



WATER TRACKER
• FOR NATIONAL CLIMATE PLANNING •

COUNTRY REPORT

Application of the Water Tracker
for National Climate Planning



COSTA RICA



I. Country Context

Costa Rica is a Central American country bordered on the north by Nicaragua and on the southeast by Panama. Its rivers flow either to the Pacific Ocean on the west, or the Caribbean Sea on the east. Costa Rica is characterized as having a humid tropical climate with an average rainfall of 2,958 mm/yr¹.

Although water is an abundant resource, climate change is affecting the hydrological cycle. According to scenarios done by the Meteorological National Institute using PRECIS regional model, an important rainfall reduction with risk of droughts is expected on the Pacific Coast watersheds and the North, while an increase of rainfall with risk of floods is expected on the Caribbean Coast watersheds. Another study estimates these variations will be of 65% and 50%, respectively, by the end of the century (2080)².

Due to a series of socioeconomic factors, such as the strong dependency of human activities on water resources, Costa Rica is sensitive to these climatic events and variations. As availability and demand of water will vary throughout the country, some sectors will face water stress situations while others will benefit from opportunities, such is the case of the hydropower sector.

Agriculture is one of the sectors more impacted by climate change. The region prone to droughts corresponds mainly to the Guanacaste province and is part of the Dry Corridor. The Corridor stretches across Costa Rica, Nicaragua, Honduras, El Salvador and Guatemala, encompassing mainly agricultural land and highly vulnerable communities³.

Costa Rica's efforts to meet international agreements regarding mitigation and adaptation to climate change have been undeniable. The strong ecosystem conservation agenda of the country has significantly contributed to making climate actions more robust.

Since 2009, in its National Climate Change Strategy, Costa Rica established the goal of achieving a carbon neutral economy. According to the National Decarbonization Plan, this is expected to be achieved by 2050. Hydropower, and therefore water availability, play a fundamental role in this goal as a clean energy source and it represents approximately 70% of the country's energy generation.⁴

A National Adaptation Policy was elaborated in 2018 as a guiding framework to orientate adaptation actions. The government also published an updated National Determined Contribution in 2020, and is developing national plans based on this commitment, including the National Strategic 2050 plan.

II. National Climate Plans

Costa Rica, like most countries that contribute what they can to mitigation and adaptation, formalized its national voluntary commitment within the United Nations Framework on Climate Change. Specifically for the Paris Agreement, it undertook, among other actions, to:

- Develop a National Adaptation Plan for the year 2018 that covers 10 sectors;
- Launch a Green and Inclusive Development (IVD) strategy;

¹ World Bank Data web page, corresponding to the period 1901-2009.

² Alvarado, 2012.

³ FAO, 2021.

⁴ Ministry of Environment and Energy, Costa Rica, "Statistics of Electricity Generation" <https://energia.minae.go.cr/?p=2032>

- Increase the forest coverage of the country;
- Consolidate the mechanism of Payment for Environmental Services and forest certification;
- Consolidate the National System of Biological Corridors and the National System of Protected Wild Areas;
- Formulate and implement a National Policy for Disaster Risk Management 2016-2030 with the National Emergency Commission (CNE);
- Have by 2020 spatial planning plans in all cities and all coastal cantons, considering vulnerability to climate change and the respective adaptation and mitigation measures;
- Create by 2020, methods to identify and correct physical vulnerabilities of public infrastructure systems and human settlements, and have a national monitoring program;
- Increase the coverage, maintenance and sustainability of the sanitary and storm sewer systems up to 90% by the year 2030;
- Establish a health surveillance program by 2018 to monitor pathologies associated with the effects of climate change;
- Consolidate a National Information System on Climate Change.

To make these commitments effective at the national level, their implementation is in process. It should be noted that Costa Rica began to build its climate change governance since 2009.

National Climate Change Strategy, 2009

It calls for public institutions and all levels of government to produce action plans containing clear goals around six pillars: mitigation, adaptation, metrics, capacity building, public awareness and education, and financing – all with the common goal of mainstreaming climate change policy in line with national strategies. Focus areas are adaptation measures in water resource planning, conservation of biodiversity, environmental quality, public health, and territorial planning. It was integrated into the National Development Plan for 2006-2010.

Plan of Action of the National Climate Change Strategy, 2015

The plan orientates the assignation of public and private resources to achieve a development model with low emissions and resilient to climate change. The mitigation targets focus on energy, transport and agriculture sectors, while the adaptation targets focus on water resources and agriculture. The document considers that integrated water resources management is the key to achieve adaptation.

