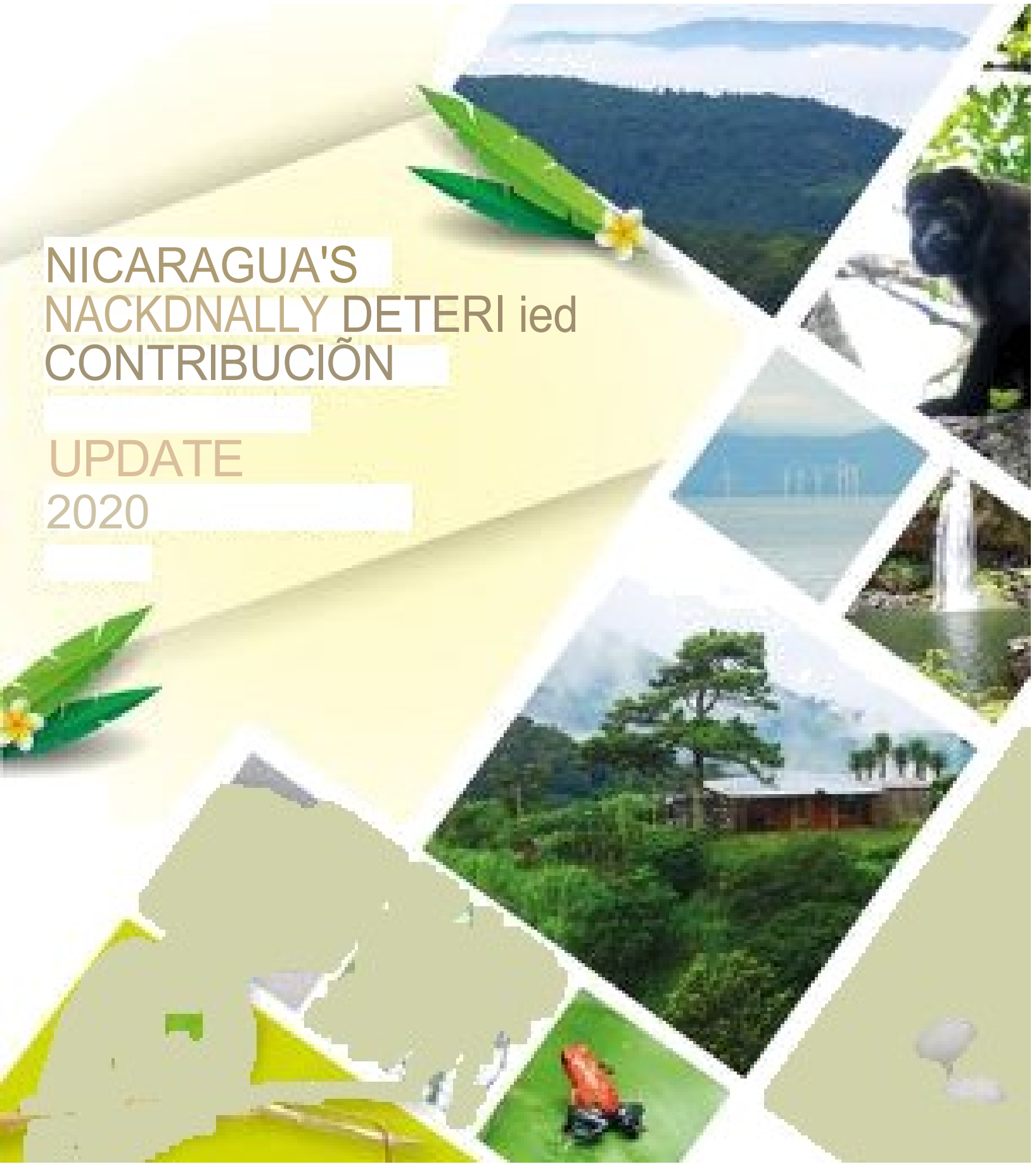


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NICARAGUA'S NACKDNALLY DETERI ed CONTRIBUCIÓN

UPDATE
2020





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ACRONYMS

ACRONYMS	Description
	CABEI Central American Bank for Economic Integration
CFCs	Chlorofluorocarbons
CH ₄	Methane
UNFCCC	United Nations Framework Convention on Climate Change CO ₂ Carbon Dioxide
CONADETI	National Commission for Demarcation and
Titling CONFOR	The National Association of Reforesters
ENACAL	Nicaraguan Water and Sewage Company ENSO
	El Niño-La Niña phenomenon
IFAD	International Fund for Agricultural Development
GEF	Global Environment Facility
(GEF,	Global Environment Facility)
GHGs	National greenhouse gas emissions
GRUN	Government of Reconciliation and National Unity
GTI	Indigenous Territorial Government
HCFCs	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
INAFOR	National Forestry Institute
INETER	Nicaraguan Institute of Territorial Studies
INPESCA	Nicaraguan Fisheries and Aquaculture Institute
INTA	Instituto Nacional de Tecnología Agropecuaria is a research body IPCC
	Intergovernmental Panel on Climate Change
	MAG Ministry of Agriculture
MARENA	Ministry of Environment and Natural Resources
MEFCCA	Ministry of Family, Community, Cooperative and
	Associative Economics of Nicaragua
	MIFIC Ministerio de Fomento, Industria y Comercio (Ministry of Development,
Industry and Trade)	
	MINED Ministry of Education
NDCC	Nationally Determined Contributions
N ₂ O	Nitrous oxide
OLADE	Latin American Energy Organisation
PFCs	Perfluorocarbons
PRE	Emission Reduction Programme
RACCN	Autonomous Region of the Northern Caribbean Coast
RACCS	Autonomous Region of the Southern Caribbean Coast
SDCC	Secretariat for the Development of the Caribbean Coast



Introduction

Nicaragua was responsible for 0.02% of global greenhouse gas emissions in 2018 according to the Global Atmospheric Research Emissions Database, however, it ranks as the sixth most vulnerable country to climate change according to the Global Climate Risk Index 2017 (GERMANWATCH,2017) report for the historical period 1998 to 2017.

According to the Third National Communication on Climate Change, Nicaragua is a country highly threatened by climate variability and extreme events. The future scenarios presented in the Fifth IPCC report, adjusted to country conditions, indicate that of the 156 municipalities, 21 are threatened by hurricanes, 48 by drought, 33 by floods and 9 by sea level rise.

One of the clear evidences of the country's high vulnerability to Climate Change is that, during 2020, extreme events occurred with the passage of two category 4 and 5 hurricanes affecting the entire country. The category 4 hurricane ETA hit the Autonomous Region of the Northern Caribbean Coast (RACCN) on 3 November and 10 days later, hurricane Iota hit the same region in category 5.

5. More than 3 million people were affected throughout the country and it is estimated that these phenomena caused losses and damage amounting to more than 738 million dollars, equivalent to 6.2% of the country's GDP.

Under the principle of Common but Differentiated Responsibilities and respective capacities, Nicaragua adhered to the Paris Agreement in 2017, assuming the commitment to strengthen its policies, strategies and government instruments in order to contribute to the goal of not increasing the world's temperature to more than 1.5 degrees Celsius.

In terms of climate action, Nicaragua has contributed to reducing greenhouse gas emissions in all its economic sectors, mainly in the energy sector, where it has managed to increase the energy matrix by 59% using renewable resources.

With respect to forests, our country is the first to sign the Charter of the Rights of Mother Earth. For this reason, since 2007, forest landscape restoration programmes have been implemented that annually generate the recovery of more than 47 thousand hectares of forest, which represents more than 2.6 million tons of carbon dioxide removed from the atmosphere.

During 2018, Nicaragua fulfilled its commitments under the United Nations Framework Convention on Climate Change by submitting its Third National Communication on Climate Change; its Forest Reference Emission Levels and its Nationally Determined Contributions (NDCs). By 2019, it published its National Climate Change Mitigation and Adaptation Policy; created the National Climate Change Response System; and is currently preparing its Fourth National Communication.

Nicaragua has a financial strategy implemented through the designated National Authority with the support of institutions that also contribute to the search for climate finance funds. Currently, there is a portfolio under management of 15 programmes and projects totalling more than U\$190 million that will develop activities that will contribute to the conservation and restoration of forests, as well as the fight against climate change. (Annex 1)[1].

With regard to the contribution to mitigation, by 2021, Nicaragua will implement with the Forest Carbon Partnership Facility an Emissions Reduction Programme on the Caribbean Coast that will contribute to reducing approximately 11 million tonnes of carbon dioxide from deforestation and forest degradation, as well as other programmes and projects that will ensure sustainable forest management and ecosystem protection.

Note : 1- Historical analysis of land use changes for the period 2005 - 2015 using official information from INETER.

Nicaragua is making efforts to implement actions focused on climate change adaptation. In the last 10 years, 363 water sources have been protected; soil and water conservation works have been carried out on approximately 25,000 hectares in the country's most vulnerable municipalities; measures have been implemented to reduce the vulnerability of the road network to climate change; and coffee and cocoa production systems have been improved with a resilient approach.

With these actions, the country continues to demonstrate its high commitment at national and international level to combat the effects of climate change and, above all, to protect our most vulnerable people.



Characterisation of National Greenhouse Gas Emissions (GHGs)

According to the Fourth Greenhouse Gas Inventory, the balance of emissions and/or removals in Nicaragua for the period between 2000 (base year) and 2015 (reference year) indicates a decrease in emissions of 1% (Figure 1). Turning points associated with the national and global context are identified, such as: changes in government and development policies implemented during the period evaluated, as well as the global economic crisis caused by the housing bubble in the United States (2008).

GHG emissions for the year 2000 were estimated at 29,251 GgCO₂eq; by 2005, an increase in total emissions of 10% is observed. During the period 2006 to 2010, emissions decreased by 8%. This behaviour of emissions reduction continues for the next five years, because in the period from 2011 to 2015, emissions decrease by 3%, estimating total emissions of 28,967 GgCO₂eq (Figure 1).

