

# National Adaptation Plan - Brazil



1<sup>st</sup> Monitoring and  
Evaluation Report  
2016 - 2017



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# **National Adaptation Plan Brazil**

**1<sup>st</sup> Monitoring and Evaluation Report  
2016 - 2017**

**Brasília  
MMA  
2017**



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Brazil's National Adaptation Plan (NAP) reflects efforts of the Federal Government and civil society to address impacts and reduce risks associated with climate change. It aims to strengthen the mitigation agenda, support implementation of the National Policy on Climate Change, and contribute towards attainment of commitments assumed under the United Nations Framework Convention on Climate Change (UNFCCC). Above all, the NAP seeks to guide implementation of adaptation measures for various sectors and themes throughout Brazil. Instituted by Ministry of Environment Order 150, of 11<sup>th</sup> May 2016, the NAP has now been in effect for one year.

This report aims briefly to inform the Brazilian public and international audiences on **monitoring and evaluation activities carried out during the first year of the NAP**. It provides information on the development of national adaptation goals and guidelines, and enables assessment of measures for addressing current challenges for achievement of the stated objectives of the NAP.

The report was produced under coordination of the Ministry of Environment, with participation of various ministries and federal-government bodies, collaboration from the private sector and the support of civil society partner institutions.

**The report will be updated annually, with a view to fostering the transparency and systematic monitoring of Brazil's National Adaptation Strategy, thereby demonstrating our national commitment to global efforts for addressing the impacts of climate change, based on a sustainable and resilient development.**







The NAP envisages a four-year execution cycle, with a major review during the final year of the current cycle. For this review, the results of monitoring and evaluation will be considered.

In accordance with Ministry of Environment Order<sup>1</sup> 150/161, coordination of the implementation of the NAP has been assigned to the Technical Group for Adaptation (GTA), which was created specifically to provide technical and policy guidance for monitoring, evaluation and review activities of the Plan. With a view to developing institutional capacity for execution of monitoring activities and functions, in November 2016, the GTA established the Thematic Technical Group for monitoring (GTTm) comprised representatives of ministries and other federal bodies that serve as sectoral focal points. This group also includes representatives of the states and municipalities, of the private sector, and of civil society organisations.

During the first half of 2017, the GTTm conducted a number of debates, thus generating inputs for the draft of this 1<sup>st</sup> report.

The monitoring efforts presented herein reflect the concern of the Brazilian Government with maintaining national adaptation initiatives aligned to demands specified in the international agenda.

The 21<sup>st</sup> Session of the Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC)<sup>2</sup>, in Paris, adopted a new Climate Change Agreement, aimed at the strengthening the capacity of countries to address the impacts of climate change. Discussions on adaptation were highlighted in the Agreement, thereby enabling an overall understanding of national and international efforts, on the adequate provision of the means for implementation of adaptation to developing countries, the identification of national and

international investments, cooperation actions among countries, and fostering of knowledge, capacity-building, and technology-transfer initiatives.

This report therefore also aims to contribute toward implementation of the Paris Agreement and to the deployment of new tools, especially those relating to the Transparency Framework for verification of mitigation and adaptation efforts.

Considering that the NAP has been in effect for only one year, its implementation has proven quite promising, given that initiatives have been conducted for 96% of the goals foreseen.

The results from the monitoring process shows that the NAP has produced positive outcomes in terms of efficacy, and towards the effectiveness of the **National Policy on Climate Change (PNMC)** and for the strengthening of other public policies and international frameworks. Moreover, the principle of mainstreaming of adaptation, applied throughout this first year, and has led to the adoption of a climate-risk component in governmental planning.

It is worth stressing that this report, encompasses adaptation measures, and also no-regrets measures, i.e., those that can be justified from economic, and social, and environmental perspectives, regardless of whether ill effects of climate change actually occur, since they reduce the country vulnerability to such hazards.

It should also be highlighted that actions carried out during the first year of the NAP are aligned to the priorities stated in **Brazil's Nationally Determined Contribution (NDC)**<sup>3</sup>, of which the NAP is the major instrument for implementation of the Adaptation agenda.

Measures targeted at ensuring water, energy and food security may also be enhanced by means of initiatives carried out under the NAP, as is reported in the outcomes section of this report.

Notwithstanding challenges still to be faced in terms of achieving greater efficiency and effectiveness of the NAP, this report provides valuable feedback on Brazil's adaptation strategy and serves as a tool in an progressive process that has enabled identification of: a) where progress has been achieved; b) the implementation capacities; c) ranking of priorities; and d) where gaps of knowledge and actions remain unfilled.

<sup>1</sup> <http://www.mma.gov.br/clima/adaptacao/plano-nacional-de-adaptacao>

<sup>2</sup> United Nations Framework Convention on Climate Change

<sup>3</sup> <http://www.mma.gov.br/comunicacao/item/10570-indc-contribui%C3%A7%C3%A3o-nacionalmente-determinada>





The report is structured as follows. The first section presents the results of consolidated monitoring process, with: aggregate statistics and a brief analysis of the main findings in terms of attainment of goals and compliance with guidelines, and its contributions to other public policies and international frameworks. The second section presents 15 summary sheets, containing information on the implementation of crosscutting goals, sectoral and thematic strategies, and private-sector contributions toward implementation of the NAP.

Lastly, as annexes to this report, all forms which were used to gather sectoral information can be accessed in the website of the Ministry of the Environment. Those provide further details on initiatives carried out during the period, together with a list of national policies/plans and international agreements and frameworks which the NAP has contributed to the implementation. These forms are available in Portuguese only.



Brazil's Nationally Determined Contribution (NDC) to the Paris Agreement designates the NAP as an instrument to foster the resilience of populations, ecosystems, infrastructure and production systems. The Plan outlines **24 goals** and **136 guidelines**, including crosscutting and sectoral strategies targeted at establishing the institutional, methodological and scientific bases for management and reduction of risks associated with climate change.

During the first year, actions deployed under the NAP addressed **96% of its goals** and **67% (91) of its sectoral guidelines** (Figure 1).

The actions carried out in the scope of goals and guidelines of the NAP were aligned to at least one of its specific objectives. Of these actions, **76%** contributed toward knowledge production and management (**Objective 1**); **54%** toward promoting institutional coordination and cooperation (**Objective 2**); and **72%** toward identification and the proposition of adaptation measures and reduction of climate risks (**Objective 3**). These outcomes indicate an implementation profile targeted toward expansion of knowledge of vulnerabilities to climate change and development of adaptation measures and tools.

