 2016.</p>	<p>Assumed after President's Dilma Rousseff Impeachment</p> <p>Last election was in October 2018, in which Jair Bolsonaro was elected. Jair Bolsonaro will start as the president on 1<sup>st</sup> January 2019.</p>



		federal programs related to cities and its sustainability, sanitation and housing.		
States and Federal District	<p>Brazil has 26 states and the Federal District, its capital, Brasilia, which are divided into 5 regions: North, Northeast, Mid-West, Southeast and South.</p> <p>It is comprised of state organizations and entities, such as the State Secretariats, the State Revenue, the State Court of Justice, the State Attorney's Office and other organizations.</p>	<p>The power reserved to the states is those that are not comprised by the Constitution.</p> <p>They have the right to self-organization and self-regulation, self-government, self-administration and tax and financial autonomy granted by the Federal Constitution.</p> <p>Under a complementary law, states may institute metropolitan regions, urban agglomerations and micro-regions to integrate the organization, planning and execution of public functions of common interest.</p>	Governor	Democratically elected
Municipalities	<p>Brazil has 5570 municipalities distributed in the 27 states and the 5 regions above mentioned.</p> <p>It is comprised by several organizations and municipal entities such as the municipal secretaries of planning, health, transport, housing, environment specific to each municipality.</p>	<p>The municipality is responsible, among others, for legislating on matters of local interest; institute and collect the taxes of their competence and apply their income; organize and provide public services of local interest; promote adequate land-use planning, through planning and control of land use, subdivision and urban land occupation.</p>	Mayor	Democratically elected





- List of key actors and map institutions of the country
  - Ministry of Environment
  - Ministry of Transport
  - Ministry of Mines and Energy
  - Ministry of Cities
  - Brazilian Panel on Climate Change
  - Brazilian Forum on Climate Change
  - The Brazilian Network of Research on Global Climate Change (Rede CLIMA)
  - National Association of Municipal Organizations of the Environment
  - SOS Mata Atlântica
  - Fundação Grupo Boticario
  - Sustainable Cities Program
  - Observatorio do Clima
  - Observatorio do Código Florestal
  - Brazilian Association of Municipalities
  - Brazilian Association of State Entities of the Environment
  - Brazilian Cooperation Agency (in the Ministry of Foreign Affairs)
  - Brazilian Association of Public Cleaning and Special Waste Companies
  - Brazilian Business Council for Sustainable Development
  - Brazilian Council for Sustainable Construction
  - National Confederation of Municipalities
  - National Fund on Climate Change
  - Climate and Society Institute
  - World Wide Fund for Nature Brasil
  - World Resources Institute Brasil
  - Brazilian Service to Support Micro and Small Enterprises
  - Engajamundo
  - Plant for the Planet Brazil
  - National Fund for Climate Change
  - WayCarbon
  - National Front of Mayors



- Global:
  - Mercociudades
  - CAF
  - Interamerican Bank of Development
  - C40
  - AFD
  - Cities Alliance
  - BYD
  - CDP
  - KAS
  - GIZ
  - IUCN
  - World Bank

Please find the institutional mapping of the country in Annex A of this document.



### 3. Relevant national legislation and context

Sector	Legislation / policy/ plan name	Brief description	Year adopted	Hyperlink	Headline target/ goal	Key related statistics
Climate	NDC and Paris Agreement	Brazil submitted its intended national contribution (iNDC) to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) in 2016, that covers mitigation, adaptation and means of implementation in order to comply with the Paris Agreement.	2016	<a href="http://www.mma.gov.br/images/arquivo/80108/BRASIL%20iNDC%20portugues%20FINAL.pdf">http://www.mma.gov.br/images/arquivo/80108/BRASIL%20iNDC%20portugues%20FINAL.pdf</a>	iNDC intends to reduce GHG by 37% compared to 2005 levels by 2025, with a subsequent reduction in emissions of 43% also below 2005 levels by 2030.	Keep the average global temperature increase below 2°C above pre-industrial levels and to join efforts to limit the temperature rise to 1,5 ° C above pre-industrial levels.
Climate	National Policy of Climate Change	The National Policy on Climate Change sets commitment to reduce greenhouse gas emissions.	2009	<a href="http://www.planalto.gov.br/ccivil_03/ato2007-2010/2009/lei/112187.htm">http://www.planalto.gov.br/ccivil_03/ato2007-2010/2009/lei/112187.htm</a>	Its objectives must be in accordance with the sustainable development in order to pursue economic growth, eradicate poverty and reduce social inequalities.  Therefore it seeks the economic and social development to contribute to the protection of the global climate system.	It aims to ensure the reduction of emissions of GHG between 36,1% to 38,9%.
Climate	Sectoral Plans of Mitigation and Adaptation	The Decree n <sup>o</sup> 7390/2010 provides for the preparation of	2010	<a href="http://www.mma.gov.br/clima/politi">http://www.mma.gov.br/clima/politi</a>	To regulate and monitor the sectors that produce most emissions.	(The Decree was revoked by the Decree 9578/