Nationally Determined Contribution, 2015

In this document, Costa Rica reaffirms its 2021 carbon neutrality target and sets its 2030 emissions target at 9.37 million tons of CO₂e. This is equivalent to 1.73 tons of CO₂e per capita, a 25% emissions reduction from 2012 emissions level and a 44% reduction compared to a business-as-usual scenario. It includes mitigation actions for the energy, waste, agriculture and forestry sectors.

National Adaptation Policy, 2018

This document is a step towards the formulation of a National Adaptation Plan. It is organized around 6 action areas that aim to: 1) improve knowledge management on the effects of climate change, climate services and the development of local and institutional capacities 2) Promote conditions for the resilience of human and natural systems through territorial, marine and coastal planning 3) better manage biodiversity, ecosystems, watersheds and marine and coastal spaces for adaptation 4) adapt public services and make infrastructure resilient 5) adapt eco-competitive production systems 6) foster investment and financial security for climate action.

Nationally Determined Contribution, 2020

This updated NDC was informed by the National Decarbonization Plan, as well as other climate policy planning documents, including the National Strategic 2050 plan. It sets a 2030 emissions target and an emissions budget for 2021-2030. The absolute emissions target is 9.11 million tons of CO₂e and intends to be consistent with the 1.5 °C trajectory. The cumulative emissions budget for the mentioned period is 106.53 million tons of CO₂e. The document outlines 13 actions covering all sectors. These actions cover a wide variety of sustainable development goals and some of them are adaptive.

Also, the development planning and the disaster risk reduction are clearly aligned to the Costa Rican climate commitments. Even when the water management plan is old it considers the integrated water resources management concepts related to climate risk management.

National Development Plan, 2019-2022

It includes a general diagnostic of the country and a set of goals and targets for every one of the 7 strategic articulation areas. The five variables considered a priority for the establishment of national goals and targets are economic growth, unemployment, poverty, inequality and decarbonization. The mitigation targets reaffirm the national carbon neutrality goal by promoting renewable energy and reducing GHG emissions. It also includes some adaptation targets mainly focused on the Guanacaste region.

National Integrated Water Resources Management Plan, 2008

A base line of water supply and demand is estimated to develop water balances by river basin. Sustainable convergence and immobilism scenarios are used to project future water balances. Climate change is considered to estimate water availability. The document compiles all the initiatives related to IWRM that public institutions have included in their planification. They are grouped by sector and river basin, indicating its cost and funding source. It also includes actions organized around 5 areas: institutional strengthening, capacities development, hydric infrastructure, water resources protection, and sanitation and water quality.

Risk Management National Plan, 2021-2030

This is the second out of three plans developed as a result of the Risk Management National Policy 2016-2030. It reviews the progress of the first plan and sets new targets organized around 5 axes: resilience generation and social inclusion; risk management participation and decentralization; education, knowledge and innovation management; sustainable financial investment, infrastructure and services; and planning, mechanisms and normative instruments for risk reduction. The targets consider risk reduction, preparation and response, as well as recovery.

III. Applying the Water Tracker

To optimize the process, the Water Tracker questions were first reviewed in depth. Then, a quick scan of the document to be reviewed was done. This was followed by a conscientious reading of the document while simultaneously answering the Water Tracker each time an answer would come across. At the end, a revision of the answers and the blank questions was done to improve and complete them. The process became easier with every document that was reviewed, as the Water Tracker became more familiar.

The Water Tracker was applied to the 8 national documents described above. To answer the questions, continuous feedback by the Ministry of Environment and Energy (MINAE) focal points was received. Periodic meetings were also held with MINAE to review progress.

The four sections of the Water Tracker were completed without any drawbacks.

IV. Water Tracker Results

All the documents reflect the clear commitment of Costa Rica towards climate action and include water considerations to some degree. They each have important initiatives, but none presents them all at once. Valuable principles and ideas are mentioned throughout the documents but sometimes they are not strongly reflected in the proposed actions. The key findings by section are presented in the following points, and a more detailed summary of the results is presented in Annex 1.