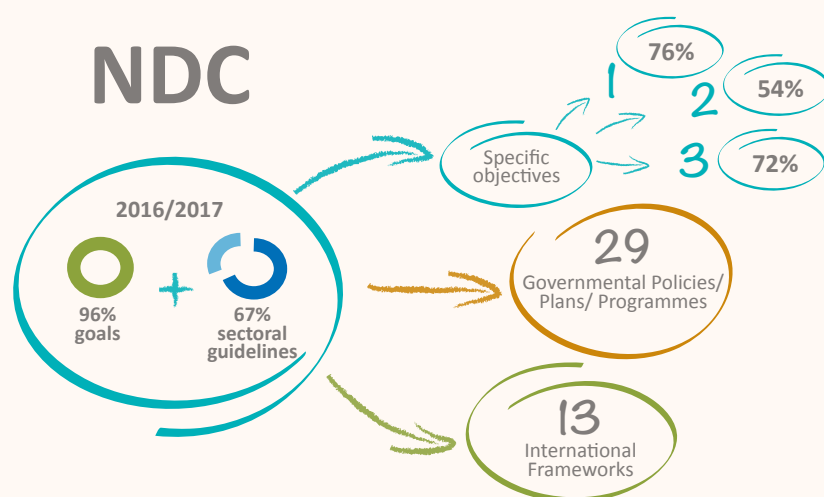


Figure 1. Overview of the alignment of implementation goals and guidelines of the National Adaptation Plan.

Among the highlights of actions carried out within the scope of **objective 1** are: municipal-scale mapping of Brazil's vulnerability to drought; the framework and development of an adaptation-knowledge platform (*AdaptaClima* - scheduled for deployment in 2017, thereby bringing forward the goal by approximately 2 years); mapping of biophysical impacts of climate change on the Atlantic Rainforest (Mata Atlântica) biome; and the generation of a Municipal Index of Vulnerability to Climate Change for 6 Brazilian states, through implementation of the SISVUCLIMA Project.

The outcomes of the SISVUCLIMA Project also exemplify efforts aligned to **objective 2**, in that they encompass cooperation among the three different governmental

levels in Brazil: federal, state and municipal, targeted at laying down the bases for development of local adaptation strategies.

Further contributions toward attainment of objective 2, include mainstreaming of adaptation, through fostering of coherence and coordination among public policies for reduction of climate risks in Brazil. In total **29 governmental policies, plans and programmes** were strengthened through implementation of the NAP, among them: the National Protection and Civil Defense Policy, the National Water Resources Policy, and the National Urban Mobility Policy.

The mainstreaming of Adaptation was fostered through the incorporation of adaptation measures and guidelines into procedures for elaboration and review of the the



following national sectoral policies: National Plan for Strengthening Extrativism, the National Water Security Plan, the National Food and Nutritional Security Plan, and into the Socio-Environmental Guidelines of the Ministry of Transport, Ports and Civil Aviation (MTPA).

Other activities in pursuit of the goals of Objective 2 included incorporation of measures for adaptation to climate change within the management procedures of institutions. Examples include establishment of the Technical Committee for Low Carbon Industry at the Ministry of Industry, Foreign Trade and Services (MDIC); the establishment of the Technical Chamber for Climate Change within the scope of the Management Committee for the National Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI); and consideration of the effects of climate change in the drafting of basins plans for the following watersheds: Piranha-Açu, Paranapanema, Grande, and Paraguay watersheds.

Given that the accomplishment of many sectoral guidelines takes place at the local level, strengthening articulation among the three levels of government and intra-governmental coordination remain among the major challenges to be addressed in coming years.

With respect to **objective 3**, it is worth noting that, beyond **identification and formulation** of measures for reducing climate risks, significant **progress in the deployment** of adaptation measures under the NAP, included:

- » Installation of 370 desalination units under the *Água Doce* Programme in municipalities of the northeast;
- » Launching of 78.000 social technologies for access to water for human consumption and food production;
- » An increase of 15% in the number of municipalities covered by the National Water Quality Program (VIGIAGUA);
- » Establishment of 600 community seed banks; and
- » Expansion of installed electric-power generating capacity from renewable sources.

Within the scope of international agreements which Brazil is a signatory, the NAP contributed toward the enforcement of **13 international frameworks\***, notably the Sendai Framework for Disaster Risk Reduction, and the United Nations Sustainable Development Goals (SDGs).

In this respect, the NAP has contributed toward the achievement of **12 of the 17 SDGs**, and **45 of the 169** proposed targets, thereby reaffirming Brazil's interest in expanding its contribution toward achievement of the objectives of the Climate Convention, within the context of sustainable development (Figure 2).

The private sector was also mobilized in support of implementation of the NAP, through the development of corporate adaptation strategies in alignment with principles and objectives proposed in the Plan, aimed at management of risks, promotion of resilience in operations and activities and creation of business opportunities.



**Figure 2.** Sustainable Development Goals toward attainment of which actions under the National Adaptation Plan are contributing.

\* The Annex of this report contains a list of national policies and international frameworks to which the NAP contributed during its first year in effect.

\*\* It was not possible, for the purposes of this first report, to collect and disclose representative information from states and municipalities and by civil society organizations during this period, but this will be made available in the second monitoring report.





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## MAIN ACHIEVEMENTS DURING THE PERIOD

In its first year in effect, were carried out actions or initiatives corresponding to **96% of the NAP's crosscutting goals**. Implementation of these actions sought to foster basic elements for adaptation and to promote synergies among sectoral and thematic strategies.

Initiatives and actions carried out during the period contributed toward attainment of **2 of the Sustainable Development Goals (SDGs)** and to strengthening of **2 National Policies** and **1 international framework**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » New climate change scenarios generated and studies contracted and developed to improve the quality of climate projections;
- » Technical assistance request from Brazil to the Climate Technology Centre and Network (CTCN) prepared, with the aim of creating a Brazilian hydrogen-energy research and development network;
- » Partnership with the Institute for Applied Economic Research (IPEA) for preparation of a book on "the potential for photovoltaic electric power in the semiarid region of the northeast";
- » Cooperation with the national designated entity (NDE) of Germany for holding of a Matchmaking Workshop, in 2017, on electric mobility technologies;
- » Support for drafting of integration projects for the Climate Network (*Rede Clima*) in the fields of: i. water, energy and food security; and ii. Socio-environmental security;
- » Direct collaboration of Rede Clima for the Third National Communication of Brazil to the UNFCCC;
- » Pilot Project of the System for Monitoring the Impacts of Climate Change (SISMOI) prepared, targeted at the semiarid region and on water, energy and food-security sectors;

- » Definition of the structure of a knowledge platform on adaptation to climate change (*AdaptaClima*);
- » Adaptive capacity strategy developed and validated and courses prepared and held;
- » Technical Thematic Group for monitoring of the NAP (GTTm) created and functioning, and framework for drafting of the 1<sup>st</sup> monitoring report prepared and implemented;
- » Mapping of funding sources for Adaptation and Mitigation conducted;
- » Study launched on international climate-change funding sources for the private sector;
- » Municipal-scale mapping of Brazil's vulnerability to drought carried out;
- » Support to WWF for drafting of a handbook to guide development of municipal adaptation plans.