		Sectoral Plans with the inclusion of specific actions, indicatives and goal of reduction of emissions and mechanisms for the verification of their implementation. As defined by the Law nº 12.187 / 2009, the Sectoral Plans must contain mitigation and adaptation strategies.		<u>ca- nacional- sobre- mudanca- do- clima/plano s-setoriais- de- mitigacao- e- adaptacao</u>		2018.)
Climate	National Fund on Climate Change (FNMC)	Law 12.114/2009 establishes the National Fund on Climate Change (FNMC), providing its nature, purpose, source and application of resources.	2009	<a href="http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2009/Lei/L12114.htm">http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2009/Lei/L12114.htm</a>	FNMC is linked to the Ministry of the Environment, with the purpose of securing resources to support projects or studies and financing of projects aimed at mitigating climate change and adapting to climate change and its effects.	The FNMC will be administered by a Management Committee linked to the Ministry of the Environment, which will coordinate it, (6 representatives of the Federal Executive Branch and 5 from non-governmental organizations). By the 2018 Annual Budget Law (LOA), R\$ 210.509.693 were predicted to the Fund's



						budget. The allocation of projects contracted was the following: Sustainable Cities and Climate Change (7%); Renewable Energies (34%); Native Forests (12%); Urban Mobility (37%); Solid Waste (8%); Innovative Projects (2%).
Climate	National Plan of Climate Change Adaptation	instituted on May 10, 2016 through Ordinance No. 150, is an instrument prepared by the federal government in collaboration with civil society, the private sector and state governments that aims to promote the reduction of national vulnerability to climate change and to manage risk associated with this phenomenon.	2016	<a href="http://www.mma.gov.br/clima/adaptacao/plano-nacional-de-adaptacao/">http://www.mma.gov.br/clima/adaptacao/plano-nacional-de-adaptacao/</a>	The general goal is to promote the management and decrease of climate risk of the country facing the adverse effects of climate change, in order to take advantage of emerging opportunities, avoid losses and damages, and build instruments that allow the adaptation of natural, human, productive and infrastructure systems.	In its first year in effect, were carried out actions or initiatives corresponding to 96% of the Plan's crosscutting goals. In between the goals achieved, there were 24 state-level Low Carbon Agriculture Plans drafted; 11 pilot projects were conducted in 16 municipalities



						with areas of Atlantic Forest to stimulate incorporation of EbA approaches; R\$ 2.264 million disbursed on: 66 water-supply installations; 59 waste-water projects; 10 urban stormdrain projects in critical municipalities; and 8 solid-waste management projects; and other relevant achievements.
Climate	Sectoral Plans of Mitigation and Adaptation	This Decree consolidates the normative acts issued by the Federal Executive Power that dispose on the National Fund on Climate Change, which deals with Law No. 12,114, of December 9, 2009, and the National Policy on Climate Change,	2018	<a href="http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2018/Decreto/D9578.htm#art25">http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/Decreto/D9578.htm#art25</a>	To regulate and monitor the sectors that produce most emissions. It revoked Decree 7390/2010,	Actions will be implemented that aim to reduce emissions between 1,168 million tCO <sub>2</sub> eq and 1,259 million tCO <sub>2</sub> eq of the total emissions estimated in art. 18 (which is 3,236 million tonCO <sub>2</sub> eq).





Waste management	National Solid Waste Policy	<p>The law nº 12.305/10 establishes this policy.</p> <p>It provides the principles, objectives, instruments and guidelines related to the integrated management and management of solid, including hazardous, waste, generators' and public authorities' responsibilities and applicable economic instruments.</p>	2010	<a href="http://www.planalto.gov.br/ccivil_03/Ato2007-2010/2010/Lei/L12305.htm">http://www.planalto.gov.br/ccivil_03/Ato2007-2010/2010/Lei/L12305.htm</a>	The policy disposes of 25 objectives, but it is important to highlight that it normalizes the final environmentally disposal of solid waste in landfills and that it seeks to reduce the generation of waste.	<p>In 2009, direct and indirect collection of solid waste covered 88,6% in Brazil.</p> <p>Per day, 183.481,50t of waste was collected in the country. It means 1,1kg per inhabitant per day.</p>
Water	National Policy of Water Resources	<p>The law nº 9.433/1997 establishes this policy, creates the National System of Management of Water Resources. It's known for its decentralizing character, for creating a national system that integrates Union and states, and participatory, for innovating with the installation of river basin committees that unites public powers in three instances, users and</p>	1997	<a href="http://www.planalto.gov.br/ccivil_03/LEIS/L9433.htm">http://www.planalto.gov.br/ccivil_03/LEIS/L9433.htm</a>	Ensure the current and future generations the necessary availability of water, in quality standards appropriate to their uses.	83.3% of Brazilians have access to treated water and 51.9% to sewage collection (2018, Ministry of Cities).