Section 1: Water in national climate plans:

- Generally, climate change impacts on the hydrological cycle and water resources are well understood but water is not always explicitly seen as an opportunity.
- Water-related risks are rarely prioritized.
- The link between hydrological-ecological systems and socioeconomic systems is implicitly embedded in the documents. However, stating it openly could promote the inclusion of an identification and prioritization of root causes for water risks.
- There is not always a specific section on the water sector, but it is always considered somehow.
- Adaptation activities are always considered and sometimes mitigation activities too.
- Infrastructure adaptation is mentioned in several documents.
- In recent documents, the link between proposed actions and the SDG6 is explicitly mentioned.
- Water is recognized as a basic need but is usually not explicitly mentioned as a mean to achieve adaptation or mitigation goals.
- A periodic update of the documents gives targets and actions some flexibility to respond to changes in climate projections and learned lessons, but other mechanisms could be considered.

Section 2: Water in national planning and governance:

- Multiple scenario studies exist and even though they are not always mentioned in detail, they influence to some degree the proposed actions.
- Water uncertainty is rarely reflected in the flexibility of proposed actions. Although an adaptive management approach is recognized as essential, implementing it is a long-term process.
- Institutional capacity building is usually proposed to improve climate change understanding and management of initiatives. However, institutional and legal flexibility is rarely discussed.
- All documents are aligned with the carbon neutrality goal of the country. By law, it is stated that all sub-national policies and programs must include climate change considerations, as it is observed in this revision.
- International obligations are usually mentioned.
- Recent documents include public consultations in their elaboration process, as well as local capacity building initiatives.
- Recent documents are more sensitive to the importance of local participation and the inequities faced by women. However, community-based approaches are not always approached.
- Costa Rica's commitment towards biodiversity and ecosystem conservation is usually translated into recognizing ecosystems as stakeholders.
- The link between ecosystem conservation and water availability is usually explicitly stated.

Section 3: Water and climate connections in specific sectors:

- There are mechanisms to track water allocations but sector prioritization for water use is rarely mentioned. There is no mention to how water rights and allocation arrangements will respond to changes in water availability.
- Action planning during severe events is rarely mentioned.

- Water and climate institutions are somehow involved in the development of sectoral measures.
- There is a strong emphasis in achieving carbon neutrality among sectoral initiatives but links between the water sector and other sectors are not always well developed. Therefore, water contributions to this goal are not fully exploited and water requirements are not specified in sector actions. However, actions to secure or strengthen water supply are always included. WASH institutions are involved.
- The importance of water resources for the generation of clean energy is usually recognized.
- Future uncertainty in water resources is not considered in the energy sector even if hydropower generation contributes so much to the goal of carbon neutrality. This could be further developed.
- Environmental flows are not considered among the strategic actions but could be a significant contribution to the adaptation strategies.
- The importance of wetlands is rarely recognized.
- There is a clear link between forests and water resources. Generally, the proposed nature-based solutions benefit from the strong system of payment for environmental services that the country has.

Section 4: Links to climate financing and project implementation:

- The documents are aligned with funding by national and international sources.
- The role of the finance institution is not always clearly stated.
- The finance sector is involved, usually through crop insurances and the PES system.
- The development of an instrument that will allow to track investments in climate change risk management is mentioned.
- Coupling of public budgets is encouraged and the potential of public-private investments is explored.

V. Next Steps

The Water Tracker, as a tool, will be improved through the feedback from officials and consultants who applied it in 2021. Also, it will extend its implementation to 20 additional countries in 2022.

Besides the feedback Costa Rica will improve its national climate instruments through the following guiding lines:

1. Prepare a detailed analysis (matrix) of the identified gaps and opportunity areas for each of the climate instruments (except the 2015 NDC)
2. The matrix will help to align the different climate instrument and prepare a proposal to support the country's Paris Agreement commitments
3. The result of the analysis will also serve to update the Climate plans when Costa Rica agrees to issue them.
4. Another of the outputs of the Water Tracker application is the portfolio of multi-sector projects which can be prioritized and fed into the climate water resilient projects pipeline to connect with climate finance institutions.
5. Prepare a capacity building program and deliver workshops to governmental officials at the national, subnational and local level with focus on the preparation of bankable projects and application of climate risk analysis tools.
6. The information of the matrix will help to consolidate the National Information System on Climate Change

It is important for the Water Tracker and for Costa Rica to share its experience with other countries by participating in focused webinars and international and regional events.