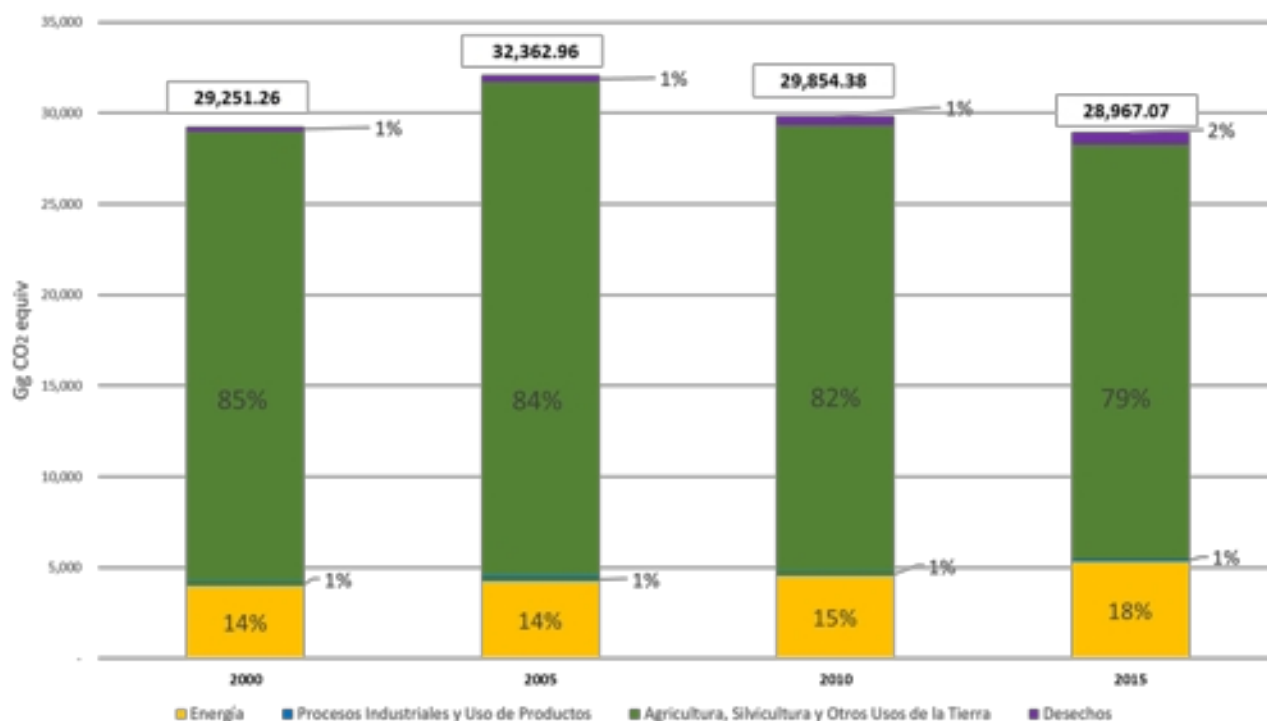


Figure 1 CO₂e emissions by sector

The Agriculture, Forestry and Other Land Use (AFOLU) sector is the main emitting sector in the whole time series, accounting for 79% (22,790 GgCO₂eq); followed by the energy sector with 18% (5,325 GgCO₂eq); the waste sector with 2% (686.42 GgCO₂eq) and, finally, the Industrial Processes and Product Use (IPPU) sector with 1% (164.22 GgCO₂eq).

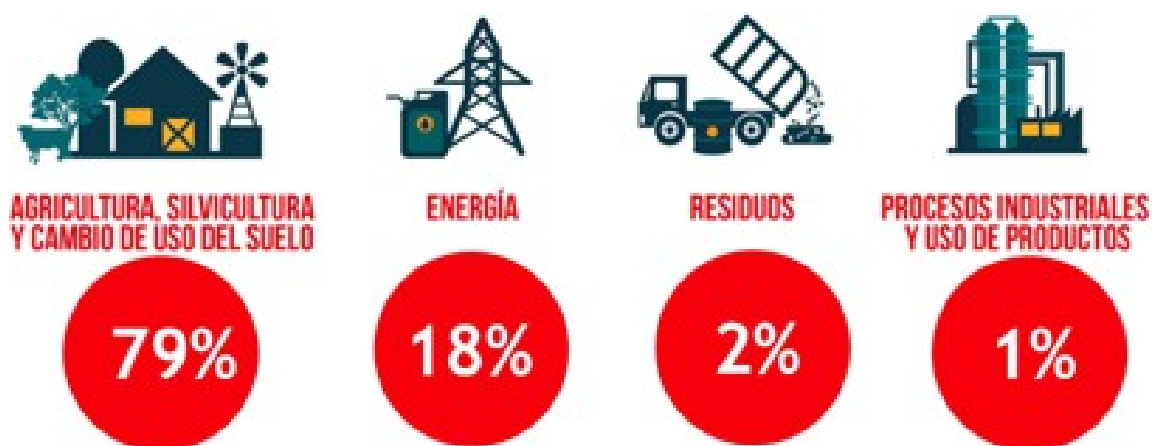


Figure 2 Greenhouse Gas Emissions by Sector - Fourth INGEI

The gas with the highest percentage weight is carbon dioxide (CO₂). For the year 2000, it is estimated that it accounted for 78% of emissions, followed by methane (CH₄) with 15% and nitrogen oxide (N₂O) with 7%. With respect to 2015, the weight of emissions by gas varies, with carbon dioxide (CO₂) accounting for 60%, methane (CH₄) for 27% and nitrous oxide (N₂O) for 13%. This is due to the increase in the country's livestock herd, which is currently an engine of economic development.

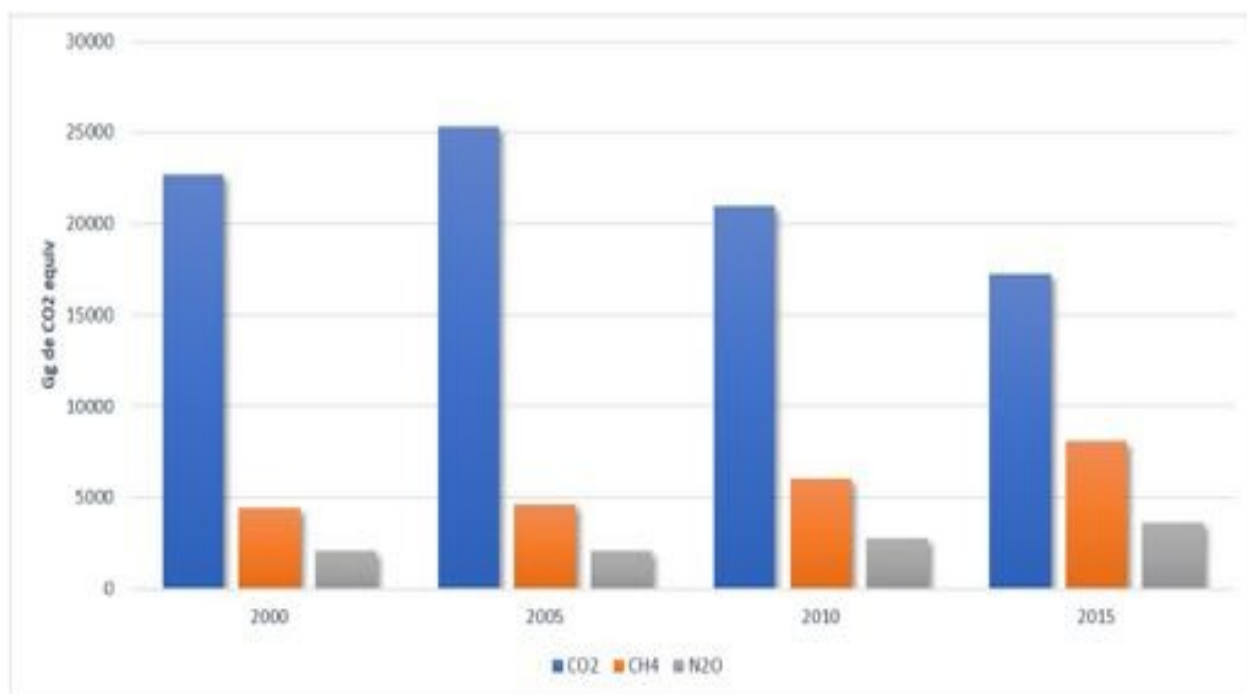


Figure 3 Trend of GHG emissions (GgCO₂eq)



Main National Developments in Climate Change

3.1.- Mitigation

Energy: The Government of Unity and National Reconciliation has increased the production of renewable energy from 25% in 2007 to 51% in 2013, even under conditions of severe energy rationing that existed at the time of the takeover since 2004.

Environmental Pollution: In order to contribute to the protection of the ozone layer, the consumption of CFCs has been phased out 100% as of 01 January 2010 and a Management Plan is being implemented for the phase-out of HCFCs from 2012 to 2020.

Agriculture: In 2010, Nicaragua joined the Global Methane Initiative, which aims, in the short term, to reduce global methane emissions by capturing methane at a reasonable cost and using it as a source of clean energy. As of 2010, 1,512 biodigesters have been built, of which between 300 and 400 are in operation.

Transport: The project "Promotion of Environmentally Sustainable Transport in Metropolitan Managua" is being implemented as one of the priorities to reform the public transport system in the Metropolitan Managua area, as reflected in the Integrated Transport Plan. Obtaining a direct reduction of 892,000 tons of CO₂ emissions over the next 20 years.

Waste: La Chureca's comprehensive development project has included not only the sealing of the landfill of the same name, considered the largest in Latin America, but also the construction of a recycling plant in which rubbish collectors work, as well as the construction of houses. The project also includes the construction of houses, a school for the more than 250 families who live there, and the reduction of the gases produced by the decomposing waste itself, which before the intervention produced spontaneous combustion across the entire surface of the landfill and are now conducted to the outside through a circuit of pipes and gasification chimneys through which the methane gas is released. These gases are planned to be used for electricity generation by the Mayor's Office of Managua.

**Figure
4**



Main advances in Climate Change mitigation.

Since 2007, wastewater treatment systems have increased significantly; by 2010, 13 departmental capitals provide wastewater treatment.

Since the start of operations of the Managua Wastewater Treatment Plant, the treatment percentage of wastewater collected in the city improved significantly from 35.22% in 2007 to 98.19% in 2011 and the treatment rate increased from 19.66% to 57.63% at the national level.

Forest Management: Nicaragua received approval for the Forest Carbon Partnership Facility, through which rural communities and indigenous peoples living in the forests of the Caribbean Coast, Bosawás and Indio Maíz will reduce deforestation and forest degradation, reducing emissions by approximately 11 million tons of carbon dioxide, and will receive positive incentives of US\$55 million over five years. This target only represents 50% of the potential for the Caribbean region to reduce emissions. This, through MARENA's ENDE-REDD+ programme, with the assistance of the World Bank.