		civil society in the management of water resources				
Sustainable development	National Policy of Sustainable Development of Traditional Peoples and Communities.	Established under the Decree nº 6.040/2007, it provides measures to protect, preserve and offer the necessary and balanced territory and natural resources for use of Traditional Peoples and Communities.	2007	<a href="http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Decreto/D6040.htm">http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Decreto/D6040.htm</a>	Promoting the sustainable development of these groups with an emphasis on the recognition, strengthening and guarantee of their territorial, social, environmental, economic and cultural rights, respecting and valuing their identities, forms of organization and institutions.	Among the traditional peoples and communities in Brazil are quilombolas, gypsies, chestnut trees, babaçu coconut smasters, pasture fund communities, artisanal fishermen, jangadeiros, gypsies, azores, pantaneiros, caatingueiros, among others. According to data from the United Nations Development Program (UNDP), the Traditional Communities constitute approximately 5 million Brazilians and occupy ¼ of the national territory.
Air quality	National Plan on Air Quality	The National Plan on Air Quality systematized all the actions of the Ministry of the	2009	<a href="http://www.mma.gov.br/cidades-sustentaveis/qualidade">http://www.mma.gov.br/cidades-sustentaveis/qualidade</a>	Protect the environment and human health from the effects of atmospheric contamination, through the implementation of a	In 2010, Brazil's rate of urbanisation was 84,36%. Air pollution in outdoor environments







		Environment and the Ministry of Health related to the improvement of air quality, constituting itself as a compendium of the federal actions in this area.		-do-ar/plano-nacional-de-qualidade-do-ar.html	continuous and integrated management of air quality in the country.	causes the death of more than 50,000 people a year in Brazil (OMS).
Land use	National Policy of Regional Development	Instituted under Decree n 6.047/2007, this policy has the dual purpose of reducing regional inequalities and activating the development potential of the Brazilian regions.	2007	<a href="http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Decreto/D6047.htm">http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Decreto/D6047.htm</a>	It has as its objective the reduction of inequalities in living standards among Brazilian regions and the promotion of equity in access to development opportunities and should guide federal programs and actions in the National Territory, in compliance with the provisions of item III of art. of the Federal Constitution.	There are 5570 municipalities within Brazil's extension (8.515.759,090 km <sup>2</sup> ). In 2018, just over half of the Brazilian population (57.0% or 118.9 million) lives in only 5.7% of the municipalities (317), which are those with more than 100 thousand inhabitants. The municipalities with more than 500 thousand inhabitants (46) concentrate 31.2% of the population of the country (64.9 million inhabitants). On the other hand, most of the Brazilian municipalities





						(68.4%) have up to 20 thousand inhabitants and only 15.4% of the country's population (32.1 million inhabitants).
Land use	National Policy of Urban Development	This policy was created in 2003 during the 1 <sup>o</sup> National Conference of Cities, with the objectives of reducing habitational deficit, providing universal access to environmental sanitation, integrated and sustainable management of the policy of sanitation, secure urban mobility, environmental urban quality, diversification of financing and promoters agents, follow the Statute of the city, democratization of information and generation of employment, work and income.	2003	<a href="https://www.unc.br/mestrado/mestrado_materiais/1PoliticaNacionalDesenvolvimentoUrbano.pdf">https://www.unc.br/mestrado/mestrado_materiais/1PoliticaNacionalDesenvolvimentoUrbano.pdf</a>	The policy seeks social equity, greater administrative efficiency, citizenship, environmental sustainability and response to the rights of vulnerable groups: children and adolescents, the elderly, the disabled, women, black people and Indigenous people.	The country lacks housing for 7.2 million families, 5.5 million of them in urban areas. The quantitative deficit in the income brackets up to 2 minimum wages is 4.2 million housing, mainly concentrated in metropolitan areas. 2.8 million urban households account for more than three residents per room; 837 thousand houses were built more than 50 years ago and are in need of reform and readjustment.





Food & agriculture	National Policy on Urban Agriculture	This law project was approved in 2017 and it establishes actions that must be undertaken by the federal government, in articulation with states and municipalities. Its objectives are to make cities more productive and self-sufficient with agriculture, enhance food and nutrition security for vulnerable urban populations; promoting the occupation of idle urban spaces; to generate an alternative of income and of occupational activity to the urban population; articulating food production in cities with institutional feeding programs in schools, kindergartens, hospitals, nursing homes, popular restaurants, penal establishments and others.	2017	<a href="http://www.camara.gov.br/proposicoesWeb/proposicoesMostrares.aspx?codigo=1313925&amp;nome=PL-906-2015/">http://www.camara.gov.br/proposicoesWeb/proposicoesMostrares.aspx?codigo=1313925&amp;nome=PL-906-2015/</a> <a href="https://legis.senado.gov.br/sdleg-getter/documento?dm=7349534&amp;disposicao=inline">https://legis.senado.gov.br/sdleg-getter/documento?dm=7349534&amp;disposicao=inline</a>	The federal government will be able to support municipalities in defining areas suitable for the development of community and individual urban agriculture, as well as assist municipalities in the provision of technical assistance and make it feasible to purchase products for government food acquisition and food programs school.	There aren't any key related national statistics. Initiatives regarding Urban Agriculture exist in Brazilian Metropolitan Areas, such as: São Paulo, Rio de Janeiro and Niterói, Porto Alegre, Curitiba, Belo Horizonte (South and Southeast Regions); Brasília and Goiânia (Center-West Region); Recife, Salvador, Belém and Fortaleza (North and Northeast Regions). Involves production, commercialization, transformation, services, autoconsumer, exchange and donations.
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#### 4. Assessment of NDC in relation to sub-national government