VI. References

- Alvarado, L. C. (2012). Escenarios de cambio climático regionalizados para Costa Rica. Meteorological National Institute. San José, Costa Rica.
- Comisión Nacional de Prevención de Riesgos y Atención de Emergencias (2015). Política Nacional de Gestión del Riesgo 2016-2030/ La Comisión. – San José, Costa Rica. http://www.da.go.cr/wp-content/uploads/2018/05/POLITICA_NACIONAL_DE_GESTION_DEL_RIESGO.pdf
- FAO (2021). Reviewed in October, 2021 from: <https://www.fao.org/americas/priorities/dry-corridor/en/>
- GFDRR (2011). Climate change country profile: Costa Rica. Vulnerability, risk reduction and adaptation to climate change. Reviewed in October, 2021 from: <https://www.gfdr.org/sites/default/files/publication/climate-change-country-profile-2011-costa-rica.pdf>
- Jiménez Gómez, R et al. (2011). Políticas de cambio climático en Costa Rica, integrando esfuerzos para asumir los retos. Universidad Estatal a Distancia Vicerrectoría de Investigación Centro de Investigación en Cultura y Desarrollo. San José Costa Rica. http://biblioteca.clacso.edu.ar/Costa_Rica/cicde-uned/20170628054324/pdf_709.pdf
- Markus, Patrick (2017). Plan Nacional de Gestión de Riesgo de Costa Rica en el Marco de la Agenda Global de Cambio para Reducir los Riesgos a Desastres. En Torno a la Prevención. Comisión Nacional de Prevención de Riesgos y Atención de Emergencias. Revista número 18, junio 2017. San José, Costa Rica. https://www.researchgate.net/publication/335549125_Plan_Nacional_de_Gestion_de_Riesgo_de_Costa_Rica_en_el_Marco_de_la_Agenda_Global_de_Cambio_para_Reducir_los_Riesgos_a_Desastres
- Ministerio de Ambiente, Energía y Telecomunicaciones (2008). Plan Nacional de Gestión Integrada de los Recursos Hídricos. San José Costa Rica. http://www.da.go.cr/wp-content/uploads/2018/05/Plan_Nacional_Gestion_Integrada_Recursos_Hidrico.pdf
- Ministerio de Ambiente, Energía y Telecomunicaciones (2009). Estrategia Nacional de Cambio Climático- 1 ed.- San José, CR: Editorial Calderón y Alvarado S. A. <https://cambioclimatico.go.cr/wp-content/uploads/2018/08/ENCC.pdf>
- Ministerio de Ambiente, Energía y Telecomunicaciones (2009). Política Hídrica Nacional. San José Costa Rica. <http://www.da.go.cr/wp-content/uploads/2018/05/Pol%C3%ADtica-H%C3%ADrica-Nacional.pdf>
- Ministerio de Agua y Energía (2015). Contribución Nacionalmente Determinada 2015. Dirección de Cambio Climático. San José, Costa Rica. <https://cambioclimatico.go.cr/wp-content/uploads/2021/01/NDC-2015-Costa-Rica.pdf?x95858>
- Ministerio del Ambiente Energía y Telecomunicaciones (2015). Plan de Acción de la Estrategia Nacional de Cambio Climático. Dirección de Cambio Climático. San José, Costa Rica. https://www.cac.int/sites/default/files/Plan_de_Acción_ENCC..pdf
- Ministerio de Agua y Energía. Política Nacional de Adaptación al Cambio Climático (2018). Dirección de Cambio Climático. San José, Costa Rica. http://www.da.go.cr/wp-content/uploads/2018/05/Politica-Adaptacion-Cambio-Climático_2018.pdf
- Ministerio de Planificación Nacional y Política Económica. (2019). Plan Nacional de Desarrollo y de Inversión Pública del Bicentenario 2019 2022. <https://www.mideplan.go.cr/plan-nacional-desarrollo>
- Ministerio de Agua y Energía (2020). Contribución Nacionalmente Determinada 2020. Dirección de Cambio Climático. San José, Costa Rica. <https://cambioclimatico.go.cr/wp->

<content/uploads/2021/01/Contribucion-Nacionalmente-Determinada-de-Costa-Rica-2020-Version-Completa.pdf?x95858>

World Bank (2021). Reviewed in October, 2021 from: <https://data.worldbank.org/country/CR>