3.2.- Adaptation

Environment and Natural Resources:

In the last 10 years, 363 water sources in the watersheds of the Río San Juan, Río Coco, Río Grande de Matagalpa and Cuenca Hidrográfica del Pacífico were protected to facilitate the operation of drinking water systems and increase access to water that improves the living conditions of 2,365 families in 20 municipalities in 88 rural communities in the departments of Chinandega, León, Matagalpa, Jinotega, Estelí, Madriz, Chontales and Nueva Segovia.

Soil and water conservation works were carried out on 25,000 hectares in 22 municipalities in the dry zone, in the departments of Chinandega, León, Matagalpa, Jinotega and Estelí, in order to reduce erosion and sedimentation of the Río Viejo, Lago de Apanás, Río Estelí, Río Estero Real and Río Negro.

During the period 2007-2017, 5,323 small water harvesting works such as reservoirs, lagoons, micro dams and rainwater harvesting systems on the roofs of houses have been implemented, supporting the implementation of Climate Change Adaptation Plans and the reduction of vulnerability and risk to drought and floods, prioritising communities located in the dry zone, which has benefited 7,848 families in 350 communities in 16 municipalities.

Agriculture and fishing: The Programme for the Development of Productive, Agricultural, Fishing and Forestry Systems in Indigenous Territories of the RACCN and RACCS (NICARIBE), 2011-2018. To improve the income levels of 10,580 families living in indigenous and Afro-descendant territories of the Caribbean Coast, supporting the increase in production and the sustainable management and use of natural resources and strengthening their organisations. Source of financing: CABEL, IFAD (Loan and Grant). Amount of financing: U\$12,000,000.00. Institutions involved: MEFCCA, MAG, INTA, INAFOR, MARENA, INPESCA, Caribbean Coast Secretariat, Regional Governments, CONADETI. Actors involved: It is estimated that, over the five years of the Programme's duration, it will directly and indirectly assist 10,580 indigenous and afro-descendant families.

The Programme to Improve the Organisational and Productive Capacities of Cocoa Producers in the Mining Triangle (PROCACAO), 2014-2017, is being implemented. The project is focused on improving family incomes and generating employment, using cocoa as the main source of income and creating a culture of promoting sustainable agroforestry systems, promoting gender equity in the Mining Triangle. Financing source: COSUDE. Amount of financing: U\$4.2 million. Duration: 1 October 2014 to 31 December 2017. Institutions involved: MEFCCA, INTA, MAG and SDCC. Who is involved: To strengthen the organisational, entrepreneurial and technical capacities of 1,200 producers and their organisations located in the Mining Triangle, Autonomous Region of the Northern Caribbean Coast (RACCN).

The Programme to Support Adaptation to Climate Change through Smallholder Coffee and Cocoa Production in Appropriate Agroclimatic Zones (NICADAPTA), 2014-2020, is being implemented, which seeks to sustainably improve the living conditions of rural families producing coffee and cocoa in four geographical areas of the Programme's intervention, incorporating them into markets and reducing their vulnerability to climate change. Source of financing: CABEL, IFAD (Loan and Grant). Amount of financing: U\$37,051,532.00. Duration: 04 January 2014 to 31 March 2020. Institutions involved: MEFCCA, INTA, IPSA, MAG, MIFIC, INETER and Secretariat of the Caribbean Coast. Stakeholders: Support 40,000 families with less than 20 manzanas that grow coffee and cocoa. The project will start in 56 coffee and cocoa growing municipalities in Nueva Segovia, Madriz, Estelí, Jinotega, Matagalpa, Boaco, and 7 indigenous territories in the RACCN and RACCS.

■ The project "Support to the Cattle Value Chain in Nicaragua (BOVINOS)" is being implemented. 2017-2021, the purpose of which is to contribute to the development of a more productive bovine livestock, with a better

The project aims to promote a competitive, sustainable and inclusive use of resources in a more environmentally friendly, competitive, sustainable and inclusive way, allowing for an increase in income, food and nutritional security and the well-being of small and medium livestock farmers in Nicaragua. Beneficiary areas of this action: 11 municipalities in the Departments of Chontales (Santo Domingo, La Libertad, Santo Tomas, El Coral, Acoyapa and Villa Sandino), Río San Juan (El Almendro) and the Southern Caribbean Autonomous Region (El Ayote, Muelle de los Bueyes, Nueva Guinea and El Rama). Total estimated cost: 21, 223,000.00 EUR. Total amount of the EU budget contribution: 20, 000,000 EUR. This action is co-financed on a co-financing basis by: Government of the Republic of Nicaragua for an amount of 1, 223,000 EUR. AECID amount to be defined in the delegation agreement with the EU.

■ A study carried out by the Third Communication on Climate Change has identified that 197 Climate Change Adaptation technologies are currently being implemented in the country in the following areas

the Water Resources, Forestry, Biodiversity and Agriculture sectors, including: Water harvesting systems, new irrigation technologies, soil conservation works on slopes, water pumping systems, organic fertilisers, crop rotation, as well as the significant use of new varieties of seeds resistant to water deficit in rice, maize, sorghum, beans, tubers and vegetables.

■ Transport: The Ministry of Transport and Infrastructure with the support of various financial institutions (IDB, the World Bank and the Nordic Development Fund) is implementing an set of measures to reduce the vulnerability of the road network to climate change. This is another milestone in the MTI's attempt to integrate climate change adaptation into planning.

■ Disaster risk prevention: The unique and successful model for disaster risk management developed by the Government of Reconciliation and National Unity is a very important contribution to disaster risk management.

for climate change adaptation because it contributes to reducing current vulnerabilities, which would not accumulate in the future, through prevention and by focusing directly on working with families and communities, building the capacity of our people from every household to cope with and respond to potentially dangerous events.

37 infrastructure works for disaster prevention and mitigation have been executed, responding to 88 critical sites in the municipalities of La Concordia, San Rafael del Norte, Jinotega, La Trinidad, San Isidro, Sébaco, Ciudad Darío, Macuelizo, Mozonte, Ocotol, Santa María, Totogalpa, Telpaneca, Condega, Estelí and Somoto. These works have responded to critical sites prioritised in the framework of Executive Decree 53-2011 of 17 October 2011, on the state of calamity and disaster throughout the national territory, caused by the meteorological phenomenon "Low Pressure Centre" E 12. With these works 45,723 men and women are protected in 16 municipalities which are: La Concordia, San Rafael del Norte, Jinotega, La Trinidad, Sébaco, San Isidro, Ciudad Darío, Totogalpa, San Lucas, Telpaneca, Somoto, Mozonte, Macuelizo, Santa María, Ocotol and Estelí, protecting their homes, the movement of protagonists to farming areas, facilitating the passage of vehicles and pedestrians and protecting road infrastructure.

Solidarity assistance to families affected by extreme events: As a result of the effects of various socio-natural events that impacted Nicaragua in the period 2007-2011, the Government provided care and solidarity support to 131,700 families, representing 697,008 people (11.6 percent of the Nicaraguan population) to whom humanitarian assistance was provided, consisting of food, construction materials, household goods, clothing, medicines, water and sanitation supplies, among others (Contingency measure).

Relocation of 1,887 families (8,435 people) residing in at-risk areas affected by constant rains and 390 families (1,950 people) living in the coastal area of Lake Xolotlán that were affected by heavy rains in 2008.

55 decent homes were built for relocated families in the municipality of San Francisco Libre. The roofs of the houses of 3,984 families in 74 communities in the municipalities of Bilwi, Prinzapolka, Waspam and Rosita, which were damaged as a result of the impact of Hurricane Felix in the RACCN, were rehabilitated, which represented 104.8 per cent of the proposed target of 3,800 roofs rehabilitated. In addition, the rehabilitation of the structure of 240 houses was carried out in four communities in the northern plain of the municipality of Puerto Cabezas and the municipality of Waspam in the RACCN.

77 churches in the RACCN and RACCS, which were affected by Hurricanes Felix and Ida, were rehabilitated to serve as shelters for the population in the event of an event.





Current Status of NDCs at Nicaragua.

Nicaragua's Nationally Determined Contribution (NDC) was submitted to the UNFCCC in 2018 and aims to contribute to compliance with the Paris Agreement on climate change mitigation and adaptation.

In relation to mitigation, it focuses on the sectors of energy and forest management, land use and land use change. The NDC defines measures for the increase of renewable energy sources, as well as actions for the conservation and restoration of forests.

In line with the Nicaraguan people's right to sustainable development, the NDC considers implementing productive national strategies in line with the country's normative and policy instruments, which contributes to generating foreign investment and international cooperation to help meet the goals proposed in the NDC's prioritised sectors.

4.1 - Proposed Mitigation Actions at NDC

- **Energy Sector**

The growth of electricity generation through renewable energy sources has been limited by the high price of clean energy generation technologies, which has forced Nicaragua to establish a balance between energy production from different sources.

Due to the above, the NDC proposes to increase the percentage of electricity generation through other renewable energy sources such as solar, wind and biomass to 60% by 2030, which represents a 35% increase in the share of renewable energies in the national electricity matrix compared to 2007, considering the increase in coverage.

- **Forestry and Land Use Change Sector**

Nicaragua has an extensive natural forest cover that represents 30% of the total continental surface area (3.9 million ha; INETER 2015), making it the fourth country in Central America with the largest forest area, and therefore with potential conditions to encourage its development based on its forest heritage. According to the biological composition, 4 types of forest have been identified: broadleaf, coniferous, palm and mangrove.

Forests are distributed in 3 main physiographic regions of the country. According to the 2015 land use map, they are found in greater proportion in the Caribbean Coast region with 88% and 12% in the Pacific and Central-North regions. Figure 5



Figure 5 Forest conservation within Indigenous Territories and Protected Areas

The loss of natural forests continues to be a challenge for Nicaragua. The most recent report on land use change at the national level presented by MARENA (2018), shows that during the period from 2000 to 2015 the country lost 100,815 ha of forest annually, i.e. deforestation was reduced by 52% compared to the figure reported between the period 1983 - 2000 (208,303 ha).