Publication date of latest NDC	2016 <a href="http://www4.unfccc.int/ndcregistry/PublishedDocuments/Brazil%20First/BRAZIL%20iNDC%20english%20FINAL.pdf">http://www4.unfccc.int/ndcregistry/PublishedDocuments/Brazil%20First/BRAZIL%20iNDC%20english%20FINAL.pdf</a> / <a href="http://www.mma.gov.br/images/arquivo/80108/BRASIL%20iNDC%20portugues%20FINAL.pdf">http://www.mma.gov.br/images/arquivo/80108/BRASIL%20iNDC%20portugues%20FINAL.pdf</a>
Lead agency/ Ministry	Ministry of Environment
Governance structures for implementation	Federal Government, state and municipal governments and relevant sectors of the economy. In addition, the Brazilian Forum on Climate Change supports the articulation with segments of society, representative entities, nongovernmental organizations, social movements and other interested groups.
To what extent are a) Sub-national government b) Urbanisation /urban relevant sectors <sup>2</sup> mentioned in the NDC?	Through the National Adaptation Plan, Brazil's vision for its adaptation undertakings is to integrate, where appropriate, vulnerabilities and climate risk management into public policies and strategies, as well as to enhance the coherence of national and local development strategies with adaptation measures. Brazil recognizes the importance of the engagement of local governments and of their efforts in combating climate change.  Due to a fast urbanization in Brazil, risk areas, housing, basic infrastructure, especially in the areas of health, sanitation and transportation, constitute key areas for adaptation policies. The Government of Brazil gives particular attention to the poorest populations, in terms of improving their housing and living conditions, bolstering their capacity to withstand the effects of severe climate events.
Do any urban-related NAMA's or NAP's, or coordinated urban/climate programs, targeted at sub-national government, exist? If so name them here	Yes. The National Adaptation Plan; the Nationally Appropriate Mitigation Actions of Brazil, which follow: National Plan for Low Carbon Agriculture; Reduction in Amazon deforestation; Reduction in Cerrado deforestation; Energy efficiency; Increase in the use of biofuels; Increase in energy supply by hydroelectric power plants; Alternative energy sources; Restoration of grazing land; Integrated crop-livestock system; No-till farming; Biological nitrogen fixation; Iron and steel - charcoal from reforestation.

<sup>2</sup> Data for your country may be found in UN-Habitat's recent publication:  
<https://unhabitat.org/books/sustainable-urbanization-in-the-paris-agreement/>



<p>Briefly describe the Monitoring, Reporting and Verification system that exists/being planned for climate action.</p>	<p>Consortium Climate Action Tracker (CAT), on an international level, the E U Climate Policy Tracker (EU CPT), at the regional level, and the Group's Public Climate Change Policy Climate Forum of the Ethos Institute, at the state level.</p>
<p>What are the major barriers identified preventing sub-national involvement in implementation of the NDC and related policies?</p>	<p>One of the main outcomes of Urban-LEDS I in Brazil was the recognition of an extensive process that ICLEI SAMS and other organization such as FNP, ANAMMA and CB 27 led advocating more prominent roles to local governments in the national climate change policy. In April 2017 the Brazilian Forum for Climate Change created a specific Thematic Technical Chamber to assess the routes for the NDC implementation in cities. Currently the major barriers for sub-national governments are linked to the access of funding for mitigation and adaptation projects.</p> <p>There are a range of items that sub-national governments must leverage funding such as:</p> <ul style="list-style-type: none"> <li>- Capacity building for local staff in sub-national governments on the NDC and Paris Agreement;</li> <li>- Designing of bankable projects;</li> <li>- Technical assessments on mitigation and adaptation infrastructure;</li> <li>- Mass communication campaign on climate change to engage local population</li> </ul> <p>Another critical point is regarding the perception of climate change by Brazilian citizens. Either the major part of civil society and politicians have embodied the idea that climate change is a secondary agenda that should be prioritized in terms of public funding only after health, education, security and housing. The Thematic Technical Chamber for Cities have identified that education on Climate Change focusing on its transversal approach is key to overcome this barrier as perception. Education and Communication on the NDC implementation has been considered the most powerful tool to engage society and politician at all levels.</p>

- How can local and regional governments help national governments (including ministries of climate change and urbanization) to seize the potential of sustainable and integrated urban and territorial development in the implementation of the NDC of your country?