ANNEX 1

1. Water in national climate plans

Sub-section	National Adaptation Policy	Nationally Determined Contribution 2020	National Climate Change Strategy	Plan of Action of the National Climate Change Strategy	Nationally Determined Contribution 2015	National Development Plan	Risk Management Plan	National Integrated Water Resources Management Plan
Water as a risk	Changes to the hydrological cycle and their impacts are mentioned but prioritization of risks and opportunities is not included.	Changes to the hydrological cycle and their impacts are mentioned but prioritization of risks and opportunities is not included.	Changes to the hydrological cycle and their impacts are mentioned but prioritization of risks and opportunities is not included.	Changes to the hydrological cycle and their impacts are mentioned. A study of vulnerable zones is also mentioned.	Changes to the hydrological cycle and their impacts are mentioned but prioritization of risks and opportunities is included.	Changes to the hydrological cycle and their impacts are not mentioned. Neither is a prioritization of risks.	Changes to the hydrological cycle and their impacts are not mentioned. Neither is a prioritization of risks.	Changes to the hydrological cycle and their impacts are mentioned but prioritization of risks and opportunities is not included.
Water as a sector	No water sector section exists in the document but there are explicit connections between the water sector and other sectors. Only adaptation actions are mentioned, some of them are linked to the SDG6 and seek to protect infrastructure.	There is a water sector section where adaptation actions are specified. Actions linked to the SDG6 and infrastructure protection are mentioned.	There is a water sector section for the mitigation as well as for the adaptation chapters. The water sector is explicitly linked to other sectors. SDG6 is not mentioned but actions linked to it and to infrastructure protection are included.	There is a section dedicated to the water sector in which adaptation actions are specified. SDG6 is not mentioned but actions linked to it, to other sections and to infrastructure protection are included.	There is no section dedicated to the water sector, but mitigation and adaptation actions are included. SDG6 is not mentioned but actions linked to it, to other sections and to infrastructure protection are included.	There is no section dedicated to the water sector, but mitigation and adaptation actions are included. SDG6 is not mentioned but actions linked to it and to infrastructure protection are included.	There is no section dedicated to the water sector, but adaptation actions are included. SDG6 is not mentioned but actions linked to it and to infrastructure protection are included.	The whole document is dedicated to the water sector and there are explicit links between this sector and other sectors. SDG6 is not mentioned but actions linked to it are included.
Water as an opportunity	Water is considered as an opportunity and as a requirement to achieve adaptation goals. There is no mention to the flexibility of these actions or their interaction with mitigation actions.	Mitigation contributions in the energy sector are related to the water sector. Mitigation and adaptation actions are not separated because it is considered that both integrated the climate action logic.	Water is considered an opportunity and a requirement to achieve mitigation and adaptation goals. There is no mention to the flexibility of the mitigation actions or the interaction between adaptation and mitigation actions. It is briefly mentioned that adaptation actions should be flexible.	Water is considered as an opportunity and as a requirement to achieve adaptation and mitigation goals. The flexibility of these actions is mentioned but not the interaction between adaptation and mitigation actions.	Water is recognized as an opportunity, especially for the energy sector, and as a requirement to achieve adaptation goals, especially in the water supply sector. Interactions between adaptation and mitigation actions are considered.	Water is considered a requirement to achieve adaptation goals. Flexibility is mentioned as a core value.	The flexibility of the actions is mentioned but not the interaction between adaptation and mitigation actions.	The transversal nature of water is recognized. Water is also considered a requirement to meet adaptation goals.