According to historical land use change studies carried out for the period 2005 - 2015, Nicaragua has an average annual rate of natural regeneration of 50 thousand ha/year and has a potential area for implementing forest cover management and restoration actions of 1.048 million ha. Figure 6

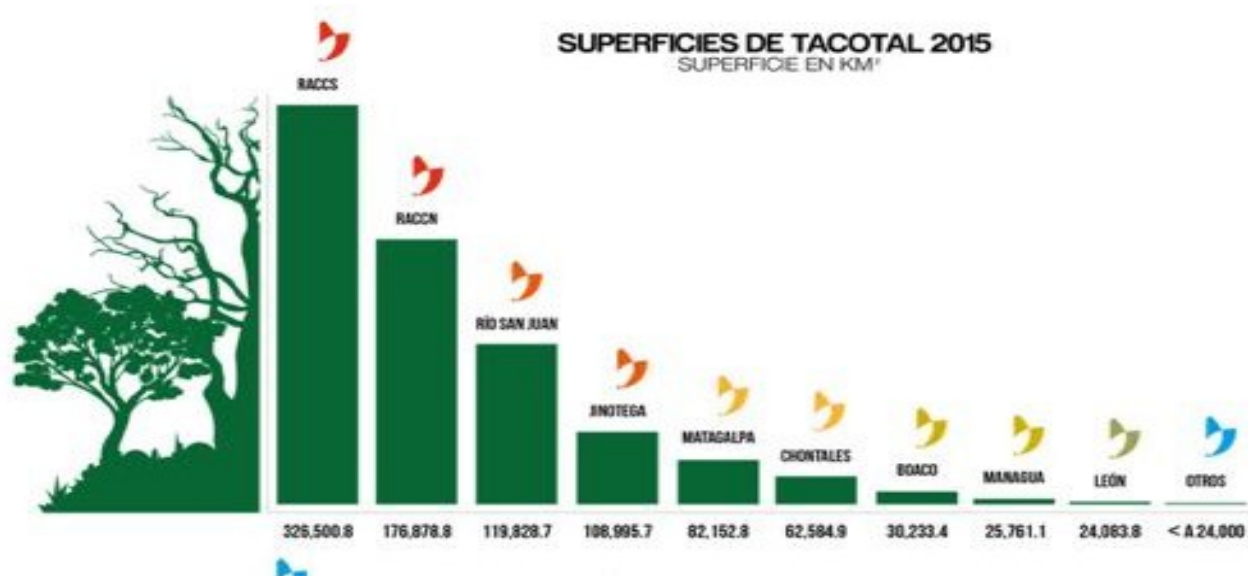


Figure 6 Potential area for forest restoration

Due to the above and the portfolio of projects under management described in Annex 1, Nicaragua proposes in its NDC for the Forestry, land use and land-use change sector to reduce emissions by 20% by 2030 with respect to its baseline, through forest restoration, management and conservation actions.

4.2 - Proposed Adaptation Actions

Due to its position and geographical characteristics, Nicaragua is exposed to various events linked to natural climate variability, such as the ENSO phenomenon (El Niño-La Niña), Pacific monsoon systems, tropical waves and hurricanes, among others, which generate significant threats of drought, floods, landslides, water shortages, destruction of crops, forests and houses.

Due to economic, social, cultural and environmental factors, Nicaragua is highly vulnerable to the threats generated by climate variability and climate change, which implies significant annual losses and damage to human and economic lives, which according to World Bank figures amount to 301.75 million dollars of purchasing power, equivalent to an average annual loss per unit of GDP of 1.72%.

To address climate change adaptation, the country requires financial support to develop priority adaptation measures, such as:

- Modernisation of the country's hydro-meteorological services, enabling the maintenance of accurate forecasts and early warning systems for an effective and efficient response, which includes modernisation of observation, assimilation and forecasting systems, access to sensors and technologies, as well as the training of qualified human resources. In 2021, the technological strengthening process will become effective.
- Measures for the development of infrastructure and drainage systems in the capital city and other cities in the Pacific of Nicaragua that are highly vulnerable to flooding. The cost of these investments is approximately USD 450 million for the capital city.
- Develop a national programme for water harvesting and promotion of irrigation systems in Nicaragua's dry corridor, for an investment of approximately USD 800 million.
- Increase the effectiveness of biosphere reserve protection through a land management and reforestation programme, with an investment of approximately US\$400 million.
- Cooperation for capacity building in climate finance.
- Development of drinking water and sanitation infrastructure and resilience programmes for urban drinking water systems.
- Access to additional resources to implement adaptation measures in the road infrastructure network.
- Capacity building, access to technology and financing in the agricultural sector.
- Implement resilient management programmes for prioritised ecosystems with a landscape approach.
- Elaborate and implement the National Climate Change Adaptation Plan at sectoral level.
- Implement the National Water Resources Plan.
- Promote adaptation measures focused on human settlements in Nicaragua.
- Developing knowledge and response capacities on the impacts of climate change on the human health of the Nicaraguan people



Fundamental Principles of the Current Goals of the NDCs

The implementation of the NDCs requires considering climate change as a problem that influences relevant public and private decisions and its impacts have repercussions on the country's economic growth. Therefore, for its integration into economic and social development, it is necessary to consider the following general principles:

Focus on sustainable development: Climate change must influence decisions and the set of actions that generate development, selecting measures that combine appropriate mitigation and adaptation, that ensure sustainable economic growth in the face of climate change impacts and with greater potential for reducing greenhouse gases and meeting the SDGs.

Complementarity with disaster risk management: Climate change complements disaster risk management, considering that reducing risk to current events is an important contribution to reducing future risk. Economic options that are vulnerable today will not adapt to future climate change, therefore measures to reduce exposure and vulnerability to current climate hazards (historical climate variability) should also contribute to future climate adaptation.

Innovation and efficient use of resources: The challenges of climate change must incorporate innovation in the decisions associated with technological development, production processes and business strategies of the private sector, as well as in public investments to achieve secure economic development, reducing future climate risks and increasing the capacity to mitigate greenhouse gases.

Ecosystem approach: Climate change adaptation measures will recognise that environmental degradation of the country's ecosystems contributes to increased vulnerability to climate change and reduced mitigation capacity, and therefore adaptation measures will be articulated in a dynamic and evolving ecosystem context.

Gender equity: Considering that women are protagonists in all economic sectors of the country, including the production and marketing of agricultural and fisheries products, activities that are recipients of the impacts of climate change and climate variability, climate change adaptation and mitigation measures will incorporate all the rights enshrined in the different national legal instruments on gender equity.

Nicaragua has a Law on Equal Rights and Opportunities (Law No. 648, approved on 14 February 2008)², which establishes six guidelines on the environment, orienting the incorporation of a gender perspective as a cross-cutting issue in the country's environmental policies.

Citizen participation: Climate change adaptation and mitigation measures will incorporate the participation of the general population, especially the most vulnerable, under the family and community model.

Feasibility of measures: Measures should be carefully assessed to determine their economic, social, environmental and climate feasibility, in order to achieve the goals proposed in the policy at the lowest costs and to generate the greatest possible benefits.

Climate finance: Government and private sector institutions will work together to manage financial resources to contribute to climate change mitigation and adaptation.

Recognition of indigenous peoples and communities: climate change affects the habits, customs and traditions of indigenous peoples, so emphasis will be placed on supporting their activities for the preservation of the environment and the sustainable use of natural resources.

The property rights of indigenous territories in the first place are guaranteed in law.

² [http://legislacion.asamblea.gob.ni/normaweb.nsf/\(\\$All\)/DFACDD675534DACE0625744B0077C73F](http://legislacion.asamblea.gob.ni/normaweb.nsf/($All)/DFACDD675534DACE0625744B0077C73F)

445, law on the communal property regime of the indigenous peoples and ethnic communities of the Autonomous Regions of the Caribbean Coast of Nicaragua and of the Bocay, Coco, Indio and Maíz rivers. Nicaragua has established in the National Strategy for the Reduction of Emissions from Deforestation and Forest Degradation, as well as in its impact programmes, compliance with environmental and social safeguards that guarantee the full participation of territories and indigenous peoples at the national level.



Implementati on Progress of the NDCs

Fulfilling national commitments is fundamental in the face of the global challenge of mitigation and adaptation to climate change. Nicaragua has made significant efforts to implement actions to ensure compliance with the targets established in its NDCs. The following is a description of the progress made in mitigation up to 2020.

6.1 - Sector Energy

Target: to increase the share of electricity generation from renewable energy sources to 60% by 2030.

6.1.1 -Progress

According to the Electricity Generation Expansion Plan (2019-2033)^[3] prepared by the Ministry of Energy and Mines, in 2006, electricity generation from renewable resources was 42%, with hydroelectric plants accounting for 33%, geothermal 28% and biomass 39%.

In order to cover the demand for electricity and guarantee coverage in the distribution network at national level, it was increased from 54% in 2006 to 98.42% in 2020. This increase in installed capacity has been carried out with a focus on sustainable development and care for mother earth. The main investment has been in the expansion of hydroelectric, wind (2009) and solar (2013) power plants. It should be noted that the investment for the construction and commissioning of the plants is private capital.

Figure 7 shows the distribution by type of plants used for power generation in 2016. Wind power plants, which started operations in 2009, accounted for 17.3% of electricity generation by 2016, followed by geothermal with 10.1%, hydroelectric with 10.1%, biomass with 7.6% and solar, which started operations in 2013, accounted for only 0.05% by 2016.

Due to the efforts made by the country, a considerable increase in energy generation with renewable sources was achieved by 2019. Figure 8 shows the increases by type of source, in the case of geothermal power plant represented 17%, followed by wind with 16%; biomass and hydroelectric with 12% and solar energy with 1% (representing a significant increase compared to 2016).