Projects and initiatives of low emission development in local governments aim to approach local impacts of unprecedented global changes, from climate change to urbanization, with the objective of promoting the urban development with as little impact as possible in global systems, and to construct people-centred and equitable communities. The initiatives aim to make the urban sustainability an inseparable part of all levels of development: subnational, national and global. According to the World Health Organization, 54% of the inhabitants of the planet lived in cities in 2014, and the



tendency is of constant increase. Along with those statistics, 70% of total emissions of greenhouse gas come from cities, which proves that projects and initiatives to reduce emissions in local governments is of great importance for a global impact.

- What are the options to integrate commitments and actions of local and regional governments in to current and future NDCs of this country?

The Brazilian Political structure is defined by the 3 well separated levels of governments: The National Government is responsible for general guidelines and identification of potential funds for policies; The State Governments are responsible for structuring sub-national policies adapting the national guidelines to each context and setting more specific targets and goals; The local governments are responsible for creating municipal policies addressing solutions and benefits to local challenges and impacts.

Given the variety of contexts, sizes, economics, and other range of factors, the National government does not use specific experiences in municipalities to base its policies. The National governments tends to monitor the implementation of policies using clusters of municipalities as samples to assess results and challenges.

Providing a clear picture of which are the main challenges, needs, GHG emission profiles, climate vulnerabilities and options for funding is the best option to optimise the multi-level dialogue amongst different levels of governments;

- How can your national government collaborate with local and regional governments to mobilize appropriate capacity building, technical, financial resources and policy/legal framework to realize solutions addressed in delivering and raising ambition; in 2018, towards 2020, towards 2050?

The National Government is searching for cooperation with international organization and identifying national institutional to support capacity building and technical resources for the NDC implementation in short and medium terms. For long term, the National government is discussing the possibility of shifting some taxes into climate change policy instruments as well as creating a full (institutional, technical, financial, political) framework led by the national government).





## 6. Project Advisory Group (PAG)

The National Project Advisory Group (PAG) in Brazil in phase 1 of the project was composed of: Ministry of Environment (BR), Ministry of Foreign Affairs of Brazil, ANAMMA (National Association of Municipalities) (BR), São Paulo Municipal Committee for Climate Change and Eco-economy (BR), Environment Secretariat of the State of São Paulo (BR), Adjunct Secretary of Green and Environment of the Municipality of São Paulo (BR), Environmental Company of the State of São Paulo (CETESB) (BR), Environment Secretariat of Santos (BR), Fiji Ambassador to Brazil, FIESP (Federation of Industries of the State of São Paulo) (BR), Brazilian Forum on Climate Change (FBMC), WRI Brazil, Climate Observatory (OC) (BR), WWF Brazil, SOS Mata Atlântica Foundation (BR), Intermunicipal Consortium of the West Region (CIOESTE), Company of the Metropolitan Region of São Paulo (BR), Green Party (BR), São Paulo State Department of Logistics and Transportation (SLT) (BR), Renewable Energies of the State of São Paulo (BR), CETESB (BR), European Union Delegation to Brazil (to be confirmed).

Annex C - Not yet available



## 8. Financial System

The main branch Brazilian Financial System deals directly with four types of market:

- Money market: it is the market that provides the economy paper money and scriptural money, that deposited in current account;
- Credit market: it is the market that provides resources for the consumption of the people in general and for the operation of the companies;
- Capital market: it is the market that allows companies in general to capture resources from third parties and, therefore, share the gains and risks;
- Foreign exchange market: it is the market for buying and selling foreign currency.

The Central Bank of Brazil proposes a subdivision of the National Financial System into 3 levels, regulatory agencies, supervisory entities and financial operators.

The regulatory bodies determine general rules for the proper functioning of the National Financial System

Supervisory bodies work to ensure that citizens and members of the financial system follow the rules set by the regulatory bodies.

Operators are institutions that deal directly with the public, in the role of financial intermediary.

- National Budget

Government Budget is an itemized accounting of the payments received by government (taxes and other fees) and the payments made by government (purchases and transfer payments). Brazil Government Budget - actual data, historical chart and calendar of releases - was last updated on November of 2018.

Brazil Government Budget.

Actual	Previous	Highest	Lowest	Dates	Unit	Frequency
-7.80	-9.00	-2.00	-10.20	2001 - 2017	percent of GDP	Yearly

Source: trading economics, 2018.



SOURCE: TRADINGECONOMICS.COM | INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE)



- Climate finance

According to the Economic Commission for Latin America and the Caribbean (Eclac), in 2014, Brazil obtained 67,1% of the total investments of Latin America, a value of approximately US\$ 14,2 millions, provided by multilateral and national development banks. Data from the Climate Funds Update show that between 2003 and 2016 funding for Brazil was US\$ 853.1 million, of which US \$ 723 million was from multilateral sources and US \$ 130.1 million from bilateral sources (CLIMATE FUNDS UPDATE, 2017).