2. Water in national planning and governance

Sub-section	National Adaptation Policy	Nationally Determined Contribution 2020	National Climate Change Strategy	Plan of Action of the National Climate Change Strategy	Nationally Determined Contribution 2015	National Development Plan	Risk Management Plan	National Integrated Water Resources Management Plan
Climate risks and future uncertainty	The risk evaluation is based on studies that consider multiple scenarios and hydrological variation but doesn't go into detail. An adaptive approach and capacity building are considered crucial.	The risk evaluation is based on studies that consider multiple scenarios and hydrological variation. Several institutions participate in its elaboration. Flexible and adequate mechanisms exist for the revision and update of the Contribution. An adaptive approach and capacity building are considered crucial.	There is no risk evaluation based on multiple scenarios and hydrological variation. An adaptive approach and capacity building are considered crucial.	The risk evaluation is based on studies that consider multiple scenarios and hydrological variation but doesn't go into detail. Flexibility is achieved through results-based management. Capacity building is considered crucial.	The risk evaluation is based on studies that consider multiple scenarios and hydrological variation but doesn't go into detail. An adaptive approach and capacity building are considered crucial.	There is no risk evaluation based on multiple scenarios and hydrological variations. Capacity building programs are included.	Flexibility is achieved through a periodic update of the document (every 5 years). Some strategic actions promote an adaptive planning approach. Institutional capacity building is considered crucial.	The risk evaluation is based on studies that consider multiple scenarios and hydrological variation. An adaptive planning approach and capacity building are considered crucial.
Water governance	There are institutional mechanisms and structures that facilitate governance. The document is aligned with water resources and disaster risk management plans. International obligations and relevant values are identified. Local users are identified as stakeholders and initiatives to develop their capacities exist. The role of the institution in charge of finances is not specified.	There are institutional mechanisms and structures that facilitate governance. The document is aligned with water resources and disaster risk management plans. International obligations and relevant values are identified. Local users are identified as stakeholders and initiatives to develop their capacities exist. The role of the institution in charge of finances is not specified. The need for financial adjustments in the process is mentioned.	The incorporation of this Strategy into the institutional frameworks of each institution and sector is pursued. It is aligned with water resources plans. There are mechanisms to align public participation. Local users are identified as stakeholders and initiatives to develop their capacities exist. The role of the institution in charge of finances is mentioned.	There are institutional structures that facilitate governance. The document seeks the integration of the adaptation axis to the National Water Resources Plan. It is also aligned with the disaster risk management plan. Local users are identified as stakeholders and initiatives to develop their capacities exist. The role of the institution in charge of finances is not specified.	There are institutional mechanisms and structures that facilitate governance. The document is aligned with disaster risk management plans. International obligations and relevant values are not identified. Local users are identified as stakeholders and initiatives to develop their capacities exist. The role of the institution in charge of finances is not specified.	International obligations are identified. Initiatives to develop local capacities exist. The role of the institution in charge of finances is specified.	There are institutional mechanisms and structures that facilitate governance. The document is aligned with disaster risk management plans. International obligations and relevant values are identified. The role of the institution in charge of finances is not specified.	Integrated water resource management plans must include climate change considerations. This document recognized international climate change obligations.
Sustainable development	Vulnerable populations are involved in the preparation of this document. Structural inequities are addressed. The importance of ecosystems is recognized, and an ecosystem-based adaptation approach is adopted.	Vulnerable populations are involved in the preparation of this document. Structural inequities are addressed. The importance of ecosystems is recognized, and an ecosystem-based adaptation approach is adopted.	Vulnerable populations are involved in the preparation of this document. Structural inequities are addressed. The importance of ecosystems is recognized. Ecosystem protection and restoration activities are included to improve water availability.	Vulnerable populations are involved in the preparation of this document. Structural inequities are addressed. The importance of ecosystems is recognized. Ecosystem protection and restoration activities are included to improve water availability.	Vulnerable populations are involved in the preparation of this document. Structural inequities are addressed. The importance of ecosystems is recognized, and an ecosystem-based adaptation approach is adopted.	Vulnerable populations are involved in the preparation of this document. Structural inequities are addressed. The importance of ecosystems is recognized, and an ecosystem-based adaptation approach is adopted.	Vulnerable populations are involved in the preparation of this document. Structural inequities are addressed. The importance of ecosystems is recognized, and an ecosystem-based adaptation approach is adopted.	Ecosystems are considered a stakeholder. Their importance to safeguard and enhance water supplies are recognized through the investment in ecosystem protection and restoration.