## CHALLENGES/ NEXT STEPS

- » Define a business model to the *AdaptaClima* Platform and make it available online ;
- » Make available, in Distance Learning Format, the 1<sup>st</sup> Courses on "Environmental Education and Climate Change" and "Ecosystem based Adaptation (EbA)";
- » Foster closer collaboration among states and municipalities for promotion of local adaptation agendas;
- » Expedite implementation of the SISMOI pilot project.

**FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
(AVAILABLE IN PORTUGUESE ONLY).**





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## MAIN ACHIEVEMENTS DURING THE PERIOD

In 2016-2017, significant progress was achieved, especially in research projects targeted toward promoting adaptation of crops and management of production systems with greater resilience to climate change, through Crop-Livestock-Forestry integration (iCLF) management. Advances were also achieved in relation to certain subsystems with potential to support Monitoring and Simulation of Agricultural Risks and Vulnerability. Regard to the Low Carbon Agriculture (LCA) Plan, actions were carried out to promote its governance and to strengthen coordination among states and municipalities.

Actions were carried out in pursuit of the **2 goals foreseen** for the Agricultural sector and to address 7 of the 8 guidelines foreseen Initiatives carried out during the period contributed toward attainment of **7 of the SDGs**, to strengthening of **3 National Policies/Plans** and of **1 international framework**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » 24 state-level Low Carbon Agriculture (LCA) Plans drafted;
- » National Low Carbon Agriculture Plan Committee in the process of being formed;
- » A Conceptual Note on the strategic model for establishment of a Climate Intelligence Centre for Agriculture drawn up;
- » Monitoring system for the LCA Plan designed and in process of implementation;
- » 14 Research projects approved and under development in the following thematic areas: a) sustainable use of water in agriculture; b) genetic improvement of plants and animals;
- » Outputs generated by the following systems of EMBRAPA and of its partner institutions:

Agro-meteorological Monitoring System (AgriTempo); Agricultural Climate Risk Zoning (ZARC); Agricultural Scenario simulator (SCenAgri); Land use and forest cover monitoring (TerraClass); Interactive Geospatial Analysis System (SIAGEO); Interactive Support System for Environmental Licensing (SISLA);

» 157 projects carried out in support of Agro-ecology and Organic Production Study Centres, of which 28 relate to the establishment of new Centres;

» 15,000 Organic Production Units controlled through actions carried out by the Ministry of Agriculture, Livestock and Food Supply (MAPA).

## CHALLENGES/ NEXT STEPS

- » Create institutional capacities for access to the Green Climate Fund;
- » Foster access to other sources of financial and human resources for implementation of the NAP's agricultural strategy;
- » Implement the monitoring system and inaugurate the National Low Carbon Agriculture Committee.

FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
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## MAIN ACHIEVEMENTS DURING THE PERIOD

In 2016/2017, the Ministry of Environment, alongside the Chico Mendes Institute for Biodiversity Conservation (ICMBIO) carried out studies and other initiatives targeted at establishing the institutional and methodological bases for compliance with guidelines and achievement of goals foreseen in the NAP. Up until the present time, **actions have been carried out in pursuit of the 3 goals encompassed** in the NAP. Moreover **activities are being carried out relating to 3** of the **4 proposed guidelines**. **These have contributed toward attainment of 14 SDGs**, to strengthening of **5 National Plans and Policies**, and of **2 international frameworks**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » Decree 8.974/2017, which provides institutional bylaws of ICMBIO was revised to encompass the theme of adaptation to climate change;
- » Guidelines for Municipal Plans for Conservation and Recuperation of the Atlantic Forest biome were drafted, taking into account Ecosystem-based Adaptation (EbA);
- » 10 Integrated fire management plans were developed for Conservation Units of the Cerrado biome, thereby contributing increased adaptive capacity to climate change;
- » A handbook of best practices for application of EbA approaches in the management plans of Conservation Units was prepared;
- » 11 pilot projects were conducted in 16 municipalities with areas of Atlantic Forest to stimulate incorporation of EbA approaches into the various instruments for municipal-scale territorial zoning;
- » Studies for analysis of the impact of climate change on biodiversity of Brazilian biomes were conducted;

» Diagnoses and mapping of the biophysical impacts of climate change on the Atlantic Forest biome, aimed at identification of areas of risk of disaster (flooding, landslides and droughts), emergence and occurrence of vectors of diseases (dengue and others), and changes in agricultural zoning and plant physiognomies, nearing conclusion;

» Report of the National Biodiversity Monitoring Programme of ICMBio, referent to the 2014-2016 period, currently approaching conclusion, to set a baseline for comprehension of the long-term effects of climate change on biodiversity;

» Study conducted on techniques for restoration of ecosystems and per-hectare cost estimates of restoration for each biome, leading to an increase of basic knowledge for future implementation of EbA measures.

## CHALLENGES/ NEXT STEPS

» Create a Technical Group for Implementation of the NAP Strategy for Biodiversity and Ecosystems and elaborate the Implementation Plan of this strategy;

» Incorporate actions of this strategy into the planning procedures of the various institutions involved, taking into account implications for budgeting and the Multi-year Plan (PPA);

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» Training for local technical staff and managers on Analysis and Approval of Projects for Stabilization of Hillsides.

## CHALLENGES/ NEXT STEPS

- » Coordinate, together with the Ministry of Environment, technical and institutional support for the conduct of actions provided for in the NAP guidelines;
- » Coordinate, together with the Ministry of Environment, institutional support for projects involving different levels of government.

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## MAIN ACHIEVEMENTS DURING THE PERIOD

During the period reviewed, the Ministry of Cities underwent structural changes that resulted in reorganisation of staff and redistribution of tasks. Notwithstanding this challenging context for implementation of the NAP, actions were pursued or concluded referent to **13 of the 15 guidelines** proposed in the plan, thereby contributing toward attainment of **13 SDGs** and to the strengthening of **2 National Plans/ Policies**, and of **2 international frameworks**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » Review of the *Minha Casa, Minha Vida* housing programme, to include urban-planning specifications targeted at improving the quality of housing estates and units;
- » Publication of Executive Order (MP) 759/2016, targeted at reducing the bureaucratic hurdles and simplifying land-tenure regularisation procedures in urban settings;
- » Ending of 10 contracts relating the drafting of municipal public-works plans for hillside-containment projects and reduction of risks;
- » R\$ 2.264 million disbursed on: 66 water-supply installations; 59 waste-water projects; 10 urban storm-drain projects in critical municipalities; and 8 solid-waste management projects;
- » Conclusion of Geotechnical Mapping of Suitability for urban development for 7 municipalities;
- » “Guidelines for Elaboration of Structural Plans and Measures for Prevention of Landslide” and “Guidelines for Urban Expansion Planning” prepared within the scope of actions targeted at strengthening the National Strategy for the Integrated Management of Natural Disaster Risks;