Several factors contribute to Brazil not being a priority in the contributions. Firstly, because it's not extremely vulnerable to warming, compared to localities in Africa and Asia, which receive most of them. Secondly, because most part of the donation are to low-income countries. As Brazil has a median income, it's often not eligible for funds. In third place, for being targeted for mitigation financing. In this way, it is strategic to identify the availability of investors.

A study by the Ethos Institute (2017), points out that most national funds in Brazil are of public character. Sectors in which the financing is focused are: efficient use of water and energy, recovery da degraded areas and springs, and the sustainable management of coastal resources. Compared to international funds, there is no equity-oriented, structured finance or climate insurance. This indicates that there are great opportunities to innovate and develop new funding mechanisms.

The table below identifies any national mechanisms by which local governments can access climate finance, e.g., via a national climate fund and/or a dedicated revenue transfer.

Key funds available	Relevant accredited entities	Brief description of fund	Timeline	Amount of funding (€)
Fundo Nacional sobre Mudança do Clima (Fundo Clima)	BNDES	Created under the Law nº 12.114/2009 with the purpose of ensuring resources to support projects or studies and finance projects aimed at mitigating climate change and adapting to climate change and its effects.	Since 2009	In 2017, the total amount was approximately 9327629,32 Euros. In 2018, with the Annual Budget Law, it was predicted a total amount of 48149984,90 Euros.
Fundo Amazônia	BNDES; The Federal Republic of Germany (via KfW); Petrobras; The Government of Norway	The purpose of the Amazon Fund is to raise donations for non-reimbursable investments in actions to prevent, monitor and combat deforestation, and to promote the conservation and sustainable use of	Since 2008	Approximately 1071511487,62 Euros (since 2009).



		forests in the Amazon Biome, pursuant to Decree 6,527, dated August 1 of 2008.		
Fundo Brasileiro para a Biodiversidade (FUNBIO)	BID; BNDES; BMU; Conjus; Conservation International Foundation; KfW; Petrobrs; Natura; Boticário; UNEP; FAO; WWF; Vale S.A.; Votorantin Industrial; World Bank; GEF;	It is an innovative financial mechanism created to develop strategies that contribute to the implementation of the Convention on Biological Diversity (CBD) in Brazil. Throughout its 22 years of operation, FUNBIO acts as strategic partner of the private sector, of different state and federal public bodies and organized civil society.	Since 1996	It was created from a donation of USD 20 million from the Global Environment Facility (GEF). In between 21 years of activities, the Fund managed more than 527931000 Euros (approx..).
Fundo Socioambiental Caixa (FSA)	Caixa Econômica Federal.	The FSA supports socio-environmental projects, in partnership with public agencies and private entities, aimed at integrated and sustainable development for the low-income population.	Since 2010	In 2017, the investments totalized approximately 2067052,38 Euros.
Plan ABC		Sectorial plans according to Decree no. 7390/2010 and has the purpose of organizing and planning the actions to be taken to adopt the sustainable production technologies, selected in order to respond to the commitment to reduce GHG emissions in the agricultural sector assumed by the country.	Since 2010	In the period between 2011 and 2020, it is estimated that resources of the order 44994800000 Euros (approx..) will be needed, financed from budgetary sources or through credit lines.



## 9. References

IBGE - Instituto Brasileiro de Geografia e Estatística. Estimativa da População Residente no Brasil e Unidades da Federação com Data de Referência em 1º de Julho de 2018. Available in: <[ftp://ftp.ibge.gov.br/Estimativas\\_de\\_Populacao/Estimativas\\_2018/estimativa\\_dou\\_2018\\_20181019.pdf](ftp://ftp.ibge.gov.br/Estimativas_de_Populacao/Estimativas_2018/estimativa_dou_2018_20181019.pdf)>. Access in 31 oct. 2018.

\_\_\_\_\_. Áreas dos Municípios. Available in: <<https://www.ibge.gov.br/geociencias-novoportal/organizacao-do-territorio/estrutura-territorial/15761-areas-dos-municipios.html?=&t=o-que-e>>. Access in 31 oct. 2018.

\_\_\_\_\_. Sinopse do Censo Demográfico 2010: Tabela 1.10 – Densidade demográfica nos Censos Demográficos, segundo as Grandes Regiões e as Unidades da Federação – 1872/2010. Available in: <[https://ww2.ibge.gov.br/home/estatistica/populacao/censo2010/sinopse/sinopse\\_tab\\_brasil\\_zip.shtm](https://ww2.ibge.gov.br/home/estatistica/populacao/censo2010/sinopse/sinopse_tab_brasil_zip.shtm)>. Access in 31 oct. 2018.

\_\_\_\_\_. População residente por religião. Available in: <<https://sidra.ibge.gov.br/tabela/137#resultado>>. Access in 31 oct. 2018.