3. Water and climate connections in specific sectors

Sub-section	National Adaptation Policy	Nationally Determined Contribution 2020	National Climate Change Strategy	Plan of Action of the National Climate Change Strategy	Nationally Determined Contribution 2015	National Development Plan	Risk Management Plan	National Integrated Water Resources Management Plan
Included sectors	Water resources, energy, agriculture, fishing and coastal zones, tourism, health, infrastructure and biodiversity	Mobility and transport, land use and land use change, energy, infrastructure and construction, industry, commerce and services, waste management, agriculture, forests and biodiversity, oceans and water resources, empowering of climatic action, transparency, finances, climate change policies and strategies.	Mitigation: energy, transport, agriculture, industry, solid waste, tourism, water resources, land use change. Adaptation: water resources, energy, agriculture, fishing and coasts, health, infrastructure, biodiversity.	Transport, energy, agriculture, water resources.	Transport, energy, agriculture, water resources, solid waste, territorial management, health	Territorial development, human security, infrastructure, mobility and territorial planning, education, innovation and competitiveness, health and social security, economy.	Water supply and sanitation, energy, forestry, education and research, infrastructure, territorial planning.	Energy, agriculture, industry, tourism.
All sectors	Improving the identification of water use by sector is proposed through updated water balances. There is no mention to the prioritization of use by sector. Allocation responses to changes in water availability are not discussed. Goals to increase efficient water use are included. Impacts beyond the scale of the project are not considered.	A monitoring system is proposed to improve the tracking of water use but no mention to the prioritization of use by sector is made. Allocation responses to changes in water availability are not discussed. Goals to increase efficient water use are included. Impacts beyond the scale of the project are not considered.	The institution in charge of climate and water participated in the development of mitigation and adaptation actions. Changes in water availability are considered. Nature-based solutions are considered in some sectors. In general, goals to increase efficient water use are included. Impacts beyond the scale of the project are not considered.	Mitigation contributions are considered in some sectors. Corresponding institutions participated in the development of sectorial measures. Impacts beyond the scale of the project are not considered.	The institution in charge of climate and water participated in the development of mitigation and adaptation actions. Nature-based solutions are considered in some sectors. In general, goals to increase efficient water use are included. Impacts beyond the scale of the project are not considered.	Climate and water institutions are involved in the development of actions. Some contingencies are in place to handle extreme events and some nature-based solutions are included.	The institution in charge of climate and water participated in the development of mitigation and adaptation actions. Security action plans are mentioned to handle impacts of extreme events. Nature-based solutions are considered in some sectors. In general, goals to increase efficient water use are included. Impacts beyond the scale of the project are not considered.	The institution in charge of water participated in the development of mitigation and adaptation actions. Improving the identification of water use by sector is proposed through improvement in the allocation system and updated water balances. Some sectors consider changes to where and when water will be available. Goals to increase efficient water use are included
Energy	Water resources uncertainty is mentioned in the hydropower generation sector.	Hydropower generation is not mentioned.	The document considers that mitigation actions should consider hydric efficiency in addition to energy efficiency.	The vulnerability of the sector is recognized as there is high dependence on water resources for hydropower generation.	The importance of water resources to generate low emissions energy is recognized.	Hydropower generation is not mentioned.	Hydropower generation is not mentioned.	Water resources uncertainty is mentioned in the hydropower generation sector.

Sub-section	National Adaptation Policy	Nationally Determined Contribution 2020	National Climate Change Strategy	Plan of Action of the National Climate Change Strategy	Nationally Determined Contribution 2015	National Development Plan	Risk Management Plan	National Integrated Water Resources Management Plan
Industry / Mining / Manufacturing	-	-	-	-	-	-	-	-
Agriculture / Livestock / Aquaculture	Impacts of climate variability in agriculture fields are mentioned. A correlation between land use change and climatic change is established.	Adaptation and mitigation measures are included in productive systems.	Dependency of terrestrial ecosystems on the hydrological cycle is recognized. It is considered that changes in them contribute to global warming. Impacts of climate variability in agriculture fields are mentioned. The development of agricultural technologies is proposed.	Impacts of land use change in water availability are mentioned. Impacts of climate variability in agriculture fields are also mentioned. Increasing the use of climate intelligent technologies is proposed. Efficient use is also included.	Impacts of land use change in water availability are mentioned. Increasing the use of climate intelligent technologies is proposed. Efficient use is also included.	Impacts of climate variability in agriculture fields are mentioned. Climate intelligent technologies are included.	Impacts of climate variability in agriculture fields are briefly mentioned. Climate intelligent technologies are included.	Water storage is taken into consideration. Impacts of land use changes in the quality of water resources and impacts of rainfall variability on crops are recognized. Increasing the use of climate intelligent technologies is proposed. Efficient use is also included.
Water Resources	Improving hydrological monitoring is proposed. No environmental flows are considered but adaptation measures to protect aquatic ecosystems are included. Importance of wetlands for climate change adaptation is recognized. Their importance as carbon sinks is not mentioned.	Improving hydrological monitoring is proposed. No environmental flows are considered but adaptation measures to protect aquatic ecosystems are included. Importance of wetlands for climate change adaptation is recognized. They are also recognized as carbon sinks.	Improvement of hydrological monitoring and protection of aquatic ecosystem are proposed. No environmental flows are considered. Importance of wetlands for climate change adaptation is recognized but their importance as carbon sinks is not mentioned.	Improving hydrological and data management is proposed. No environmental flows are considered but adaptation measures to protect aquatic ecosystems is proposed.	Improving hydrological and climatic monitoring is proposed. No environmental flows are considered but measures to protect water sources are included.	Adaptation measures to protect freshwater ecosystems are considered. The importance of coastal ecosystems is recognized.	Improving hydrological monitoring is proposed. The preparation of a technical norm for flow adaptation is mentioned. Importance of wetlands for climate change adaptation is recognized. Their importance as carbon sinks is not mentioned.	Improving hydrological monitoring is proposed. The sustainability of the water regime is proposed though the publication of a decree. Importance of wetlands is not mentioned.
Solid Waste	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Forestry and Land Use	Watershed management is considered in the document. Improving ecosystem protection is proposed.	Increasing forest area is considered.	Legal security is given to aquifer protection zones that are essential for human supply.	Watershed-scale interventions are proposed. Integration of water and forest resource management is also considered. Ecosystem protection	Development of water-scale interventions is proposed. Integration of water and forest resource management is also considered. Protection of water sources is mentioned.	Watershed management is considered in the document.	The contributions of forests to mitigation and adaptation objectives are recognized. Studies to protect aquifers are mentioned.	Watershed-based planning is included and considered crucial for climate action. Water and land protection are proposed for