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## MAIN ACHIEVEMENTS DURING THE PERIOD

In the first year of implementation of the strategy, the National Protection and Civil Defence System (SINPDEC) underwent a number of institutional, normative and management changes, which greatly enhanced its capacity to attain goals foreseen in the NAP. Actions were carried out in pursuit of **4 of the 5 guidelines foreseen for the sector**. Such actions **contributed toward attainment of 2 SDGs** and to **strengthening of 2 Policies**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » Implementation of the São Francisco River Integration Project (PISF), Brazil's largest water infrastructure project, which aims to ensure water security for 12 million people living in the Northeast region;
- » National Water Security Plan (PNSH) currently being drafted;
- » Decree regulating implementation of the National Protection and Civil Defence Policy (PNPDEC) awaiting publication;
- » Capacity Building Programme of the National Secretariat for Protection and Civil Defence 2016-2017;
- » Project for Strengthening the National Strategy for Integrated Natural Disaster Risk Management (GIDES) currently being implemented (Winner of the 2017 Sasakawa Award);
- » Project for an exchange of experiences between Brazil and the European Union on Ecosystem based Adaptation for Disaster Risk Reduction prepared and submitted to the EU;
- » Mapping conducted of Brazil's vulnerability to drought, in the context of climate change;
- » Guidelines on Protection and Civil Defence revised, taking into account recommendations of the 2015/2030 Sendai Framework and Agenda 2030;

» Integrated Information System on Disasters (S2ID) enhanced, with functional modules relating to civil defence activities;

» Protocols established for joint actions by various bodies for monitoring and early warning of natural disasters.

## CHALLENGES/ NEXT STEPS

- » Foster continuity of capacity-building actions, with a view to promoting cultural change in relation to responses and prevention of disasters and the incorporation of knowledge of risks associated with climate change;
- » Review of the legislation and fundamentals referent to disaster risk management;
- » Deployment of S2ID, with a view to enhancing federal surveillance functions during State of Emergency or State of Public Calamity (SE/ECP), and request resources for risk/disaster prevention, mitigation, preparation, response and recovery, within the scope of the SINPDEC.

FOR MORE DETAILED INFORMATION,  
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<b>Institutions Responsible</b>	Ministry of Industry and Foreign Trade and Services Ministry of Mines and Energy
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<b>Contact</b>	<a href="mailto:cges@mdic.gov.br">cges@mdic.gov.br</a>

## MAIN ACHIEVEMENTS DURING THE PERIOD

During the first year of implementation of the NAP, the Ministry of Industry, Foreign Trade and Services (MDIC) and the National Confederation of Industry Brazil (CNI) acted in synergy to establish the bases for implementation of guidelines proposed in the plan. **Actions have been deployed in pursuit of 6 of the 8 guidelines foreseen, targeted at attainment of 6 SDGs and strengthening of 6 national Policies /Plans.**

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » Establishment at MDIC of the Technical Committee for Low Carbon Industry (CTIBC) to discuss adjustments to the climate policy for industry in a post-Paris Agreement scenario;
- » A study on *Inclusion of Adaptation into Industrial Development Policies* prepared, to serve as a basis for an Industry Sector Adaptation Strategy and Action Plan;
- » Preparation, by the Technical Chamber for Adaptation to Climate Change of CNI, of a document entitled *Contribution of Industry to the National Strategy for Adaptation to Climate Change*;
- » Technical cooperation agreement signed by MDIC, CNI and the National Water Agency (ANA) to address: industrial reuse of water; economic and public financing instruments to enhance efficient water use; conducting of a study on modelling of industrial demand for water; and capacity building for private-sector players.

## CHALLENGES/ NEXT STEPS

- » Stimulate international cooperation to attract financial, human and technological resources to promote adaptation;
- » Foster means for strengthening implementation and increase investment in federal, state and municipal-level public policies that affect the resilience of industry;

- » Reassess current federal, state and municipal policies, applying a climate lens, with a view to avoiding overlapping of current environmental laws;
- » Adjust governance and strategies for industry to the NAP, with a view to ensuring ensuring deployment of actions at the federal, state and municipal levels.
- » Preparation by CNI, in partnership with the Sustainability Studies Centre (GVCes), of a project for *Disaster Risk Management in the Production Chains of Small and Medium-size Businesses*;

**FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
(AVAILABLE IN PORTUGUESE ONLY).**





## Institution Responsible

Ministry of Mines and Energy

## Contact

[desenvolvimento.energetico.dde@mme.gov.br](mailto:desenvolvimento.energetico.dde@mme.gov.br)

## MAIN ACHIEVEMENTS DURING THE PERIOD\*

In recent years, Brazil has achieved progress in the implementation of adaptation measures, especially in terms of **diversification of its energy mix** and expansion **of the transmission networks**, thereby ensuring greater energy security in face of the adverse effects of climate change.

Growth of the share of energy from renewable sources has highlighted the cleanness of Brazil's energy mix in relation to that of other countries. Data for 2016<sup>4</sup> show that renewables account for 43.5% of the Domestic Energy Supply, whereas the average for OECD countries is a mere 9.5%.

Data from the Ministry of Mines and Energy<sup>5</sup> indicate that the diversification of Brazil's energy mix through increased use of renewable sources is likely to continue. In 2016, the increase in installed electric-power generating capacity from renewable sources worldwide was estimated at just over 70%, whereas in Brazil renewable sources account for 90% of this increase. The global expansion of the installed capacity of electricity generation with renewable sources in 2016 was estimated to be just over 70%, while in Brazil these sources accounted for 90% of the expansion. Of the 6 guidelines foreseen in the NAP for the electric-power sector, **initial actions were carried out for approximately 65%**. Measures undertaken have contributed toward attainment of **2 of the SDGs**, to strengthening of **1 national plan/commitment** (the National Energy Plan - 2050, currently being drafted) and of **1 international framework** (Paris Agreement on Climate Change, Brazil's Nationally Determined Contribution (NDC)).

<sup>4</sup> MME, *Resenha Energética Brasileira: Exercício 2016*, ed. Junho de 2017. <http://www.mme.gov.br/web/guest/publicacao-es-e-indicadores/boletins-de-energia>.

<sup>5</sup> MME, *Capacidade Instalada de Geração Elétrica Brasil e Mundo*, ed. Maio de 2017. <http://www.mme.gov.br/web/guest/publicacao-es-e-indicadores/boletins-de-energia>.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

» **2026 - Ten-year Energy Expansion Plan (PDE) for the 2017-2026 period:** This is a planning tool that contemplates expansion of energy infrastructure works, including energy-related aspects of the NDC.

» **Project for development of Energy Systems for the Future:** Set up within the scope of the Basic Technical Cooperation Agreement between Brazil and Germany, this project aims to increase the share of renewable energy sources and foster greater energy efficiency.