\_\_\_\_\_. Brasil em síntese. Available in: <<https://brasilemsintese.ibge.gov.br/contas-nacionais/pib-per-capita.html>>. Access in 31 oct. 2018.

\_\_\_\_\_. PIB avança 1,00% em 2017 e fecha ano em R\$ 6,6 trilhões. Available in: <<https://agenciadenoticias.ibge.gov.br/agencia-sala-de-imprensa/2013-agencia-de-noticias/releases/20166-pib-avanca-1-0-em-2017-e-fecha-ano-em-r-6-6-trilhoes>>. Access in 31 oct. 2018.

\_\_\_\_\_. Desemprego volta a crescer no primeiro trimestre de 2018. Available in: <<https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/20995-desemprego-volta-a-crescer-no-primeiro-trimestre-de-2018>>. Access in 31 oct. 2018.

Ministério da Ciência, Tecnologia, Inovação e Comunicações. Emissões de dióxido de carbono equivalente por setor. Available in: <<http://sirene.mcti.gov.br/emissoes-em-co2-e-por-setor>>. Access in 01 nov. 2018.

MEYER, Amelia. Brazil. <https://www.brazil.org.za/brazil-geography-into.html>

[https://carbons.org/entities?utf8=%E2%9C%93&q=&sort\\_by=country&country%5B%5D=brazil&range%5Binitiatives%5Bmin%5D%5D=0&range%5Binitiatives%5Bmax%5D%5D=120&range%5Bpopulation%5Bmin%5D%5D=0&range%5Bpopulation%5Bmax%5D%5D=16051521&range%5Bgdp%5Bmin%5D%5D=0&range%5Bgdp%5Bmax%5D%5D=4119700000000.0](https://carbons.org/entities?utf8=%E2%9C%93&q=&sort_by=country&country%5B%5D=brazil&range%5Binitiatives%5Bmin%5D%5D=0&range%5Binitiatives%5Bmax%5D%5D=120&range%5Bpopulation%5Bmin%5D%5D=0&range%5Bpopulation%5Bmax%5D%5D=16051521&range%5Bgdp%5Bmin%5D%5D=0&range%5Bgdp%5Bmax%5D%5D=4119700000000.0)

<http://www4.unfccc.int/ndcregistry/PublishedDocuments/Brazil%20First/BRAZIL%20iNDC%20english%20FINAL.pdf> /

<http://www.mma.gov.br/images/arquivo/80108/BRASIL%20iNDC%20portugues%20FINAL.pdf>

<http://www.mma.gov.br/component/k2/item/15137-discuss%C3%B5es-para-implementa%C3%A7%C3%A3o-da-ndc-do-brasil.html>

<https://wribrasil.org.br/sites/default/files/monitoramento-da-implementacao-da-politica-climatica-brasileira.pdf>

<https://www.cepea.esalq.usp.br/br/documentos/texto/analise-das-emissoes-de-gee-ameacas-e-oportunidades-para-o-setor-agropecuario-brasileiro-aviii-encontro-da-sociedade-brasileira-de-economia-ecologica-cuiaba-mt-5-7-ago-2009.aspx>

<https://www.sinergiaengenharia.com.br/mudancas-climaticas/>

<http://www.mi.gov.br/politica-nacional-de-desenvolvimento-regional-pndr>

<https://pt.scribd.com/document/79570808/PNQA-Plano-Nacional-de-Qualidade-do-Ar-2009-SUBSIDIOS-A-ELABORACAO-DA-1%C2%AA-CONFERENCIA-NACIONAL-DE-SAUDE-AMBIENTAL>

<http://www.portalfederativo.gov.br/noticias/destaques/ministerio-das-cidades-marca-uma-nova-politica-de-desenvolvimento-urbano>

<http://www2.camara.leg.br/camارانoticias/noticias/AGROPECUARIA/548085-CAMARA-APROVA-POLITICA-NACIONAL-DE-AGRICULTURA-URBANA.html>

[http://databank.worldbank.org/data/download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global\\_POVEQ\\_BRA.pdf](http://databank.worldbank.org/data/download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_BRA.pdf)

[https://unfccc.int/files/focus/mitigation/application/pdf/brazil\\_namas\\_and\\_mrv.pdf](https://unfccc.int/files/focus/mitigation/application/pdf/brazil_namas_and_mrv.pdf)

<https://www.cartacapital.com.br/sustentabilidade/governos-locais-na-linha-de-frente-do-combate-as-mudancas-climaticas>

[https://www.ethos.org.br/wp-content/uploads/2017/09/Publicaca%C3%A7%C3%A3o\\_Financiamento\\_Clim%C3%A1tico\\_compressed.pdf](https://www.ethos.org.br/wp-content/uploads/2017/09/Publicaca%C3%A7%C3%A3o_Financiamento_Clim%C3%A1tico_compressed.pdf)

<https://tradingeconomics.com/brazil/government-budget>

[http://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report\\_Name=Country\\_Profile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=BRA](http://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report_Name=Country_Profile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=BRA)