3 <http://www.mem.gob.ni/wp-content/uploads/2019/05/Plan-de-Expansion-of-Electric-Generation-2019-2033.pdf>

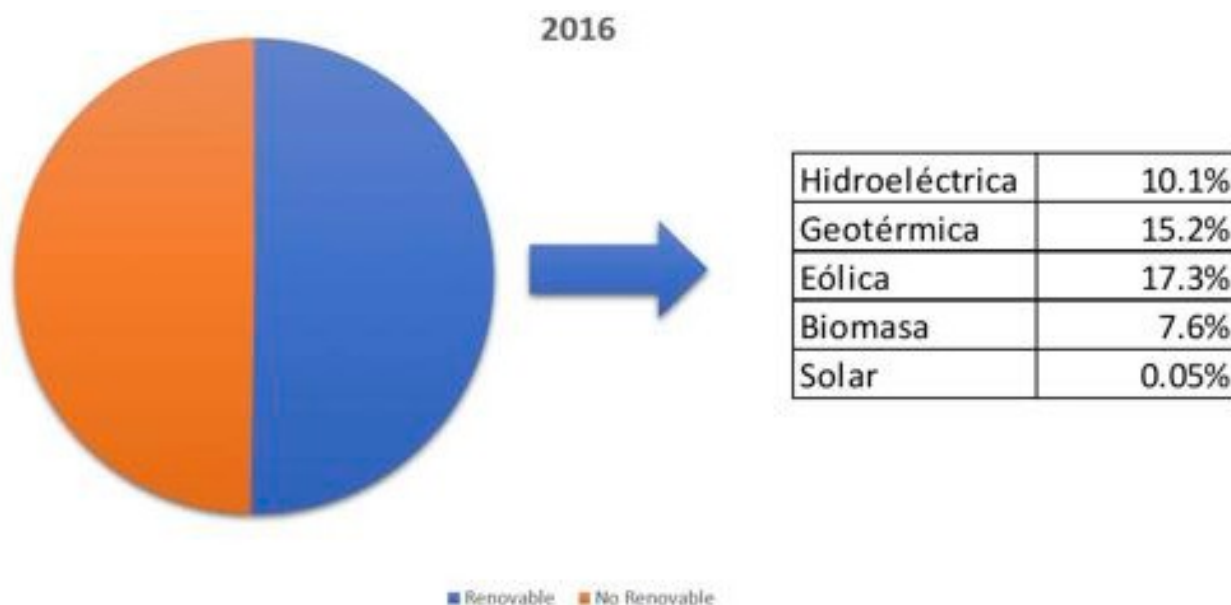
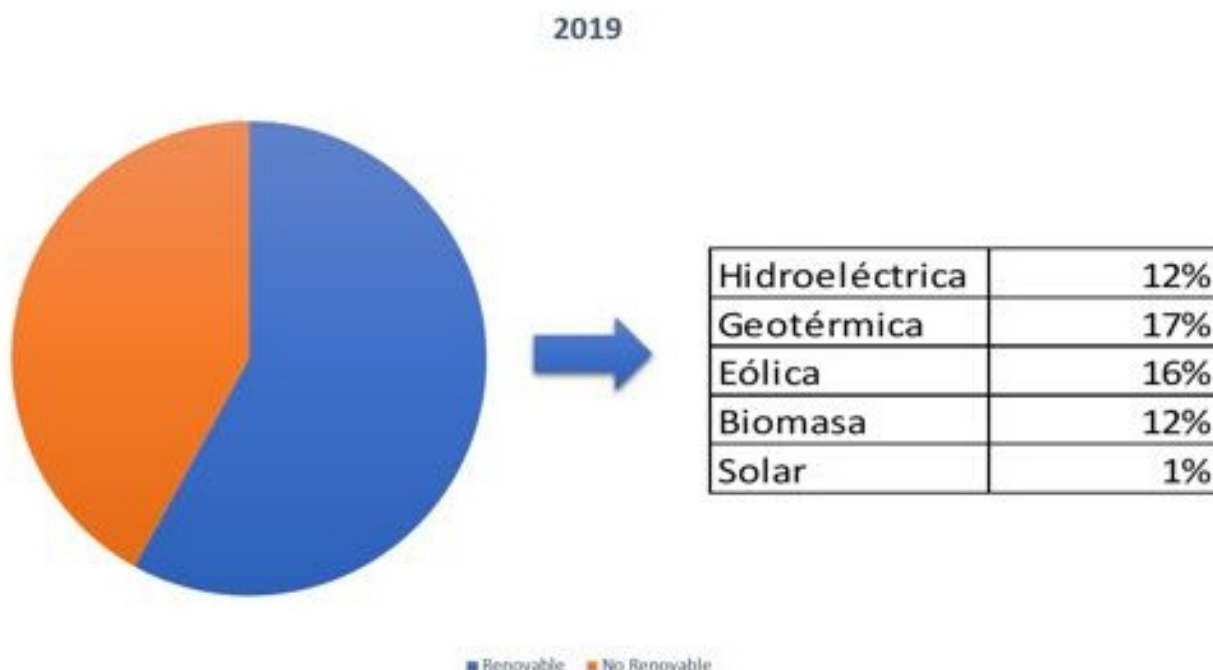


Figure 7 Percentage distribution of nominal installed capacity by source type 2016

Therefore, the increase in the energy matrix using renewable sources from 2016 to 2019 is 15% reaching 58% of renewable sources for power generation in the country.

Figure 8 Percentage distribution of nominal installed capacity by source type 2019

During the period 2006 - 2017, the evolution of the installed capacity by type of source is as follows



generation capacity. The expansion of the thermal power plant is identified in order to guarantee meeting the national energy demand, however, the increase in capacity and diversification of renewable energy sources installed in the country throughout this period is also observed.

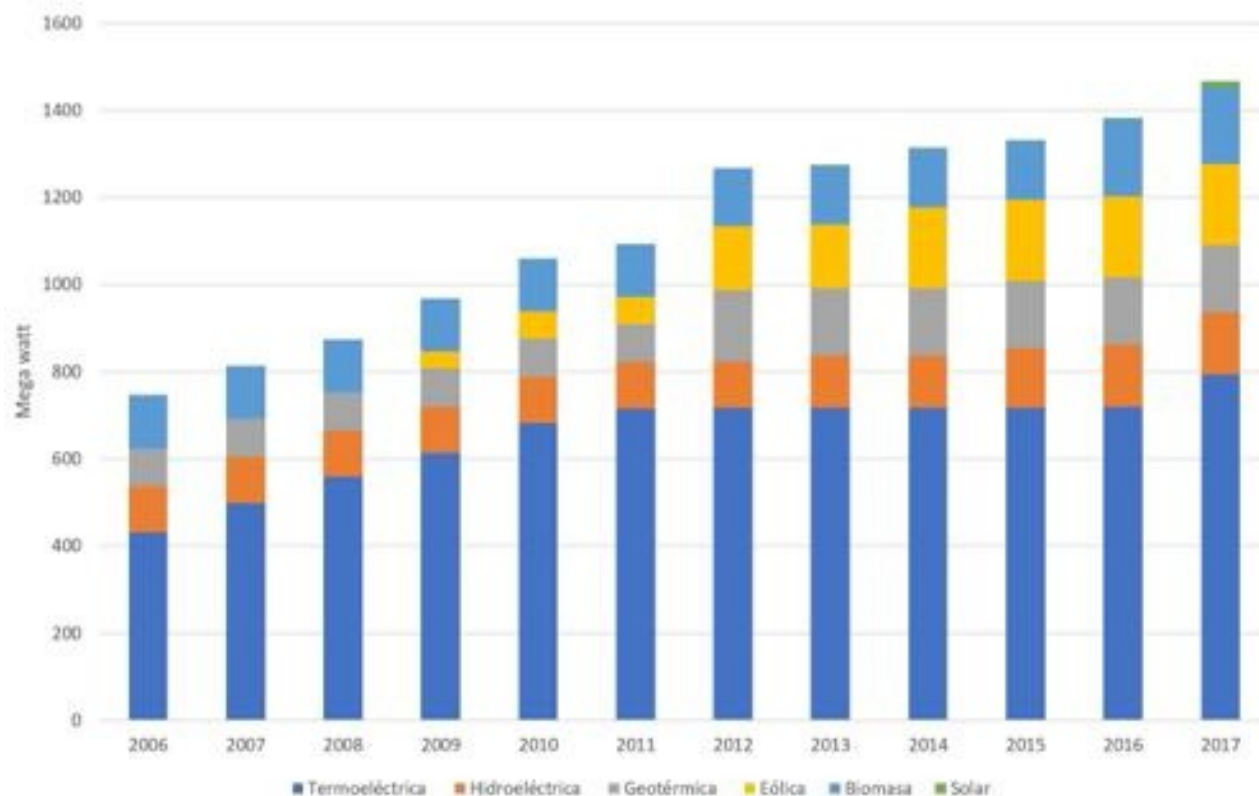


Figure 9 Nominal Installed Capacity (MW) By type of source.

6.2 - Forest management, land use and land use change

Target: Promote agro-ecological production, permanent shaded crop plantations resistant to climate change impacts, as well as the reduction of extensive livestock farming practices and the incorporation of forests on idle land to conserve national carbon sink capacities.

6.2.1 -Progress

- Plantation Forestry

Nicaragua has productive strategies that promote the conversion of productive areas to environmentally friendly systems, including: silvopastoral systems, agroforestry systems, forest plantations for industrial purposes, environmental restoration and management of natural regeneration, reforestation campaigns.

Since 2007, INAFOR has been promoting the National Reforestation Crusade as a programme

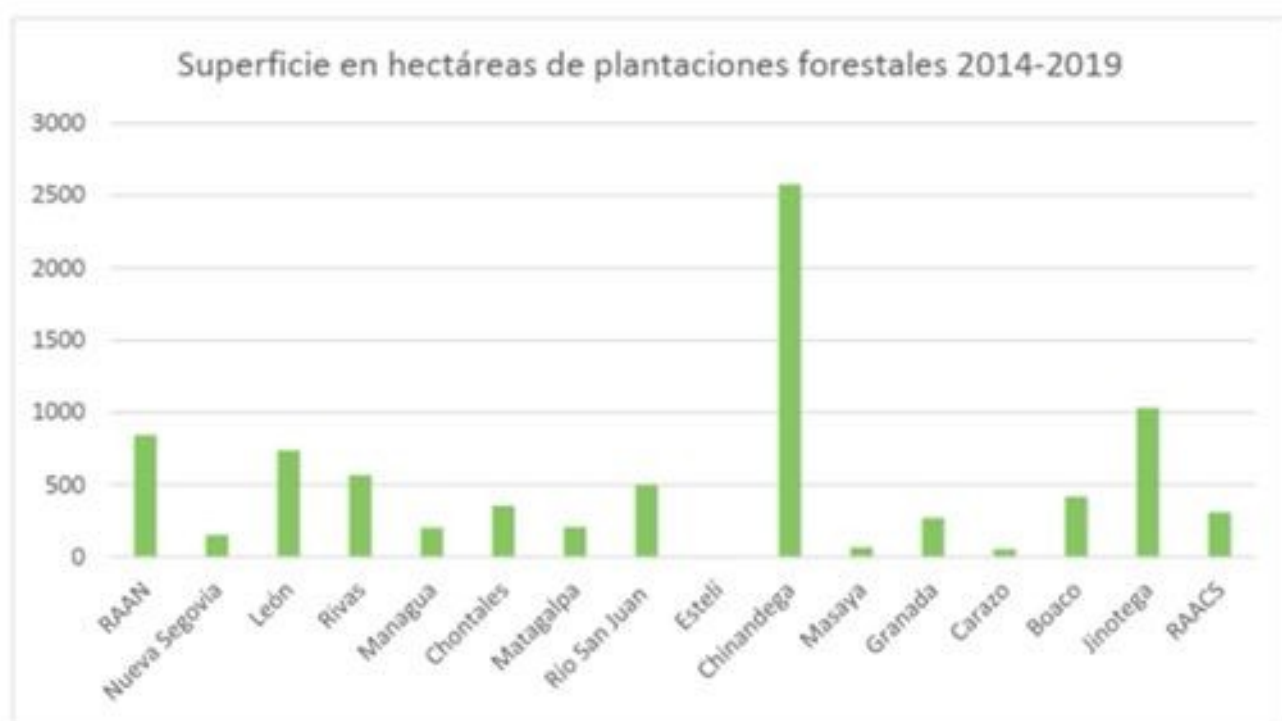
The project is an emblematic initiative of the Government of Reconciliation and National Unity (GRUN), with the participation of different government institutions (MARENA, MINED, National Army, National Police, MEFCCA), municipal governments and civil organisations (Guardabarranco Environmental Movement, among others). Most of the plantations have been established with a focus on the conservation of public and private areas and on raising awareness among the general population.