» **Basic Vulnerability Study:** A Study proposal for methodological assessment of the impact of climate change upon the electric-power sector, considering climate and anthropic aspects at the river-basin level, to be developed with support of the World Bank (IBRD).

## CHALLENGES/ NEXT STEPS

» Conduct a study on the influence of climate change on the electric-power sector (Basic Vulnerability Study) with evaluation of methodologies and disclosure of findings.

» Develop proposals for new specific studies on the effects of climate change on the electric-power sector, based upon findings of the Basic Vulnerability Study.

» Establish new partnerships to attract resources for implementation and fostering of actions in pursuit of the guidelines agreed to in the NAP for the energy sector.

FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
(AVAILABLE IN PORTUGUESE ONLY).





Institution Responsible	Ministry of Cities
Contact	<a href="mailto:gab.semob@ciudades.gov.br">gab.semob@ciudades.gov.br</a>

## MAIN ACHIEVEMENTS DURING THE PERIOD

During the first year of implementation of the NAP, notwithstanding structural changes, the Ministry of Cities ensured a favourable environment for implementation of the agreed guidelines. Of the guidelines proposed for the sector, **4 have actions underway** and have directly contributed toward attainment of **4 SDGs** and to strengthening of **2 National Plans/Policies**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » Conclusion of the project for Adaptation to Climate Change in Urban Mobility and publication of the corresponding technical study, encompassing: identification of the main climate risks and impacts on urban mobility, conceptual analysis of vulnerabilities associated in four dimensions<sup>6\*</sup>, projection and analysis of climate scenarios based on specific indicators;
- » Holding of the International Seminar on Challenges and Opportunities for Adaptation to Climate Change in Urban Mobility;
- » Holding of a workshop with specialists on the theme of Adaptation and Urban Mobility.

## NO REGRETS MEASURES

- » Low Carbon Urban Mobility Programme currently under development;
- » Support for the drafting and/or review of urban mobility plans, studies, and projects in 42 municipalities, whereas in 3 municipalities such projects have been concluded;
- » Publication of the Collection of Technical Handbooks for Urban Mobility Projects (containing guidance, standards and basic knowledge on the sector, with the aim of improving infrastructure projects);

<sup>6</sup> Urban development, mobility systems, social and economic dimensions

- » Support for installation of 1465 km of sidewalks, provided for in the Growth Acceleration Programme - Paving and Qualification of Roadways;
- » Support for implementation and/or refurbishing of tyre-based transit systems in 72 municipalities, of which 84 km were concluded in 2016;
- » Support for implementation and/or refurbishing of rail-based transit systems in 16 municipalities, of which 45 km were concluded in 2016;

## CHALLENGES/ NEXT STEPS

- » Coordinate with MMA technical, institutional and financial support for the conduct of actions linked to the guidelines proposed in the NAP and provide support for internal assimilation of the adaptation agenda;
- » Review the Sectoral Transport and Urban Mobility Plan for Mitigation and Adaptation to Climate Change (PSTM);
- » Seek resources for implementation of the actions of NDC referent to the sector.

FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
(AVAILABLE IN PORTUGUESE ONLY).







## Institution Responsible

Ministry of Transport, Ports and Civil Aviation (MTPA)

## Contact

[dqad.smntta@transportes.gov.br](mailto:dqad.smntta@transportes.gov.br)

## MAIN ACHIEVEMENTS DURING THE PERIOD

During the period, significant actions were carried out with the aim of promoting adoption of strategies for adaptation of transport infrastructure to climate change, and for mainstreaming of adaptation issues in the transport-sector planning. **Actions were carried out to address all of the 6 guidelines** proposed in the plan, thereby contributing toward attainment of **2 SDGs** and to strengthening of **2 National Plans/Policies**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » National Integrated Logistics Plan (PNLI) elaborated taking into account effects of climate change on national production systems and the planning and development of cargo handling capacities;
- » Project “Adaptation Plan for Federal Highways Subject to Recurrent Natural Disasters” drawn up, with the aim of assessing the risks and impacts of disasters on federal highways and presenting guidelines for preventive actions;
- » Socio-Environmental Guidelines of the MTPA drawn up, with inclusion of measures targeted at fostering the adaptation to climate change; of the transport infrastructure;
- » Publication on the website<sup>7</sup>, of information on the status of sections of federal highways under jurisdiction of the National Transport Infrastructure Department (DNIT) affected by rainfall;
- » Capacity building provided on Socio-Environmental Guidelines of the MTPA, through Distance Education modules and presential courses, specifically addressing climate change issues (mitigation and adaptation).

<sup>7</sup> [http://www.dnit.gov.br/copy\\_of\\_sala-de-imprensa/emergencias-chuvas](http://www.dnit.gov.br/copy_of_sala-de-imprensa/emergencias-chuvas)

## CHALLENGES/ NEXT STEPS

- » Increase coordination between MTPA and associated bodies, with a view to enhancing management and sharing information and knowledge on vulnerabilities and adaptation for the transport sector;
- » Increase coordination between MTPA and associated bodies to foster the integration of sectoral information systems, including those for monitoring the effects of climate change, in support decision making on issues involving climate risks the transport sector;
- » Simplify administrative procedures and reduce bureaucratic obstacles to funding for development of studies, projects, and capacity building activities of the sector.

FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
(AVAILABLE IN PORTUGUESE ONLY).





<b>Institutions Responsible</b>	Ministry of Environment National Indian Foundation Ministry of Social and Agrarian Development
<b>Contact</b>	<a href="mailto:gabinete.sedr@mma.gov.br">gabinete.sedr@mma.gov.br</a> <a href="mailto:cqgam@funai.gov.br">cqgam@funai.gov.br</a> <a href="mailto:se.cnpct@mds.gov.br">se.cnpct@mds.gov.br</a>

## MAIN ACHIEVEMENTS DURING THE PERIOD

During the first year of implementation of the Strategy for Vulnerable Peoples and Populations the focus was upon raising awareness among its target-group about the importance of the agenda and upon inter-institutional coordination. **Actions were initiated for the 3 goals and for 11 of the 14 guidelines** foreseen. Actions carried out targeted at attainment of adaptation goals and guidelines for this sector **contributed toward 13 of the SDGs**, to strengthening of **8 National Policies/Plans** and of **5 international frameworks**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » Inclusion of NAP related issues into the Work Plan of the Technical Chamber for Climate Change within the scope of the Steering Committee of the National Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI);
- » 5 awareness building events on adaptation to climate change scheduled for target-groups;
- » Food and Nutritional Insecurity Map drawn up and consolidated, to be used when assessing the vulnerability of peoples and populations to climate change
- » Preparation of the 1<sup>st</sup> module of a distance learning course for municipal managers on climate change, to foster application of a climate lens for local-level projects;
- » Call for proposals for capacity building of leaders and managers of Conservation Units benefited by the *Bolsa Verde*, including the theme of climate change;
- » Inclusion of 2 guidelines focusing upon adaptation to climate change within the National Plan for Strengthening of Extrativist and Riverside Communities (PLANAFE);
- » Support for drafting, review and implementation of 31 Territorial and Environmental Management Plans for Indigenous Lands (PGTAs). Strengthening

of environmental conservation, sustainable land management for indigenous lands, and territorial planning and management have increased adaptive capacities;

» The Observation and Monitoring System for Indigenous Amazonia (SOMAI) developed and deployed. This online platform aims to provide scientific information to assist indigenous peoples in adapting to the impacts of climate change;

» Institutional FUNAI / IPAM partnership established for:

- a. studies relating to climate change and indigenous peoples; and
- b. capacity building, for use of the SOMAI Platform and the Indigenous Climate Warning App. (*Alerta Clima Indígena*);

» Inclusion of climate-change themes within the scope of the Inter-ministerial Work Group responsible for development of a territorial and environmental management policy for *quilombola* territories.