<https://www.bcb.gov.br/pre/composicao/composicao.asp>

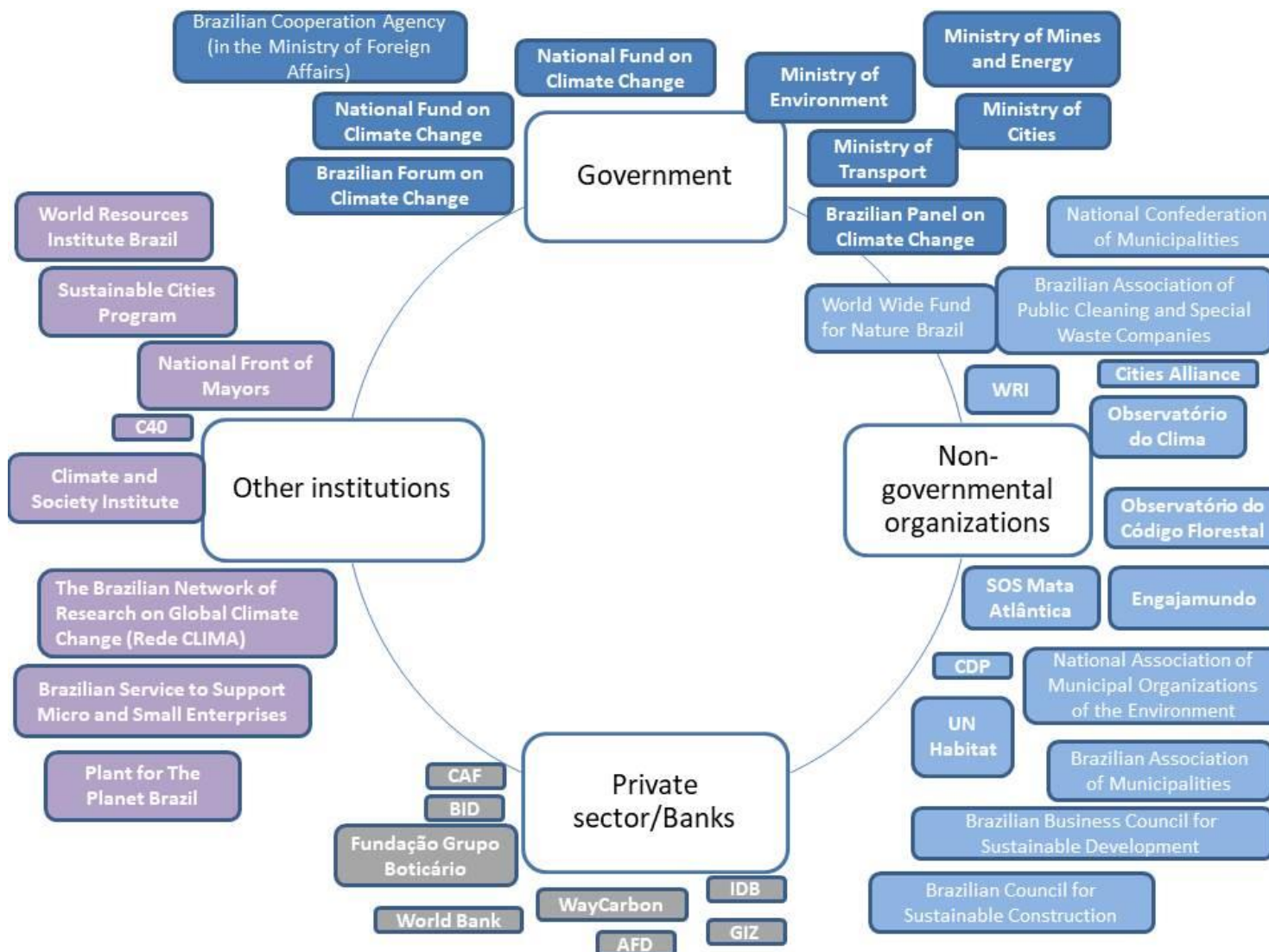
[http://www.mma.gov.br/images/arquivo/80382/PAAR%202018\\_pos24RO.pdf](http://www.mma.gov.br/images/arquivo/80382/PAAR%202018_pos24RO.pdf)

<http://www.fundoamazonia.gov.br/pt/fundo-amazonia/doacoes/>





## Annex A - Institutional mapping of Brazil



## Annex B – Climate hazards and critical assets mapping

The table contained in Annex B lists

- the most significant climate hazards currently faced by the country,
- how climate change is expected to affect the frequency and intensity of the hazards the Country faces,
- the overall impact of future hazards on the Country,
- the critical assets or services that will be most affected by these impacts,
- the factors that most greatly effect the Country's adaptive capacity, and
- additional benefits or improvements resulting from adaptation planning and / or adaptation actions.





## Annex C – National Project Advisory Group (PAG) members

The table contained in Annex C lists the members of the national PAG of the country.

Not yet available.