There is high potential for the establishment of commercial forest plantations by companies. private. Up to 2020, there are many companies registered, the most important of which are: Maderas Segovianas

S.A. with pine plantations; Agroforestal S.A. (African mahogany plantations); The National Association of Reforesters (CONFOR), between 2003 and 2016 has established 22,521 ha, with an estimated investment to date of US\$ 128 million and is expected to continue the same rate of growth in the coming years.

Figure 9 shows the reports of the national forestry activities registration office in charge of INAFOR, where it refers to the areas under forest plantations registered during the five-year period 2014 to 2019, these areas correspond to forest plantations with industrial, energy or agroforestry systems objectives.

According to INAFOR records, during the period from January 2014 to September 2019, 8,282.22 hectares of plantations have been established in 14 Departments and 2 Autonomous Regions of the country. The two departments leading this effort are Chinandega (2,578.83 ha) and Jinotega (1,031.4 ha).



Fuente: Registro de INAFOR; 2019

Figure 10 Forest plantation register

In addition, the Nicaraguan Water and Sewage Company (ENACAL), within the framework of the National Reforestation Crusade, has managed to establish 115 hectares of plantations, including educational workshops in more than 13 cities in the country.

■ Reforestation

In 2007, INAFOR established 12,000 ha and in subsequent years achieved goals of 20,000 ha. For 2017, the reforestation goal established by INAFOR was 26,000 ha distributed throughout the national territory.

Statistics from the National Forestry Institute (INAFOR) show that from 2007 to 2019, more than 120,000 hectares have been reforested, with priority given to the central and Caribbean Coast areas of the country.

■ Natural Regeneration Management

According to the national land cover maps of Nicaragua, during the period 2005 - 2015, there is evidence of a significant recovery of vegetation cover, improving the carbon reservoirs through changes in natural savannahs, tachotales, shrub and herbaceous areas. It is estimated that 50,000 ha are restored annually through the management of natural regeneration, which occur in the Pacific and North Central corridor of the country.



Figure 11 Forest cover recovery map for the period 2005 - 2015

■ Linking forest restoration and the NDC in Nicaragua

To adapt to and mitigate climate change, as well as to preserve the nation's natural areas and services, Nicaragua joined the 20x20 Initiative in 2015 with the goal of restoring close to 2.8 million hectares to: Manage watersheds, Improve resilience of rural livelihoods to the effects of Climate Change and conserve biodiversity.

The 2.8 million hectares are distributed in actions related to forest conservation, restoration, management and protection:

- ✓ 1,666,082 ha for productive reforestation
- ✓ 138,820 ha for plantation forestry for ecosystem services
- ✓ 277,680 ha for implementation of forestry business
- ✓ 416,520 ha for timber product plantations
- ✓ 555,361 ha for agroforestry
- ✓ 277,680 ha for sustainable agribusiness plantations
- ✓ 1,110,721 ha of reclamation of land degraded by erosion, soil compaction, agrochemical contamination or overgrazing.

Through these measures, the country implements actions to recover areas degraded by land use changes. According to the study of the Causes of Deforestation and Forest Degradation-^[4] elaborated by MARENA in 2019, the direct causes of forest loss are linked to the expansion of the agricultural frontier and extensive cattle ranching. It is estimated that approximately 84% of forest land use has been changed to other uses, especially attributed to cattle ranching.

For this reason, the restoration measures established in the programmes and projects are aimed at establishing sustainable production systems that link biological corridors, restore landscapes and ecosystems and increase biodiversity and other ecosystem services.

To achieve this objective, Nicaragua, through the national production, consumption and trade system, has established production strategies with a focus on mitigating and adapting to climate change, promoting better practices for the establishment and management of crops and incorporating low-emission production initiatives that also contribute to environmental restoration.

Management of forest and climate change programmes and projects

In order to ensure compliance with the targets proposed in the NDC for this sector, Nicaragua has managed a portfolio of projects focused on forest restoration, protection and conservation (Figure 12).

Emissions Reduction Programme (ERP) which will start in 2021. It is expected to generate a positive environmental and economic impact on rural communities and indigenous peoples living in the forests of the Caribbean Coast, BOSAWAS and Indio Maíz Reserves. In addition, it will contribute to reducing deforestation and forest degradation, mitigating approximately 11 million tons of carbon dioxide.

Strengthening the Resilience of Multiple-Use Protected Areas for the Generation of Multiple Global Environmental Benefits (GEF5). It started in 2020 and will affect 13 protected areas, covering the biological corridors of dry, humid, semi-humid and cloud forests. It will contribute to mitigate -137,127 tCO₂eq.

Management of resilient landscapes (GEF6). It impacts the biological corridor of 9 protected areas. Of these, 7 are located within the country's Drylands Corridor, in the ecosystem of the pine and oak-oak ecoregion and 2 in the ecosystem of the Caribbean pine forest of the tropical rainforest in the Autonomous Region of the Northern Caribbean Coast (RACCN). The total area of impact of this project is 141,355 ha. It will contribute to mitigate 860,000 tCO₂eq.

4

<http://www.marena.gob.ni/Enderedd/wpcontent/uploads/Fases/2.%20Estudio%20Causes%20Deforestation%20and%20Forest%20Degradation%20.pdf>

Programme for the sustainable management of biodiversity in the Indio Maíz Biological Reserve, Indio-Maíz Biological Reserve (Central Area of the Río San Juan Biosphere Reserve) and its Buffer Zone (GEF7). The geographical area of influence of the project is 808,631 ha. It will contribute to mitigate 3,300,000 tCO₂eq over 5 years).

Transformed food systems and reduced deforestation in the landscape related to the protected areas and biological corridors of the Autonomous Region of the Southern Caribbean Coast and San Juan River (FOLUR). Will contribute to mitigate 4.89 MtCO₂eq over 5 years).

Integrated climate action to reduce deforestation and strengthen resilience in the BOSAWAS and Río San Juan Biosphere Reserves" (BIO-Clima). With funding from the Green Fund of the Climate, Nicaragua will implement a major capacity building component for productive landscape restoration and forest conservation. It will contribute to mitigate 18 MtCO₂eq over 7 years).



Figure 12 Map of Programmes and Projects under management by Nicaragua.



Nicaragua's Commitments to Improving the Metrics of its NDCs

As part of the commitments acquired by Nicaragua before the convention, actions have been developed to strengthen the metrics for monitoring, reporting and verification of emissions, in this sense, a roadmap for continuous improvement has been proposed to prepare the country for the arrival of the enhanced transparency framework, based on the 5 fundamental pillars established by the convention: (1) Transparency, (2) Accuracy, (3) Completeness, (4) Consistency and (5) Comparability.

Nicaragua, from 2021, will establish a National GHG Inventory System, which will serve as an interoperable platform where generators of sectoral statistical information estimate activity data and calculate their emissions. There is a proposal for institutional arrangements that group each institution according to its role in the INGEI sectors.

As part of the implementation of the Decree to Establish the National Policy on Climate Change Mitigation and Adaptation and the Creation of the National System for Climate Change Response (SNRCC), the first steps have been taken to formalise the participation of national institutions in the elaboration of the INGEI on a regular and validated basis.

In order to present official activity data and eliminate duplication of efforts in the definition of conceptual aspects, development of data collection formats, methods, methodologies and units of measurement that cover the needs of all institutions in the different areas in which each one develops.

Because the system has a wide variety of institutions, working groups composed of representatives from these institutions have been created for each of the INGEI sectors to review and validate the activity data, variables, emission factors and estimation results for each of the sectors (Figure 13). (Figure 13).

In addition, Nicaragua has established collaboration agreements with the Latin American Energy Organisation (OLADE) to review and provide input for improvement on the metrics of emissions in the energy sector from the consumption of fossil fuels and geothermal energy. Likewise, it has a Monitoring, Reporting and Verification Committee for the sub-sector Forests, Land Use and Land Use Change, where methodological documents and studies on historical and current dynamics of land use change at national, regional and territorial levels are prepared.

By 2021, the country will implement projects that will contribute to strengthening national capacities for international reporting and reporting. These include: a) Enabling the preparation of Nicaragua's Fourth National Communication and the First Biennial Update Report to the UNFCCC and b) Strengthening institutional and technical capacities in Nicaragua's agricultural and forestry sectors to respond to the requirements of the enhanced transparency framework under the Paris Agreement - CBIT.

The above mentioned projects will contribute to improve the following technical aspects required by the UNFCCC to ensure quality assurance and quality control of the reports:

In terms of [transparency](#), the origin of each of the data used will be documented in a spreadsheet showing a link to the basic digital information used and on each of the assumptions used in the calculations, contributing to a simple way to perform both internal quality control and quality assurance by external reviewers, whether national or international.

On [accuracy](#), Nicaragua will develop a system of annualised accounts to reflect annual developments, determining trends such as shocks and their link to the specific economic sector. This will be analysed on a sectoral basis, seeking to improve the metrics as much as possible through the development of higher level methods including national emission factors.