Sub-section	National Adaptation Policy	Nationally Determined Contribution 2020	National Climate Change Strategy	Plan of Action of the National Climate Change Strategy	Nationally Determined Contribution 2015	National Development Plan	Risk Management Plan	National Integrated Water Resources Management Plan
				is proposed to improve water availability.				improving water availability.
Human Settlements	Resilience conditions of natural and human systems are proposed through territorial planning.	Incorporation of adaptation criteria into territorial planning instruments is mentioned.	-	-	-	Community and nature-based solutions are mentioned to improve adaptation.	Risk assessments are proposed to review construction activity and investment in public infrastructure.	-
Water Supply and Sanitation	The Water Department participated in the formulation of the Policy and its strategic lines. Building local capacities and strengthening services resilience is considered.	There is mention to the development of guidelines with adaptation criteria to guarantee the protection of infrastructure and continuity of public basic services.	It is aligned with the National Integrated Water Resources Management Plan. Infrastructure improvement of drinking water systems is mentioned briefly.	Public policies within the water sector are aligned. Integration of climate change in local water security plans is proposed, they include response measures and protocols to extreme events. Building local capacities is considered.	Institutions of the WASH sector participate in the planning. Building local capacities and strengthening services resilience is considered.	Institutions of the WASH sector participate in the planning. Building local capacities is considered.	Institutions of the WASH sector participate in the planning. Integration of environmental risk is considered in WASH systems investment. Guaranteeing the protection of infrastructure and continuity of public basic services is mentioned. Building local capacities is considered.	This document is aligned with national climate plans.
Health	Links between health and water aspects of climate change are mentioned.	-	Links between health and water aspects of climate change are mentioned. Protection of vulnerable populations is considered.	-	Protecting vulnerable populations is considered.	Protecting vulnerable populations is considered.	Protecting vulnerable populations is considered.	-

4. Links to climate financing and project implementation

Sub-section	National Adaptation Policy	Nationally Determined Contribution 2020	National Climate Change Strategy	Plan of Action of the National Climate Change Strategy	Nationally Determined Contribution 2015	National Development Plan	Risk Management Plan	National Integrated Water Resources Management Plan
General	Institutions involved must link their targets to financial opportunities. Mechanisms to align resources from private and public sources exist. Investment in adaptation projects until the preparation of this document is known but the development of a mechanism for a continuous tracking of financial allocations in this topic is not proposed.	Alignment between this document and available international funding is proposed. Climatic actions are aligned with annual budgets. Banking sector is involved. The development of an instrument that will allow to track investments in climate change risk management is mentioned. The potential of public-private investments is explored.	The strategy is aligned with funding by national and international sources. Mechanisms to align resources from formal markets or voluntary sources exist. The finance sector is involved through harvest credits.	The plan instrumentalizes actions in one financing axis. Alignment of national resources, international cooperation and private resources is mentioned. Public-private initiatives are promoted.	The contribution is aligned with funding by national and international sources. Mechanisms to align resources from non-institutional sources exist. The finance sector is involved through credits.	Alignment with national resources and international cooperation is mentioned. The finance sector is involved through crop insurance. Co-investing is considered.	The contribution is aligned with funding by national and international sources. Mechanisms to align resources from non-institutional sources exist. The finance sector is involved through crop insurance and PES. The development of an instrument that will allow to track investments in climate change risk management is mentioned.	The document is aligned with funding from national and international sources. The finance sector is involved through the PES system. Co-investing is considered.