## CHALLENGES/ NEXT STEPS

- » Ensure participation of Indigenous Peoples, Traditional Peoples and Communities, and Family Farmers during implementation of the Strategy;
- » Foster mainstreaming of climate-change themes in spaces for dialogue and execution of public policies among the various target publics;
- » Overcome limitations imposed by scarcity of financial resources for implementation of the strategy.

**FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
(AVAILABLE IN PORTUGUESE ONLY).**





Institution Responsible	National Water Agency
Collaborating Institution	Ministry of Environment
Contact	<a href="mailto:soe@ana.gov.br">soe@ana.gov.br</a> <a href="mailto:gabinete.srhq@mma.gov.br">gabinete.srhq@mma.gov.br</a>

## MAIN ACHIEVEMENTS DURING THE PERIOD

During the first year of the NAP, structural measures were conducted to increase the resilience of water resources management in Brazil, in line with goals and guidelines established in the Plan. Measures for attainment of the **2 goals agreed to are currently being implemented and initiatives are underway for 19 of the 36 guidelines**, distributed among 8 lines of action, thereby contributing toward fulfillment of **10 of the SDGs** and to strengthening of the **National Water Resources Policy**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » Inclusion of climate-change themes into procedures for the drafting of Basin Plans for the Piranhas-Açu, Paranapanema, Grande, and Paraguai rivers;
- » 370 desalination systems installed in municipalities of the Northeast region, for the purpose of ensuring security for human water supply, amounting to a total public investment of approximately R\$ 67 million in 2016;
- » Studies contracted to provide technical inputs for drafting of plans and setting of targets for adaptation, for use both internally within ANA and together with state-level water resources management bodies and water-user sectors;
- » System for Periodic Monitoring of Drought in North-eastern Brazil<sup>8</sup> implemented;
- » Support for implementation of the Project for Adaptation of Water Resources Planning and Operations to climate variability and change in the Greater São Francisco River Basin<sup>9</sup>;

<sup>8</sup> <http://monitordesecas.ana.gov.br/>

<sup>9</sup> <http://www3.funceme.br/web/applications/mc-pisf/public/pg/pagina/show/221>

» Publication CAPES and CNPq calls for research proposals, contemplating lines of research on climate change and water-resources related themes;

» Drought assessment and impact studies and modelling of the impacts of climate change prepared, taking into account economic aspects, in the Piracicaba, Capivari and Jundiaí river basins in the State of São Paulo; and in the Piranhas-Açu river basin which encompasses parts of the States of Paraíba and Rio Grande do Norte;

» Up until the present time, 96 Basin Committees in 10 states have joined the Pró-Comitês Programme, which aims to foster implementation of management instruments, thereby increasing adaptive capacities at the river-basin level;

» Programme for Consolidation of the National Pact for Water Resources Management (*PROGESTÃO*)<sup>10</sup> underway, with the aim of strengthening of water resources management and institutions.

## CHALLENGES/ NEXT STEPS

- » Establish methodologies for incorporation of climate-change adaptation measures into water resources management activities, to enable compatibility at different levels and time scales (current and future management of water resources) thereby conferring greater resilience upon water resources management instruments.

FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
(AVAILABLE IN PORTUGUESE ONLY).





Institution Responsible	Ministry of Social Development
Contact	<a href="mailto:sesan.institucional@mds.gov.br">sesan.institucional@mds.gov.br</a>

## MAIN ACHIEVEMENTS DURING THE PERIOD

Significant progress has been made in the field of Food and Nutritional Security in recent years, including measures that foster adaptation to climate change. **Actions have been carried out relating to all 6 guidelines foreseen for the sector.** Such actions have contributed toward attainment of 4 of the SDGs, to strengthening of 4 National Policies/Plans, and of State-level Food and Nutritional Security Plans.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » 2<sup>nd</sup> National Food and Nutritional Security Plan (PLANSAN 2016-2019) containing specific climate change goals, prepared;
- » 59,874 cisterns and other social technologies for drinking water supply installed;
- » 18,166 social technologies for access to water for food production installed, benefitting approximately 200,000 families threatened with food insecurity;
- » 1,663 cisterns installed at rural public schools;
- » 30,174 families inscribed in the Programme for Development of Rural Productive Activities;
- » 600 community seed banks installed;
- » Number of families benefitting from the *Bolsa Verde* Programme increased from 70,000 to 90,000, thereby contributing toward maintenance of resilient agrarian systems;
- » Increased market access for extrativists, through actions, publicity, capacity building and fostering of production-cost studies, and improved access to the Minimum Price Guarantee Policy. Improved incomes have enhanced the capacity of families whose livelihoods depend upon extraction of forest products to adapt to climate change;

- » 194 initiatives agreed under the National Agro-ecology and Organic Production Plan (PLANAPO 2016-2019) targeted at farm families, agrarian reform settlers, and traditional peoples and communities, for inclusion into grass-roots agro-ecology and organic production systems;
- » Support for drafting, review and implementation of 31 Plans for Environmental and Territorial Management of Indigenous Lands (PGTAs);
- » 13 State-level Food and Nutritional Security Plans drafted;

## CHALLENGES/ NEXT STEPS

- » Implementation of the second PLANSAN, in coordination with the NAP;
- » Drafting of a sectoral-adaptation-strategy implementation plan for the coming years.

FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
(AVAILABLE IN PORTUGUESE ONLY).







<b>Institution Responsible</b>	Ministry of Health
<b>Collaborating Institutions</b>	Fundação Oswaldo Cruz (FIOCRUZ) National Health Surveillance Agency (ANVISA)
<b>Contact</b>	<a href="mailto:gabinetesvs@saude.gov.br">gabinetesvs@saude.gov.br</a>

- » Coordinate institutional support for mainstreaming of the NAP and of the climate agenda with the Ministry of Environment and various secretariats of the Ministry of Health ;
- » Expand the SISVUCLIMA Project to all the Brazilian states.