In relation to [completeness](#), analyses will be carried out at sector and sub-sector level. To date, Nicaragua has used the flexibility to report only the main gases, a flexibility that persists in the Paris Agreement, however, given the progress in the implementation of the Kigali Amendment, Nicaragua would be in a position to report at least the main fluorinated gases (HFCs and PFCs) in the future.



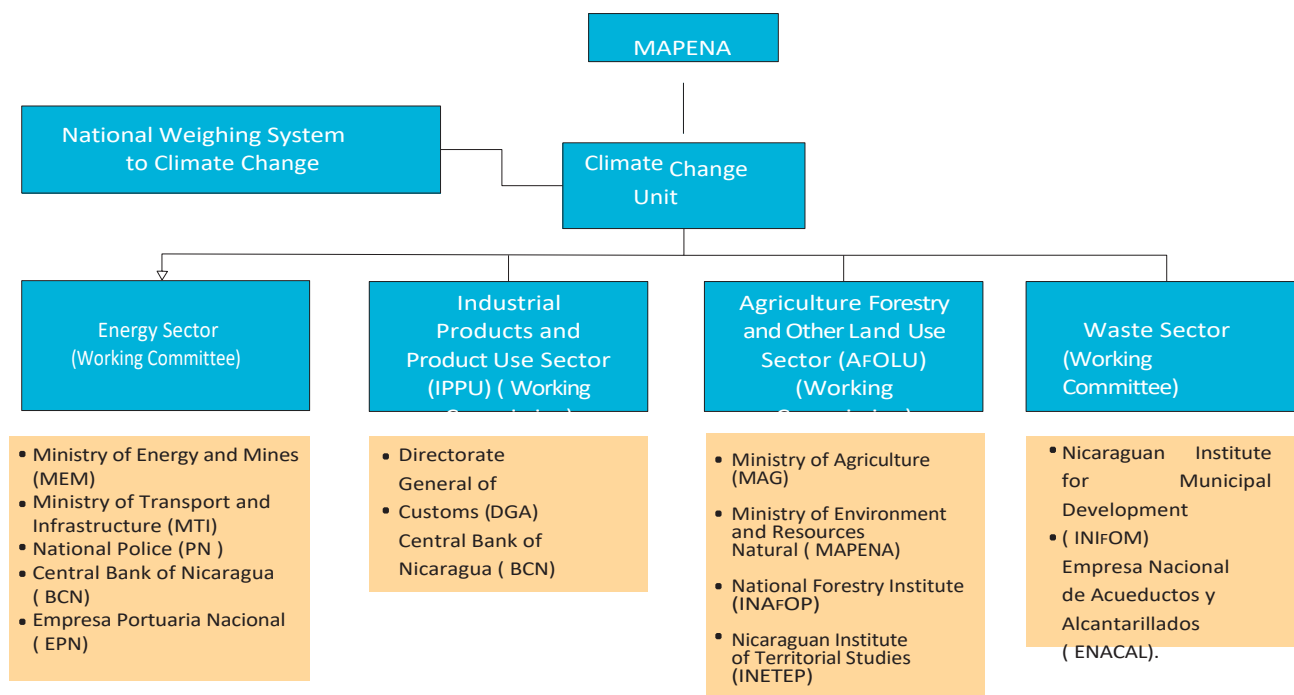


Figure 13 Organisational structure for the construction of INGEIs

On **comparability**, work will be done on the development of a time series, which will run from the NDC reference year and the reporting year will not exceed 3 years from the reporting year.

In terms of **consistency**, it shall be ensured that no changes in emission trends occur as a result of different methods or assumptions.





NDCs' Communication Strategy for Inclusive and Participatory Development

The Government of Nicaragua implements a Communication Policy based on three fundamental principles: the social right to information and free expression, unrestricted adherence to the Political Constitution of Nicaragua, and the right of citizens to participate in public decisions.

As part of the actions developed in the process of updating the NDCs, communication with vulnerable sectors was strengthened, expanding the dialogue with indigenous peoples, women's groups and youth at the national level. Figure 14

The communication process was developed with a multi-sectoral and multicultural approach, involving all stakeholders: indigenous and Afro-descendant peoples, agricultural producers, universities, regional and national government institutions, media, social organisations and the general population.

The Communication Plan will continue to work with the model of alliance, dialogue and consensus with communities at the national level, through the development of technical communication roundtables, with the participation of regional government communicators, representatives of the GTIs and the Caribbean Coast Development Secretariat.

As part of the communication strategy of the NDCs, during their implementation, the Communication Policy of the Government of Reconciliation and National Unity will be taken as a fundamental guide, designing and implementing national campaigns for the formation of values, placing families as the main protagonists in the process of fulfilling the climate commitments.

Similarly, inter-institutional communication objectives will be articulated, creating synergies to reach a greater number of protagonists, through conventional media such as radio, written press, digital portals and television.

The new challenges posed by the global pandemic situation establish new paradigms in effective communication, for this reason, the strategy proposes the dissemination through mass media, including a specific strategy in social networks for the communication of the progress and main challenges in the fulfilment of the NDCs.

At the inter-institutional level, work will continue under the platform of the National Climate Change Response System, with the objective of effectively aligning strategies, programmes and projects for the benefit of compliance with the contributions.



Figure 14 Presentation of progress on the Nationally Determined Contribution with women, youth, academia and institutions



Proposed Update of the NDC

According to the IPCC 1.5 report and the sense of urgency in which it was presented, highlighting the need for accelerated and immediate action to limit the global temperature increase to 1.5°C, Nicaragua has developed a proposal to increase the ambition of its NDCs focused on mitigation and adaptation to Climate Change.

According to the NDC submitted by Nicaragua to the UNFCCC in 2018, the main efforts focus on increasing the energy matrix to 60% from renewable energy sources and reducing emissions from deforestation and forest degradation by 20% by 2030.

The Government of Nicaragua, in its strategic development plans and national policies, has oriented actions that contribute to the protection, care, rational and sustainable use of the natural resources provided by Mother Earth. For this reason, progress has been made by 2020 in increasing the energy matrix with renewable resources to 59%; national capacities for monitoring, reporting and verification of forest resources have been strengthened; reforestation goals have been increased; surveillance and protection of areas in natural regeneration processes have been strengthened; surveillance systems within protected areas have been strengthened; strategic alliances with indigenous and Afro-descendant communities have been strengthened; among others.

Considering the above, a proposal to increase the ambition of the NDC with respect to GHG mitigation of the country's productive sectors is described below.

9.1.-Proposed increase in ambition at Mitigation

9.1.1.-Sector Energy

● **Conditional: increase the energy mix to 65% from renewable energy sources by 2030.**

- The increased ambition will contribute to reducing emissions from the energy sector compared to the 2018 baseline.
- Required activities:
- National study to identify potential areas for expanding renewable energy production.
- Financial, technical and technological gap analysis for the 65% increase in energy generation.

9.1.2-Industrial Processes and Use Sector of Products

● **Reduction of the consumption of fluorinated gases considered in the Kigali Amendment**

Required activities:

Development of a strategy for the use of natural or low global warming potential refrigerants, which would have an impact on the industrial processes sector, sub-sector emissions of ozone-depleting fluorinated substitutes.

9.1.3.- Forest Management and Land Use Change Sector

● **Conditional NDC in the forestry sector and land use change: Reduce CO₂ emissions from gross deforestation nationally by 25% by 2030 compared to the country baseline.**

During 2020, Nicaragua designed projects aligned and oriented to the restoration and protection of forests; the establishment of sustainable and environmentally friendly production systems and the strengthening of local and institutional capacities that guarantee the protection of the forest.

Interventions are considered to support indigenous communities and producers with capacities, technical assistance, inputs and sound financial and market incentives for the sustainable intensification of their livelihoods geared towards the restoration and conservation of natural resources and forests on their farms and territories. These interventions are: 1) establishment of agroforestry systems; 2) establishment of silvopastoral systems; 3) management of natural regeneration; 4) community forest management; 5) commercial reforestation; and 6) improvement of forest governance.

Considering the mitigation potential of the mentioned interventions, Nicaragua will increase its ambition in the forestry sector under the condition of receiving international funding sources for the implementation of programmes and projects that contribute to the fulfilment of the country goal.

- Required activities:
 - Capacity building plan for institutions responsible for forest and land use change monitoring.
 - Reduction of extensive livestock practices and increase of forest cover in the livestock sector.
 - Formulation of a Nationally Appropriate Mitigation Action (NAMA) strategy for sustainable, low-carbon and climate-resilient cattle ranching.
 - National GHG Emissions Management Plan for Enteric Fermentation and Livestock Manure Management through Biodigesters
 - Design of an electro-mobility strategy for public transport in the city of Managua.

9.2 Synthesis of the proposal to increase NDC ambition at Nicaragua

Table 1 presents a comparative summary of the NDC presented in 2018 and the changes incorporated in the 2020 update.

NDC CURRENT		NDC ambition increase proposal	
Sector	Target	Sector	Target
Energy	By 2030, 60% of the installed capacity of the electricity matrix will come from renewable energy sources.	Energy	By 2030, 65% of the installed capacity of the electricity matrix will come from renewable energy sources.
Forests and Land Use Change	Increase in carbon sequestration capacity by 20% compared to the Reference Scenario to 2030.	Forests and Land Use Change	Increase in carbon sequestration capacity by 25% compared to the Reference Scenario to 2030.
Industrial Processes	Not Considered	Industrial Processes	Reducing the consumption of fluorinated gases considered in the Kigali amendment

Table 1 Summary of the proposed increase in NDC ambition in Nicaragua.

- Sector Goal Sector Goal

Energy By 2030, 60% of the installed capacity of the electricity grid must come from renewable energy sources
 Energy By 2030, 65% of the installed capacity of the electricity grid must come from renewable energy sources

Forests and Land Use Change

Increase in carbon sequestration capacity by 20% compared to the Reference Scenario to 2030.

Forests and Land Use Change

Increase in carbon sequestration capacity by 25% compared to the Reference Scenario to 2030.

Industrial Processes Not Considered

Industrial Processes Reduction of the consumption of fluorinated gases considered in the amendment of the Kigali.

9.3 - Medium-term actions to be considered in future NDCs (2025 - 2030)

The process of updating the NDCs in Nicaragua has been assumed as a continuous task, where monitoring, follow-up and evaluation of the proposed goals is carried out systematically. The following is a list of actions that should be considered in the elaboration of future NDC updates.