## MAIN ACHIEVEMENTS DURING THE PERIOD

Within the scope of the Ministry of Health, ANVISA and FIOCRUZ, progress was achieved toward implementation of the NAP bearing in mind that some of the goals and guidelines were covered by current activities of these bodies, and characterised as no-regrets measures that enhance the adaptive capacity of the sector.

Actions are already underway for **the 2 goals** proposed under the NAP, and for **7 of the 8 agreed guidelines**, thereby contributing toward attainment of **7 SDGs**, and to strengthening of **3 National Plans/Policies** and **4 international frameworks**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » 6 Brazilian states have developed Municipal Climate Change Vulnerability Indexes, through implementation of the SISVUCLIMA Project;
- » A 15% increase, in relation to 2014, in the number of municipalities covered by the National Drinking Water Quality Surveillance Programme (VIGIAGUA);
- » Support for conducting of a Study on Extreme Climate Events; and for the Study on Climate Related Diseases, to serve as inputs for the process of adaptation to climate change within the healthcare sector;
- » Capacity-building Course on Climate and Health for healthcare professionals of the Unified Health System (SUS).

## CHALLENGES/ NEXT STEPS

- » Increase availability of economic and human resources for implementation of actions specified in the climate-change agenda;

FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
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Institution Responsible	Ministry of Environment
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- » Attract human and financial resources in support of attainment of goals and guidelines of the sector;
- » Draft a work plan for implantation of Reference Centres for Coastal Management.

FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
(AVAILABLE IN PORTUGUESE ONLY).

## MAIN ACHIEVEMENTS DURING THE PERIOD

During the first year of the NAP, structural actions were carried out to enable adaptation measures, within the scope of coastal management. Implantation of **2 of the 3 goals** for this sector was initiated and actions were carried out under **2 of the 12 guidelines** foreseen. Initiatives during the period contributed toward attainment of **2 Sustainable Development Goals (SDGs)** and to strengthening of **3 National Policies/Plans** and **2 international frameworks**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

- » A National Programme for Conservation of the Coastline (PROCOSTA) of which the ALT-BAT Project is the main initiative, is to be established;
- » A Committee was established within the scope of the National Cartography Commission, to draft a methodology for harmonising continental altimetry with bathymetry, to serve as a basis for assessment of vulnerability of the Coastal Zone to climate change.
- » Inventory of current data as a basis for a macro diagnosis of the Coastal Zone, carried out;
- » Cooperation with the Federal University of Rio Grande do Sul (FURG) for establishment the requirements for the new macro diagnosis of the coastal zone, encompassing a database and platform coordinated by the MMA;
- » Approval of Brazil's participation in drafting of the chapter referent to Oceans and Cryosphere for the next IPCC Report.

## CHALLENGES/ NEXT STEPS

- » Establish a coalition of institutions in support of implantation of Reference Centres for Coastal Management and secure agreement on regional criteria for their establishment;





<b>Institution Responsible</b>	*Centre for Sustainability Studies of Fundação Getúlio Vargas (Gvces/FGV) *Instituto Ethos for Corporate and Social Responsibility
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## CONTEXT

The business sector participated in the process of building the NAP and can potentially offer great contributions toward implementation of the adaptation agenda. Such actions can be deployed against a broader background of local, national and regional agendas, not only through contributions of knowledge and resources, but also within the scope of corporate adaptation strategies targeted at management of risks, adding greater resilience to operations and generating business opportunities.

For this first monitoring report, a pilot process was launched to obtain information from the business sector. The initiatives reported contributed toward implementation of **2 crosscutting goals** (development of a knowledge platform on adaptation, and a study on financing of economic incentives for adaptation); **16 guidelines** for sectoral strategies for **Industry and Mining**, and for **Infrastructure (Transport, Urban Mobility and Energy)**, **Water Resources and Coastal Zones**, for fulfilment of **12 Sustainable Development Goals (SDGs)** and strengthening of **2 National Plans/Policies** and of **2 international frameworks**.

## SUMMARY OF ACTIONS/ INITIATIVES CARRIED OUT

» Development of referential business cases for identification of climate-change related risks and opportunities, development and implementation of adaptation plans, by means of application of a “Tool for Drafting of Adaptation Strategies”;

» Study underway on financing for adaptation measures, with the aim of crossing data on the supply of international and national investments, and data on demand for resources in Brazil. The study also aims to conduct mapping of the more vulnerable sectors and regions of Brazil, to assess national and international funding sources, and to disseminate findings;

» Coordination among regional business hubs and Federations of Industry, with the aim of engaging governmental and other partners in the assessment of deployment of water-reuse projects;

» Coordination among businesses and private and governmental bodies, at the municipal, state and federal levels, to identify monitoring and management actions for rising sea levels;

» Studies contracted for enhancement of climate information relating to extra-tropical cyclones and storms in Brazil’s South region and for assessment of technological alternatives for performance of port and cargo handling activities during periods of storms.

## CHALLENGES/ NEXT STEPS

» Fill climate-information gaps, in support of decision making at the strategic and operational levels;

» Encourage more companies to pursue sustainability strategies, including a climate-change component, with a view to strengthening and increasing business competitiveness and promoting Sustainable Development.

\* GVCes and Instituto Ethos performed as facilitators in gathering information for this first NAP report from their respective companies and networks. For subsequent reports, adaptation initiatives of other networks and companies may be included.

FOR MORE DETAILED INFORMATION,  
SEE THE ANNEX TO THIS REPORT  
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The achievements of the NAP in its first year of implementation and ratification of the Paris Agreement on 12<sup>th</sup> September 2016 are manifest evidence of the seriousness of the Brazilian Government's domestic and international commitment toward strengthening national management capacities and mitigating risks associated with climate change.

Notwithstanding financial limitations and institutional

and policy changes during the period, the initiatives carried out went far exceeded expectations, through pursuit of policies, programmes and projects targeted at reducing vulnerabilities associated with climate change. The NAP has proceeded in accordance with its stated aims, as an instrument for implementation of an adaptation strategy in consonance with Brazil's Nationally Determined Contribution, thereby establishing a firm basis for reinforcement of Brazil's adaptation capacity, assessment of risks and management of vulnerabilities at the national, state and municipal levels.

It is worth noting that the progress achieved during this first year of the NAP owes much to the bases of governance for adaptation, founded upon principles of collaborative decision making, articulation, mobilization and mutual support on the part of institutions involved.



Notwithstanding the progress reported up until the present time, the following challenges remain for the coming years:

- » Secure means for the attainment of of goals and compliance with sectoral guidelines,
- » especially through approaches that foster cooperation with local governments;
- » Promote new approaches to strengthening cooperation and inter-institutional coordination (Specific objective 2);
- » Ensure the continuity of coordination efforts targeted at strengthening the adaptation agenda within the scope of institutional partnerships;
- » Strengthen, through greater public involvement, the collaborative bases for the implementation of the Plan;
- » Fill climate information gaps, so as to assist with decision making processes;
- » Develop adaptation measures that adopt an Ecosystem-based Adaptation (EbA) approach;
- » Strengthen the role of the Ministry of Environment in the alignment of socio-environmental policies for

attainment of the Sustainable Development Goals and of goals and guidelines of the NAP;

- » Enhance the NAP monitoring and evaluation system to encompass reporting of the actions of civil society and of states and municipalities.





## LIST OF INTERNATIONAL FRAMEWORKS AND NATIONAL POLICIES

### INTERNATIONAL FRAMEWORKS

Paris Agreement - United Nations Framework Convention on Climate Change (UNFCCC)

Intergovernmental Oceanographic Commission (COI) of UNESCO

ILO Convention on Indigenous and Tribal Peoples (C169)

Minamata Convention on Mercury

Ramsar Convention on Wetlands

American Declaration on the Rights of Indigenous Peoples

United Nations Declaration on the Rights of Indigenous Peoples

Final Document of the World Conference on Indigenous Peoples

Hyogo Framework for Action (HFA)

International Strategy for Disaster Reduction (ISDR)

Sendai Framework for Disaster Risk Reduction

Aichi Biodiversity Targets

Intergovernmental Panel on Climate Change (IPCC)

International Sanitary Regulations of WHO

### NATIONAL POLICIES/PLANS/PROGRAMMES

Rural Environmental Registry (CAR) Forestry Code

Nationally Determined Contribution (NDC)

Convention on Biological Diversity (CBD)

National Action Plan and Strategy for Biodiversity (EPANB)

2<sup>nd</sup> National Food and Nutritional Security Plan

National Biodiversity Goals (AICHI)

New Urban Agenda (Habitat III)

Intergovernmental Panel on Climate Change (IPCC)

Low Carbon Agriculture Plan (*Plano ABC*)

Low Carbon Mining Plan

Industry Plan

National Agro-ecology Plan National Energy Plan

National Plan for Strengthening Extrativist and Riverside Communities (PLANAFE)

National Coastal Management Plan

National Organic and Agro-ecological Production Plan

National Plan for Promotion of Socio-biodiversity Production Chains (PNPSB)

National Plan for Recuperation of Native Vegetation (PLANAVEG)

National Health Plan (PNS)

National Food and Nutritional Security Plan (PLANSAN)

Multi-Year Plan (PPA 2016-2019)

State Food and Nutritional Security Plans

National Policy for Sustainable Development of Traditional Peoples and Communities

National Environmental Education Policy

National Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI)

National Urban Mobility Policy

National Protection and Civil Defence Policy

National Water Resources Policy (PNRH)

National Basic Sanitation Policy

National Transport Policy

National Policy on Climate Change(PNMC)

Growth Acceleration Programme (PAC II)

Probiogás Project

National System of Conservation Units (SNUC)



## ACRONYMS

EbA - Ecosystems based Adaptation

IBRD – International Bank for Reconstruction and Development – World Bank

CadRisco - National Registry of Municipalities with Areas Susceptible to Landslides, Flooding or Related Geological or Hydrological Processes

CadÚnico – Unified Registry

CAISAN - National Food and Nutritional Security System

CGGAM - Coordination-General for Environmental Management

CONAREDD+ - National REDD+ Commission

COP-22 - Conference of the Parties on Climate Change

CT - Technical Chamber

CTCN - Climate Technology Centre & Network

CT-MC/CG PNGATI - Technical Chamber for Climate Change of the PNGATI Steering Committee

DDE - Energy Development Department

DECO - Ecosystems Conservation Department

DEX – Extractivism Department

DPDS - Directory for Promotion of Sustainable Development

DPMC - Department for Climate Change Policies

ENREDD+ - National REDD+ Strategy

EVTE – Technical and Economic Feasibility Studies

FGV - *Fundação Getúlio Vargas*

FUNAI – National Indian Foundation

GEF - Global Environment Facility

GIDES - Strengthening of the National Strategy for Integrated Management of Natural Disaster Risks

IBAMA - Brazilian Institute for Environment and Renewable Natural Resources

iLPF – integrated Crop/Livestock/Forestry

INPE – National Institute for Space Research

INSAN - Food and Nutritional Insecurity

IPAM - Amazon Environmental Research Institute

ITDP - Institute for Transportation and Development Policy

MCidades - Ministry of Cities

MCTIC - Ministry of Science, Technology, Innovation and Communications

MDSA - Ministry of Social and Agrarian Development

MI - Ministry of National Integration

MMA - Ministry of Environment

MME - Ministry of Mines and Energy

MTPA - Ministry of Transport, Ports and Civil Aviation

NDC Brasil – Nationally Determined Contribution

OECD - Organisation for Economic Cooperation and Development

SDG - Sustainable Development Goals

OGU – Brazilian Federal Budget

ILO – International Labour Organisation

NGOs - Non-Governmental Organisations

PAC - Growth Acceleration Programme

PBQP-H – Brazilian Habitat Quality and Productivity Programme

PCJ - Piracicaba, Capivari and Jundiaí river basins

II PNGATI - Integrated Plan for Implementation of the National Policy for Territorial and Environmental Management of Indigenous Lands

PIPCTAFs - Indigenous Peoples, Traditional Peoples and Communities, and Family Farmers

PLANAFE - National Plan for Strengthening Extrativism

PLANAPO - National Agro-ecology and Organic Production Plan



PLANSAB - National Basic Sanitation Plan

PLANSAN - National Food and Nutritional Security Plan

NAP - National Adaptation Plan

PNGATI - National Policy for Territorial and Environmental Management of Indigenous Lands

PNMC - National Climate Change Policy

PNMU - National Urban Mobility Policy

PNPCT - National Policy for Sustainable Development of Traditional Peoples and Communities

PNPSB - National Plan for Promotion of Socio-Biodiversity Product Chains

PROBIOGÁS - Brazilian-German Project for Energy from Biogas

PSTM - Sectoral Plan for Transportation and Urban Mobility for Mitigation and Adaptation to Climate Change

REDD+ - Reduction of Emissions from Deforestation and Forest Degradation

RS - Rio Grande do Sul

SANASA - *Sociedade de Abastecimento de Água e Saneamento S/A*

SBIO – Secretariat for Biodiversity

SEDR – Secretariat for Extrativism and Rural Sustainable Development

SESAN - National Food Security Secretariat

SINAT - National System for Technical Evaluation of Innovative Products and Conventional Systems

SMCF - Secretariat for Climate Change and Forests

SNDU - National Secretariat for Urban Development

SNH - National Housing Secretariat

SNSA - National Environmental Sanitation Secretariat

SOMAI - Indigenous Amazon Observation and Monitoring System


SPDA - Atmospheric Discharge Protection System

SPE – Secretariat for Energy Planning and Development

UC – Conservation Unit

USAID – United States Agency for International Development





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