- ✓ Entry of the natural gas plant into the energy mix replacing plants with higher emissions (Bunker and Diesel).
- ✓ Agreement on mitigation practices in the cement industry (energy and Clinker)
- ✓ Inclusion of all reservoirs in FOLU accounting, accompanied by anti-erosion practices for agricultural soils and pastures,
- ✓ Biodigesters in municipal and industrial wastewater treatment plants
- ✓ Development of a circular economy based on a culture of repair and recycling.
- ✓ Development of planning instruments for territorial environmental management with a climate focus.
- ✓ Detailed design of a NAMA proposal in the energy sector transition towards cleaner transport in Nicaragua.



Commitment- based Mitigation Projections Acquired

Nicaragua has prepared climate change mitigation scenarios considering the ambition proposed in its Nationally Determined Contributions (NDCs).

In a scenario where the country does not develop and implement actions that contribute to reducing greenhouse gas emissions "Business as Usual", it is expected that emissions by 2030 will be 77 million TonCO₂eq generated by all productive sectors.

In a scenario of successful compliance with the current NDC, emissions will be reduced by 8%, i.e. by 2030 Nicaragua will emit 71 million TonCO₂eq. In a scenario that considers increasing the ambition of the NDC in the energy, forestry and land use change sectors (as proposed in Table 1), the country will achieve a 10% reduction in emissions compared to the "Business as Usual" scenario, i.e. by 2030 Nicaragua will emit 69 million TonCO₂eq. Figure 15

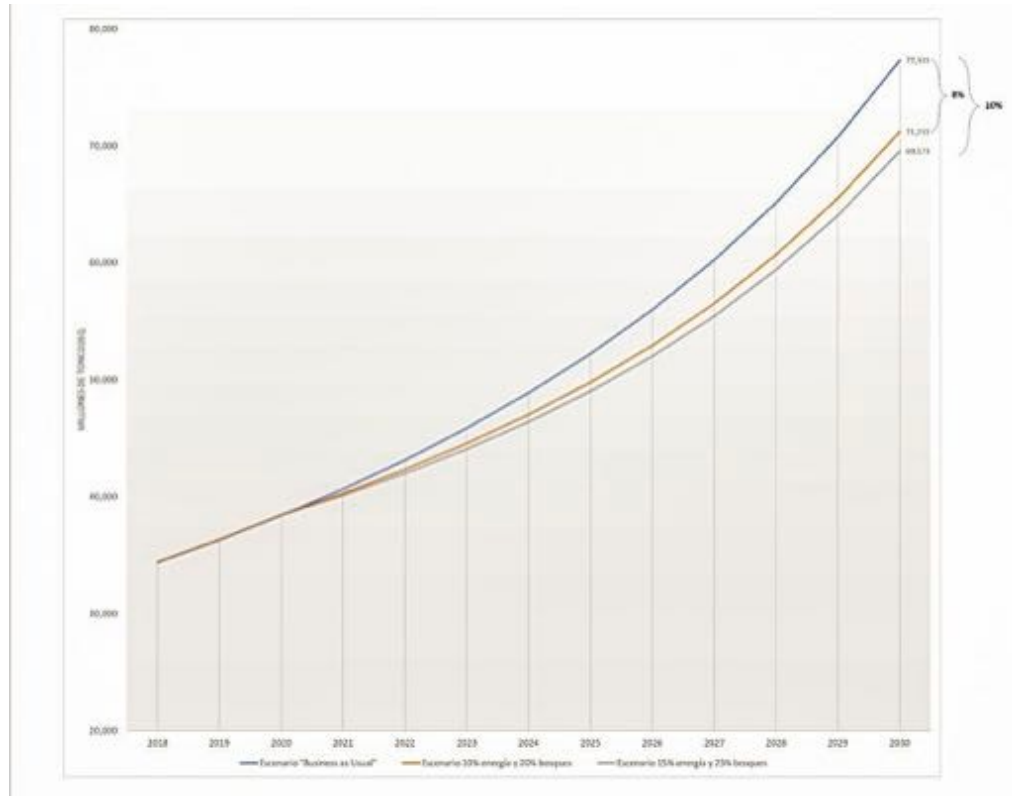


Figure 15 Mitigation scenarios considering current NDC and proposed increase in NDC ambition.










Contribution Component Adaptation







In the process of updating the NDCs, the insertion of specific scopes and objectives related to adaptation to climate change is contemplated. In this sense, for the case of Nicaragua, the methodology of multi-criteria analysis was used in relation to the following variables:







- Impact on poverty reduction and human welfare
- Building resilience capacities in productive sectors relevant to food security
- Cost-effectiveness ratio
- List of national policies and strategies
- Inclusion of indigenous peoples and vulnerable populations
- Contribution to mitigation-based adaptation





As part of the NDC update, the identified measures were grouped by sector of intervention according to national priority and scopes and objectives were defined, as well as their contribution to the achievement of the SDGs. Table 2

Table - 2 NDC adaptation measures and their relationship with the SDGs

Measure Adaptation	Development Objective sustainable	Prioritised sector	Sector objective
Increase the effectiveness of the protection of biosphere reserves through a programme of land management and reforestation, boosting reforestation, with an investment of approximately 400 million dollars.	 	Biodiversity	<p>Promote productive enterprises that reduce the pressure on the natural resource.</p> <p>It contemplates actions for the conservation of habitats and species of both flora and fauna, through the sustainable management of the resource.</p>
<p>Develop a national programme for water harvesting and promotion of irrigation systems in Nicaragua's dry corridor.</p> <p>Development of drinking water infrastructure and sanitation and resilience programmes for urban drinking water systems.</p> <p>Implementing the National Water Resources Plan</p>	    	Water resources	<p>Promote infrastructure and ecosystem actions that increase water availability. Availability of the resource according to the demand offered: human, productive, energy and industrial consumption. Contemplates infrastructure and restoration actions.</p>

Measure Adaptation	Development Objective sustainable	Prioritised sector	Sector objective
Formulation of the Programme for resilient management of prioritised ecosystems with a landscape approach and eco-systems-based adaptation.	 	Forest Resource	Promote integrated forest resource management with a landscape approach. It encompasses the protection of ecosystem services provided by forests and attention to the most vulnerable (native communities and small forest producers).
Capacity building, access to technology and finance in the agricultural sector	   	Productive Sector	Increasing productivity under a climate change scenario. Protection of agricultural and livestock production and its contribution to the family economy. Includes actions for small subsistence farmers.

Measure Adaptation	Development Objective sustainable	Prioritised sector	Sector objective
Development of knowledge and response capacities on the impacts of climate change on the health of the Nicaraguan people.	     	Human Health	<p>To reduce vulnerability and increase the resilience of the population to the impact of climate change on health.</p> <p>Improving the responsiveness of the health system to cope with the main threats of climate change, mainly in the most vulnerable sectors.</p>

Measure Adaptation	Development Objective sustainable	Prioritised sector	Sector objective
Modernisation of the country's hydro-meteorological services, enabling accurate forecasting and early warning systems for effective and efficient response.	    	Infrastructure and human settlements	<p>Vulnerability reduction in human settlements.</p> <p>Increasing the adaptive capacity of communities through climate risk management in their infrastructure works.</p>
Measures for the development of infrastructure and drainage systems in the capital city and other Pacific cities of Nicaragua that are highly vulnerable to flooding.	 	Infrastructure and human settlements	<p>Vulnerability reduction in human settlements.</p> <p>Increasing the adaptive capacity of communities through climate risk management in their infrastructure works.</p>

Measure Adaptation	Development Objective sustainable	Prioritised sector	Sector objective
Access to additional resources to implement adaptation measures in the road infrastructure network	   	Infrastructure and human settlements	Reducing vulnerability in human settlements. Increasing the adaptive capacity of communities through climate risk management in their infrastructure works.
Promote adaptation measures focused on Human Settlements in Nicaragua.	  		

Annexes

Annex 1 Programmes and Projects under Management

No.	Source	Projects	Total Amount Under Management US\$
1	FCPF: Forest Carbon Partnership Facility / WB	REDD+ Programme to combat Climate Change and Poverty in Nicaragua	55.000.000
2	SDC	Community Management Project in the Dipilto River Basin. PHASE II	2.100.000
3	GEF 6	Nicaragua Resilient Landscape Management Project (GEF ID 9579)	4.389.261
4	GEF 7	Programme: Sustainable Management of Biodiversity in the Indio Maíz Biological Reserve	3.370.000
5	Gef-FOLUR	Transforming food systems and reducing defoliation in the protected areas and landscapes of the biological corridors of the Autonomous Region of the Southern Caribbean Coast and the Department of Río San Juan (FOLUR Nicaragua).	4.000.000
6	FVC - BIOCLIMA	Comprehensive climate action to reduce deforestation and increase resilience in BOSAWAS and Río San Juan Biosphere Reserves	110.000.000
7	GEF - CBIT	Strengthening institutional and technical capacities in Nicaragua's agriculture and forestry sectors to respond to the requirements of the Enhanced Transparency Framework (EFF) under the Paris Agreement (GEF ID 10118).	863.242
8	UNIDO	Minamata Initial Assessment (MIA) and development of the National Action Plan (NAP-Mercury)	700.000
9	FDV SICA-CCAD	Restoration of Climate Change Resilient Landscapes and Ecosystems in the Municipality of El Castillo, Río San Juan Biosphere Reserve.	1.500.000
10	CCAD	Resilient Gulf of Fonseca project.	8.000.000
11	NDC Partnership	Plan for capacity building and implementation of climate actions in Nicaragua. NDC	190.000
12	FVC	Preparation and support to the elaboration of the NAP-Readiness	3.000.000
13	GCF - UN Environment	Ecosystem-based adaptation and transformative measures to increase resilience to climate change in the Central American Dry Corridor and Arid Zones of the Dominican Republic	0
14	AMEXCID-CONANP	Institutional strengthening for the conservation and management of protected areas in Mexico and Nicaragua	0,00
14,1	AMEXCID -PROFEPA	Wildlife Management and Landscape Restoration Project	0,00
15	United Nations Convention to Combat Desertification. UNCCD	Landscape and ecosystem restoration to reduce land degradation in the Río San Juan Biosphere Reserve	0,00
		Resource mobilisation	193,112,503.00 US\$ 193,112,503.00

La presente actualización de la Contribución Determinada a Nivel Nacional (NDC) de Nicaragua, fue aprobada por el Presidente de la República, y presentada el 21 de Diciembre de 2020, a la Secretaría de la Convención Marco de las Naciones Unidas sobre el Cambio Climático.



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